

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

Eleventh Monthly EM&A Report

14 October 2014

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

Eleventh Monthly EM&A Report

Document Code: 0215660_11th Monthly EM&A_20141014.doc

Client: Gammon		Project No: 0215660			
Summary: This document presents the Eleventh Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section.		Date: 14 October 2014			
		Approved by: 			
		Mr Craig Reid Partner			
		Certified by: 			
		Mr Jovy Tam ET Leader			
	Eleventh Monthly EM&A Report	VAR	JT	CAR	14/10/14
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_2327L.14

15 October 2014

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 September 2014 (EP-354/2009/B)**

Reference is made to the Monthly Environmental Monitoring and Audit (EM&A) Report (September 2014) certified by the ET Leader (ET's ref.: "0215660_11th Monthly EM&A_20141014.doc" dated 14 October 2014) and provided to us via mail on 14 October 2014.

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/B.

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, ENPO Site

Q:\Projects\HYDHZMBEEM00\02_Proj_Mgt\02_Corr\HYDHZMBEEM00_0_2327L.14.doc

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>4</i>
<i>2.1</i>	<i>AIR QUALITY</i>	<i>4</i>
<i>2.2</i>	<i>NOISE MONITORING</i>	<i>5</i>
<i>2.3</i>	<i>WATER QUALITY MONITORING</i>	<i>7</i>
<i>2.4</i>	<i>DOLPHIN MONITORING</i>	<i>9</i>
<i>2.5</i>	<i>CORAL MONITORING</i>	<i>12</i>
<i>2.6</i>	<i>EM&A SITE INSPECTION</i>	<i>12</i>
<i>2.7</i>	<i>WASTE MANAGEMENT STATUS</i>	<i>14</i>
<i>2.8</i>	<i>ENVIRONMENTAL LICENSES AND PERMITS</i>	<i>15</i>
<i>2.9</i>	<i>IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES</i>	<i>18</i>
<i>2.10</i>	<i>SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT</i>	<i>18</i>
<i>2.11</i>	<i>SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS</i>	<i>18</i>
<i>3</i>	<i>FUTURE KEY ISSUES</i>	<i>19</i>
<i>3.1</i>	<i>CONSTRUCTION PROGRAMME FOR THE COMING MONTHS</i>	<i>19</i>
<i>3.2</i>	<i>KEY ISSUES FOR THE COMING MONTH</i>	<i>19</i>
<i>3.3</i>	<i>MONITORING SCHEDULE FOR THE COMING MONTH</i>	<i>19</i>
<i>4</i>	<i>CONCLUSIONS AND RECOMMENDATIONS</i>	<i>20</i>
<i>4.1</i>	<i>CONCLUSIONS</i>	<i>20</i>

List of Tables

Table 1.1	Contact Information of Key Personnel
Table 2.1	Locations of Impact Air Quality Monitoring Stations
Table 2.2	Air Quality Monitoring Equipment
Table 2.3	Summary of 1-hour TSP Monitoring Results in the Reporting Period
Table 2.4	Summary of 24-hour TSP Monitoring Results in the Reporting Period
Table 2.5	Location of Impact Noise Monitoring Station
Table 2.6	Noise Monitoring Equipment
Table 2.7	Summary of Construction Noise Monitoring Results in the Reporting Period
Table 2.8	Locations of Impact Water Quality Monitoring Stations and its Corresponding Monitoring Requirements
Table 2.9	Water Quality Monitoring Equipment
Table 2.10	Dolphin Monitoring Equipment
Table 2.11	Impact Dolphin Monitoring Line Transect Co-ordinates
Table 2.12	Individual Survey Event Encounter Rates
Table 2.13	Monthly Average Encounter Rates
Table 2.14	Specific Observations Identified during the Weekly Site Inspections in this Reporting Month
Table 2.15	Quantities of Different Waste Generated in the Reporting Period
Table 2.16	Summary of Environmental Licensing and Permit Status

List of Figures

Figure 1.1	General Project Layout Plan of the Project
Figure 1.2	Detailed Layout Plan of Contract No. HY/2012/07
Figure 1.3	Locations of Construction Activities in the Reporting Month
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
Figure 2.1	Locations of Impact Air Quality Monitoring Stations
Figure 2.2	Locations of Impact Noise Monitoring Station
Figure 2.3	Locations of Impact Water Quality Stations
Figure 2.4	Line Transects for Impact Dolphin Monitoring Survey
Figure 2.5	Locations of Dolphin Sightings during Impact Dolphin Monitoring Survey
Figure 2.6	Environmental Complaint Handling Procedure

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*. Another application for variation of environmental permit (VEP) (*EP-354/2009/B*) was granted on 28 January 2014.

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 Eleventh Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 30 September 2014 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:

Land-Based Works

- Construction of pile cap superstructure of Viaduct B;
- Fence installation and relocation of Area 2, Viaduct A, B, C & D;
- Land Piling at Viaduct B & C;
- Piling platform installation for Viaduct B, C, D & E;
- Additional land GI, trial pits & lab testing
- Utility surveys; and
- Slope work of Slope 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9

Marine-based Works

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

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	11 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental site inspection	5 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. No sighting of the Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) was recorded in September 2014 during the exclusion zone monitoring.

Coral Monitoring

No Post-Translocation Coral Monitoring was conducted in the reporting month.

Environmental Complaints, Non-compliance & Summons

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

Reporting Change

There was no reporting change required in the reporting period.

Upcoming Works for the Next Reporting Period

Works to be undertaken in the next monitoring period of October 2014 include the following:

Marine Works

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

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- Fence installation and relocation of Area 2, Viaducts A, B, C & D;
- Land Piling at Viaduct B;
- Piling platform installation for Viaducts B, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slope 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 October 2014 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-354/2009A) 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*. Another application for variation of environmental permit (VEP) (*EP-354/2009/B*) was granted on 28 January 2014.

The construction phase of the Contract commenced on 31 October 2013 and will be tentatively be 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 & 1.2*.

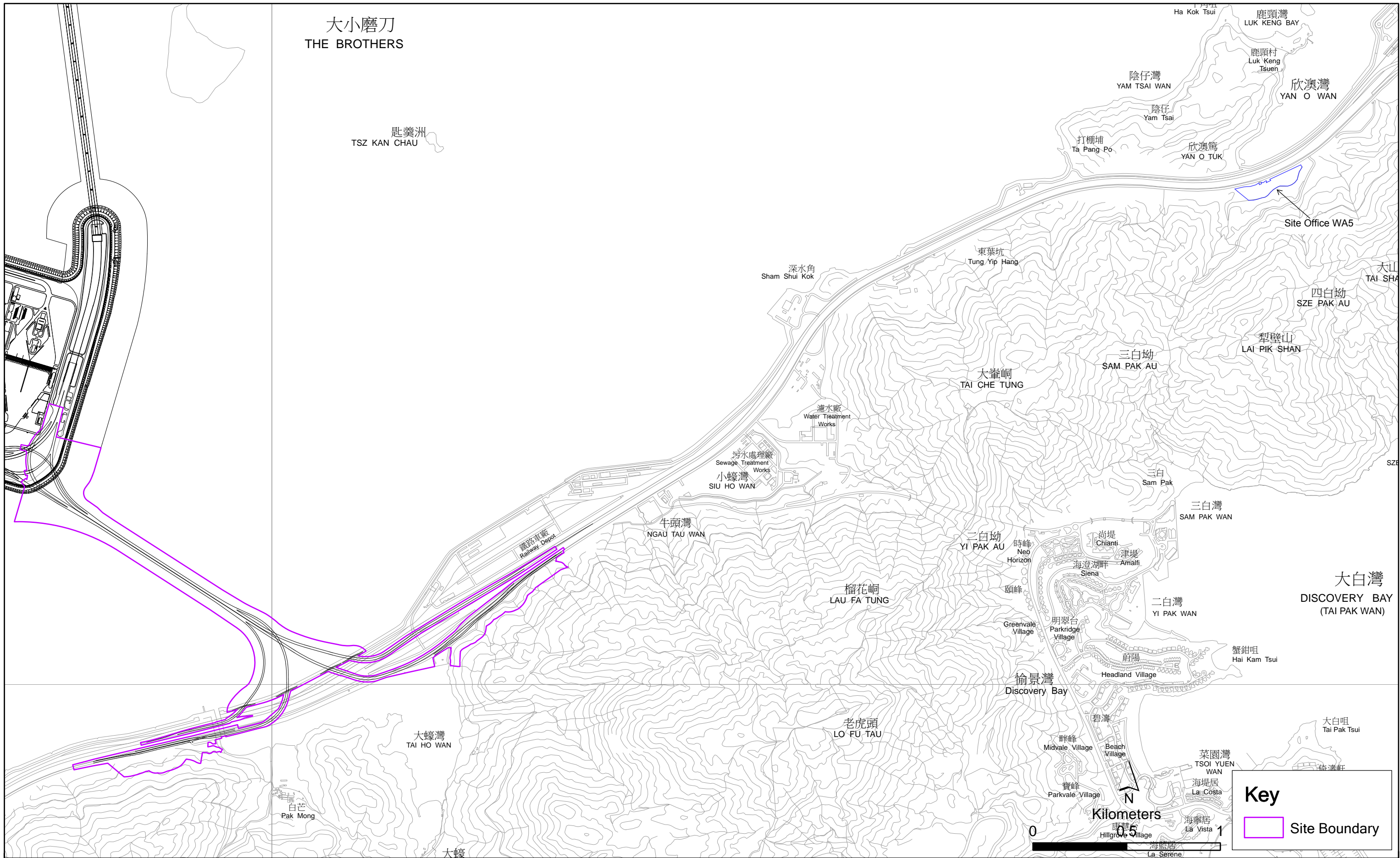


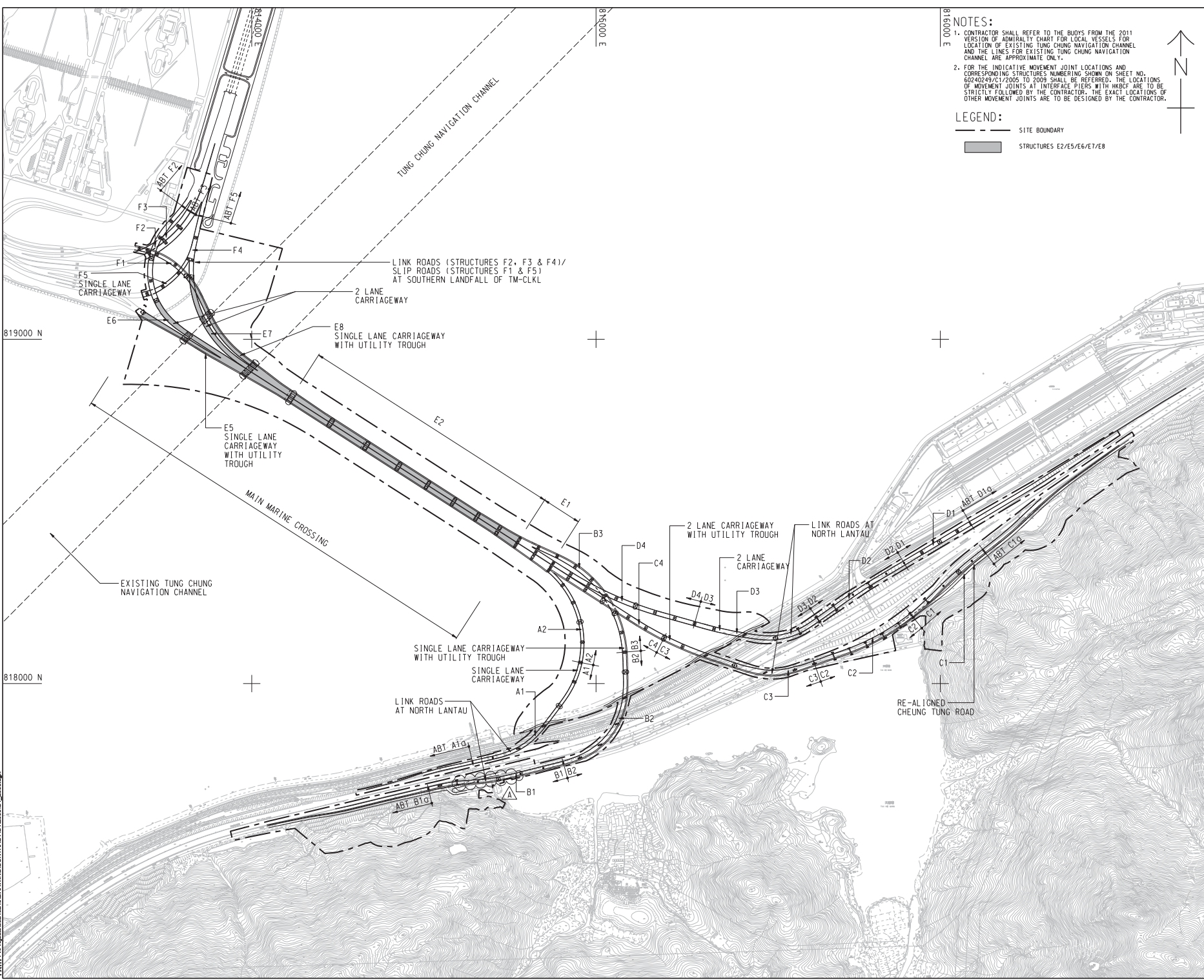
Figure 1.1

General Layout Plan of the Project

Environmental
Resources
Management



Proj File by: H:\AECOM\2012\02\240249\C1\2000.dgn
 Path: P:\Projects\2012\02\240249\C1\2000.dgn
 Project Management: Hinkley
 Designer: LHM/BB
 Checker: SLYT
 Approver: CWN
 ISO AT 50mm x 61mm
 Only



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
Hong Kong - Zhuhai - Hainan Bridge
Hong Kong Project Management Office

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

Figure 1.2a

ISSUE/REVISION

NO.	DATE	DESCRIPTION	CHK.

STATUS

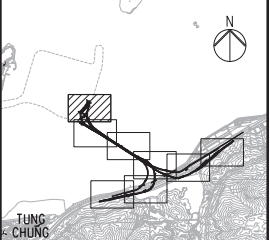
SCALE	DIMENSION UNIT
A1 : 6000	METRES

KEY PLAN

PROJECT NO. 60240249	CONTRACT NO. HY/2012/07
SHEET TITLE SOUTHERN CONNECTION GENERAL LAYOUT PLAN	
SHEET NUMBER 60240249/C1/2000A	

This drawing has been prepared for the use of AECOM's client. It may not be used, modified, reproduced or related parts by third parties, except as approved by AECOM. AECOM accepts no responsibility for any errors or omissions in this drawing or for any consequences arising therefrom. All measurements must be obtained from the latest drawings.

DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



KEY PLAN

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 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



Printed by : 12/09/2013
 File name : J:\3518\99\REC\DRG_20130927\Ground Investigation Plan\CAD\231498_P_OAP_04_01000.dwg

Rev	Description	By	Date	Rev	Description	By	Date
A	SUBMISSION	RC	07/13				
B	SUBMISSION	RC	07/13				
C	SUBMISSION	RC	09/13				

Drawn	Date	Client
RL	07/13	HONG KONG GOVERNMENT HIGHWAYS DEPARTMENT 香港政府 路政處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office
Checked	Approved	
DS	DOP	
Scale	1:1000 @ A1 / 1:2000 @ A3	

Supervising Officer: **AECOM**

Contractor: **GAMMON**

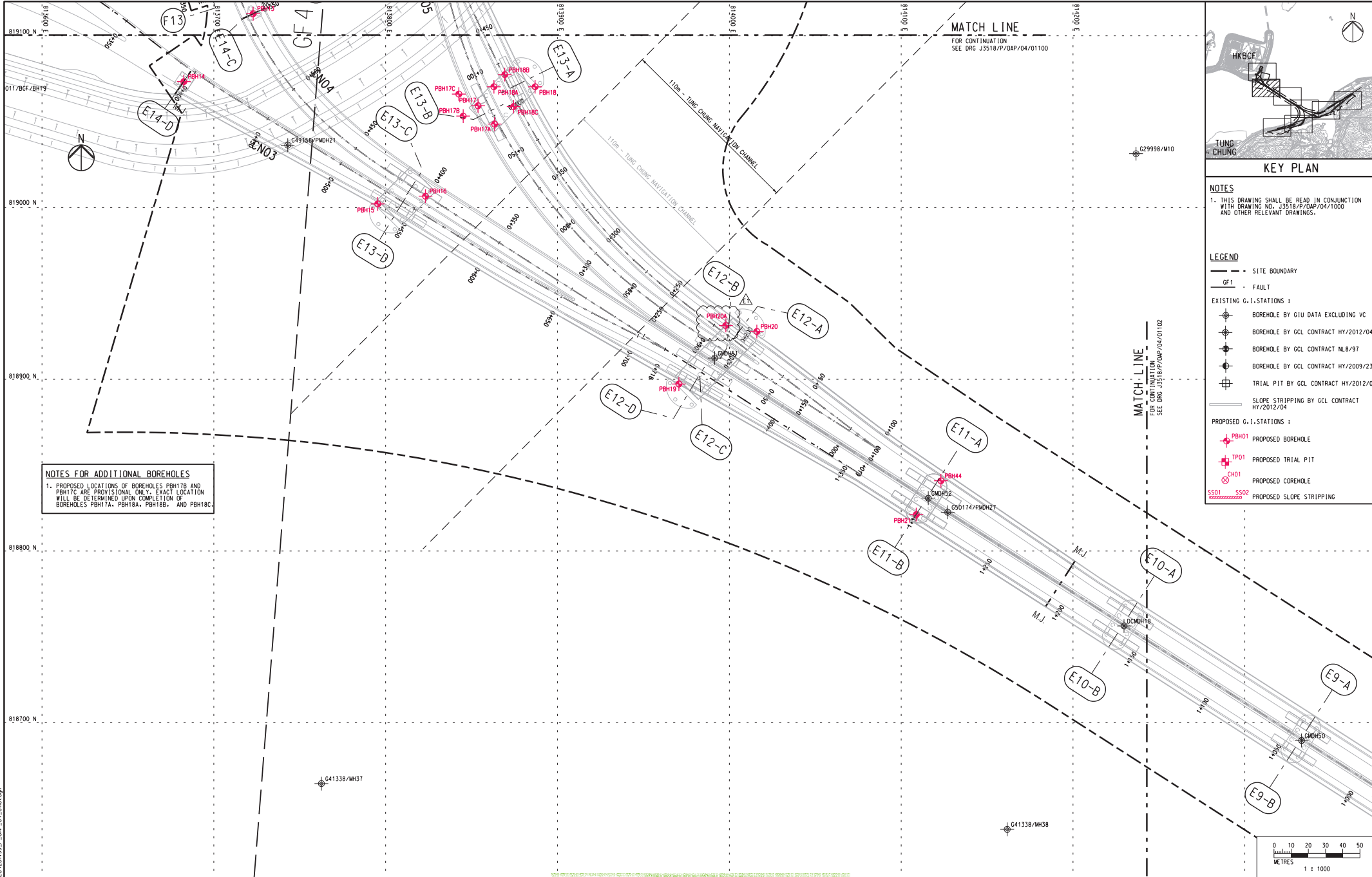
Project Title
 Contract No. HY/2012/07
 Tuen Mun - Chek Lap Kok Link
 Southern Connection Viaduct Section

Originator: **ARUP**

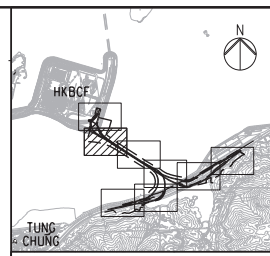
Drawing title
Figure 1.2b

Drawing no. J3518/P/OAP/04/01100 Rev. C

DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



MATCH LINE
FOR CONTINUATION
SEE DRG J3518/P/OAP/04/01100

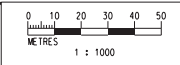


KEY PLAN

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 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

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.



Printed by : 05.11.13
Filename : E:\23499\WIP\GEO\23499_P_OAP_04_01100.dgn

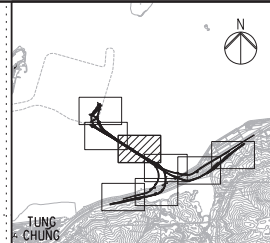
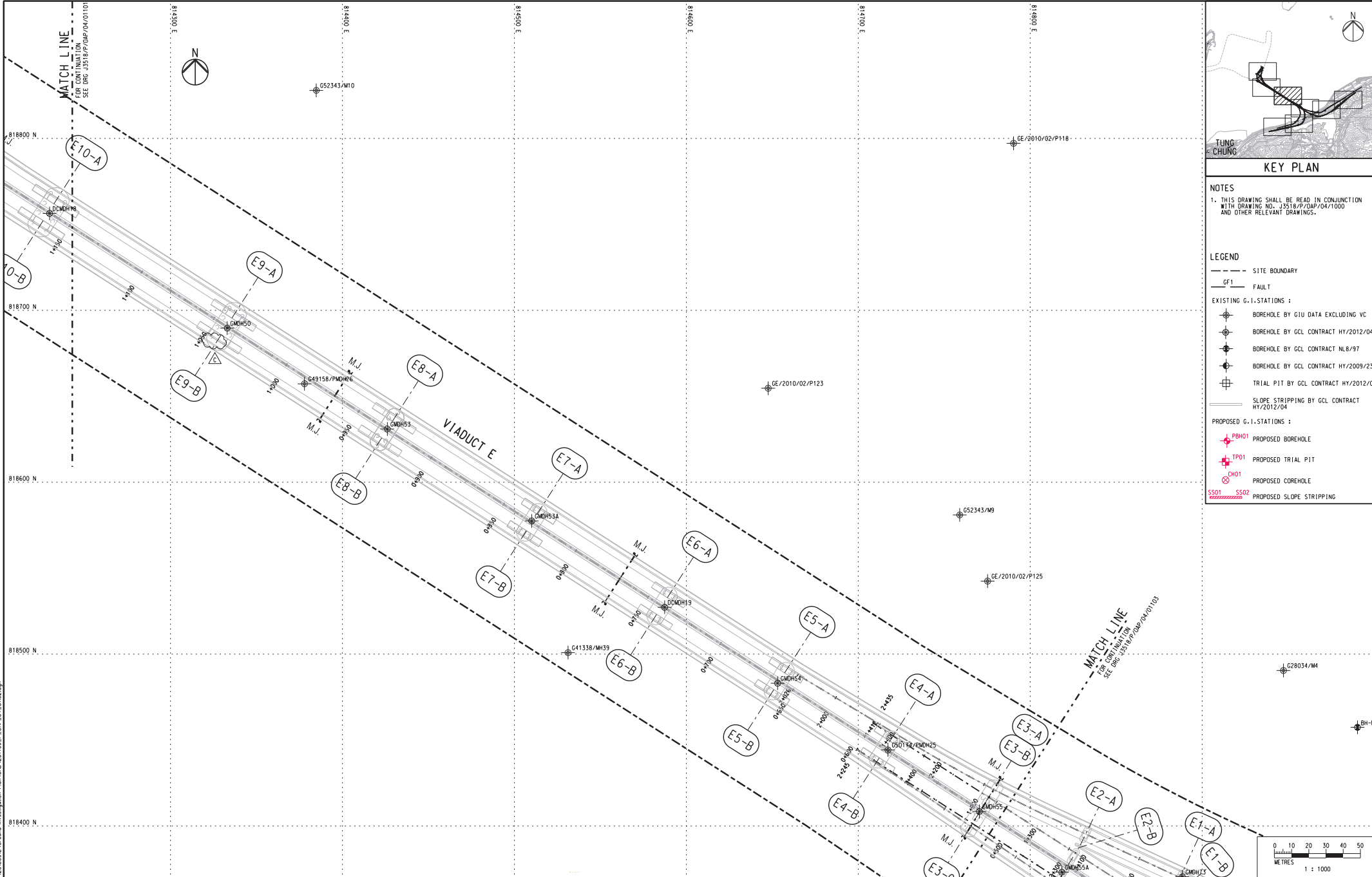
Rev	Description	By	Date	Rev	Description	By	Date
A	SUBMISSION	RC	07/13				
B	SUBMISSION	RC	07/13				
C	SUBMISSION	RC	09/13				
D	SUBMISSION	RC	10/13				
E1	FOR INTERNAL REVIEW	RC	11/13				

Drawn	RL	Date	07/13
Checked	DS	Approved	DOP
Scale	1:1000 @ A1; 1:2000 @ A3		

Client	路政署 HIGHWAYS DEPARTMENT 香港渠務及港務工程處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office
Supervising Officer	AECOM
Contractor	Gammon
Originator	ARUP

Project Title	Contract No. HY/2012/07 Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section
Drawing title	Figure 1.2c
Drawing no.	J3518/P/OAP/04/01101
Rev.	E1

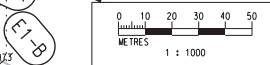
DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



KEY PLAN

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 NL8/97
 - ⊕ BOREHOLE BY GCL CONTRACT HY/2009/23
 - ⊕ TRIAL PIT 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



Printed by : 12/09/2013 File name : J:\3518\99\REC\000\20130912\Ground Investigation\Plan\CAD\23498_P_OAP_04_01102.dgn

Rev	Description	By	Date	Rev	Description	By	Date
A	SUBMISSION	RC	07/13				
B	SUBMISSION	RC	07/13				
C	SUBMISSION	RC	09/13				

Drawn	Date	Checked	Approved
RL	07/13		
DS		DOP	

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

Client

 路政署 HIGHWAYS DEPARTMENT
 香港港大橋港務工程管理有限公司
 Hong Kong Project Management Office

Supervising Officer

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

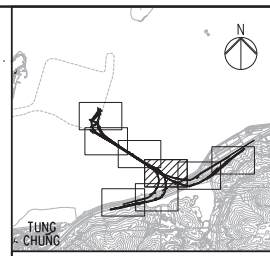
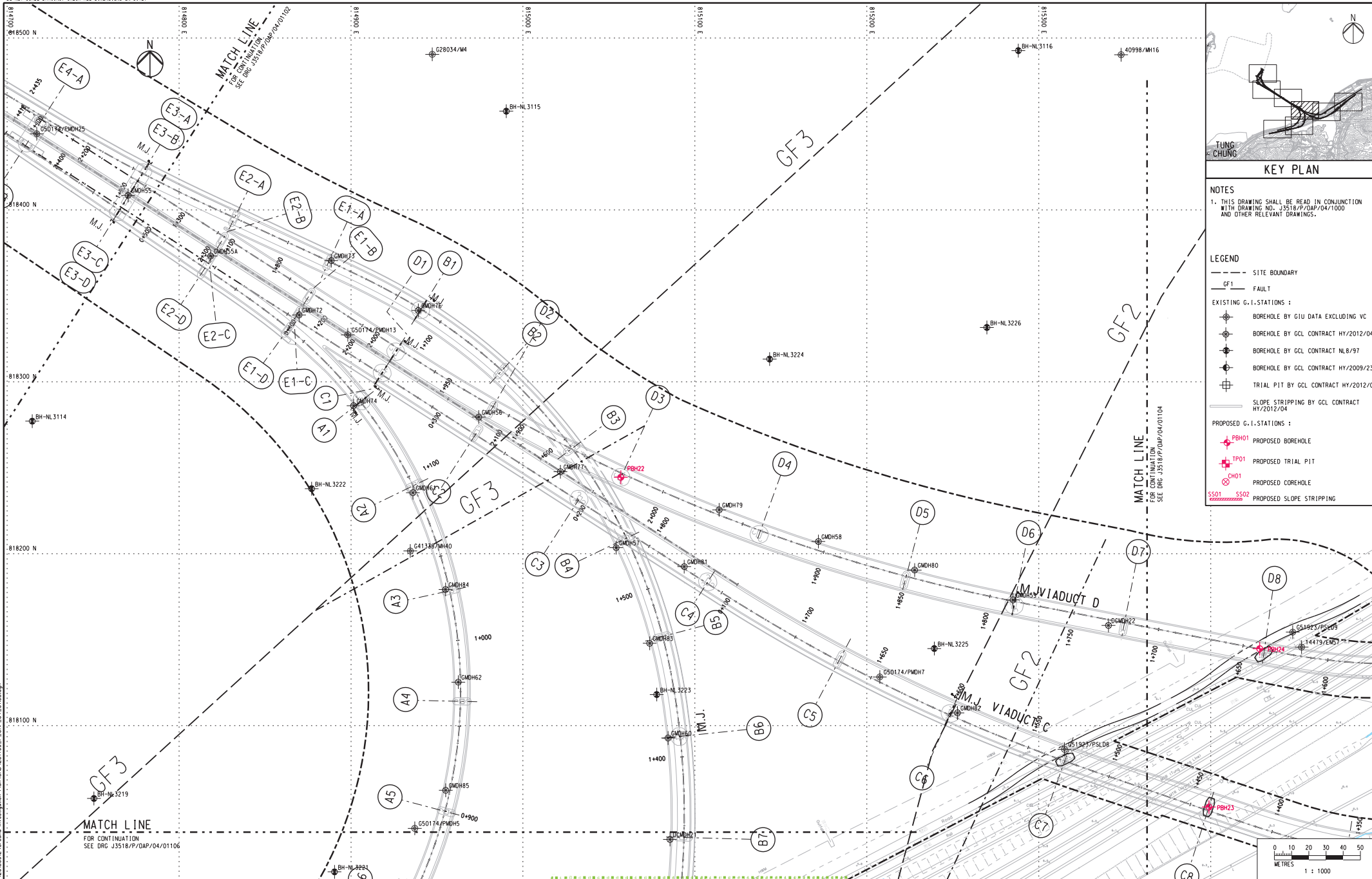
Contractor

Originator

Drawing title
Figure 1.2d

Drawing no. J3518/P/OAP/04/01102 Rev. C

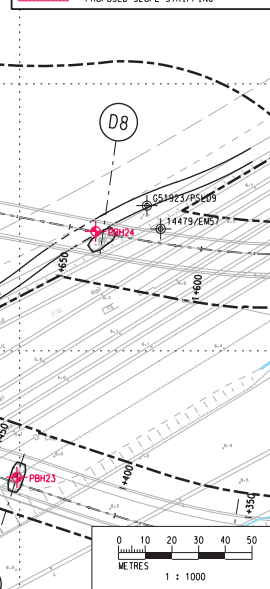
DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



KEY PLAN

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

- LEGEND**
- SITE BOUNDARY
 - - - 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
 - PROPOSED G.I.-STATIONS :
 - ⊕ PBH01 PROPOSED BOREHOLE
 - ⊕ TP01 PROPOSED TRIAL PIT
 - ⊕ CH01 PROPOSED COREHOLE
 - SS01 SS02 PROPOSED SLOPE STRIPPING



Printed by : 13/9/2013
 File name : J3518/P/OAP/04/1000.dwg
 Record : 20130927 Ground Investigation Plan CAD\23498_P_OAP_04_0103.dwg

Rev	Description	By	Date	Rev	Description	By	Date
A	SUBMISSION	RC	07/13				
B	SUBMISSION	RC	07/13				
C	SUBMISSION	RC	09/13				

Checked	Approved
DS	DOP

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

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

Project Title

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

Supervising Officer

Drawing title

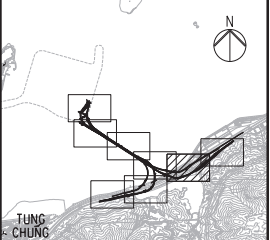
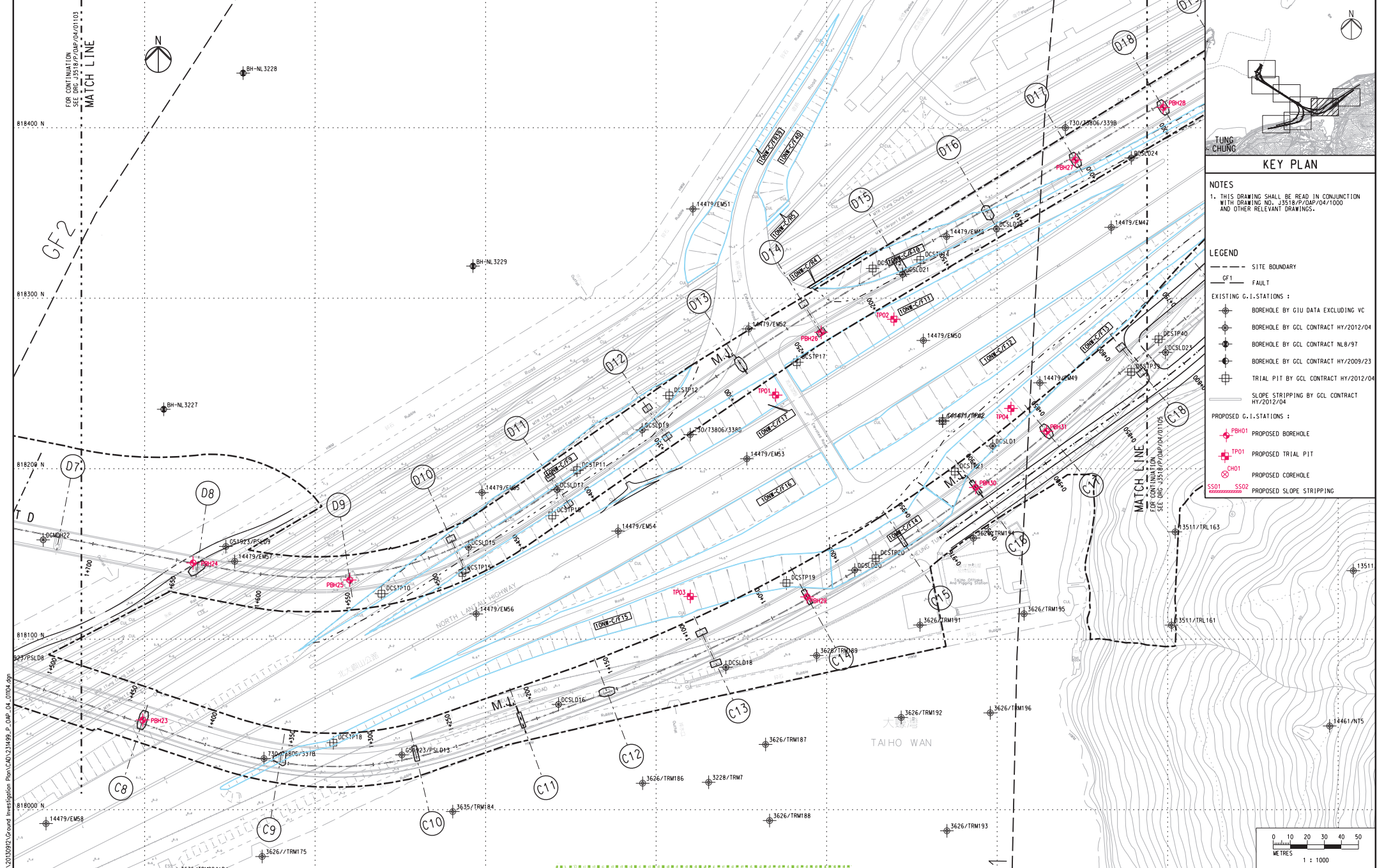
Figure 1.2e

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

Contractor

Originator

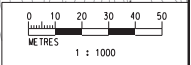
DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



KEY PLAN

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

- LEGEND**
- - - SITE BOUNDARY
 - - - FAULT
 - - - GF1
 - 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
 - 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
 港珠澳大橋香港工程總處
 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

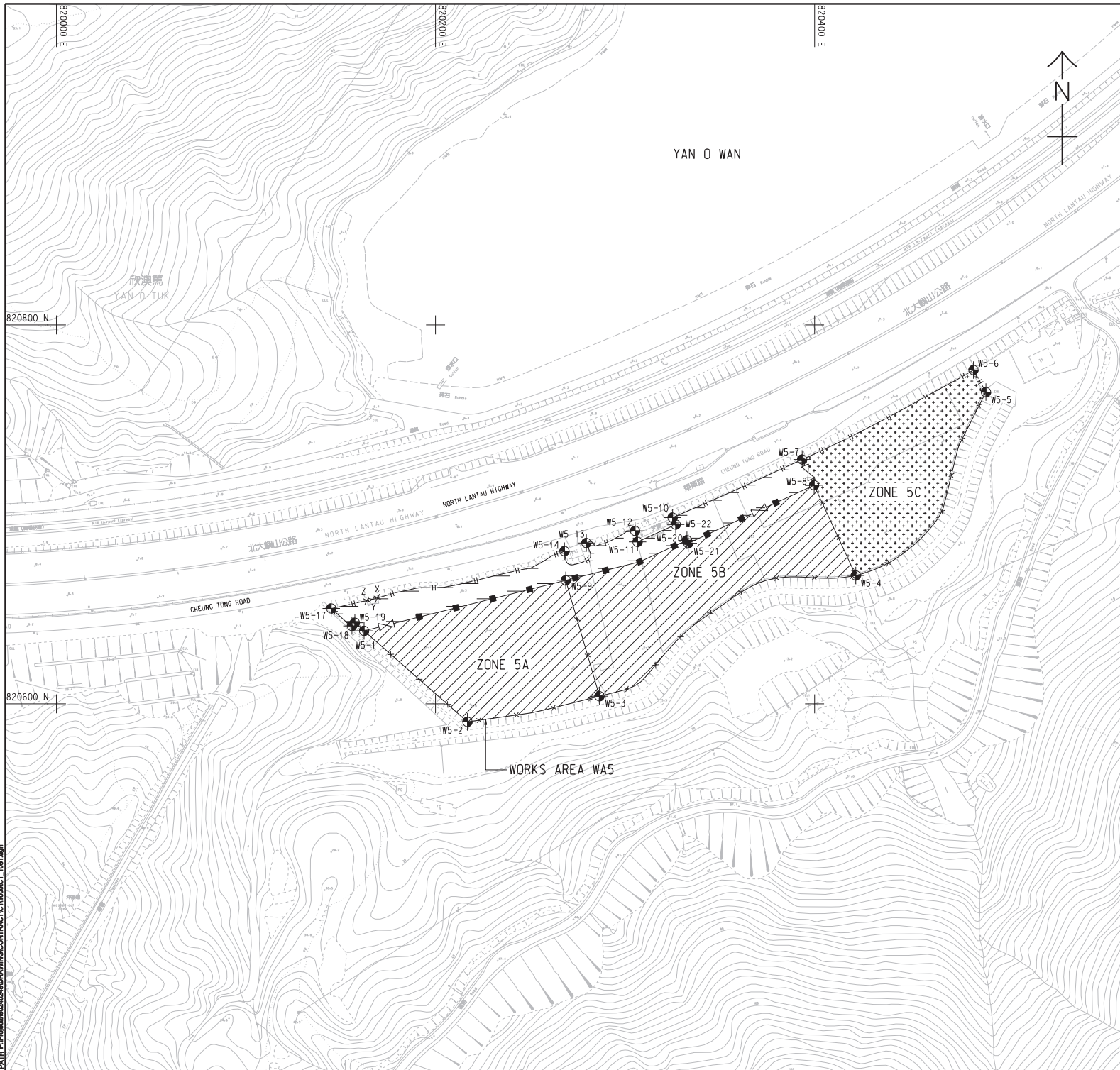
Contractor
Gammon

Originator
ARUP


Drawing title
Figure 1.2f

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







Printed by : 12/09/2013
 File name : J:\3518\99\REC\000\20120927\Ground Investigation Plan\CAD\231498_P_OAP_04_01104.dwg



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

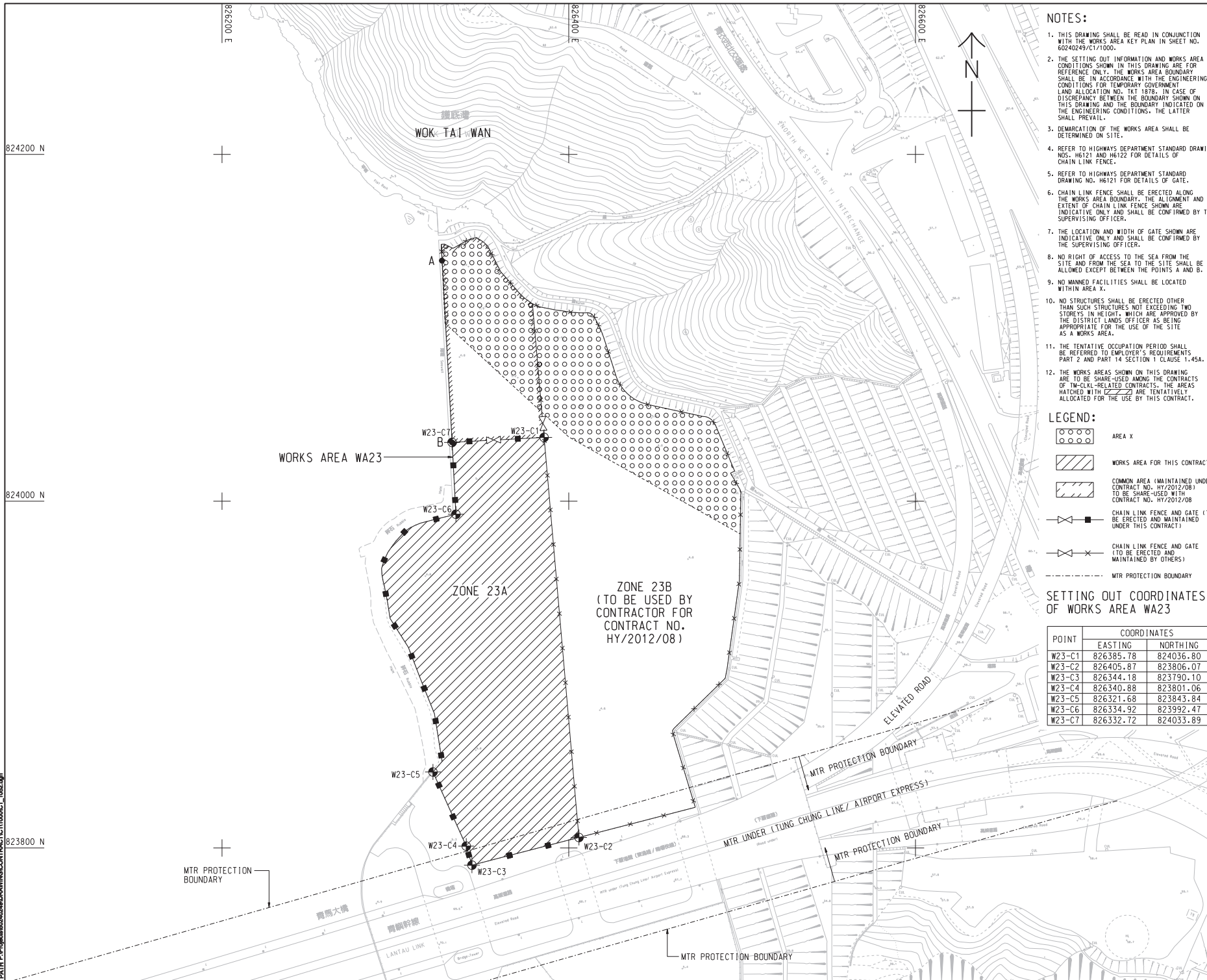
STATUS

SCALE	DIMENSION UNIT
A1:1000	METRES

KEY PLAN

Figure 1.2h

This drawing has been prepared for the use of the contractor. It may not be used, modified, reproduced or reissued without the prior written approval of AECOM. AECOM accepts no responsibility for any errors or omissions in this drawing. The contractor shall be responsible for the accuracy of the data used in this drawing.



NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/CT1/000.
2. 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. TKT 1879. IN CASE OF DISCREPANCY BETWEEN THE BOUNDARY SHOWN ON THIS DRAWING AND THE BOUNDARY INDICATED ON THE ENGINEERING CONDITIONS, THE LATTER SHALL PREVAIL.
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 hatching symbol] WORKS AREA FOR THIS CONTRACT
- [Cross-hatching 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 cross symbol] CHAIN LINK FENCE AND GATE (TO BE ERECTED 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

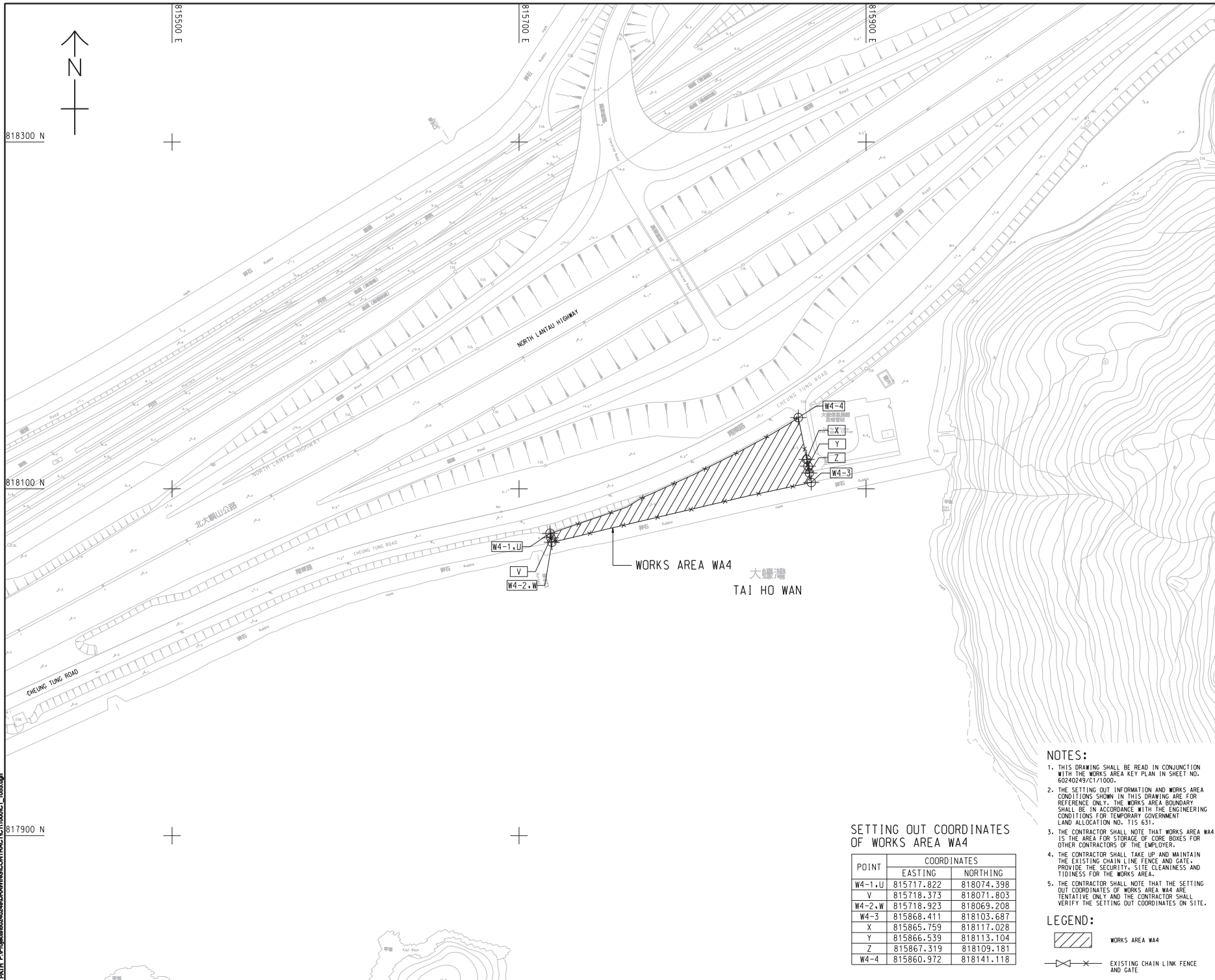
CONTRACT NO.
HY/2012/07

SHEET TITLE
WORKS AREA AND HOARDING PLAN

SHEET NUMBER
60240249/CT1/052

SHEET 2 OF 2

This drawing has been prepared for the use of AECOM by the client. It may not be used, copied, reproduced or modified in any way without the prior written consent of AECOM. AECOM accepts no responsibility, and disclaims any liability, for any loss or damage, however caused, arising from the use of this drawing. The client shall be responsible for the accuracy of the information provided to AECOM.



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 HIGHWAYS DEPARTMENT
 港務大樓管理工程管理處
 Hong Kong + Zhuhai + Hainan Bridge
 Hong Kong Project Management Office

CONSULTANT
 AECOM Asia Company Ltd.
 www.aecom.com

SUB-CONSULTANTS
 2/11/2012/16

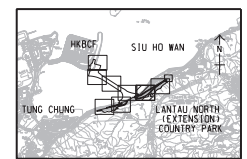
Figure 1.2j

ISSUE/REVISION

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

SCALE
 A1 : 1:1000

DIMENSION UNIT
 大呎
 METRES



PROJECT NO.
 60240249

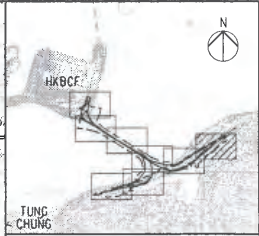
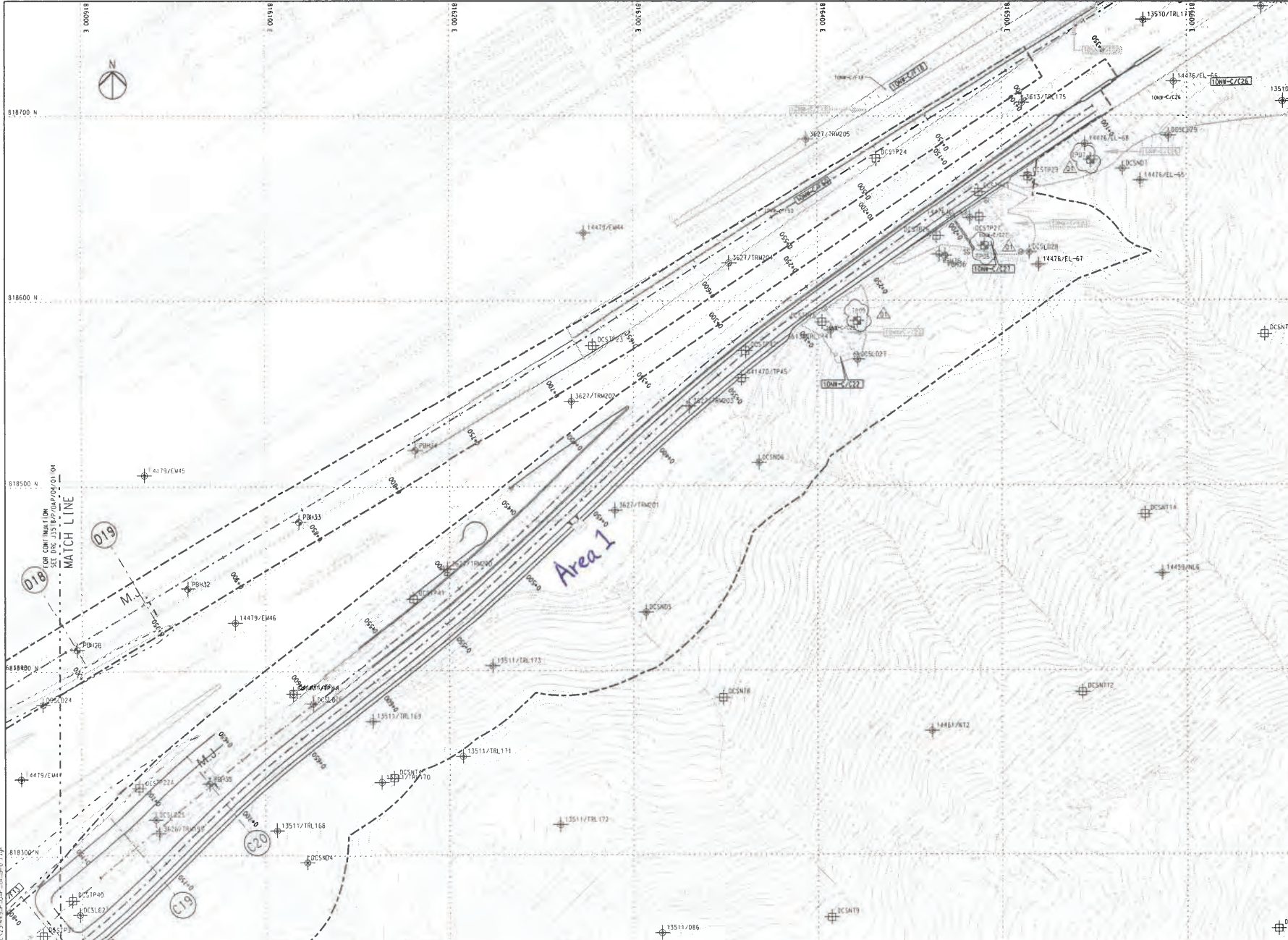
CONTRACT NO.
 HY/2012/07

SHEET TITLE
 WORKS AREA WA4

SHEET NUMBER
 60240249/C1/1053

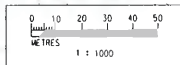
This drawing has been prepared for the use of AECOM, except as may be otherwise approved by AECOM, and shall not be used for any other purpose without the written consent of AECOM. Do not scale this drawing. All measurements must be taken from the actual dimensions.

DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



NOTES
 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 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 :
- ⊕ B-0 PROPOSED BOREHOLE
 - ⊕ T-0 PROPOSED TRIAL PIT
 - ⊕ C-01 PROPOSED COREHOLE
 - ⊕ S-01 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 港珠澳大桥香港工程指挥部 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office
Checked	Approved	
DS	DOP	
Scale		

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

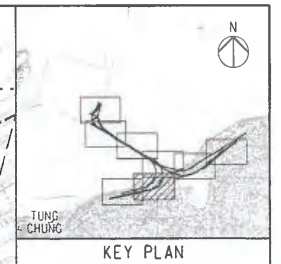
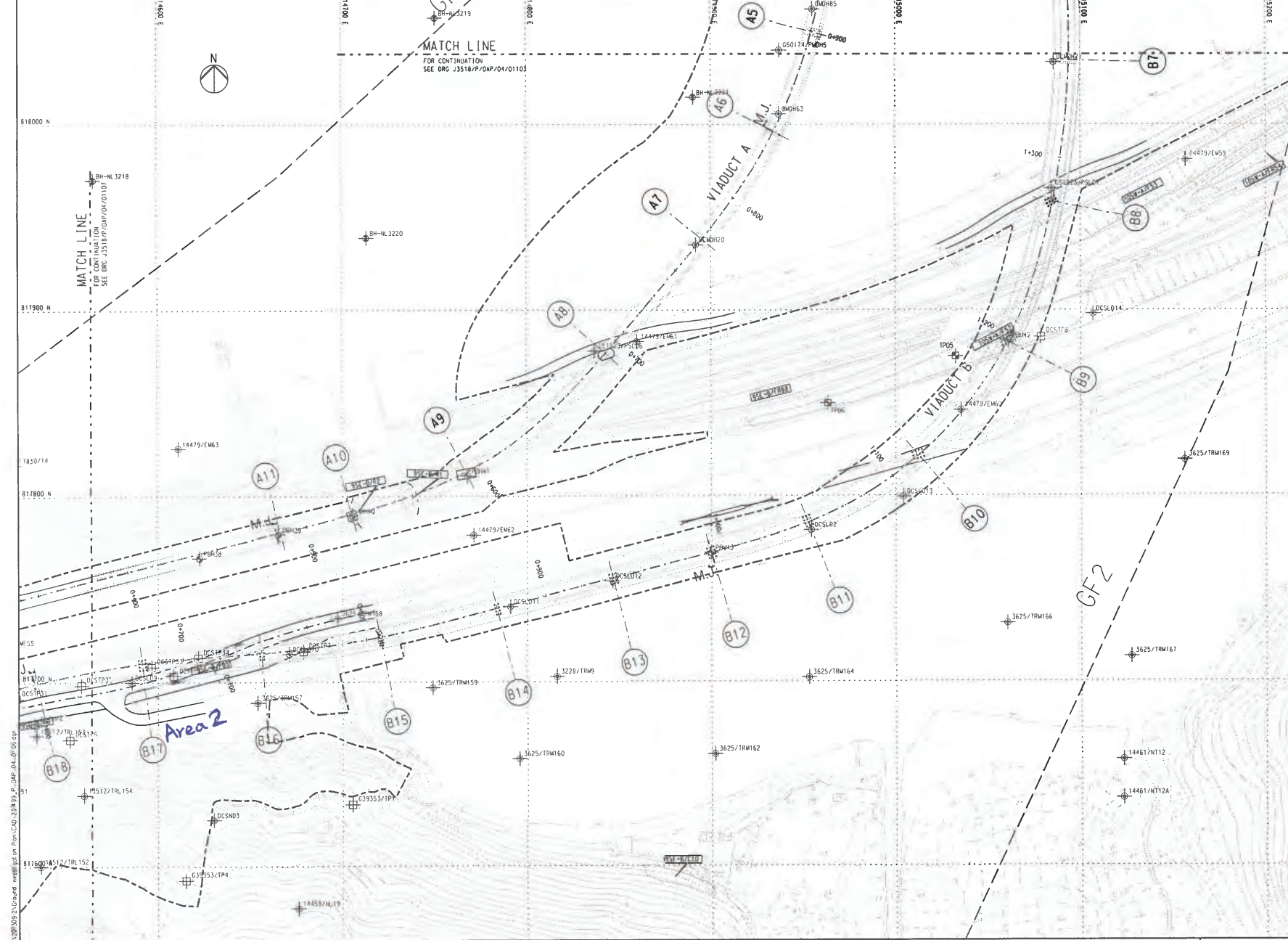
	Project Title Contract No. HY/2012/07 Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section
Supervising Officer	Contractor
Originator	

Drawing title
Figure 1.2k

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

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

DO NOT SCALE DRAWING. CHECK ALL DIMENSIONS ON SITE.



- NOTES**
- 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 N/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 :**
- ⊕ PROPOSED BOREHOLE
 - ⊕ PROPOSED TRIAL PIT
 - ⊕ E-01 PROPOSED COREHOLE
 - PROPOSED SLOPE STRIPPING



Rev	Description	By	Date	Rev	Description	By	Date
1	REVISION	RL	07/13				
2	REVISION	RL	07/13				
3	REVISION	RL	07/13				

Drawn: RL Date: 07/13
 Checked: DS Approved: DOP
 Scale: 1:1000 @ A1 / 1:2000 @ A3

Client 路政署 HIGHWAYS DEPARTMENT 港珠澳大桥香港工程管理有限公司 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office	Project Title Contract No. HY/2012/07 Tuen Mun - Chek Lap Kok Link Southern Connection Viaduct Section		Drawing Title Figure 1.2I
	Supervising Officer ARCOM	Contractor Gammon	
Drawing no. J3518/P/OAP/04/1106			Rev c

1.2 SCOPE OF REPORT

This is the Eleventh 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 September 2014.

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:

Land-Based Works

- Construction of pile cap superstructure of Viaduct B;
- Fence installation and relocation of Area 2, Viaduct A, B, C & D;
- Land Piling at Viaduct B & C;
- Piling platform installation for Viaduct B, C, D & E;
- Additional land GI, trial pits & lab testing
- Utility surveys; and
- Slope work of Slope 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9

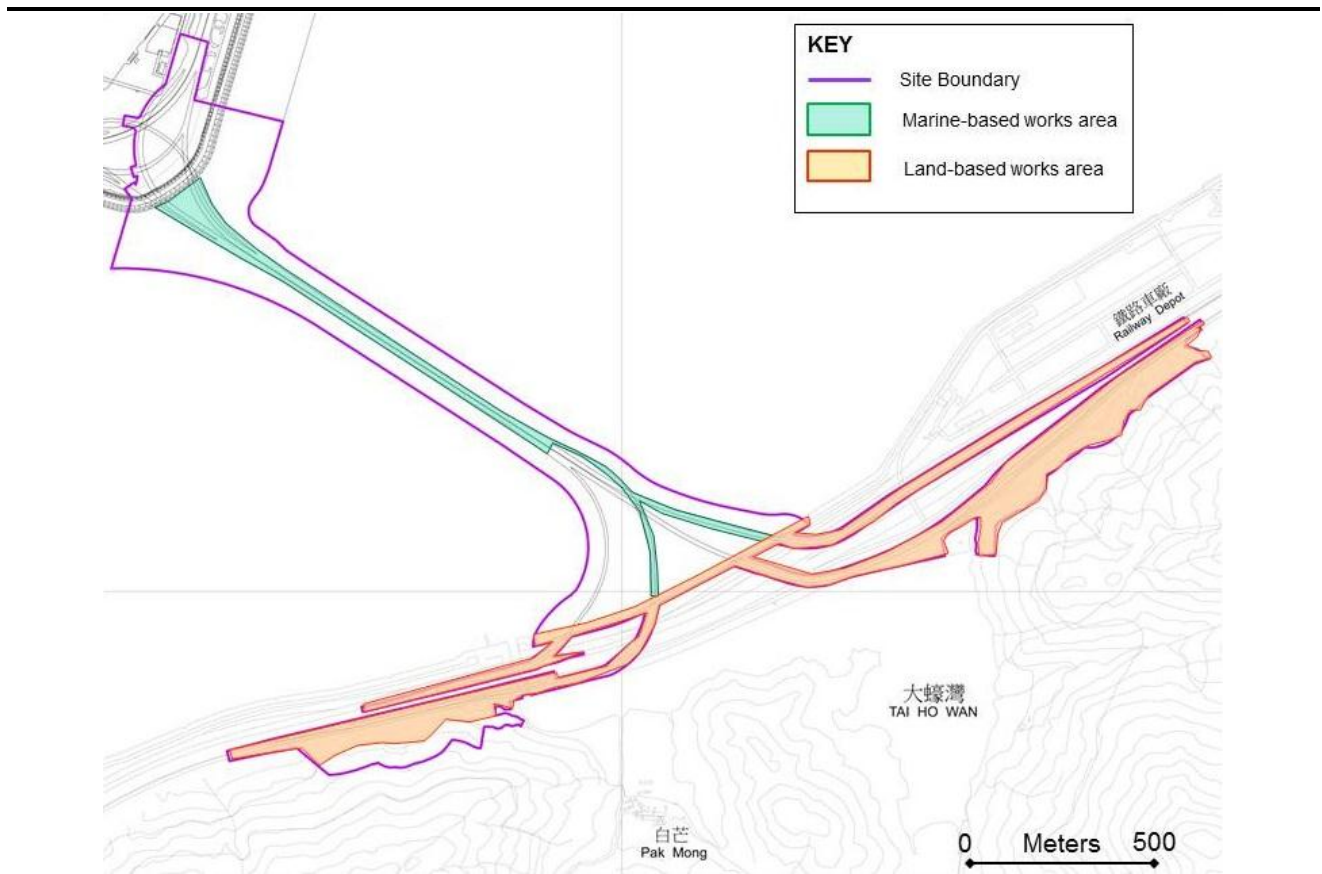
Marine-based Works

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

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 are 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

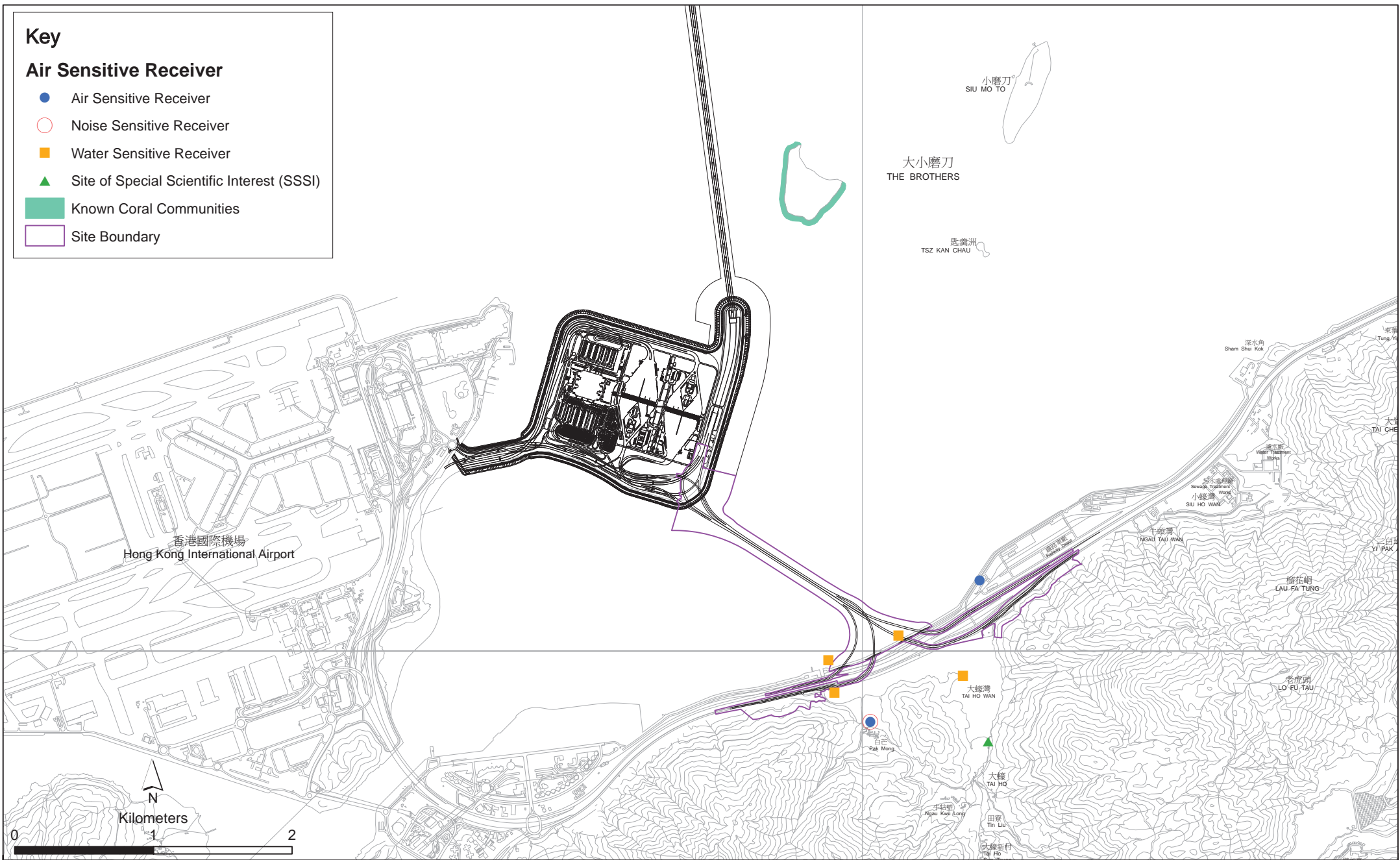


Figure 1.4

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 8	Pak Mong Village Watch Tower	Rooftop of the premise	1, 5, 11, 17, 23 and 27 September 2014
ASR 8A	Area 4	On ground at the Area 4	

High Volume Samplers (HVSs) were used for carrying out 1-hour and 24-hr TSP monitoring on 1, 5, 11, 17, 23 and 27 September 2014 at ASR8 (Pak Mong Village Watch Tower) and ASR8A (Area 4) (*Figure 2.1; Table 2.1*) in accordance with the requirements stipulated in the Updated EM&A Manual. Wind anemometer was installed at the rooftop of Pak Mong Village Watch Tower for logging wind speed and wind direction. Details of the equipment deployed are given in *Table 2.2*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

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)

Key

- Original Monitoring Station
- Alternative Monitoring Station
- Site Boundary

AQMS	X	Y
ASR9A	815847.40	818508.64
ASR9C	816399.52	818946.65
ASR8	815059.45	817488.99
ASR8A	815856.14	818118.14

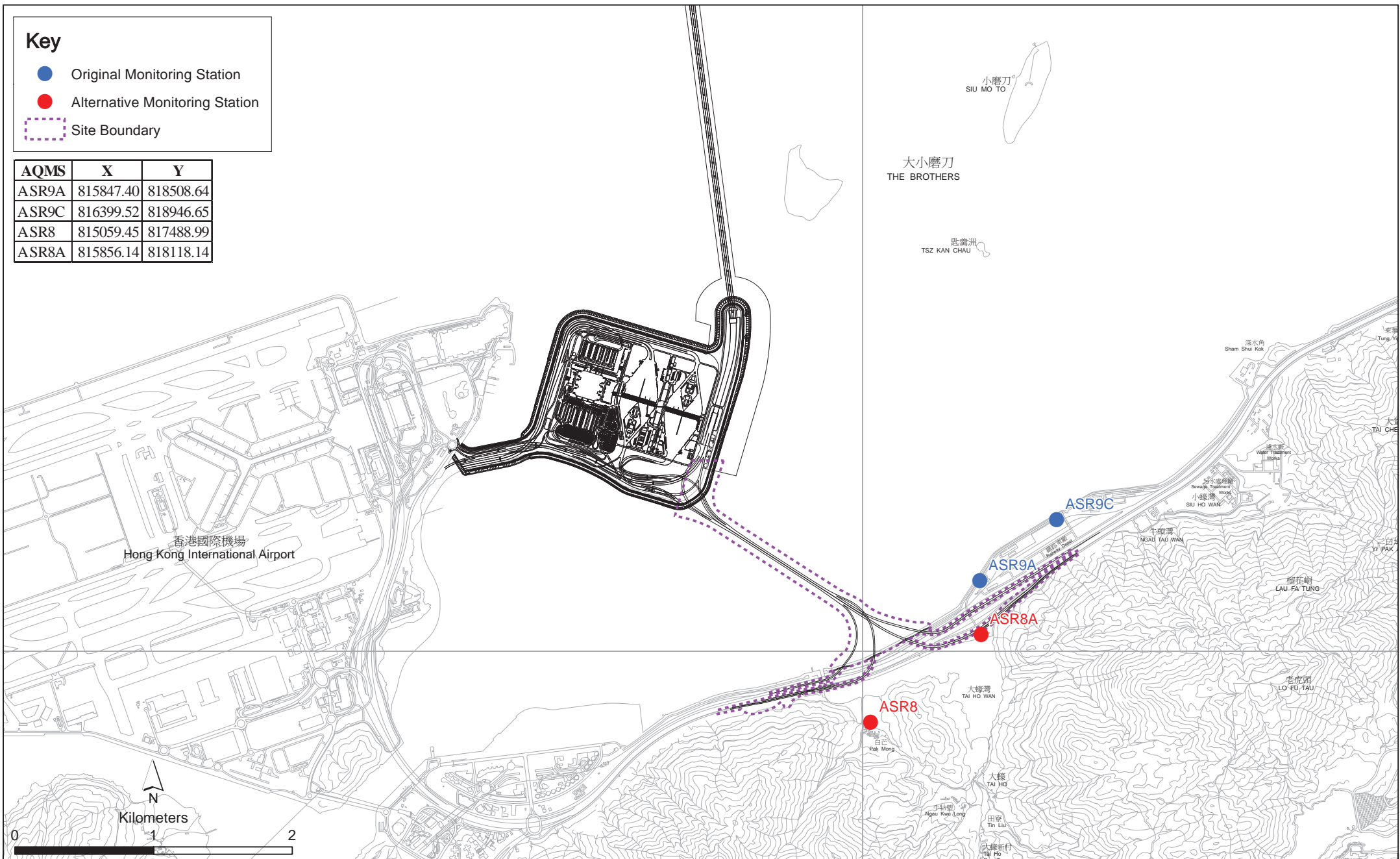


Figure 2.1

Locations of Air Quality Monitoring Stations

File: T:\GIS\CONTRACT\0215660\Mxd\0215660_AQMS.mxd
Date: 6/12/2013

Remark: Air Quality Monitoring Stations ASR9A and ASR9C (Siu Ho Wan MTRC Depot) proposed in accordance with the Updated EM&A were temporarily relocated to ASR8A and ASR8, respectively.

**Environmental
Resources
Management**



2.1.2 *Monitoring Schedule for the Reporting Month*

The schedule for air quality monitoring in September 2014 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*

	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	89	60 - 148	394	500
ASR 8	80	59 - 130	393	500

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

	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	51	41 - 60	178	260
ASR 8	49	39 - 65	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 the rooftop of Pak Mong Village Watch Tower, including wind speed and wind direction, is provided in *Appendix H*. No meteorological information was collected in the morning of 17 September 2014 due to adverse weather condition.

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 1, 5, 11, 17, 23 and 27 September 2014 using sound level meter at the designated monitoring station NSR 1 (*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 equipment deployed

Key

- Noise Monitoring Station
- Site Boundary

NMS	X	Y
NSR1	815059.45	817488.99

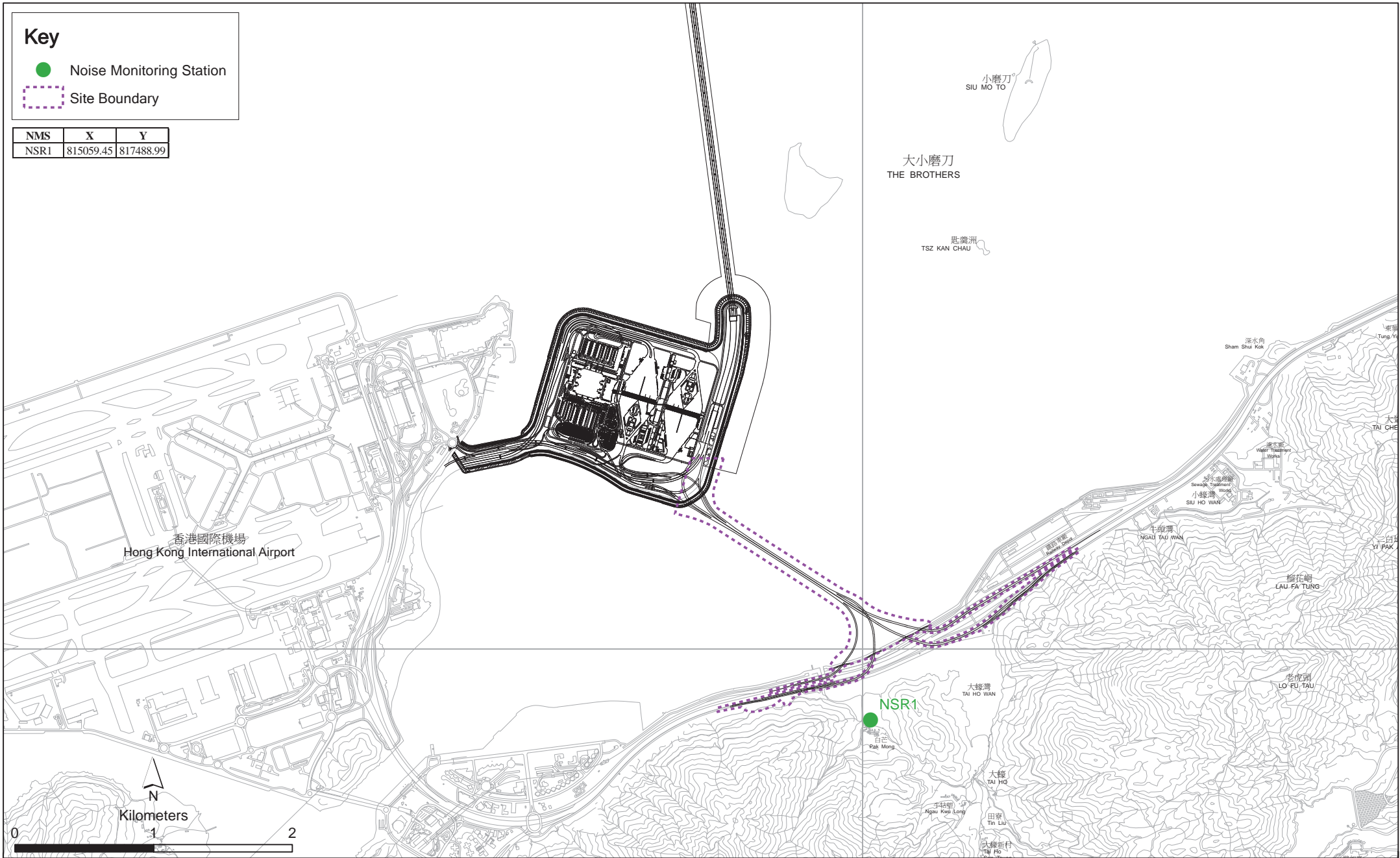


Figure 2.2

Locations of Noise Monitoring Stations

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 1	Pak Mong Village Watch Tower	Rooftop of the premise	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	1, 5, 11, 17, 23 and 27 September 2014

Table 2.6 *Noise Monitoring Equipment*

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

2.2.2 *Monitoring Schedule for the Reporting Month*

The schedule for construction noise monitoring in the reporting period is provide 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), L_{eq} (30mins)	Range, dB(A), L_{eq} (30mins)	Limit Level, dB(A), L_{eq} (30mins)
NSR 1	57	55 - 59	75

No noise Action Level and Limit level exceedance was recorded at all monitoring stations 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 is provided in *Appendix D*.

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

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			

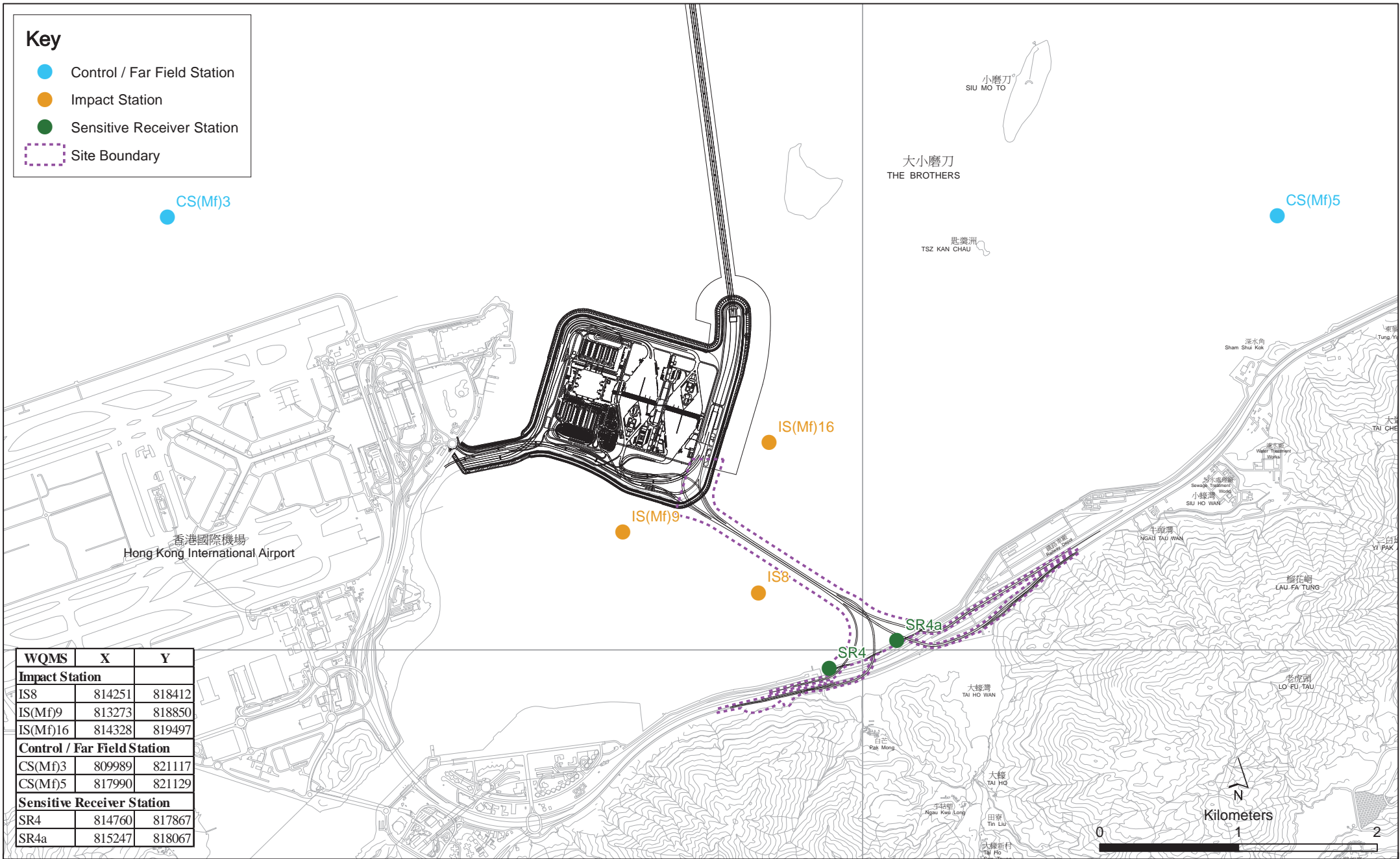
*Notes:

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*.

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 2.9 **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 September 2014 is provided in *Appendix F*. It is useful to note that no impact water quality monitoring was conducted on 9 and 16 September 2014 due to suspension of marine works and adverse weather condition, respectively.

2.3.3 **Results and Observations**

A total of 11 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*.

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.

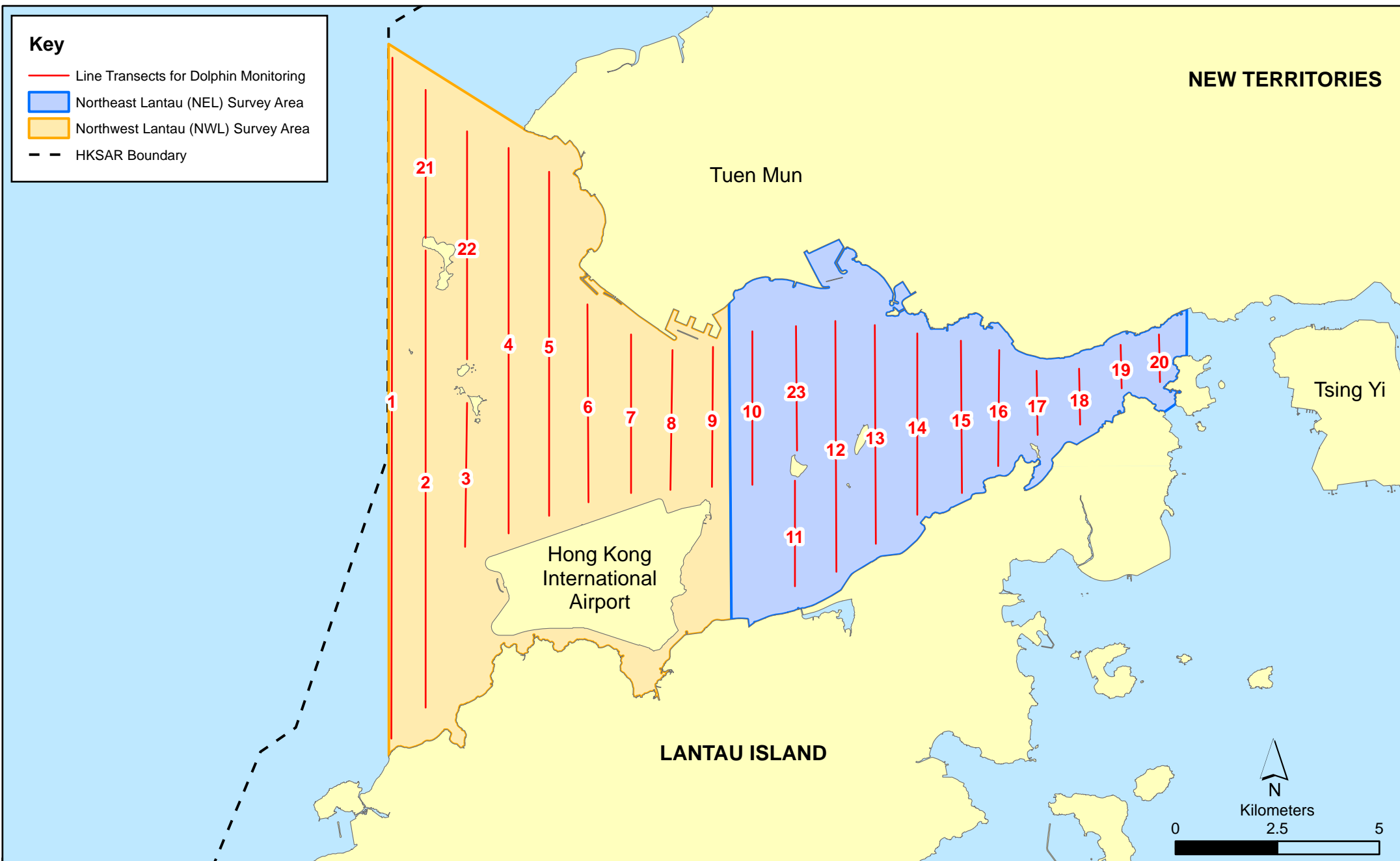


Figure 2.4

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 2, 11, 19 and 22 of September 2014 (*Appendix F*).

2.4.7 *Results and Observations*

A total of 298.52 km of survey effort was collected, with 100% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) during the September's surveys. Among the two areas, 116.40 km and 182.12 km of survey effort were collected from NEL and NWL survey areas respectively. The total survey effort conducted on primary and secondary lines were 214.57 km and 83.95 km respectively. The survey efforts are summarized in *Appendix K*.

A total of eight (8) groups of thirty-four (34) Chinese White Dolphins were sighted during the two sets of monitoring surveys in September 2014. All sightings were made in NWL during the two sets in September 2014, while no dolphin was sighted at all in NEL in this month. All except one sighting were made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. The distribution of dolphin sightings 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 September 2014 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: Sept 2 nd /11 th	0.0	0.0
	Set 2: Sept 19 th /22 nd	0.0	0.0
NWL	Set 1: Sept 2 nd /11 th	5.7	28.6
	Set 2: Sept 19 th /22 nd	4.3	18.8

Note: Dolphin Encounter Rates are deduced from the two sets of surveys (two surveys in each set) in September 2014 in Northeast (NEL) and Northwest Lantau (NWL)

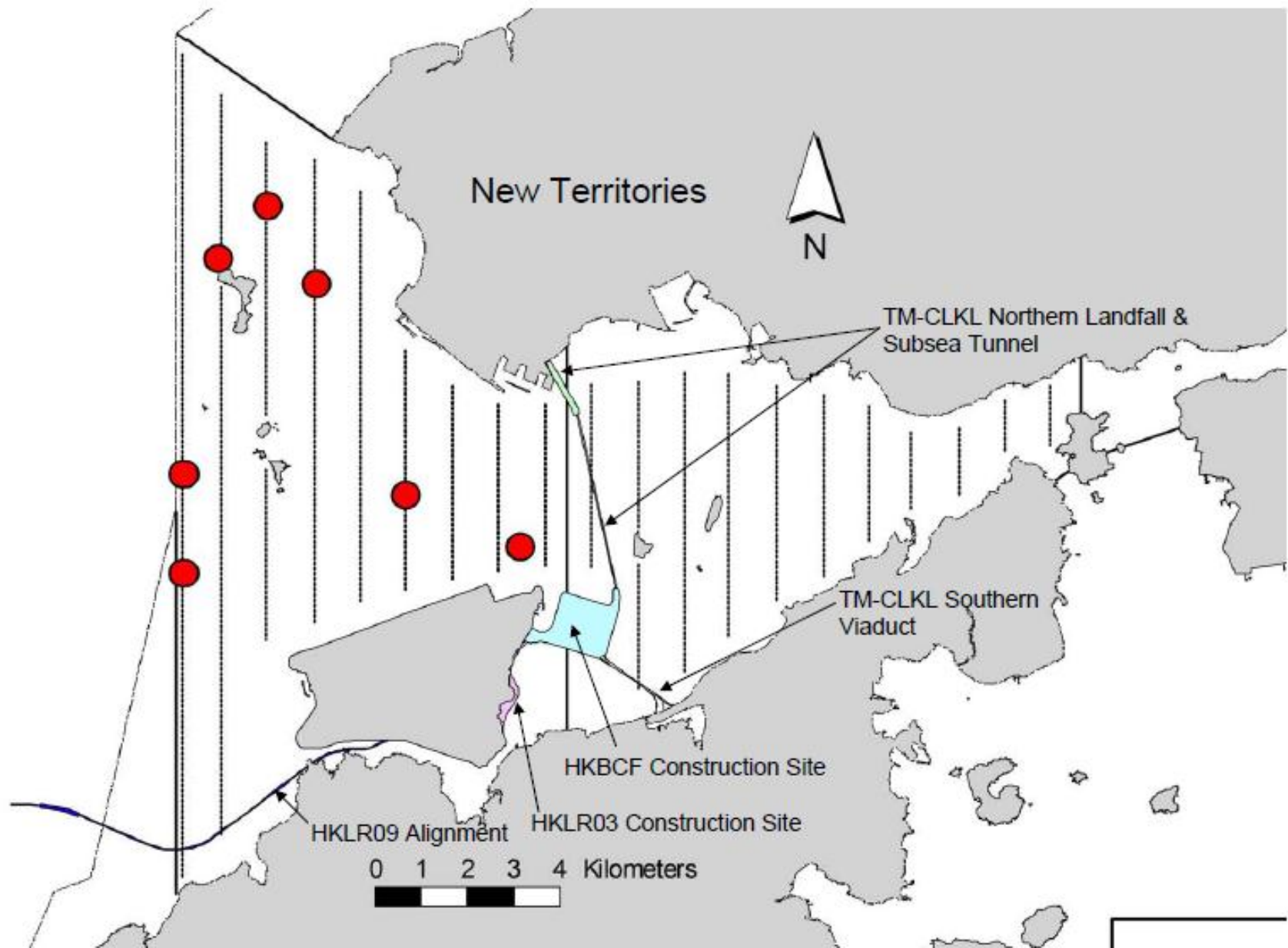


Figure 2.5

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 September 2014)

Date 06/10/2014

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	5.0	3.8	23.7	18.1

Note: Overall dolphin encounter rates (sightings per 100km of survey effort) from all four surveys are conducted in September 2014 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau

The average group size of Chinese White Dolphins in September 2014 was 4.25 individuals per group. Three (3) dolphin groups were composed of one to three (1-3) animals, while five (5) dolphin groups were composed of five to six (5-6) animals with slightly larger group size. Detailed results of dolphin monitoring in this reporting month are presented in *Appendix K*.

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 sighting of Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) were recorded in September 2014 during the exclusion zone monitoring.

2.5 CORAL MONITORING

No Post-Translocation Coral Monitoring Exercise was conducted in the reporting month.

2.6 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, five (5) site inspections were carried out on 4, 10, 19, 25 and 30 September 2014.

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 September 2014	<p>Temporary platform at seafront</p> <ul style="list-style-type: none"> Welding machine was not placed on decoupling pad. <p>Pier E9</p> <ul style="list-style-type: none"> Grouting material was observed on the platform. Chemical container was found disposed improperly. Dumping permit was expired. 	<p>Temporary platform at seafront</p> <ul style="list-style-type: none"> Decoupling pad should be provided to the machine. <p>Pier E9</p> <ul style="list-style-type: none"> The excessive grouting material should be cleaned up. The chemical container was removed immediately. An updated dumping permit should be provided.
10 September 2014	<p>Site Access 9B</p> <ul style="list-style-type: none"> Refuse was accumulated in the drainage on slope. <p>Pak Mong</p> <ul style="list-style-type: none"> EP was missing <p>Pier D9</p> <ul style="list-style-type: none"> A chemical container was not placed in drip tray. 	<p>Site Access 9B</p> <ul style="list-style-type: none"> The container was reminded to remove the refuse in drainage on slope. <p>Pak Mong</p> <ul style="list-style-type: none"> The contractor should place the updated EP at the gate. <p>Pier D9</p> <ul style="list-style-type: none"> The chemical container was removed immediately.
19 September 2014	<p>Seafront</p> <ul style="list-style-type: none"> Chemical containers were found placed without drip tray. Stagnant water was found ponding over the tarpaulin sheet inside a skip on rockfill platform. <p>Pier B6</p> <ul style="list-style-type: none"> A drip tray for generator was nearly overflowing. <p>Pier E12</p> <ul style="list-style-type: none"> The dumping permit was found expired. 	<p>Seafront</p> <ul style="list-style-type: none"> The chemical containers were removed immediately. Stagnant water was removed immediately. <p>Pier B6</p> <ul style="list-style-type: none"> The contractor was reminded to clear stagnant water. <p>Pier E12</p> <ul style="list-style-type: none"> The contractor was reminded to update the dumping permit.
25 September 2014	<p>Seafront</p> <ul style="list-style-type: none"> Stagnant water was accumulated in a drip tray for welding machine. Waste container was full. Refuse was accumulated in drainage. <p>Pier B1</p> <ul style="list-style-type: none"> Oil stain was found dispersed in the sea. <p>WA5</p> <ul style="list-style-type: none"> Refuse was accumulated at the site entrance. <p>General reminder</p> <ul style="list-style-type: none"> The contractor was reminded to improve the watering system 	<p>Seafront</p> <ul style="list-style-type: none"> The contractor was reminded to clean up the stagnant water. The contractor should routinely dispose the waste on site. No waste should be accumulated in drainage. <p>Pier B1</p> <ul style="list-style-type: none"> The contractor should clean up the oil stain. <p>WA5</p> <ul style="list-style-type: none"> The contractor should remove the refuse.

Inspection Date	Environmental Observations	Recommendations/ Remarks
30 September 2014	<p>WA5</p> <ul style="list-style-type: none"> Chemical containers were found placed without drip tray and oil stain was found at the bottom of them. A locker was incorrectly labelled 'Chemical Waste'. A drip tray for generator was unplugged. Waste water from washing machine had no proper treatment. Waste paint was found on site. Chemical waste locker was found damaged. <p>Slope BC9</p> <ul style="list-style-type: none"> A drip tray was found damaged. Grouting material was found accumulated in the grouting station. Soil was accumulated on tarpaulin sheet. Soil was accumulated near the bund on slope. Refuse was found on slope. <p>Pak Mong</p> <ul style="list-style-type: none"> Refuse was found in Tai Ho Steam Channel. A chemical container was placed without drip tray. Refuse was found on site. 	<p>WA5</p> <ul style="list-style-type: none"> The contractor removed the chemical containers immediately and was reminded to remove the oil stain. The incorrect label was removed immediately. The drip tray should be plugged. Proper treatment to waste water should be provided. Waste paint should be disposed properly. The contractor should repair the locker. <p>Slope BC9</p> <ul style="list-style-type: none"> The contractor should provide a drip tray which can avoid waste water runoff. The contractor should avoid any runoff from grouting station. Soil on tarpaulin sheet should be cleaned up regularly. The contractor should avoid soil runoff from slope and accumulation at the bund. <p>Pak Mong.</p> <ul style="list-style-type: none"> Refuse should be removed. The contractor should avoid any disposal into water body and clean up the refuse. The chemical container should be placed in drip tray. Refuse should be disposed properly.

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

2.7 WASTE MANAGEMENT STATUS

The Contractor had 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. 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 Materials ^(a) (m ³)	Imported Fill (m ³)	Inert Construction Waste Re-used (m ³)	Non-inert Construction Waste ^(b) (kg)	Recyclable Materials ^(c) (kg)	Chemical Wastes (kg)	Marine Sediment (m ³)	
							Category L	Category M (M _p & M _f)
September 2014	7,722	140	175	238,010	34,351	0	400	132

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.

2.8 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/B	28 Jan 2014	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
Billing Account for Disposal	7017735	10 Jul 2013	End of Project	GCL	-
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)
Construction Waste Disposal Account	7017735	10 Jul 2013	N/A	GCL	Waste disposal in Contract HY/2012/07
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	GW-RS0419-14	15 May 2014	13 Nov 2014	GCL	For loading & unloading on NLH near Viaducts A & B
Construction Noise Permit	GW-RS0226-14	30 Mar 2014	29 Sep 2014	GCL	For loading & unloading on NLH near Viaduct D
Construction Noise Permit	GW-RS0792-14	31 Jul 2014	24 Dec 2014	GCL	Broad Permit for Works at Seafront & Marine Piers & Pier B9
Construction Noise Permit	GW-RS0700-14	21 Jul 2014	31 Dec 2014	GCL	For loading & unloading on NLH near Viaduct A & B
Dumping Permit/ Loading Permit (Type 1 - Open Sea Disposal)	(4) in EP/MD/14-075	25 Sep 2013	N/A	GCL	-
Chemical Waste Registration	5213-951-G2380-17	12 Jun 2014	N/A	GCL	Viaducts A, B, C, D & E
Construction Noise Permit for night works and works in general holidays	GW-RS0646-14	27 Jun 2014	26 Oct 2014	GCL	Broad Permit for Works at Seafront & Marine Piers & Pier B9
Construction Noise Permit for night works and	GW-RS0647-14	28 Jun 2014	26 Oct 2014	GCL	Pier C7 & D8 at CEDD Access Road

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
works in general holidays					
Construction Waste Disposal Account	7017735	10 Jul 2013	N/A	GCL	-
Construction Noise Permit	GW-RW0640-14	28 Aug 2014	27 Feb 2015	GCL	General works at WA5
Marine Dumping Permit	EP/MD/15-066	28 Jul 2014	27 Jan 2015	GCL	For dumping Type I sediment
Construction Noise Permit for night works and works in general holidays	GW-RS0942-14	11 Sep 2014	14 Mar 2015	GCL	For Plant mobilization using tractor
Construction Noise Permit for night works and works in general holidays	GW-RS1032-14	25 Sep 2014	28 Mar 2015	GCL	For Load unload at NLH near Viaduct D
Marine Dumping Permit	EP/MD/15-098	1 Sep 2014	30 Sep 2014	GCL	For dumping Type I (Dedicated Site) and Type II sediment

2.9 *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.

2.10 *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*.

2.11 *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*.

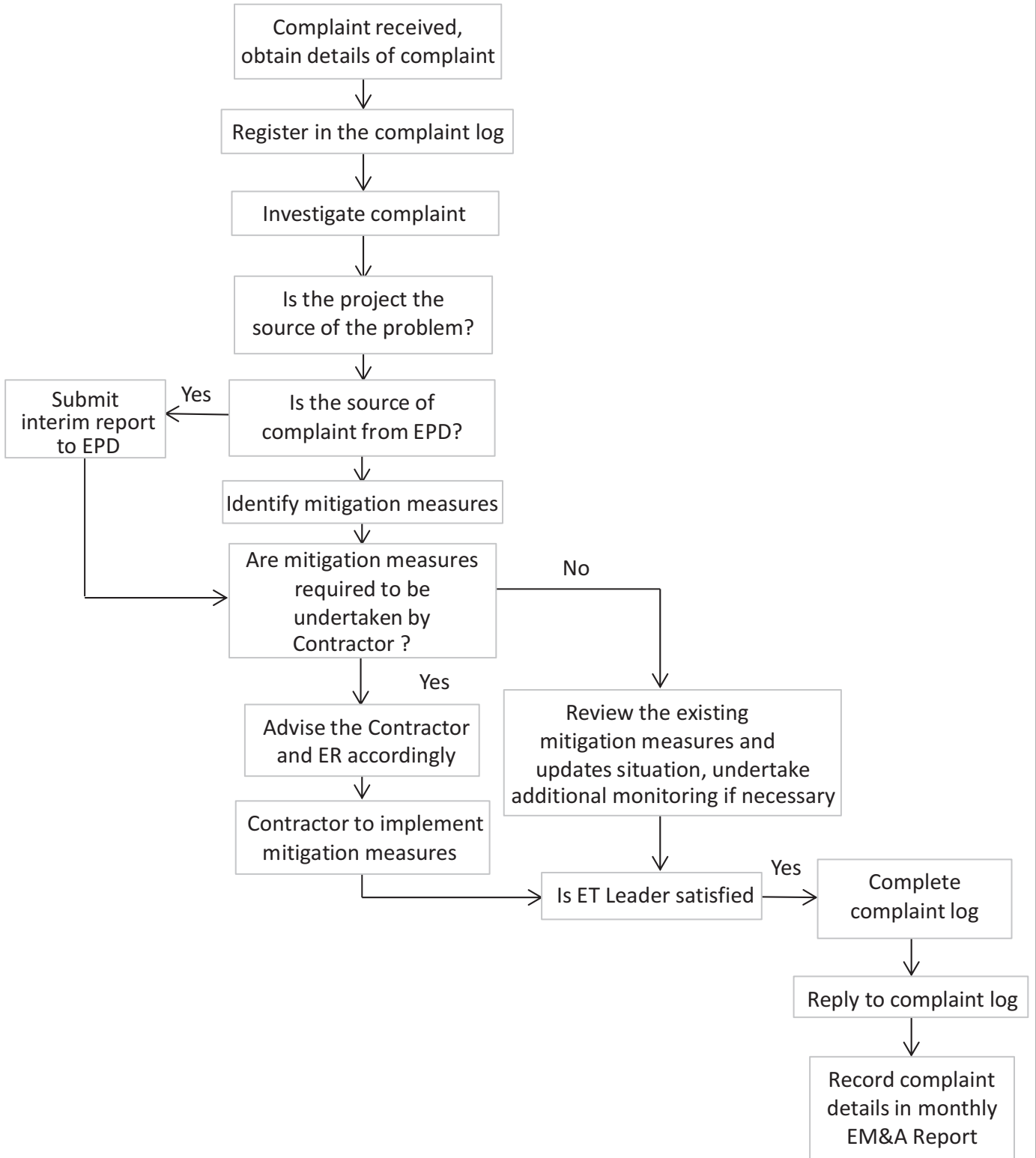


Figure 2.6

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 October 2014 will be:

Marine Works

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

Land-based Works

- Construction of pile cap superstructure of Viaduct B;
- Fence installation and relocation of Area 2, Viaducts A, B, C & D;
- Land Piling at Viaduct B;
- Piling platform installation for Viaducts B, C, D & E;
- Additional land GI, trial pits & lab testing;
- Utility surveys; and
- Slope work of Slope 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 October 2014 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 schedule for environmental monitoring in October 2014 is provided in *Appendix F*.

4.1 CONCLUSIONS

This Eleventh Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 30 September 2014, in accordance with the Updated EM&A Manual and the requirements of EP-354/2009/B.

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-hr TSP, 24-hr TSP and noise monitoring complied with the Action and Limit levels in the reporting period.

A total of eight (8) groups of thirty-four (34) Chinese White Dolphins were sighted during the two sets of monitoring surveys in September 2014. All sightings were made in NWL during the two sets of surveys in September 2014, while no dolphin was sighted at all in NEL in this month. All except one (1) sighting were made on primary lines during on-effort search, and none of the dolphin groups was associated with operating fishing vessel. 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 were noticeable from general observations.

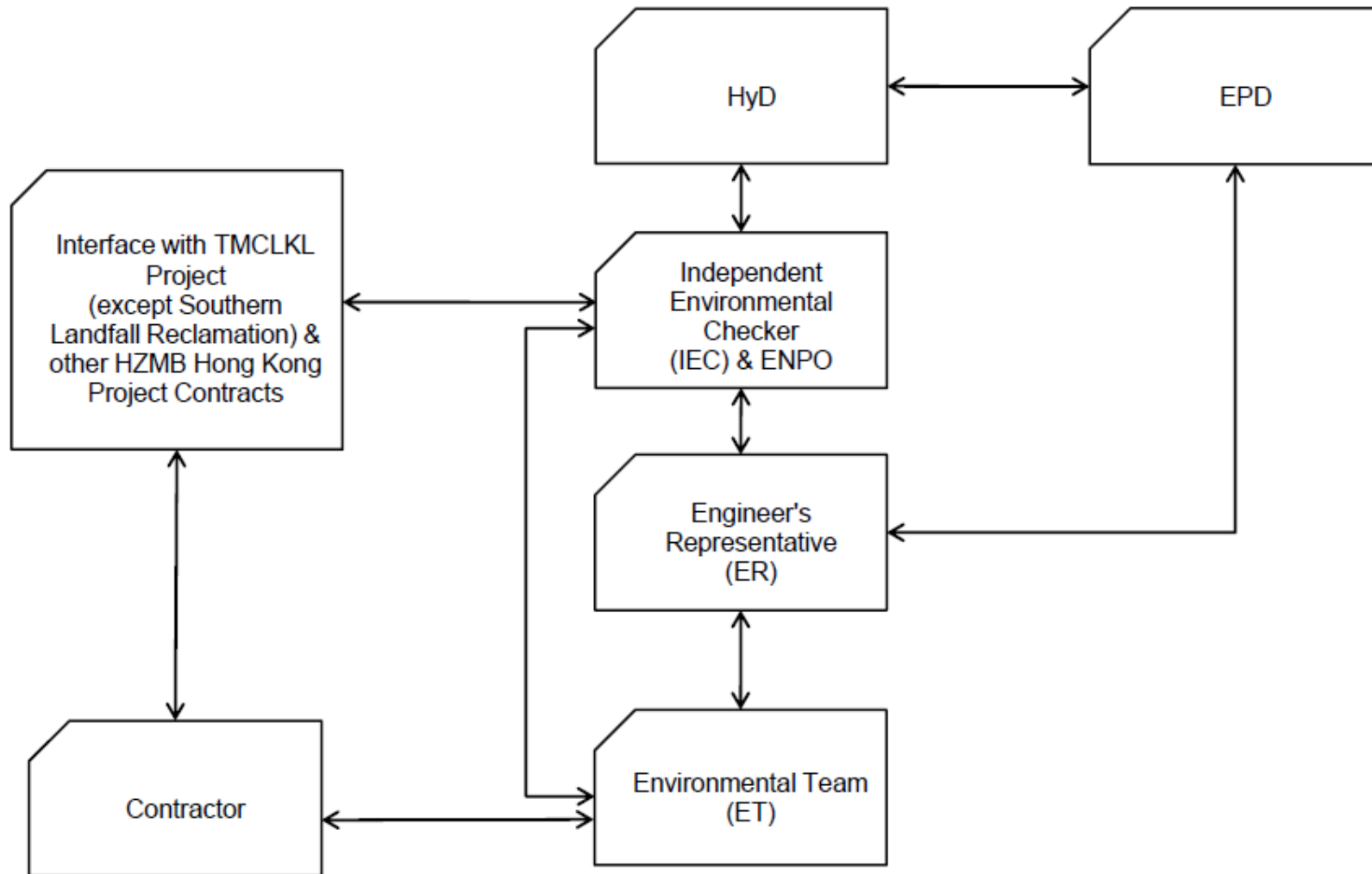
Environmental site inspection was carried out five (5) times in September 2014. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

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	2014																			
											August				September				October				November							
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10	17		
HY/2012/07 - TM-CLK Link-SC [DWP rD1] - Status Update 21-08-2014																														
Contract Key Dates																														
Possession Dates / Access Period																														
POS02	Portion A (Commencement of Works+499 days)	0	03-Nov-14*	0%	0		03-Nov-14		0	0																				
IPS Milestones																														
Cost Centre IPS Milestones																														
CC 2 - Design and Design Checking of the Works																														
MS2.006	Accept construction traffic impact assessment by the Supervising Officer	0		0%	0	01-Sep-14*		02-Apr-17	944	381																				
MS2.008	Accept ground investigation reports by the Supervising Officer	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.014	Approve AIP for Structure F1, exd Structure F1 between Pier F1c and Pier F1d, by the S.O.	0		0%	0	29-Sep-14		02-Apr-17	916	190																				
MS2.015	Submit DDA for Structure F1, excluding Structure F1 between Pier F1c and Pier F1d	0		0%	0	18-Nov-14		02-Apr-17	866	140																				
MS2.018	Approve AIP for Structure F1 between Pier F1c and Pier F1d by the Supervising Officer	0		0%	0	29-Sep-14		02-Apr-17	916	190																				
MS2.019	Submit DDA for Structure F1 between Pier F1c and Pier F1d	0		0%	0	18-Nov-14		02-Apr-17	866	140																				
MS2.030	Approve AIP for Structure F3 betw Pier F3c and Pier F3d by Supervising Officer	0		0%	0	29-Sep-14		02-Apr-17	916	190																				
MS2.031	Submit DDA for Structure F3 between Pier F3c and Pier F3d	0		0%	0	18-Nov-14		02-Apr-17	866	140																				
MS2.038	Approve AIP for Structure F5, exd Structure F5 betw Pier F5c & Pier F5d, by S.O.	0		0%	0	29-Sep-14		02-Apr-17	916	192																				
MS2.039	Submit DDA for Structure F5, excluding Structure F5 between Pier F5c and Pier F5d	0		0%	0	18-Nov-14		02-Apr-17	866	142																				
MS2.042	Approve AIP for Structure F5 betw Pier F5c and Pier F5d by the Supervising Officer	0		0%	0	29-Sep-14		02-Apr-17	916	192																				
MS2.043	Submit DDA for Structure F5 between Pier F5c and Pier F5d	0		0%	0	18-Nov-14		02-Apr-17	866	142																				
MS2.047	Submit DDA for Structure E1	0		100%	0	30-Jul-14 A																								
MS2.052	Approve DDA for Structure E2 by the Supervising Officer	0		0%	0	18-Nov-14		02-Apr-17	866	303																				
MS2.056	Approve DDA for Structure E5, exd Structure E5 betw Pier E5c & Pier E5d, by S.O.	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.060	Approve DDA for Structure E5 betw Pier E5c & Pier E5d by Supervising Officer	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.064	Approve DDA for Structure E6 by the Supervising Officer	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.068	Approve DDA for Structure E7 by the Supervising Officer	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.072	Approve DDA for Structure E8 by the Supervising Officer	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.074	Approve AIP for Structure A by the Supervising Officer	0		0%	0	06-Nov-14		02-Apr-17	879	162																				
MS2.080	Approve DDA for Structure B by the Supervising Officer	0		0%	0	23-Oct-14		02-Apr-17	892	329																				
MS2.082	Approve AIP for Structure C by the Supervising Officer	0		100%	0	18-Aug-14 A																								
MS2.083	Submit DDA for Structure C	0		0%	0	29-Oct-14		02-Apr-17	886	105																				
MS2.087	Submit DDA for Structure D	0		0%	0	10-Sep-14		02-Apr-17	935	105																				
MS2.090	Approve AIP for At grade Roadworks and Other Works along NLH by the S.O.	0		0%	0	29-Sep-14		02-Apr-17	916	115																				
MS2.091	Submit DDA for At grade Roadworks and Other Works along NLH	0		0%	0	09-Oct-14		02-Apr-17	906	105																				
MS2.094	Approve AIP for At grade Roadworks & Other Works along Cheung Tung Road by S.O.	0		0%	0	29-Sep-14		02-Apr-17	916	115																				
MS2.095	Submit DDA for At grade Roadworks and Other Works along Cheung Tung Road	0		0%	0	09-Oct-14		02-Apr-17	906	105																				
MS2.097	Submit AIP for At grade Roadworks and Other Works at Southern Landfall	0		0%	0	21-Aug-14		02-Apr-17	955	39																				
MS2.098	Approve AIP for At grade Roadwrks & Other Wrks at Southern Landfall by S.O.	0		0%	0	29-Sep-14		02-Apr-17	916	45																				
MS2.099	Submit DDA for At grade Roadworks and Other Works at Southern Landfall	0		0%	0	21-Aug-14		02-Apr-17	955	84																				
MS2.100	Approve DDA for At grade Roadwrks & Other Wrks at Southern Landfall by S.O.	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.102	Approve AIP for Watermains & All Assoc Wrks frm Tung Chung to South Landfall by S.O.	0		0%	0	29-Sep-14		02-Apr-17	916	45																				
MS2.103	Submit DDA for Watermains & All Assoc Wrks frm Tung Chung to South Landfall	0		100%	0	23-Jul-14 A																								
MS2.104	Approve DDA for Watermains & All Assoc Wrks frm Tung Chung to South Landfall by S.O.	0		0%	0	13-Nov-14		02-Apr-17	871	308																				
MS2.106	Approve AIP for Irrigation System for Soft Landscape Works by the Supervising Officer	0		100%	0	13-Aug-14 A																								
MS2.107	Submit DDA for Irrigation System for Soft Landscape Works	0		0%	0	08-Oct-14		02-Apr-17	907	105																				
MS2.108-3	Submit DDA for Fac Prov for TCSS Wrks for At grade Rds at Southern Landfall	0		0%	0	17-Sep-14		02-Apr-17	928	105																				
MS2.111	Submit DDA for Facilities Provision for TCSS Works for Viaducts	0		0%	0	17-Sep-14		02-Apr-17	928	105																				

<ul style="list-style-type: none"> ■ Actual Work ■ Planned Bar ■ Critical Bar ◆ Milestone 	Project ID: J3518DWP rD1-M15 Layout: J3518-DWP-3MRP Submission - M15 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.	Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 1 of 34 Pages) (Progress as of 21-Aug-14)	<table border="1"> <thead> <tr> <th>Date</th> <th>Revision</th> <th>Checked</th> <th>Approved</th> </tr> </thead> <tbody> <tr> <td>28-Jun-14</td> <td></td> <td>FZ</td> <td></td> </tr> <tr> <td>29-Jul-14</td> <td></td> <td>FZ</td> <td></td> </tr> <tr> <td>29-Aug-14</td> <td></td> <td>FZ</td> <td></td> </tr> </tbody> </table>	Date	Revision	Checked	Approved	28-Jun-14		FZ		29-Jul-14		FZ		29-Aug-14		FZ		DWG. No.: J3518/GCL/PGM/3MRP-M15
Date	Revision	Checked	Approved																	
28-Jun-14		FZ																		
29-Jul-14		FZ																		
29-Aug-14		FZ																		

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	2014													
											August				September				October				November	
											21	28	04	11	18	25	01	08	15	22	29	06	13	20
MS2.115	Submit DDA for Fac Prov for TCSS Wrks for At grade Rds along NLH	0		0%	0	17-Sep-14		21-Mar-17	916	105					◆									
MS2.120	Approve DDA for Facilities Provision for E&M Works by the Supervising Officer	0		0%	0	13-Nov-14		02-Apr-17	871	308													◆	
MS2.121	Submit AIP for remaining works	0		0%	0	02-Oct-14		02-Apr-17	913	56					◆									
CC 4.1 - Structure E2 and All Associated Works																								
MS4.1.07	Complete piles of 35% of total pile length for Structure E2	0		100%	0	22-Jul-14 A					◆													
MS4.1.08	Complete piles of 40% of total pile length for Structure E2	0		100%	0	31-Jul-14 A					◆													
MS4.1.09	Complete piles of 45% of total pile length for Structure E2	0		100%	0	11-Aug-14 A					◆													
MS4.1.10	Complete piles of 50% of total pile length for Structure E2	0		100%	0	21-Aug-14 A					◆													
MS4.1.11	Complete piles of 55% of total pile length for Structure E2	0		0%	0	08-Sep-14*		02-Apr-17	937	145					◆									
CC 4.2 - Structure E5, excl structure E5 betw Pier E5c & Pier E5d, & All Assoc Works																								
MS4.2.01	Compl piles of 5% of total pile length for part of structure E5 under this CC No.	0		100%	0	21-Jul-14 A					◆													
MS4.2.02	Compl piles of 10% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.03	Compl piles of 15% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.04	Compl piles of 20% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.05	Compl piles of 25% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.06	Compl piles of 30% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.07	Compl piles of 35% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.08	Compl piles of 40% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.09	Compl piles of 45% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.10	Compl piles of 50% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.11	Compl piles of 55% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.12	Compl piles of 60% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.13	Compl piles of 65% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.14	Compl piles of 70% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2.15	Compl piles of 75% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	4					◆									
MS4.2.16	Compl piles of 80% of total pile length for part of structure E5 under this CC No.	0		0%	0	25-Aug-14*		02-Apr-17	951	7					◆									
MS4.2.17	Compl piles of 85% of total pile length for part of structure E5 under this CC No.	0		0%	0	01-Sep-14*		02-Apr-17	944	7					◆									
MS4.2.18	Compl piles of 90% of total pile length for part of structure E5 under this CC No.	0		0%	0	08-Sep-14*		02-Apr-17	937	11					◆									
MS4.2.19	Compl piles of 95% of total pile length for part of structure E5 under this CC No.	0		0%	0	19-Sep-14*		02-Apr-17	926	141					◆									
CC 4.2A - Structure E5 between Pier E5c & Pier E5d, & All Assoc Works																								
MS4.2A.01	Compl piles of 5% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.02	Compl piles of 10% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.03	Compl piles of 15% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.04	Compl piles of 20% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.05	Compl piles of 25% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.06	Compl piles of 30% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.07	Compl piles of 35% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.08	Compl piles of 40% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.09	Compl piles of 45% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.10	Compl piles of 50% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.2A.11	Compl piles of 55% of total pile length for part of structure E5 under this CC No.	0		0%	0	21-Aug-14*		02-Apr-17	955	4					◆									
MS4.2A.12	Compl piles of 60% of total pile length for part of structure E5 under this CC No.	0		0%	0	25-Aug-14*		02-Apr-17	951	191					◆									
CC 4.3 - Structure E6 and All Associated Works																								
MS4.3.01	Complete piles of 5% of total pile length for Structure E6	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.3.02	Complete piles of 10% of total pile length for Structure E6	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.3.03	Complete piles of 15% of total pile length for Structure E6	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									
MS4.3.04	Complete piles of 20% of total pile length for Structure E6	0		0%	0	21-Aug-14*		02-Apr-17	955	0					◆									

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	2014																											
											August				September				October				November															
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10	17										
MS7.14	Complete piles of 70% of total pile length for Structure B	0		100%	0	14-Aug-14 A																																
MS7.15	Complete piles of 75% of total pile length for Structure B	0		0%	0	22-Aug-14*		02-Apr-17	954	15																												
MS7.16	Complete piles of 80% of total pile length for Structure B	0		0%	0	06-Sep-14*		02-Apr-17	939	59																												
MS7.17	Complete piles of 85% of total pile length for Structure B	0		0%	0	04-Nov-14*		02-Apr-17	880	20																												
MS7.21	Complete 10% of number of pile caps for Structure B	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS7.22	Complete 20% of number of pile caps for Structure B	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS7.23	Complete 30% of number of pile caps for Structure B	0		0%	0	21-Aug-14*		02-Apr-17	955	11																												
MS7.24	Complete 40% of number of pile caps for Structure B	0		0%	0	01-Sep-14*		02-Apr-17	944	14																												
MS7.25	Complete 50% of number of pile caps for Structure B	0		0%	0	15-Sep-14*		02-Apr-17	930	21																												
MS7.26	Complete 60% of number of pile caps for Structure B	0		0%	0	06-Oct-14*		02-Apr-17	909	35																												
MS7.27	Complete 70% of number of pile caps for Structure B	0		0%	0	10-Nov-14*		02-Apr-17	874	35																												
MS7.31	Complete 10% of number of bridge piers for Structure B	0		0%	0	21-Aug-14*		02-Apr-17	955	11																												
MS7.32	Complete 20% of number of bridge piers for Structure B	0		0%	0	01-Sep-14*		02-Apr-17	944	10																												
MS7.33	Complete 30% of number of bridge piers for Structure B	0		0%	0	11-Sep-14*		02-Apr-17	934	16																												
MS7.34	Complete 40% of number of bridge piers for Structure B	0		0%	0	27-Sep-14*		02-Apr-17	918	21																												
MS7.35	Complete 50% of number of bridge piers for Structure B	0		0%	0	18-Oct-14*		02-Apr-17	897	28																												
MS7.36	Complete 60% of number of bridge piers for Structure B	0		0%	0	15-Nov-14*		02-Apr-17	869	32																												
CC 8 - Structure C and All Associated Works																																						
MS8.01	Complete piles of 5% of total pile length for Structure C	0		0%	0	07-Nov-14*		02-Apr-17	877	10																												
MS8.02	Complete piles of 10% of total pile length for Structure C	0		0%	0	17-Nov-14*		02-Apr-17	867	14																												
CC 9 - Structure D and All Associated Works																																						
MS9.01	Complete piles of 5% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.02	Complete piles of 10% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.03	Complete piles of 15% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.04	Complete piles of 20% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.05	Complete piles of 25% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.06	Complete piles of 30% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.07	Complete piles of 35% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.08	Complete piles of 40% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.09	Complete piles of 45% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.10	Complete piles of 50% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.11	Complete piles of 55% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	0																												
MS9.12	Complete piles of 60% of total pile length for Structure D	0		0%	0	21-Aug-14*		02-Apr-17	955	4																												
MS9.13	Complete piles of 65% of total pile length for Structure D	0		0%	0	25-Aug-14*		02-Apr-17	951	7																												
MS9.14	Complete piles of 70% of total pile length for Structure D	0		0%	0	01-Sep-14*		02-Apr-17	944	14																												
MS9.15	Complete piles of 75% of total pile length for Structure D	0		0%	0	15-Sep-14*		02-Apr-17	930	19																												
MS9.16	Complete piles of 80% of total pile length for Structure D	0		0%	0	04-Oct-14*		02-Apr-17	911	33																												
MS9.17	Complete piles of 85% of total pile length for Structure D	0		0%	0	06-Nov-14*		02-Apr-17	878	45																												
MS9.21	Complete 10% of number of pile caps for Structure D	0		0%	0	06-Oct-14*		12-Mar-17	888	11																												
MS9.22	Complete 20% of number of pile caps for Structure D	0		0%	0	07-Nov-14*		02-Apr-17	877	17																												
General Submissions																																						
General Requirements																																						
Temporary Works Design																																						
PR00130	Unloading Jetty at HKBCF - Working Platform design and approval	90	02-Jun-14 A	10%	81	27-Nov-14	13-May-14	16-Aug-14	-85	0																												
Land Works																																						
PR00160	Propose/submit/approval of a performance review for piled fnds in accordance w/ ETWB TC	101	26-May-14 A	49.5%	51	23-Oct-14	02-Dec-15	02-Feb-16	380	30																												
Land GI Works																																						

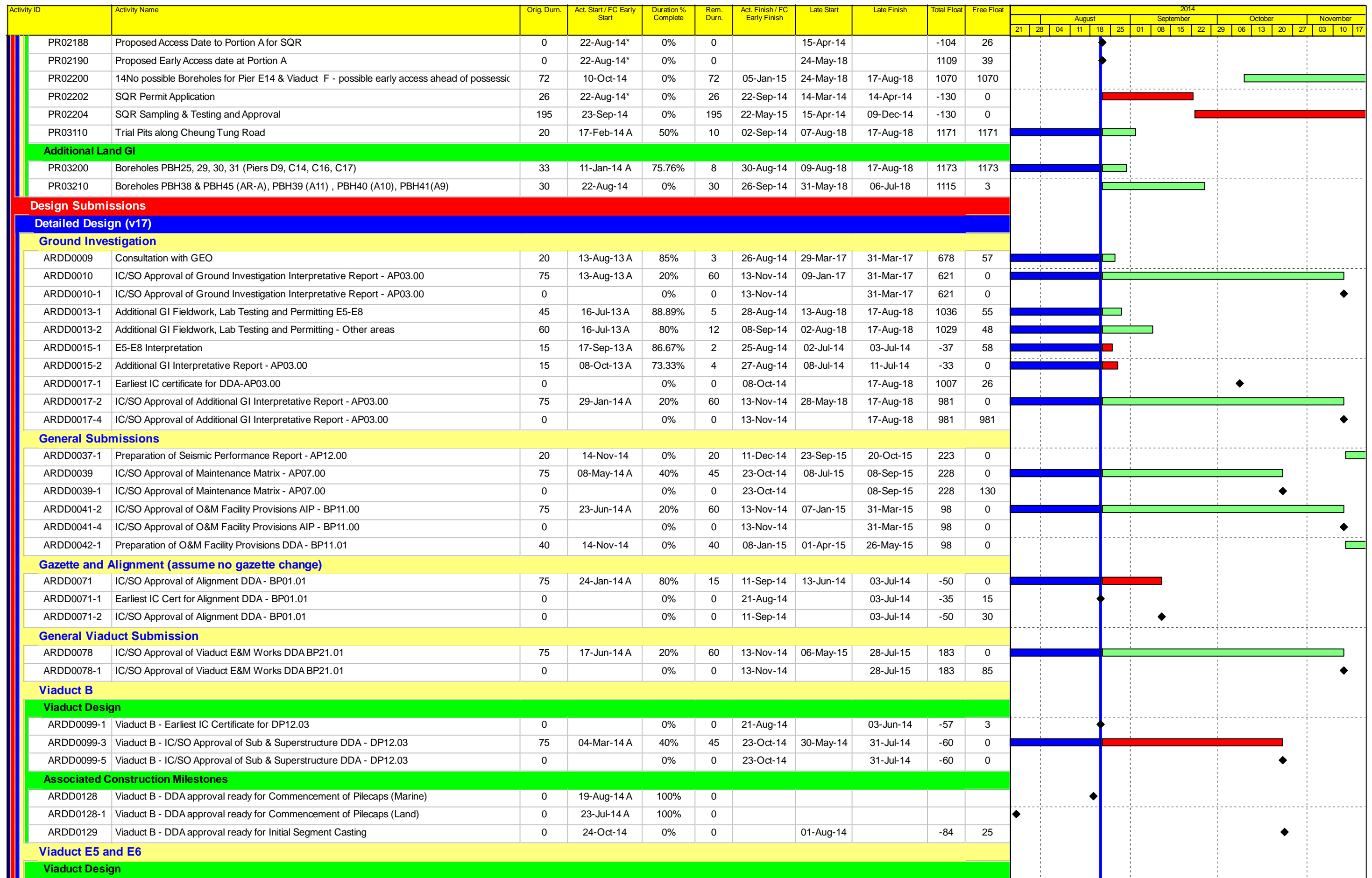
■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWPPrD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.





Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 4 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15



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	2014													
											August				September				October				November	
											21	28	04	11	18	25	01	08	15	22	29	06	13	20
ARDD0537	Viaduct F2, F4 & F5 - Typical Pilecap Reinforcement - Regular Rebar	0		0%	0	11-Sep-14		25-Feb-15	118	6														
ARDD0538	Viaduct F2, F4 & F5 - Final Pilecap Reinforcement	0		0%	0	23-Oct-14		31-Mar-15	112	13														
ARDD0540	Viaduct F2, F4 & F5 - Final Pier Shapes and Reinforcement	0		0%	0	23-Oct-14		23-Mar-15	106	36														
ARDD0541	Viaduct F2, F4 & F5 - Typical Segment Shapes for Moulds	0		0%	0	11-Sep-14		27-Nov-14	55	0														
ARDD0542	Viaduct F2, F4 & F5 - Typical Segment Reinforcement	0		0%	0	09-Oct-14		08-Jan-15	65	58														
ARDD0543	Viaduct F2, F4 & F5 - Final Segment Types and Reinforcement	0		0%	0	18-Nov-14		19-Feb-15	67	60														
ARDD0544	Viaduct F2, F4 & F5 - Typical Anchorage and Tendon Types	0		0%	0	18-Nov-14		27-Nov-14	7	0														
ARDD0545	Viaduct F2, F4 & F5 - Final Anchorage and PT Requirements	0		0%	0	18-Nov-14		19-Feb-15	67	60														
ARDD0546	Viaduct F2, F4 & F5 - Provisional Bearing Schedule	0		0%	0	18-Nov-14		17-Oct-14	-22	0														
ARDD0547	Viaduct F2, F4 & F5 - Final Bearing Schedule	0		0%	0	18-Nov-14		17-Oct-14	-22	63														
ARDD0548	Viaduct F2, F4 & F5 - Provisional Movement Joint (MJ) Schedule	0		0%	0	18-Nov-14		26-Feb-15	72	0														
ARDD0549	Viaduct F2, F4 & F5 - Final Movement Joint (MJ) Schedule	0		0%	0	18-Nov-14		26-Feb-15	72	42														
Parapet and Utility Trough																								
ARDD0560	IC/SO Approval of AIP - DP30.00	68	17-Apr-14 A	60.29%	27	29-Sep-14	16-Oct-14	21-Nov-14	39	0														
ARDD0560-1	IC/SO Approval of AIP - DP30.00	0		0%	0	29-Sep-14		21-Nov-14	39	48														
ARDD0561	Preparation of Parapet DDA DP30.01	40	24-Apr-14 A	100%	0	30-Jul-14 A																		
ARDD0562	Preparation of Utility Trough DDA	30	16-Apr-14 A	100%	0	30-Jul-14 A																		
ARDD0562-1	Submission of Parapet and Utility Trough DDA -DP30.01	0		100%	0	30-Jul-14 A																		
ARDD0563	Preparation of Utility Truss DDA	60	23-Jun-14 A	70%	18	16-Sep-14	25-Jul-18	17-Aug-18	1023	1023														
ARDD0565	Submission of Utility Truss DDA - DP30.02	0		0%	0	21-Aug-14		08-Aug-14	-9	0														
ARDD0566	IC/SO Approval of DDA -DP30.01 & DP30.02	75	22-Aug-14	0%	75	04-Dec-14	11-Aug-14	21-Nov-14	-9	0														
TCSS Provisions																								
ARDD0571	Finalisation of TCSS Civil Provisions	30	01-Jul-14 A	70%	9	03-Sep-14	15-Jul-14	25-Jul-14	-28	0														
ARDD0572	Preparation of DDA for TCSS civil provisions - BP10.01	10	04-Sep-14	0%	10	17-Sep-14	28-Jul-14	08-Aug-14	-28	0														
ARDD0573	IC/SO Approval of DDA for TCSS civil provisions - BP10.01	75	18-Sep-14	0%	75	31-Dec-14	11-Aug-14	21-Nov-14	-28	0														
Slopeworks for Viaduct C: 10NW -C/C22, C/C26, C/C27, C/F13, C/F14, C/F15																								
ARDD0587	IC/SO Approval of Slope Combined AIP/DDA-CP13.01	75	20-Nov-13 A	89.33%	8	02-Sep-14	15-Oct-14	24-Oct-14	38	0														
ARDD0587-1	IC/SO Approval of Slope Combined AIP/DDA-CP13.01	0		0%	0	02-Sep-14		24-Oct-14	38	58														
Slopeworks for Viaduct A: 9SE-B/FR8, B/R1, B/R2																								
ARDD0595	IC/SO Approval of Slope Combined AIP/DDA-CP11.01	75	31-Jul-14 A	0%	75	04-Dec-14	11-Jun-15	23-Sep-15	209	0														
Slopeworks for Viaduct D: 10NW -C/R4, C/F9, C/F10, C/F11, C/F17, C/F50																								
ARDD0602	Preparation of Slope Combined AIP/DDA - CP14.01	20	10-Dec-13 A	80%	4	27-Aug-14	23-Oct-14	28-Oct-14	44	0														
ARDD0603	IC/SO Approval of Slope Combined AIP/DDA-CP14.01	75	28-Aug-14	0%	75	10-Dec-14	29-Oct-14	10-Feb-15	44	0														
Natural Terrian Hazard Assessment																								
ARDD0612	IC/SO Approval of NTHA Combined General Submission - CP20.01, CP21.01	68	31-Dec-13 A	100%	0	04-Aug-14 A																		
ARDD0612-1	IC/SO Approval of NTHA Combined General Submission - CP20.01, CP21.01	0		100%	0	04-Aug-14 A																		
ARDD0613	GEO Approval of NTHM Combined AIP/DDA - CP20.02, CP21.02	75	16-Jul-14 A	20%	60	13-Nov-14	29-Dec-14	20-Mar-15	91	0														
ARDD0613-1	GEO Approval of NTHM Combined AIP/DDA - CP20.02, CP21.02	0		0%	0	13-Nov-14		20-Mar-15	91	0														
Waterworks, Drainage & Utility Diversions																								
ARDD0622	IC/SO Approval of Waterworks, Drainage & Utility AIP - BP20.00	68	03-Jan-14 A	60.29%	27	29-Sep-14	23-Feb-17	31-Mar-17	654	0														
ARDD0622-1	IC/SO Approval of Waterworks, Drainage & Utility AIP - BP20.00	0		0%	0	29-Sep-14		31-Mar-17	654	0														
ARDD0624	Preparation of Waterworks, Drainage & Utility DDA - BP20.01	40	06-Mar-14 A	100%	0	21-Jul-14 A																		
ARDD0628	Submission of Waterworks, Drainage & Utility DDA - BP20.01	0		100%	0	21-Jul-14 A																		
ARDD0629	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	75	22-Jul-14 A	20%	60	13-Nov-14	04-Aug-14	24-Oct-14	-14	0														
ARDD0629-1	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	0		0%	0	13-Nov-14		24-Oct-14	-14	0														
ARDD0630	Gov't Approval of Submissions for Waterworks, Drainage & Utility Diversions	75	22-Jul-14 A	20%	60	13-Nov-14	04-Aug-14	24-Oct-14	-14	0														

	Actual Work
	Planned Bar
	Critical Bar
	Milestone

Project ID: J3518DWP-rD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 10 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014																
											August				September				October				November				
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10
Approach Ramp D																											
ARDD0650	Approach D - IC/SO Approval of Approach Ramp D AIP - DP21.00	68	05-Jul-14 A	20.59%	54	05-Nov-14	04-Sep-14	18-Nov-14	9	0																	
ARDD0650-1	Approach D - IC/SO Approval of Approach Ramp D AIP - DP21.00	0		0%	0	05-Nov-14		18-Nov-14	9	0																	
ARDD0651	Approach D - Preparation of Approach Ramp D DDA Submission - DP20.01	30	07-Aug-14 A	30%	21	19-Sep-14	30-Sep-14	28-Oct-14	27	18																	
ARDD0652	Approach D - IC/SO Approval of Approach Ramp D DDA - DP20.01	75	16-Oct-14	0%	75	28-Jan-15	29-Oct-14	10-Feb-15	9	0																	
Approach Ramp C																											
ARDD0656	Approach C - IC/SO Approval of Approach Ramp C AIP -DP20.00	68	18-Jun-14 A	20.59%	54	05-Nov-14	01-Oct-14	15-Dec-14	28	0																	
ARDD0656-1	Approach C - IC/SO Approval of Approach Ramp C AIP -DP20.00	0		0%	0	05-Nov-14		15-Dec-14	28	0																	
ARDD0657	Approach C - Preparation of Approach Ramp C DDA Submission - DP20.01	30	18-Jul-14 A	60%	12	08-Sep-14	07-Nov-14	24-Nov-14	55	27																	
ARDD0658	Approach C - IC/SO Approval of Approach Ramp C DDA -DP20.01	75	16-Oct-14	0%	75	28-Jan-15	25-Nov-14	09-Mar-15	28	0																	
Approach Ramp B																											
ARDD0662	Approach B - IC/SO Approval of Approach Ramp B AIP -DP21.00	68	11-Jun-14 A	100%	0	06-Aug-14 A																					
ARDD0662-1	Approach B - IC/SO Approval of Approach Ramp B AIP -DP21.00	0		100%	0	06-Aug-14 A																					
ARDD0663	Approach B - Preparation of Approach Ramp B DDA Submission -DP21.01	30	09-Jun-14 A	60%	12	08-Sep-14	26-Jun-14	11-Jul-14	-41	0																	
ARDD0664	Approach B - IC/SO Approval of Approach Ramp B DDA -DP21.01	75	09-Sep-14	0%	75	22-Dec-14	14-Jul-14	24-Oct-14	-41	0																	
Approach A																											
ARDD0668	Approach A - IC/SO Approval of Approach Ramp A AIP -DP20.00	68	18-Jun-14 A	20.59%	54	05-Nov-14	14-Aug-14	28-Oct-14	-6	0																	
ARDD0668-1	Approach A - IC/SO Approval of Approach Ramp A AIP -DP20.00	0		0%	0	05-Nov-14		28-Oct-14	-6	0																	
ARDD0669	Approach A - Preparation of Approach Ramp A DDA Submission -DP20.01	30	18-Jul-14 A	60%	12	08-Sep-14	22-Sep-14	07-Oct-14	21	27																	
ARDD0670	Approach A - IC/SO Approval of Approach Ramp A DDA - DP20.01	75	16-Oct-14	0%	75	28-Jan-15	08-Oct-14	20-Jan-15	-6	0																	
Approach F																											
ARDD0673	Approach F - Preparation of Approach Ramp F AIP Submission -DP22.00 Update	40	03-Jul-14 A	80%	8	02-Sep-14	10-Jun-14	19-Jun-14	-53	0																	
ARDD0674	Approach F - IC/SO Approval of Approach Ramp F AIP -DP22.00	68	03-Sep-14	0%	68	05-Dec-14	20-Jun-14	23-Sep-14	-53	0																	
ARDD0675	Approach F - Preparation of Approach Ramp F DDA Submission -DP22.01	50	15-Oct-14	0%	50	23-Dec-14	01-Aug-14	09-Oct-14	-53	0																	
Viaduct Pavement																											
ARDD867	Viaduct Pavement - IC/SO Approval of AIP - BP02.00	68	27-Jun-14 A	20.59%	54	05-Nov-14	05-Jun-18	17-Aug-18	987	0																	
ARDD867-1	Viaduct Pavement - IC/SO Approval of AIP - BP02.00	0		0%	0	05-Nov-14		17-Aug-18	987	987																	
ARDD871	Viaduct Pavement - IC/SO Approval of DDA - BP02.01	75	27-Jun-14 A	20%	60	13-Nov-14	11-Sep-14	03-Dec-14	14	0																	
ARDD871-1	Viaduct Pavement - IC/SO Approval of DDA - BP02.01	0		0%	0	13-Nov-14		03-Dec-14	14	0																	
Signs, Markings and Street Furniture																											
ARDD0683	IC/SO Approval of Signs, Markings & Street Furniture AIP - BP03.00	68	01-Mar-14 A	60.29%	27	29-Sep-14	23-Feb-17	31-Mar-17	654	0																	
ARDD0683-1	IC/SO Approval of Signs, Markings & Street Furniture AIP - BP03.00	0		0%	0	29-Sep-14		31-Mar-17	654	0																	
ARDD0685	Preparation of Final Signs and Markings Plans	30	04-Jun-14 A	70%	9	03-Sep-14	29-Dec-14	08-Jan-15	91	16																	
ARDD0686	Preparation of Detail Sign Gantry Structures	50	16-Jul-14 A	50%	25	25-Sep-14	05-Dec-14	08-Jan-15	75	0																	
ARDD0687	Preparation of Signs, Markings & Street Furniture DDA Submission - BP03.01	10	26-Sep-14	0%	10	09-Oct-14	09-Jan-15	22-Jan-15	75	0																	
ARDD0688	IC/SO Approval of Signs, Markings & Street Furniture DDA - BP03.01	75	10-Oct-14	0%	75	22-Jan-15	23-Jan-15	07-May-15	75	0																	
Landscape																											
ARDD0696	IC/SO Approval of AIP for landscape works - BP22.00	68	14-May-14 A	100%	0	13-Aug-14 A																					
ARDD0696-1	IC/SO Approval of AIP for landscape works - BP22.00	0		100%	0	13-Aug-14 A																					
ARDD0697	Prepare Final Planting Plans and Schedules	20	14-Aug-14 A	30%	14	10-Sep-14	04-Aug-15	21-Aug-15	247	0																	
ARDD0698	Prepare Irrigation Plans	20	14-Aug-14 A	30%	14	10-Sep-14	04-Aug-15	21-Aug-15	247	0																	
ARDD0699	Preparation of DDA Submission for landscape works - BP22.01	20	11-Sep-14	0%	20	08-Oct-14	24-Aug-15	18-Sep-15	247	0																	
ARDD0700	IC/SO Approval of DDA for landscape works - BP22.01	75	09-Oct-14	0%	75	21-Jan-15	21-Sep-15	01-Jan-16	247	0																	
Remaining Works																											
ARDD0704	Preparation of Remaining Works AIP - ZP01.00	30	22-Aug-14	0%	30	02-Oct-14	02-May-16	10-Jun-16	441	0																	
ARDD0705	IC/SO Approval of Remaining Works AIP - ZP01.00	40	03-Oct-14	0%	40	27-Nov-14	13-Jun-16	05-Aug-16	441	0																	
Segment Target Geometry And Erection Engineering																											

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWPPrD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 11 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
Viaduct B																										
ARDD0712	Viaduct B - Erection Sequence Analysis	20	09-Jan-14 A	90%	2	25-Aug-14	07-May-14	08-May-14	-77	0																
ARDD0713	Viaduct B - Target Geometry Analysis	20	06-Feb-14 A	90%	2	25-Aug-14	07-May-14	08-May-14	-77	0																
ARDD0714	Viaduct B - Segment Geometry Schedules	10	06-Mar-14 A	90%	1	22-Aug-14	08-May-14	08-May-14	-76	1																
ARDD0714-1	Viaduct B - Final Erection Geometry (Bridge B3)	0		0%	0	25-Aug-14		08-May-14	-77	0																
ARDD0714-2	Viaduct B - Final Erection Geometry (Bridge B2 & B1)	0		0%	0	06-Oct-14		19-Jun-14	-77	0																
Viaduct A																										
ARDD0716	Viaduct A - Confirmation of Erection Sequence from Freyssinet	0		0%	0	20-Nov-14		22-Jan-15	45	0																
Viaduct C																										
ARDD0721	Viaduct C - Confirmation of Erection Sequence from Freyssinet	0		0%	0	26-Sep-14		03-Nov-14	26	0																
ARDD0722	Viaduct C - Erection Sequence Analysis	20	29-Sep-14	0%	20	24-Oct-14	04-Nov-14	01-Dec-14	26	0																
ARDD0723	Viaduct C - Target Geometry Analysis	20	27-Oct-14	0%	20	21-Nov-14	02-Dec-14	29-Dec-14	26	0																
Viaduct D																										
ARDD0726	Viaduct D - Confirmation of Erection Sequence from Freyssinet	0		0%	0	21-Aug-14		02-Jun-14	-58	0																
ARDD0727	Viaduct D - Erection Sequence Analysis	20	22-Aug-14	0%	20	18-Sep-14	03-Jun-14	30-Jun-14	-58	0																
ARDD0728	Viaduct D - Target Geometry Analysis	20	19-Sep-14	0%	20	16-Oct-14	01-Jul-14	28-Jul-14	-58	0																
ARDD0729	Viaduct D - Segment Geometry Schedules	10	17-Oct-14	0%	10	30-Oct-14	29-Jul-14	11-Aug-14	-58	0																
ARDD0729-1	Viaduct D - Final Erection Geometry (Bridge D3)	0		0%	0	30-Oct-14		11-Aug-14	-58	0																
Viaduct E5 and E6																										
ARDD0731	Viaduct E5 & E6 - Confirmation of Erection Sequence from Freyssinet	0		0%	0	21-Aug-14		09-Jun-14	-53	23																
ARDD0732	Viaduct E5 & E6 - Erection Sequence Analysis	30	24-Dec-13 A	23.33%	23	23-Sep-14	08-May-14	09-Jun-14	-76	0																
ARDD0733	Viaduct E5 & E6 - Target Geometry Analysis	30	04-Feb-14 A	23.33%	23	23-Sep-14	08-May-14	09-Jun-14	-76	0																
ARDD0734	Viaduct E5 & E6 - Segment Geometry Schedules	10	18-Mar-14 A	20%	8	02-Sep-14	29-May-14	09-Jun-14	-61	15																
ARDD0734-1	Viaduct E5 & E6 - Final Erection Geometry	0		0%	0	23-Sep-14		09-Jun-14	-76	2																
Viaduct E7 & E8																										
ARDD0736	Viaduct E7 & E8 - Confirmation of Erection Sequence from Freyssinet	0		0%	0	21-Aug-14		30-May-14	-59	23																
ARDD0737	Viaduct E7 & E8 - Erection Sequence Analysis	30	24-Dec-13 A	23.33%	23	23-Sep-14	30-Apr-14	30-May-14	-82	0																
ARDD0738	Viaduct E7 & E8 - Target Geometry Analysis	30	04-Feb-14 A	23.33%	23	23-Sep-14	30-Apr-14	30-May-14	-82	0																
ARDD0739	Viaduct E7 & E8 - Segment Geometry Schedules	10	18-Mar-14 A	20%	8	02-Sep-14	21-May-14	30-May-14	-67	15																
ARDD0739-1	Viaduct E7 & E8 - Final Erection Geometry	0		0%	0	23-Sep-14		30-May-14	-82	2																
Viaduct E1																										
ARDD0741	Viaduct E1 - Confirmation of Erection Sequence from Freyssinet	0		0%	0	21-Aug-14		19-Jun-14	-45	0																
ARDD0742	Viaduct E1 - Erection Sequence Analysis	30	22-Aug-14	0%	30	02-Oct-14	20-Jun-14	31-Jul-14	-45	0																
ARDD0743	Viaduct E1 - Target Geometry Analysis	30	03-Oct-14	0%	30	13-Nov-14	01-Aug-14	11-Sep-14	-45	0																
ARDD0744	Viaduct E1 - Segment Geometry Schedules	10	14-Nov-14	0%	10	27-Nov-14	12-Sep-14	25-Sep-14	-45	0																
Viaduct E2																										
ARDD0746	Viaduct E2 - Confirmation of Erection Sequence from Freyssinet	0		0%	0	21-Aug-14		15-May-14	-70	23																
ARDD0747	Viaduct E2 - Erection Sequence Analysis	30	24-Dec-13 A	23.33%	23	23-Sep-14	15-Apr-14	15-May-14	-93	0																
ARDD0748	Viaduct E2 - Target Geometry Analysis	30	04-Feb-14 A	23.33%	23	23-Sep-14	15-Apr-14	15-May-14	-93	0																
ARDD0749	Viaduct E2 - Segment Geometry Schedules	10	18-Mar-14 A	20%	8	02-Sep-14	06-May-14	15-May-14	-78	15																
ARDD0749-1	Viaduct E2 - Final Erection Geometry	0		0%	0	23-Sep-14		15-May-14	-93	0																
Viaduct F																										
ARDD0751	Viaduct F - Confirmation of Erection Sequence from Freyssinet	0		0%	0	09-Oct-14		20-Oct-14	7	0																
ARDD0752	Viaduct F - Erection Sequence Analysis	30	10-Oct-14	0%	30	20-Nov-14	21-Oct-14	01-Dec-14	7	0																
Reprovisioning Works																										
Chung Tung Road Realignment Viaduct B																										
ARDD0804	Viaduct B - IC/SO Approval of AIP of CTR Reprovisioning Works AIP - BP33.00	68	31-Dec-13 A	100%	0	08-Aug-14 A																				

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

Project ID: J3518DWP/PrD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 12 of 34 Pages)
(Progress as of 21-Aug-14)**

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
ARDD0804-1	Viaduct B - IC/SO Approval of AIP of CTR Reprovisioning Works AIP - BP33.00	0		100%	0	08-Aug-14 A																				
ARDD0807	Viaduct B - IC/SO Approval of CTR Reprovisioning Works DDA - BP33.01	75	11-Jun-14 A	20%	60	13-Nov-14	04-Aug-14	24-Oct-14	-14	0																
ARDD0807-1	Viaduct B - IC/SO Approval of CTR Reprovisioning Works DDA - BP33.01	0		0%	0	13-Nov-14		24-Oct-14	-14	50																
Chung Tung Road Realignment Viaduct C																										
ARDD0881	Viaduct C - IC/SO Approval of AIP of CTR Reprovisioning Works AIP - BP34.00	68	04-Apr-14 A	60.29%	27	29-Sep-14	29-May-14	04-Jul-14	-61	0																
ARDD0881-1	Viaduct C - IC/SO Approval of AIP of CTR Reprovisioning Works AIP - BP34.00	0		0%	0	29-Sep-14		04-Jul-14	-61	0																
ARDD0887	Viaduct C - IC/SO Approval of CTR Reprovisioning Works DDA - BP34.01	75	20-Jun-14 A	20%	60	13-Nov-14	14-Apr-14	04-Jul-14	-94	0																
ARDD0887-1	Viaduct C - IC/SO Approval of CTR Reprovisioning Works DDA - BP34.01	0		0%	0	13-Nov-14		04-Jul-14	-94	6																
Remaining Reprovisioning Works (Viaduct A&D)																										
ARDD0813	Viaduct A&D - IC/SO Approval of AIP for Remaining Reprovisioning Works V-A&D BP35.00	68	30-Apr-14 A	100%	0	12-Aug-14 A																				
ARDD0813-1	Viaduct A&D - IC/SO Approval of AIP for Remaining Reprovisioning Works V-A&D BP35.00	0		100%	0	12-Aug-14 A																				
ARDD0815	Viaduct A&D - IC/SO Approval of DDA of Remaining Reprovisioning Works BP35.01	75	26-Jun-14 A	20%	60	13-Nov-14	30-Jun-15	21-Sep-15	222	0																
ARDD0815-1	Viaduct A&D - IC/SO Approval of DDA of Remaining Reprovisioning Works BP35.01	0		0%	0	13-Nov-14		21-Sep-15	222	50																
CEDD Access Track																										
ARDD0808	Preparation of Combined AIP/DDA for CEDD Access Track - BP32.01	30	09-Sep-13 A	80%	6	29-Aug-14	19-Feb-16	26-Feb-16	390	0																
ARDD0809	IC/SO Approval of Combined AIP/DDA for CEDD Access Track - BP32.01	75	01-Sep-14	0%	75	12-Dec-14	29-Feb-16	10-Jun-16	390	0																
Construction Traffic Impact Assessment																										
ARDD0811	IC/SO Approval of CTIA - AP05.00	75	25-Feb-14 A	90.67%	7	01-Sep-14	23-Mar-17	31-Mar-17	674	0																
ARDD0816	IC/SO Approval of CTIA - AP05.00	0		0%	0	01-Sep-14		31-Mar-17	674	0																
Other Design																										
Marine Permanent Navigation Aids																										
BMT0135	Preparation of MPNA DDA - BP36.01	46	11-Jun-14 A	10.87%	41	17-Oct-14	20-Feb-15	17-Apr-15	130	0																
BMT0140	IC/SO Approval of MPNA DDA BP36.01	75	20-Oct-14	0%	75	30-Jan-15	20-Apr-15	31-Jul-15	130	0																
Major Procurement																										
Marine Permanent Navigation Aids																										
PR65011	Design & Approvals for Marine Navigation Aids	150	16-Dec-13 A	52%	72	30-Jan-15	06-May-15	31-Jul-15	145	0																
Tower Cranes																										
PR66010	Procure Tower Crane Supplier	96	23-Jun-14 A	53.13%	45	16-Oct-14	08-Aug-14	30-Sep-14	-12	0																
PR66011	Procure & Deliver Tower Cranes	325	17-Oct-14	0%	325	19-Nov-15	03-Oct-14	05-Nov-15	-12	0																
PR66012	Erect & Commission Tower Crane @ E3	24	17-Oct-14	0%	24	13-Nov-14	18-Dec-14	17-Jan-15	53	136																
PR66013	Erect & Commission Tower Crane @ E4	24	17-Oct-14	0%	24	13-Nov-14	03-Oct-14	01-Nov-14	-10	106																
PR66018	Erect & Commission Tower Crane @ E9	24	17-Oct-14	0%	24	13-Nov-14	10-Jun-15	27-Jul-15	176	108																
PR66019	Erect & Commission Tower Crane @ E10	24	23-Oct-14	0%	24	19-Nov-14	16-Jan-15	12-Feb-15	70	101																
PR66020	Erect & Commission Tower Crane @ E11	24	17-Nov-14	0%	24	13-Dec-14	17-Nov-14	13-Dec-14	0	122																
Equipment Platforms for Tower Cranes																										
PR66025	Inst.Temp.Eqpt.Platform (piles & deck) @ E3	18	22-Aug-14	0%	18	16-Sep-14	27-Nov-14	17-Dec-14	73	20																
PR66026	Inst.Temp.Eqpt.Platform (piles & deck) @ E4	18	23-Aug-14	0%	18	18-Sep-14	05-Sep-14	30-Sep-14	9	19																
PR66031	Inst.Temp.Eqpt.Platform (piles & deck) @ E9	18	11-Sep-14	0%	18	06-Oct-14	11-May-15	08-Jun-15	183	7																
PR66032	Inst.Temp.Eqpt.Platform (piles & deck) @ E10	18	27-Sep-14	0%	18	22-Oct-14	23-Dec-14	15-Jan-15	70	0																
PR66033	Inst.Temp.Eqpt.Platform (piles & deck) @ E11	18	27-Oct-14	0%	18	15-Nov-14	27-Oct-14	15-Nov-14	0	0																
Deck Segment Installation Equipment																										
Launching Gantry 1																										
PR67040	Launching Gantry Design	95	05-Feb-14 A	94.74%	5	27-Aug-14	30-Aug-14	04-Sep-14	7	5																
PR67041	Launching Gantry 1 Fabrication	95	15-May-14 A	89.47%	10	02-Sep-14	25-Aug-14	04-Sep-14	2	0																
PR67042	Launching Gantry 1 Delivery	20	03-Sep-14	0%	20	26-Sep-14	05-Sep-14	29-Sep-14	2	80																
Launching Gantry 2																										
PR67043	Launching Gantry 2 Fabrication	105	16-Jun-14 A	20%	84	01-Dec-14	03-Oct-14	12-Jan-15	33	56																

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-3MRP-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 13 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014																							
											August				September				October				November											
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10	17						
Lifting Frames																																		
Lifting Frames 1 & 2																																		
PR68011	Lifting Frame 1&2 Design	70	02-Jun-14 A	50%	35	04-Oct-14	13-Aug-14	23-Sep-14	-8	0																								
PR68012	Lifting Frame 1&2 Approval	60	28-Aug-14	0%	60	08-Nov-14	05-Sep-14	17-Nov-14	7	15																								
PR68013	Lifting Frame 1&2 Fabrication	140	22-Aug-14	0%	140	07-Feb-15	13-Aug-14	29-Jan-15	-8	0																								
Lifting Frames 3 & 4																																		
PR68015	Lifting Frame 3&4 Design	70	02-Jun-14 A	60%	28	24-Sep-14	26-Jul-14	27-Aug-14	-23	2																								
PR68016	Lifting Frame 3&4 Approval	60	22-Aug-14	0%	60	03-Nov-14	19-Aug-14	30-Oct-14	-3	20																								
PR68017	Lifting Frame 3&4 Fabrication	140	22-Aug-14	0%	140	07-Feb-15	26-Jul-14	12-Jan-15	-23	0																								
Lifting Frames 5 & 6																																		
PR68019	Lifting Frame 5&6 Design	70	22-Aug-14	0%	70	14-Nov-14	08-Nov-14	31-Jan-15	64	0																								
PR68020	Lifting Frame 5&6 Approval	60	04-Nov-14	0%	60	15-Jan-15	13-Feb-15	02-May-15	84	20																								
PR68021	Lifting Frame 5&6 Fabrication	140	04-Nov-14	0%	140	27-Apr-15	21-Jan-15	15-Jul-15	64	0																								
Unloading Frames																																		
Type 1																																		
PR69100	Unloading Frame Type 1 Design	50	05-May-14 A	40%	30	26-Sep-14	10-Oct-14	13-Nov-14	39	17																								
PR69110	Unloading Frame Type 1 Fabrication	95	22-Aug-14	0%	95	13-Dec-14	10-Oct-14	31-Jan-15	39	0																								
Type 2																																		
PR69170	Unloading Frame Type 2 Design	50	05-May-14 A	40%	30	26-Sep-14	18-May-15	23-Jun-15	216	17																								
PR69180	Unloading Frame Type 2 Fabrication	95	22-Aug-14	0%	95	13-Dec-14	18-May-15	08-Sep-15	216	0																								
Type 3																																		
PR69220	Unloading Frame Type 3 Design	50	05-May-14 A	100%	0	15-Aug-14 A																												
PR69230	Unloading Frame Type 3 (Lantau) Fabrication	95	16-Jun-14 A	60%	38	14-Oct-14	30-Jun-14	13-Aug-14	-50	0																								
PR69240	Unloading Frame Type 3 Delivery	24	15-Oct-14	0%	24	11-Nov-14	14-Aug-14	11-Sep-14	-50	0																								
Type 4																																		
PR69250	Unloading Frame Type 4 Design	50	05-May-14 A	40%	30	26-Sep-14	29-Oct-14	02-Dec-14	55	17																								
PR69260	Unloading Frame Type 4 (BCF) Fabrication	95	22-Aug-14	0%	95	13-Dec-14	29-Oct-14	23-Feb-15	55	0																								
Deck Segments & Precast Pile Cap Shells																																		
Preliminaries																																		
MBBE0010	Set Up Precast Segment Casting Yard & Beds etc	176	15-Oct-13 A	100%	0	31-Jul-14 A																												
MBBE0012	Precast Segment Mould Design (Viaduct B)	42	15-Oct-13 A	90.48%	4	26-Aug-14	14-Aug-18	17-Aug-18	1177	1177																								
MBBE0014	Precast Segment Mould Fabrication & Assembly (Viaduct B)	52	04-Mar-14 A	80.77%	10	02-Sep-14	27-May-14	07-Jun-14	-73	0																								
MBBE0016	Trial Precast Segments (in pair) and Approval	45	03-Sep-14	0%	45	28-Oct-14	09-Jun-14	31-Jul-14	-73	0																								
MBBE0018	Precast Segment Mould Design (Viaduct E5, E6, E7 & E8)	42	15-Oct-13 A	59.52%	17	11-Sep-14	19-Jun-14	09-Jul-14	-54	0																								
MBBE0020	Precast Segment Mould Fabrication & Assembly (Viaduct E5, E6, E7 & E8)	52	12-Sep-14	0%	52	13-Nov-14	10-Jul-14	08-Sep-14	-54	35																								
MBBE0024	Precast Segment Mould Design (Viaduct E2)	42	15-Oct-13 A	59.52%	17	11-Sep-14	26-May-14	14-Jun-14	-74	0																								
MBBE0026	Precast Segment Mould Fabrication & Assembly (Viaduct E2)	52	12-Sep-14	0%	52	13-Nov-14	16-Jun-14	15-Aug-14	-74	35																								
MBBE0030	Precast Segment Mould Design (Viaduct E1)	42	30-Jul-14 A	0%	42	13-Oct-14	09-Jul-14	26-Aug-14	-38	0																								
MBBE0032	Precast Segment Mould Fabrication & Assembly (Viaduct E1)	52	14-Oct-14	0%	52	12-Dec-14	27-Aug-14	29-Oct-14	-38	14																								
MBBE0036	Precast Segment Mould Design (Viaduct D)	42	11-Sep-14	0%	42	31-Oct-14	07-Jul-14	23-Aug-14	-56	0																								
MBBE0038	Precast Segment Mould Fabrication & Assembly (Viaduct D)	52	01-Nov-14	0%	52	03-Jan-15	25-Aug-14	27-Oct-14	-56	21																								
MBBE0042	Precast Segment Mould Design (Viaduct C)	42	30-Aug-14	0%	42	21-Oct-14	06-Dec-14	27-Jan-15	81	0																								
MBBE0044	Precast Segment Mould Fabrication & Assembly (Viaduct C)	52	22-Oct-14	0%	52	20-Dec-14	28-Jan-15	01-Apr-15	81	44																								
MBBE0048	Precast Segment Mould Design (Viaduct A)	42	24-Oct-14	0%	42	11-Dec-14	23-Jul-15	09-Sep-15	219	0																								
MBBE0054	Precast Segment Mould Design (Viaduct F1 to F5)	42	12-Sep-14	0%	42	01-Nov-14	16-Jan-15	09-Mar-15	103	0																								
MBBE0056	Precast Segment Mould Fabrication & Erection (Viaduct F1 to F5)	52	03-Nov-14	0%	52	05-Jan-15	10-Mar-15	14-May-15	103	95																								

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-rD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 14 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August					September					October			November		
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
PP7480	Rebar - Cut, Bend & Fabricate for Viaduct C Marine Pile Caps	42	13-Nov-14	0%	42	03-Jan-15	16-Jan-15	09-Mar-15	52	86																
Marine Piers - Viaduct E																										
PP7270	Rebar - Cut, Bend & Fabricate for Viaduct E2 Piers	180	20-Sep-14	0%	180	02-May-15	30-May-14	03-Jan-15	-94	40																
Land Pile Caps																										
PP7752	Rebar - Cut, Bend & Fabricate for Viaduct B Land Pile Caps	26	16-Jul-14 A	11.54%	23	18-Sep-14	06-Aug-14	01-Sep-14	-14	0																
PP7754	Rebar - Cut, Bend & Fabricate for Viaduct D Land Pile Caps	29	15-Oct-14	0%	29	17-Nov-14	20-Sep-14	25-Oct-14	-19	0																
PP7756	Rebar - Cut, Bend & Fabricate for Viaduct C Land Pile Caps	34	13-Nov-14	0%	34	22-Dec-14	26-Jan-15	09-Mar-15	60	0																
Land / Marine Piers - Viaduct A, B, C, D & F																										
PP7060	Bending of Rebar for Viaduct B Piers	64	19-Sep-14	0%	64	04-Dec-14	02-Sep-14	18-Nov-14	-14	5																
PP7420	Bending of Rebar for Viaduct D Piers	71	18-Nov-14	0%	71	11-Feb-15	14-Mar-15	11-Jun-15	94	117																
In-Situ Formworks / Falseworks																										
PP7070	On-Site Preparation & Assembly of Pier Formwork for Viaduct B Piers	70	04-Nov-14	0%	70	27-Jan-15	30-Aug-14	22-Nov-14	-53	0																
PP7140	On-Site Preparation & Assembly of Pier Formwork for Viaduct E5 & E6 Piers	90	04-Nov-14	0%	90	23-Feb-15	15-Sep-14	02-Jan-15	-41	83																
PP7280	On-Site Preparation & Assembly of Pier Formwork for Viaduct E2 Piers	90	04-Nov-14	0%	90	23-Feb-15	27-Jun-14	14-Oct-14	-107	0																
PP7430	On-Site Preparation & Assembly of Pier Formwork for Viaduct D Piers	90	04-Nov-14	0%	90	23-Feb-15	20-Oct-14	05-Feb-15	-13	0																
PP7510	On-Site Preparation & Assembly of Pier Formwork for Viaduct C Piers	90	04-Nov-14	0%	90	23-Feb-15	26-Mar-15	17-Jul-15	116	143																
PPPF02	Design & Fabrication of Falsework / Formwork & Delivery	120	20-Feb-14 A	50%	60	03-Nov-14	11-Apr-14	26-Jun-14	-107	0																
Bearings																										
Viaduct B																										
PPBRB3	Bearing design and submission - Viaduct B	12	07-Feb-14 A	83.33%	2	23-Aug-14	28-Oct-14	29-Oct-14	54	130																
PPBRB4	Design check by ICE - Viaduct B	24	06-Jun-14 A	50%	12	04-Sep-14	23-May-14	06-Jun-14	-76	0																
PPBRB5	SO review & comment on design submission - Viaduct B	36	06-Jun-14 A	20%	29	25-Sep-14	07-Jun-14	11-Jul-14	-64	0																
PPBRB6	Bearing Design Amendment & re-issue - Viaduct B	12	25-Sep-14	0%	12	11-Oct-14	28-Jul-14	09-Aug-14	-51	25																
PPBRB7	Manufacture of Bearing - Viaduct B	54	05-Sep-14	0%	54	10-Nov-14	07-Jun-14	09-Aug-14	-76	0																
PPBRB8	Testing Bearing - Viaduct B	18	11-Nov-14	0%	18	01-Dec-14	11-Aug-14	30-Aug-14	-76	0																
Viaduct D																										
PPBRD1	Preliminary Design of Bearings - Viaduct D	50	06-Nov-14	0%	50	06-Jan-15	10-Jul-14	05-Sep-14	-99	0																
Viaduct E																										
PPBRE2	Confirmation of bearing assumption - Viaduct E (E1, E2, E5, E6, E7 & E8)	0		0%	0	21-Aug-14		31-Jul-14	-18	4																
PPBRE3	Bearing design and submission - Viaduct E (E1, E2, E5, E6, E7 & E8)	12	06-Jan-14 A	66.67%	4	26-Aug-14	28-Jul-14	31-Jul-14	-22	0																
PPBRE4	Design check by ICE - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	27-Aug-14	0%	24	24-Sep-14	01-Aug-14	28-Aug-14	-22	0																
PPBRE5	SO review & comment on design submission - Viaduct E (E1, E2, E5, E6, E7 & E8)	36	25-Sep-14	0%	36	07-Nov-14	29-Aug-14	13-Oct-14	-22	0																
PPBRE6	Bearing Design Amendment & re-issue - Viaduct E (E1, E2, E5, E6, E7 & E8)	12	08-Nov-14	0%	12	21-Nov-14	21-Oct-14	03-Nov-14	-16	6																
PPBRE7	Manufacture of Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	54	25-Sep-14	0%	54	28-Nov-14	29-Aug-14	03-Nov-14	-22	0																
Movement Joints																										
PPMJ01	Design & Submission of MJ	138	08-Feb-14 A	29.71%	97	15-Jan-15	30-Oct-14	26-Feb-15	33	24																
Other Sub-Contract Procurement																										
Pavement																										
PP7760-2	Procure Pavement Viaduct Sub-Contractor	36	14-Nov-14	0%	36	27-Dec-14	02-Oct-15	13-Nov-15	260	0																
Structural Health Monitoring System (SHMS)																										
PP7774	SHMS - So approval of Preliminary System Proposal	30	29-Jul-14 A	0%	30	26-Sep-14	09-May-14	13-Jun-14	-88	18																
PP7776	SHMS - Prepare & Submit Final System Proposal	48	29-Jul-14 A	0%	48	20-Oct-14	12-Apr-14	13-Jun-14	-106	0																
PP7778	SHMS - So approval of Final System Proposal	30	21-Oct-14	0%	30	24-Nov-14	14-Jun-14	19-Jul-14	-106	0																
PP7780	SHMS - Prepare Civil Work Provision	90	22-Aug-14	0%	90	08-Dec-14	14-May-14	28-Aug-14	-84	0																
PP7782	SHMS - Submit Precast Pile Cap Shell SHMS details for E5-E6-E7-E8	0	20-Sep-14	0%	0		25-Jun-14		-73	38																
PP7786	SHMS - Submit Segment SHMS details for E5-E6-E7-E8	0	14-Oct-14	0%	0		18-Jul-14		-72	17																
Site Preparation / Mobilisations																										

<ul style="list-style-type: none"> Actual Work Planned Bar Critical Bar Milestone 	Project ID: J3518DWP-rD1-M15 Layout: J3518-DWP-3MRP Submission - M15 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.	Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 16 of 34 Pages) (Progress as of 21-Aug-14)			Date	Revision	Checked	Approved	DWG. No.: J3518/GCL/PGM/3MRP-M15
					28-Jun-14		FZ		
					29-Jul-14		FZ		
					29-Aug-14		FZ		

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
GFXX144	A1 (A2e) - Bored Piles (1.80m dia. x 3 nos)	88	12-Aug-14 A	5.68%	83	29-Nov-14	24-Apr-15	03-Aug-15	197	0																
Bridge A1																										
Pier A8 (A1d)																										
Preliminary Works for Land Piling																										
PA080020	A08 (A1d) - Erect MTR protective fence / Remove existing fence	12	14-Nov-14	0%	12	27-Nov-14	19-Sep-14	04-Oct-14	-44	0																
PA080030	A08 (A1d) - Install Geo. Instru. & Baseline Monitoring	36	14-Nov-14	0%	36	27-Dec-14	19-Sep-14	01-Nov-14	-46	0																
Pier A9 (A1c)																										
Preliminary Works for Land Piling																										
PA090010	A9 (A1c) - Implement TTMS along north side of NLH E/B	2	14-Nov-14	0%	2	15-Nov-14	24-Oct-14	25-Oct-14	-18	0																
PA090020	A9 (A1c) - Erect boundary fence, site clearance & set up site ingress	4	17-Nov-14	0%	4	20-Nov-14	27-Oct-14	30-Oct-14	-18	6																
Pier A10 (A1b)																										
Preliminary Works for Land Piling																										
PA100010	A10 (A1b) - Implement TTMS along north side of NLH E/B	2	14-Nov-14	0%	2	15-Nov-14	05-Nov-14	06-Nov-14	-8	0																
Pier A11 (A1a) & Abutment A																										
Preliminary Works for Land Piling																										
PA110010	A11 (A1a) to Abutment A - Implement TTMS along north side of NLH E/B	2	14-Nov-14	0%	2	15-Nov-14	05-Nov-14	06-Nov-14	-8	0																
PA110020	A11 (A1a) to Approach Ramp A - Erect boundary fence / water filled barrier & set up site ingri	14	17-Nov-14	0%	14	02-Dec-14	07-Nov-14	22-Nov-14	-8	0																
Viaduct B																										
Milestones - Marine Foundation																										
GFXX155-1	B7 (B2f) - Completion of piling works	0		0%	0	10-Sep-14		08-Sep-14	-1	7																
GFXX160-1	B6 (B3a) - Completion of piling works	0		0%	0	10-Sep-14		13-Sep-14	3	8																
GFXX165-1	B5 (B3b) - Completion of piling works	0		100%	0	21-Jul-14 A																				
GFXX170-1	B4 (B3c) - Completion of piling works	0		0%	0	10-Sep-14		01-Sep-14	-7	8																
GFXX175-1	B3 (B3d) - Completion of piling works	0		0%	0	24-Oct-14		02-Sep-14	-42	7																
Milestones - Land Foundation																										
ZB00101	B14 (B1f) - Completion of piling works	0		0%	0	05-Sep-14		27-Sep-14	18	0																
ZB00111	B13 (B1g) - Completion of piling works	0		0%	0	11-Sep-14		14-Nov-14	53	0																
ZB00140	B10 (B2c) - Start date for piling	0	14-Oct-14	0%	0		26-Sep-14		-13	0																
ZB00150	B9 (B2d) - Start date for piling	0	22-Jul-14 A	100%	0																					
ZB00151	B9 (B2d) - Completion of piling works	0		0%	0	13-Sep-14		16-Oct-14	26	0																
ZB00161	B8 (B2e) - Completion of piling works	0		0%	0	23-Aug-14		25-Jul-14	-25	9																
Bridge B3																										
Pier B1 (B3f)																										
Pile Cap Works																										
SB3F0070	B1 (B3f) - Marine Pile Cap M2 - Inst.Floating Seal & Casing Head Steelwork	7	24-Jul-14 A	100%	0	11-Aug-14 A																				
SB3F0080	B1 (B3f) - Marine Pile Cap M2 - Install precast shell in position	1	12-Aug-14 A	100%	0	12-Aug-14 A																				
SB3F0090	B1 (B3f) - Marine Pile Cap M2 - Inst.Access & make Watertight	3	13-Aug-14 A	100%	0	14-Aug-14 A																				
SB3F0100	B1 (B3f) - Marine Pile Cap M2 - Weld Fin plates/Plug Rebar & Concrete	9	15-Aug-14 A	100%	0	21-Aug-14 A																				
SB3F0110	B1 (B3f) - Marine Pile Cap M2 - Dewater precast shell / Remove Lifting Frame	2	22-Aug-14	0%	2	23-Aug-14	17-Jul-14	18-Jul-14	-23	0																
SB3F0120	B1 (B3f) - Marine Pile Cap M2 - Pile cut down	12	25-Aug-14	0%	12	11-Sep-14	19-Jul-14	05-Aug-14	-23	0																
SB3F0130	B1 (B3f) - Marine Pile Cap M2 - Rebar fixing, inst.inserts etc	12	12-Sep-14	0%	12	27-Sep-14	07-Aug-14	25-Aug-14	-23	0																
SB3F0140	B1 (B3f) - Marine Pile Cap M2 - Concreting	1	29-Sep-14	0%	1	29-Sep-14	26-Aug-14	26-Aug-14	-23	0																
SB3F0164	B1 (B3f) - Marine Pile Cap M2 - Curing incl. CJ preparation	6	30-Sep-14	0%	6	09-Oct-14	28-Aug-14	04-Sep-14	-23	0																
Pier Works																										
SB3F0170	B1 (B3f) - Type 4B-MJ Pier Temp. Support Platform	6	30-Sep-14	0%	6	09-Oct-14	28-Aug-14	04-Sep-14	-23	0																
SB3F0172	B1 (B3f) - Type 4B-MJ Pier Scaffolding (1st Lift)	4	10-Oct-14	0%	4	14-Oct-14	05-Sep-14	11-Sep-14	-23	0																
SB3F0180	B1 (B3f) - Type 4B-MJ Pier Rebarwork (1st Lift)	4	16-Oct-14	0%	4	20-Oct-14	12-Sep-14	16-Sep-14	-23	0																

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWPPrD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 18 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014												
											August			September			October			November			
											21	28	04	11	18	25	01	08	15	22	29	06	13
Pile Cap Works																							
SB2F0070	B7 (B2f) - Marine Pile Cap M1 - Inst.Floating Seal & Casing Head Steelwork	6	11-Sep-14	0%	6	18-Sep-14	01-Sep-14	08-Sep-14	-6	11													
SB2F0080	B7 (B2f) - Marine Pile Cap M1 - Install precast shell in position	1	06-Oct-14	0%	1	06-Oct-14	11-Sep-14	11-Sep-14	-17	0													
SB2F0090	B7 (B2f) - Marine Pile Cap M1 - Inst.Access & make Watertight	3	07-Oct-14	0%	3	10-Oct-14	12-Sep-14	15-Sep-14	-17	0													
SB2F0100	B7 (B2f) - Marine Pile Cap M1 - Weld Fin plates/Plug Rebar & Concrete	9	11-Oct-14	0%	9	22-Oct-14	16-Sep-14	27-Sep-14	-17	0													
SB2F0120	B7 (B2f) - Marine Pile Cap M1 - Dewater precast shell / Remove Lifting Frame	2	23-Oct-14	0%	2	24-Oct-14	29-Sep-14	30-Sep-14	-17	0													
SB2F0130	B7 (B2f) - Marine Pile Cap M1 - Pile cut down	6	25-Oct-14	0%	6	31-Oct-14	03-Oct-14	10-Oct-14	-17	0													
SB2F0140	B7 (B2f) - Marine Pile Cap M1 - Rebar fixing, inst.inserts etc	10	01-Nov-14	0%	10	12-Nov-14	11-Oct-14	23-Oct-14	-17	0													
SB2F0150	B7 (B2f) - Marine Pile Cap M1 - Concreting	1	13-Nov-14	0%	1	13-Nov-14	24-Oct-14	24-Oct-14	-17	0													
SB2F0160	B7 (B2f) - Marine Pile Cap M1 - Curing incl. CJ Preparation	6	14-Nov-14	0%	6	20-Nov-14	25-Oct-14	31-Oct-14	-17	0													
Pier Works																							
SB2F0170	B7 (B2f) - Type 4B Pier Temp. Support Platform	6	14-Nov-14	0%	6	20-Nov-14	25-Oct-14	31-Oct-14	-17	0													
Pier B8 (B2e)																							
Socketted H-Pile Installation																							
GFXX353	B8 (B2e) - Install SH Pile (14 nr)	60	25-Jun-14 A	96.67%	2	23-Aug-14	18-Jun-14	19-Jun-14	-55	0	[Blue bar]												
Pile Cap Works																							
SB2E0088	B8 (B2e) - Pile cap - Pipe Pile Wall for ELS	24	04-Sep-14	0%	24	06-Oct-14	26-Jul-14	30-Aug-14	-26	0													
SB2E0090	B8 (B2e) - Pile cap Excavation / ELS	38	07-Oct-14	0%	38	21-Nov-14	01-Sep-14	22-Oct-14	-26	0													
Pier B9 (B2d)																							
Socketted H-Pile Installation																							
GFXX347-1	B9 (B2d) - Confirm Rockhead Levels	8	07-Jun-14 A	100%	0	21-Jul-14 A																	
GFXX348	B9 (B2d) - Install SH Pile (14 nr)	71	22-Jul-14 A	73.24%	19	13-Sep-14	29-Jul-14	19-Aug-14	-21	0	[Blue bar]												
Pile Cap Works																							
SB2D0090	B9 (B2d) - ELS / Pile cap Excavation	24	15-Sep-14	0%	24	16-Oct-14	17-Oct-14	13-Nov-14	24	0	[Green bar]												
SB2D0092	B9 (B2d) - Pile Breakdown to cut-off etc.	4	17-Oct-14	0%	4	21-Oct-14	14-Nov-14	18-Nov-14	24	0													
SB2D0100	B9 (B2d) - Pile cap Blinding	1	22-Oct-14	0%	1	22-Oct-14	19-Nov-14	19-Nov-14	24	0													
SB2D0110	B9 (B2d) - Pile cap Formwork	3	23-Oct-14	0%	3	25-Oct-14	20-Nov-14	22-Nov-14	24	0													
SB2D0120	B9 (B2d) - Pile cap Rebarwork	4	27-Oct-14	0%	4	30-Oct-14	24-Nov-14	27-Nov-14	24	0													
SB2D0122	B9 (B2d) - Pile cap Kicker Formwork	2	31-Oct-14	0%	2	01-Nov-14	28-Nov-14	29-Nov-14	24	0													
SB2D0130	B9 (B2d) - Pile cap Concreting	1	03-Nov-14	0%	1	03-Nov-14	01-Dec-14	01-Dec-14	24	0													
SB2D0140	B9 (B2d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	04-Nov-14	0%	6	10-Nov-14	02-Dec-14	08-Dec-14	24	0													
Pier Works																							
SB2D0150	B9 (B2d) - Type 5B Pier Scaffolding (1st Lift)	4	11-Nov-14	0%	4	14-Nov-14	09-Dec-14	13-Dec-14	25	0													
SB2D0160	B9 (B2d) - Type 5B Pier Rebarwork (1st Lift)	4	15-Nov-14	0%	4	19-Nov-14	15-Dec-14	18-Dec-14	25	0													
SB2D0170	B9 (B2d) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	4	20-Nov-14	0%	4	24-Nov-14	19-Dec-14	23-Dec-14	25	0													
Pier B10 (B2c)																							
Preliminary Works for Land Piling																							
PB100070	B10 (B2c) - Construct new Gate G8	20	23-Jun-14 A	75%	5	28-Aug-14	26-Apr-14	03-May-14	-73	0	[Blue bar]												
PB100080	B10 (B2c) - Construct new Gate G9	20	23-Jun-14 A	75%	5	28-Aug-14	26-Apr-14	03-May-14	-73	0	[Blue bar]												
PB100100	B10 (B2c) - Remove original gates G8 & G9	6	29-Aug-14	0%	6	05-Sep-14	08-May-14	15-May-14	-73	0	[Red bar]												
PB100110	B10 (B2c) - Fence existing openings of orig.gates & convert area to construction site	10	29-Aug-14	0%	10	12-Sep-14	08-May-14	20-May-14	-73	0	[Red bar]												
PB100120	B10 (B2c) - Complete Civil Preparation Works for piling to commence	0		0%	0	12-Sep-14		20-May-14	-73	0	[Milestone diamond]												
Socketted H-Pile Installation																							
GFXX340	B10 (B2c) - Predrilling (2 nos)	16	13-Sep-14*	0%	16	03-Oct-14	22-May-14	10-Jun-14	-95	0	[Red bar]												
GFXX340-1	B10 (B2c) - Confirm Rockhead Levels	8	04-Oct-14	0%	8	13-Oct-14	11-Jun-14	19-Jun-14	-95	0	[Red bar]												
GFXX341	B10 (B2c) - Install SH Pile (14 nr)	36	14-Oct-14	0%	36	24-Nov-14	20-Jun-14	01-Aug-14	-95	0	[Red bar]												
Pier B11 (B2b)																							

- Actual Work
- Planned Bar
- Critical Bar
- Milestone

Project ID: J3518DWPPrD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 21 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014													
											August			September			October			November				
											21	28	04	11	18	25	01	08	15	22	29	06	13	20
Pile Cap Works																								
SB2B0090	B11 (B2b) - Utility diversion & Cut Slope	36	10-Jul-14 A	100%	0	22-Jul-14 A																		
SB2B0091	B11 (B2b) - Pile cap Excavation / ELS	24	19-Jul-14 A	75%	6	29-Aug-14	09-Jan-15	15-Jan-15	109	0														
SB2B0092	B11 (B2b) - Pile Breakdown to cut-off etc.	4	30-Aug-14	0%	4	04-Sep-14	16-Jan-15	20-Jan-15	109	0														
SB2B0100	B11 (B2b) - Pile cap Blinding	1	05-Sep-14	0%	1	05-Sep-14	21-Jan-15	21-Jan-15	109	0														
SB2B0110	B11 (B2b) - Pile cap Formwork	3	06-Sep-14	0%	3	11-Sep-14	22-Jan-15	24-Jan-15	109	0														
SB2B0120	B11 (B2b) - Pile cap Rebarwork	4	12-Sep-14	0%	4	16-Sep-14	26-Jan-15	29-Jan-15	109	0														
SB2B0122	B11 (B2b) - Pile cap Kicker Formwork	2	17-Sep-14	0%	2	18-Sep-14	30-Jan-15	31-Jan-15	109	0														
SB2B0130	B11 (B2b) - Pile cap Concreting	1	19-Sep-14	0%	1	19-Sep-14	02-Feb-15	02-Feb-15	109	0														
SB2B0140	B11 (B2b) - Pile cap Curing & Striking of Forms incl. CJ prep	6	20-Sep-14	0%	6	26-Sep-14	03-Feb-15	09-Feb-15	109	0														
Pier Works																								
SB2B0150	B11 (B2b) - Type 5B-B Pier Scaffolding (1st Lift)	4	27-Sep-14	0%	4	03-Oct-14	10-Feb-15	13-Feb-15	109	0														
SB2B0160	B11 (B2b) - Type 5B-B Pier Rebarwork (1st Lift)	4	04-Oct-14	0%	4	09-Oct-14	14-Feb-15	18-Feb-15	109	0														
SB2B0170	B11 (B2b) - Type 5B-B Pier Formwork & Prep for Concreting (1st Lift)	4	10-Oct-14	0%	4	14-Oct-14	23-Feb-15	26-Feb-15	109	0														
SB2B0180	B11 (B2b) - Type 5B-B Pier Concreting (1st Lift)	1	16-Oct-14	0%	1	16-Oct-14	27-Feb-15	27-Feb-15	109	0														
SB2B0182	B11 (B2b) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	17-Oct-14	0%	2	18-Oct-14	28-Feb-15	02-Mar-15	109	0														
SB2B0190	B11 (B2b) - Type 5B-B Pier Scaffolding (2nd Lift)	4	20-Oct-14	0%	4	23-Oct-14	03-Mar-15	07-Mar-15	110	0														
SB2B0200	B11 (B2b) - Type 5B-B Pier Rebarwork (2nd Lift)	4	24-Oct-14	0%	4	28-Oct-14	09-Mar-15	12-Mar-15	110	0														
SB2B0210	B11 (B2b) - Type 5B-B Pier Formwork & Prep for Concreting (2nd Lift)	4	29-Oct-14	0%	4	01-Nov-14	13-Mar-15	17-Mar-15	110	0														
SB2B0220	B11 (B2b) - Type 5B-B Pier Concreting (2nd Lift)	1	03-Nov-14	0%	1	03-Nov-14	18-Mar-15	18-Mar-15	110	0														
SB2B0222	B11 (B2b) - Type 5B-B Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	04-Nov-14	0%	2	05-Nov-14	19-Mar-15	20-Mar-15	110	0														
SB2B0230	B11 (B2b) - Type 5B-B Pier Head Scaffolding	4	06-Nov-14	0%	4	10-Nov-14	21-Mar-15	25-Mar-15	110	0														
SB2B0240	B11 (B2b) - Type 5B-B Pier Head Rebarwork	4	11-Nov-14	0%	4	14-Nov-14	26-Mar-15	30-Mar-15	110	0														
SB2B0250	B11 (B2b) - Type 5B-B Pier Head Formwork & Prep for Concreting	4	15-Nov-14	0%	4	19-Nov-14	31-Mar-15	10-Apr-15	110	0														
SB2B0260	B11 (B2b) - Type 5B-B Pier Head Concreting	1	20-Nov-14	0%	1	20-Nov-14	11-Apr-15	11-Apr-15	110	0														
Pier B12 (B2a)																								
Socketted H-Pile Installation																								
GFXX354-5	B12 (B2a) - Selection of pile for loading test	24	03-Jul-14 A	58.33%	10	02-Sep-14	25-Jun-18	06-Jul-18	1135	0														
GFXX354-7	B12 (B2a) - Loading Test for pre-bored H-pile	36	03-Sep-14	0%	36	17-Oct-14	07-Jul-18	17-Aug-18	1135	1135														
Pile Cap Works																								
SB2A0090	B12 (B2a) - Utility diversion & Cut Slope	36	15-Jul-14 A	100%	0	21-Jul-14 A																		
SB2A0091	B12 (B2a) - Pile cap Excavation / ELS (incl. sheet piling)	24	13-Aug-14 A	50%	12	06-Sep-14	03-Jan-15	16-Jan-15	104	0														
SB2A0092	B12 (B2a) - Pile Breakdown to cut-off etc.	4	08-Sep-14	0%	4	13-Sep-14	17-Jan-15	21-Jan-15	104	0														
SB2A0100	B12 (B2a) - Pile cap Blinding	1	15-Sep-14	0%	1	15-Sep-14	22-Jan-15	22-Jan-15	104	0														
SB2A0110	B12 (B2a) - Pile cap Formwork	3	16-Sep-14	0%	3	18-Sep-14	23-Jan-15	27-Jan-15	105	0														
SB2A0120	B12 (B2a) - Pile cap Rebarwork	4	19-Sep-14	0%	4	23-Sep-14	28-Jan-15	31-Jan-15	105	0														
SB2A0122	B12 (B2a) - Pile cap Kicker Formwork	2	24-Sep-14	0%	2	25-Sep-14	02-Feb-15	03-Feb-15	105	0														
SB2A0130	B12 (B2a) - Pile cap Concreting	1	26-Sep-14	0%	1	26-Sep-14	04-Feb-15	04-Feb-15	105	0														
SB2A0140	B12 (B2a) - Pile cap Curing & Striking of Forms incl. CJ prep	6	27-Sep-14	0%	6	06-Oct-14	05-Feb-15	11-Feb-15	105	0														
Pier Works																								
SB2A0150	B12 (B2a) - Type 5B-MJ Pier Scaffolding (1st Lift)	4	07-Oct-14	0%	4	11-Oct-14	12-Feb-15	16-Feb-15	105	0														
SB2A0160	B12 (B2a) - Type 5B-MJ Pier Rebarwork (1st Lift)	4	13-Oct-14	0%	4	17-Oct-14	17-Feb-15	24-Feb-15	105	0														
SB2A0170	B12 (B2a) - Type 5B-MJ Pier Formwork & Prep for Concreting (1st Lift)	4	18-Oct-14	0%	4	22-Oct-14	25-Feb-15	28-Feb-15	105	0														
SB2A0180	B12 (B2a) - Type 5B-MJ Pier Concreting (1st Lift)	1	23-Oct-14	0%	1	23-Oct-14	02-Mar-15	02-Mar-15	105	0														
SB2A0182	B12 (B2a) - Type 5B-MJ Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	24-Oct-14	0%	2	25-Oct-14	03-Mar-15	04-Mar-15	105	0														
SB2A0190	B12 (B2a) - Type 5B-MJ Pier Scaffolding (2nd Lift)	4	27-Oct-14	0%	4	30-Oct-14	05-Mar-15	10-Mar-15	106	0														
SB2A0200	B12 (B2a) - Type 5B-MJ Pier Rebarwork (2nd Lift)	4	31-Oct-14	0%	4	04-Nov-14	11-Mar-15	14-Mar-15	106	0														

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWP-rD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 22 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
SB2A0210	B12 (B2a) - Type 5B-MJ Pier Formwork & Prep for Concreting (2nd Lift)	4	05-Nov-14	0%	4	08-Nov-14	16-Mar-15	19-Mar-15	106	0																
SB2A0220	B12 (B2a) - Type 5B-MJ Pier Concreting (2nd Lift)	1	10-Nov-14	0%	1	10-Nov-14	20-Mar-15	20-Mar-15	106	0																
SB2A0222	B12 (B2a) - Type 5B-MJ Pier Curing & Striking of Forms incl. CJ prep (2nd Lift)	2	11-Nov-14	0%	2	12-Nov-14	21-Mar-15	23-Mar-15	106	107																
Bridge B1																										
Pier B13 (B1g)																										
Socketted H-Pile Installation																										
GFXX334-3	B13 (B1g) - Install SH Pile (13 nr)	52	09-Jul-14 A	67.31%	17	11-Sep-14	27-Oct-14	14-Nov-14	53	0																
Pile Cap Works																										
SB1G0090	B13 (B1g) - Utility diversion & Cut slope	36	12-Sep-14	0%	36	28-Oct-14	15-Nov-14	29-Dec-14	51	0																
SB1G0091	B13 (B1g) - Pile cap Excavation / ELS (incl. sheet piling)	24	29-Oct-14	0%	24	25-Nov-14	30-Dec-14	27-Jan-15	51	0																
Pier B14 (B1f)																										
Socketted H-Pile Installation																										
GFXX334-4	B14 (B1f) - Install SH Pile (13 nr)	52	23-Jun-14 A	75%	13	05-Sep-14	13-Sep-14	27-Sep-14	18	0																
Pile Cap Works																										
SB1F0090	B14 (B1f) - Utility diversion & Cut slope	36	06-Sep-14	0%	36	24-Oct-14	29-Sep-14	13-Nov-14	17	0																
SB1F0091	B14 (B1f) - Pile cap Excavation / ELS (incl. sheet piling)	24	25-Oct-14	0%	24	21-Nov-14	14-Nov-14	11-Dec-14	17	0																
Pier B15 (B1e)																										
Pile Cap Works																										
SB1E0095	B15 (B1e) - Pile cap Excavation / ELS (incl. sheet piling)	24	09-Jun-14 A	79.17%	5	28-Aug-14	13-Aug-18	17-Aug-18	1060	1060																
SB1E0096	B15 (B1e) - Pile Breakdown to cut-off etc.	4	18-Aug-14 A	50%	2	23-Aug-14	03-Feb-15	04-Feb-15	130	44																
SB1E0102	B15 (B1e) - Pile cap Blinding	1	24-Oct-14	0%	1	24-Oct-14	05-Feb-15	05-Feb-15	86	0																
SB1E0112	B15 (B1e) - Pile cap Formwork	3	25-Oct-14	0%	3	28-Oct-14	06-Feb-15	09-Feb-15	86	0																
SB1E0124	B15 (B1e) - Pile cap Rebarwork	4	29-Oct-14	0%	4	01-Nov-14	10-Feb-15	13-Feb-15	86	0																
SB1E0126	B15 (B1e) - Pile cap Kicker Formwork	2	03-Nov-14	0%	2	04-Nov-14	14-Feb-15	16-Feb-15	86	0																
SB1E0132	B15 (B1e) - Pile cap Concreting	1	05-Nov-14	0%	1	05-Nov-14	17-Feb-15	17-Feb-15	86	0																
SB1E0142	B15 (B1e) - Pile cap Curing & Striking of Forms incl. CJ prep	6	06-Nov-14	0%	6	12-Nov-14	18-Feb-15	27-Feb-15	86	0																
Pier Works																										
SB1E0150	B15 (B1e) - Type 5B Pier Scaffolding (1st Lift)	4	13-Nov-14	0%	4	17-Nov-14	28-Feb-15	04-Mar-15	86	0																
SB1E0160	B15 (B1e) - Type 5B Pier Rebarwork (1st Lift)	4	18-Nov-14	0%	4	21-Nov-14	05-Mar-15	09-Mar-15	86	0																
Pier B16 (B1d)																										
Socketted H-Pile Installation																										
GFXX326-2	B16 (B1d) - Selection of pile for loading test	24	16-Jun-14 A	50%	12	04-Sep-14	22-Jun-18	06-Jul-18	1133	0																
GFXX326-4	B16 (B1d) - Loading Test for pre-bored H-pile	36	05-Sep-14	0%	36	20-Oct-14	07-Jul-18	17-Aug-18	1133	1133																
Pile Cap Works																										
SB1D0120	B16 (B1d) - Pile cap Rebarwork	4	19-Jul-14 A	100%	0	22-Aug-14	27-Mar-15	27-Mar-15	172	0																
SB1D0122	B16 (B1d) - Pile cap Kicker Formwork	2	22-Aug-14	0%	2	23-Aug-14	27-Mar-15	30-Mar-15	172	0																
SB1D0130	B16 (B1d) - Pile cap Concreting	1	25-Aug-14	0%	1	25-Aug-14	30-Mar-15	31-Mar-15	172	0																
SB1D0140	B16 (B1d) - Pile cap Curing & Striking of Forms incl. CJ prep	6	26-Aug-14	0%	6	02-Sep-14	31-Mar-15	14-Apr-15	172	0																
Pier Works																										
SB1D0150	B16 (B1d) - Type 5B Pier Scaffolding (1st Lift)	4	04-Sep-14	0%	4	08-Sep-14	14-Apr-15	20-Apr-15	172	0																
SB1D0160	B16 (B1d) - Type 5B Pier Rebarwork (1st Lift)	4	11-Sep-14	0%	4	15-Sep-14	20-Apr-15	25-Apr-15	172	0																
SB1D0170	B16 (B1d) - Type 5B Pier Formwork & Prep for Concreting (1st Lift)	4	16-Sep-14	0%	4	19-Sep-14	25-Apr-15	02-May-15	172	0																
SB1D0180	B16 (B1d) - Type 5B Pier Concreting (1st Lift)	1	20-Sep-14	0%	1	20-Sep-14	02-May-15	04-May-15	172	0																
SB1D0182	B16 (B1d) - Type 5B Pier Curing & Striking of Forms incl. CJ prep (1st Lift)	2	22-Sep-14	0%	2	23-Sep-14	04-May-15	08-May-15	172	0																
SB1D0190	B16 (B1d) - Type 5B Pier Head Scaffolding	4	24-Sep-14	0%	4	27-Sep-14	08-May-15	13-May-15	172	0																
SB1D0200	B16 (B1d) - Type 5B Pier Head Rebarwork	4	29-Sep-14	0%	4	04-Oct-14	13-May-15	19-May-15	172	0																
SB1D0210	B16 (B1d) - Type 5B Pier Head Formwork & Prep for Concreting	4	06-Oct-14	0%	4	10-Oct-14	19-May-15	26-May-15	172	0																

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

Project ID: J3518DWPPrD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

**Tuen Mun - Chek Lap Kok Link - Southern Connection
 3-Month Rolling Programme (Page 23 of 34 Pages)
 (Progress as of 21-Aug-14)**

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
SB1D0220	B16 (B1d) - Type 5B Pier Head Concreting	1	11-Oct-14	0%	1	11-Oct-14	26-May-15	27-May-15	172	0																
SB1D0270	B16 (B1d) - Type 5B Pier Head Curing & Striking of Forms & Remove Scaffolding	6	13-Oct-14	0%	6	20-Oct-14	27-May-15	10-Jun-15	173	0																
SB1D0280	B16 (B1d) - Type 5B Pier Backfilling Works	4	21-Oct-14	0%	4	24-Oct-14	10-Jun-15	19-Jun-15	173	80																
Pier B18 (B1b) & Abutment B																										
Preliminary Works for Land Piling																										
PB180030	B18 (B1b) - Install Geo. Instru. & Baseline Monitoring	36	13-Jun-14 A	0%	36	06-Oct-14	03-Nov-15	14-Dec-15	355	464																
Viaduct C																										
Milestones - Marine Foundation																										
GFXX192	Viaduct C - ARUP issues Pile Spacing & Diameter for Temporary Platform Design	0		0%	0	21-Aug-14		18-Nov-14	73	95																
GFXX214-1	C2 (C4d) - Start date for piling	0	14-Nov-14	0%	0		19-Dec-14		30	16																
GFXX219-1	C1 (C4e) - Start date for piling	0	18-Aug-14 A	100%	0																					
ZC00010	Viaduct C - Approval of Foundation DDA	0		0%	0	13-Nov-14		10-Nov-14	-3	0																
Milestones - Land Foundation																										
ZC00020	C20 (C1c) - Start date for piling	0	14-Nov-14	0%	0		10-Mar-15		93	72																
ZC00030	C19 (C1d) - Start date for piling	0	14-Nov-14	0%	0		25-Apr-15		129	0																
ZC00040	C18 (C1e) - Start date for piling	0	14-Nov-14	0%	0		21-Apr-15		125	72																
ZC00095	C8 (C3d) - Start date for piling	0	14-Nov-14	0%	0		10-Feb-15		72	20																
General - Preliminary Works for Land Piling																										
ZC80050	Implement TTMS for C9 to C20 for land piling preliminary works	12	22-Aug-14	0%	12	06-Sep-14	05-Sep-14	20-Sep-14	10	0																
Bridge C4																										
Pier C1 (C4e)																										
Foundation Works																										
GFXX219	C1 (C4e) - Pre-drilling (3 nos)	14	26-Jul-14 A	100%	0	12-Aug-14 A																				
GFXX219-2	C1 (C4e) - Confirm Rockhead Levels	8	11-Aug-14 A	100%	0	17-Aug-14 A																				
GFXX220	C1 (C4e) - Bored Piles (1.80m dia. x 3 nos)	84	18-Aug-14 A	5.95%	79	25-Nov-14	08-Oct-14	10-Jan-15	37	0																
Pier C2 (C4d)																										
Foundation Works																										
GFXX213	C2 (C4d) - Inst.Temp.Working Platform	13	23-Jul-14 A	100%	0	20-Aug-14 A																				
GFXX214	C2 (C4d) - Pre-drilling (2 nos)	12	22-Aug-14	0%	12	04-Sep-14	17-Nov-14	29-Nov-14	71	0																
GFXX214-2	C2 (C4d) - Confirm Rockhead Levels	8	05-Sep-14	0%	8	15-Sep-14	14-Feb-15	26-Feb-15	133	119																
GFXX215	C2 (C4d) - Bored Piles (2.20m dia. x 2 nos)	70	14-Nov-14	0%	70	06-Feb-15	01-Dec-14	26-Feb-15	14	0																
Bridge C3																										
Pier C7 (C3e)																										
Preliminary Works for Land Piling																										
GFXX360	C7 (C3e) - Set up for Pregrouting	5	01-Nov-14	0%	5	06-Nov-14	21-Oct-14	25-Oct-14	-10	0																
GFXX361-1	C7 (C3e) - Pre-grouting Works	30	07-Nov-14	0%	30	11-Dec-14	27-Oct-14	29-Nov-14	-10	0																
PC070020	C7 (C3e) - CEDD Access Track Temp. Re-alignment	24	30-Jun-14 A	100%	0	28-Jul-14 A																				
PC070030	C7 (C3e) - Erect MTR protective fence / Remove existing fence	12	07-Aug-14 A	16.67%	10	04-Sep-14	08-Aug-14	21-Aug-14	-10	0																
PC070040	C7 (C3e) - Install Geo. Instru. & Baseline Monitoring	36	05-Sep-14	0%	36	20-Oct-14	22-Aug-14	06-Oct-14	-12	0																
PC070050	C7 (C3e) - Set up piling platform	10	21-Oct-14	0%	10	31-Oct-14	07-Oct-14	20-Oct-14	-10	0																
Pier C8 (C3d)																										
Preliminary Works for Land Piling																										
GFXX361-3	C8 (C3d) - Pre-grouting Works	30	11-Oct-14	0%	30	14-Nov-14	14-Jul-18	17-Aug-18	1111	0																
PC080020	C8 (C3d) - Set up site ingress	4	24-Jul-14 A	100%	0	31-Jul-14 A																				
PC080030	C8 (C3d) - General site clearance	5	24-Jul-14 A	100%	0	28-Jul-14 A																				
PC080040	C8 (C3d) - Erect boundary fence / water filled barrier	12	21-Jul-14 A	41.67%	7	30-Aug-14	31-May-18	09-Jun-18	1008	1058																
PC080050	C8 (C3d) - Install Geo. Instru. & Baseline Monitoring	36	22-Aug-14	0%	36	06-Oct-14	31-May-18	13-Jul-18	1115	4																

- Actual Work
- Planned Bar
- Critical Bar
- Milestone

Project ID: J3518DWPRD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 24 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014												
											August			September			October			November			
											21	28	04	11	18	25	01	08	15	22	29	06	13
PC080060	C8 (C3d) - Set up piling platform	36	22-Aug-14	0%	36	10-Oct-14	23-May-18	13-Jul-18	1001	0	[Gantt bar: 22-Aug-14 to 13-Jul-18]												
PC080070	C8 (C3d) - Complete Civil Preparation Works for piling to commence	0		0%	0	14-Nov-14		17-Aug-18	1000	1000	[Milestone diamond: 17-Aug-18]												
Socketted H-Pile Installation																							
GFXX392	C8 (C3d) - Predrilling	17	14-Aug-14 A	100%	0	19-Aug-14 A					[Actual work bar: 14-Aug-14 to 19-Aug-14]												
GFXX392-1	C8 (C3d) - Confirm Rockhead Levels	8	20-Aug-14 A	0%	8	30-Aug-14	31-Jan-15	09-Feb-15	133	61	[Planned bar: 20-Aug-14 to 09-Feb-15]												
GFXX393	C8 (C3d) - Install SH Pile (16 no.)	108	14-Nov-14	0%	108	26-Mar-15	10-Feb-15	26-Jun-15	72	0	[Planned bar: 14-Nov-14 to 26-Jun-15]												
Pier C9 (C3c)																							
Preliminary Works for Land Piling																							
PC090010	C9 (C3c) - Install Geo. Instru. & Baseline Monitoring	36	08-Sep-14	0%	36	22-Oct-14	22-Sep-14	04-Nov-14	11	0	[Planned bar: 08-Sep-14 to 04-Nov-14]												
Pier C10 (C3b)																							
Preliminary Works for Land Piling																							
PC100010	C10 (C3c) - Install Geo. Instru. & Baseline Monitoring	36	08-Sep-14	0%	36	22-Oct-14	31-Oct-14	11-Dec-14	43	0	[Planned bar: 08-Sep-14 to 11-Dec-14]												
Pier C11 (C3a)																							
Preliminary Works for Land Piling																							
PC110010	C11 (C3a) - Install Geo. Instru. & Baseline Monitoring	36	12-Sep-14	0%	36	25-Oct-14	26-Nov-14	09-Jan-15	62	0	[Planned bar: 12-Sep-14 to 09-Jan-15]												
Bridge C2																							
Pier C12 (C2f)																							
Preliminary Works for Land Piling																							
PC120010	C12 (C2f) - Install Geo. Instru. & Baseline Monitoring	36	19-Sep-14	0%	36	01-Nov-14	02-Mar-15	16-Apr-15	132	0	[Planned bar: 19-Sep-14 to 16-Apr-15]												
PC120020	C12 (C2f) - Erect fencing, site clearance & form piling platform	8	15-Jul-14 A	100%	0	15-Aug-14 A					[Actual work bar: 15-Jul-14 to 15-Aug-14]												
PC120030	C12 (C2f) - Complete civil preparation works for piling to commence	0		100%	0	15-Aug-14 A					[Milestone diamond: 15-Aug-14]												
Foundation Works																							
GFXX410	C12 (C2f) - Predrilling (2 nos)	13	19-Aug-14 A	46.15%	7	29-Aug-14	02-Apr-15	14-Apr-15	182	0	[Actual work bar: 19-Aug-14 to 14-Apr-15]												
GFXX411	C12 (C2f) - Confirm Rockhead Levels	8	30-Aug-14	0%	8	08-Sep-14	17-Apr-15	25-Apr-15	184	118	[Planned bar: 30-Aug-14 to 25-Apr-15]												
Pier C13 (C2e) Portal																							
Preliminary Works for Land Piling																							
PC130010	C13 (C2e) - Install Geo. Instru. & Baseline Monitoring	36	03-Nov-14	0%	36	13-Dec-14	17-Apr-15	30-May-15	132	0	[Planned bar: 03-Nov-14 to 30-May-15]												
PC130020	C13 (C2e) - Erect fencing, site clearance & form piling platform	10	15-Jul-14 A	100%	0	09-Aug-14 A					[Actual work bar: 15-Jul-14 to 09-Aug-14]												
PC130030	C13 (C2e) - Complete Civil Preparation Works for piling to commence	0		100%	0	09-Aug-14 A					[Milestone diamond: 09-Aug-14]												
Socketted H-Pile Installation																							
GFXX387	C13 (C2e) - Predrilling (2 Nr)	14	11-Aug-14 A	50%	7	29-Aug-14	27-Apr-15	05-May-15	199	0	[Actual work bar: 11-Aug-14 to 05-May-15]												
GFXX387-1	C13 (C2e) - Confirm Rockhead Levels	8	30-Aug-14	0%	8	08-Sep-14	06-May-15	14-May-15	199	64	[Planned bar: 30-Aug-14 to 14-May-15]												
Pier C15 (C2c)																							
Preliminary Works for Land Piling																							
PC150010	C15 (C2c) - Install Geo. Instru. & Baseline Monitoring	36	16-Aug-14 A	0%	36	06-Oct-14	23-Jun-15	04-Aug-15	245	41	[Planned bar: 16-Aug-14 to 04-Aug-15]												
Pier C16 (C2b)																							
Preliminary Works for Land Piling																							
PC160010	C16 (C2b) - Install Geo. Instru. & Baseline Monitoring	36	08-Sep-14	0%	36	22-Oct-14	22-Jan-15	07-Mar-15	111	0	[Planned bar: 08-Sep-14 to 07-Mar-15]												
Bridge C1																							
Pier C17 (C2a)																							
Preliminary Works for Land Piling																							
PC170010	C17 (C2a) - Install Geo. Instru. & Baseline Monitoring	36	16-Sep-14	0%	36	29-Oct-14	29-Jan-15	14-Mar-15	111	0	[Planned bar: 16-Sep-14 to 14-Mar-15]												
Pier C18 (C3d) Portal																							
Preliminary Works for Land Piling																							
PC180010	C18 (C1e) - Install Geo. Instru. & Baseline Monitoring	36	23-Sep-14	0%	36	05-Nov-14	16-May-18	28-Jun-18	1077	0	[Planned bar: 23-Sep-14 to 28-Jun-18]												
PC180020	C18 (C1e) - Erect fencing, site clearance & form piling platform	10	10-Jul-14 A	100%	0	06-Aug-14 A					[Actual work bar: 10-Jul-14 to 06-Aug-14]												
PC180030	C18 (C1e) - Complete Civil Preparation Works	0		100%	0	06-Aug-14 A					[Milestone diamond: 06-Aug-14]												

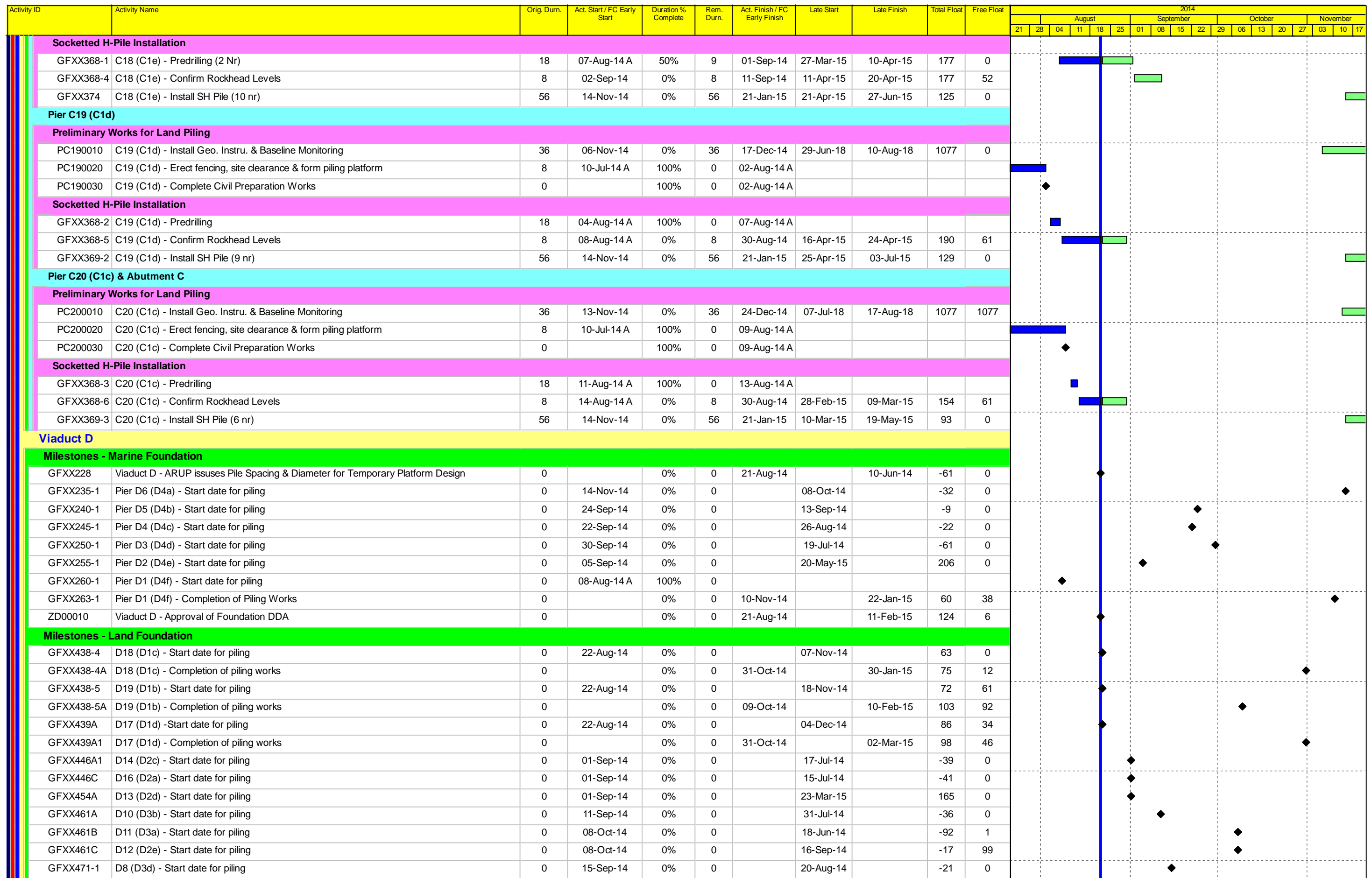
█ Actual Work
█ Planned Bar
█ Critical Bar
◆ Milestone

Project ID: J3518DWPPrD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 25 of 34 Pages)
(Progress as of 21-Aug-14)





Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15



<ul style="list-style-type: none"> █ Actual Work █ Planned Bar █ Critical Bar ◆ Milestone 	Project ID: J3518DWPPrD1-M15 Layout: J3518-DWP-3MRP Submission - M15 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.	Tuen Mun - Chek Lap Kok Link - Southern Connection 3-Month Rolling Programme (Page 26 of 34 Pages) (Progress as of 21-Aug-14)	Date	Revision	Checked	Approved	DWG. No.: J3518/GCL/PGM/3MRP-M15
			28-Jun-14		FZ		
			29-Jul-14		FZ		
			29-Aug-14		FZ		

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	2014																		
											August				September				October				November						
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10	17	
General - Preliminary Works for Land Piling																													
ZD20010	Viaduct D works area between MTR and NLH - Setup TTMS	4	22-Aug-14	0%	4	26-Aug-14	30-Jul-18	02-Aug-18	1049	0																			
Bridge D3																													
Pier D1 (D4f)																													
Foundation Works																													
GFXX260	D1 (D4f) - Predrilling for Piles (3 nos)	14	22-Jul-14 A	100%	0	02-Aug-14 A																							
GFXX260-2	D1 (D4f) - Confirm Rockhead Levels	8	03-Aug-14 A	100%	0	07-Aug-14 A																							
GFXX261	D1 (D4f) - Bored Piles (1.80m dia. x 3 nos)	58	08-Aug-14 A	15.52%	49	21-Oct-14	26-Jun-14	22-Aug-14	-48	0																			
GFXX262	D1 (D4f) - Sonic & Interface Coring	12	22-Oct-14	0%	12	04-Nov-14	03-Jan-15	16-Jan-15	60	0																			
GFXX263	D1 (D4f) - Dismantle removable panels of temp. platform	5	05-Nov-14	0%	5	10-Nov-14	17-Jan-15	22-Jan-15	60	0																			
Pier D2 (D4e)																													
Foundation Works																													
GFXX254	D2 (D4e) - Inst.Temp.Working Platform	12	23-Jul-14 A	100%	0	20-Aug-14 A																							
GFXX255	D2 (D4e) - Predrilling (2 nos)	12	22-Aug-14	0%	12	04-Sep-14	16-Jun-14	28-Jun-14	-57	0																			
GFXX255-2	D2 (D4e) - Confirm Rockhead Levels	8	05-Sep-14	0%	8	15-Sep-14	30-Jun-14	09-Jul-14	-57	0																			
GFXX256	D2 (D4e) - Bored Piles (2.35m dia. x 2 nos)	63	05-Sep-14	0%	63	20-Nov-14	30-Jun-14	12-Sep-14	-57	0																			
Pier D3 (D4d)																													
Foundation Works																													
GFXX249	D3 (D4d) - Inst.Temp.Working Platform	20	22-Aug-14	0%	20	15-Sep-14	11-Jun-14	04-Jul-14	-61	0																			
GFXX250	D3 (D4d) - Predrilling for Piles (3 nos)	12	16-Sep-14	0%	12	29-Sep-14	05-Jul-14	18-Jul-14	-61	0																			
GFXX250-2	D3 (D4d) - Confirm Rockhead Levels	8	30-Sep-14	0%	8	10-Oct-14	19-Jul-14	28-Jul-14	-61	0																			
GFXX251	D3 (D4d) - Bored Piles (2.00m dia. x 3 nos)	65	30-Sep-14	0%	65	16-Dec-14	19-Jul-14	06-Oct-14	-61	0																			
Pier D4 (D4c)																													
Foundation Works																													
GFXX244	D4 (D4c) - Inst.Temp.Working Platform	14	22-Aug-14	0%	14	06-Sep-14	28-Jul-14	12-Aug-14	-22	0																			
GFXX245	D4 (D4c) - Predrilling (3 nos)	11	08-Sep-14	0%	11	20-Sep-14	13-Aug-14	25-Aug-14	-22	0																			
GFXX245-2	D4 (D4c) - Confirm Rockhead Levels	8	22-Sep-14	0%	8	30-Sep-14	26-Aug-14	03-Sep-14	-22	0																			
GFXX246	D4 (D4c) - Bored Piles (2.00m dia. x 3 nos)	70	22-Sep-14	0%	70	13-Dec-14	26-Aug-14	18-Nov-14	-22	0																			
Pier D5 (D4b)																													
Foundation Works																													
GFXX239	D5 (D4b) - Inst.Temp.Working Platform	15	22-Aug-14	0%	15	08-Sep-14	25-Jul-14	11-Aug-14	-24	0																			
GFXX240	D5 (D4b) - Predrilling (2 nos)	12	10-Sep-14	0%	12	23-Sep-14	12-Aug-14	25-Aug-14	-24	0																			
GFXX240-2	D5 (D4b) - Confirm Rockhead Levels	8	24-Sep-14	0%	8	04-Oct-14	26-Aug-14	03-Sep-14	-24	0																			
GFXX241	D5 (D4b) - Bored Piles (2.35m dia. x 2 nos)	78	24-Sep-14	0%	78	27-Dec-14	26-Aug-14	27-Nov-14	-24	0																			
Pier D6 (D4a)																													
Foundation Works																													
GFXX234	D6 (D4a) - Inst.Temp.Working Platform	10	22-Oct-14	0%	10	01-Nov-14	23-Aug-14	03-Sep-14	-48	0																			
GFXX235	D6 (D4a) - Predrilling (3 nos)	10	03-Nov-14	0%	10	13-Nov-14	04-Sep-14	16-Sep-14	-48	0																			
GFXX235-2	D6 (D4a) - Confirm Rockhead Levels	8	14-Nov-14	0%	8	22-Nov-14	17-Sep-14	25-Sep-14	-48	0																			
GFXX236	D6 (D4a) - Bored Piles (2.00m dia. x 3 nos)	62	14-Nov-14	0%	62	28-Jan-15	17-Sep-14	29-Nov-14	-48	0																			
Bridge D2																													
Pier D8 (D3d)																													
Preliminary Works for Land Piling																													
GFXX432	D8 (D3d) - Set up for Pregrouting	5	21-Oct-14	0%	5	25-Oct-14	09-Jul-18	13-Jul-18	1098	0																			
GFXX433-1	D8 (D3d) - Pregrouting Works	30	27-Oct-14	0%	30	29-Nov-14	14-Jul-18	17-Aug-18	1098	0																			
PD080030	D8 (D3d) - Erect MTR protective fence / remove existing fence	12	07-Aug-14 A	16.67%	10	04-Sep-14	08-Jun-18	22-Jun-18	1013	23																			
PD080032	D8 (D3d) - Install Geo. Instru. & Baseline Monitoring	36	22-Aug-14	0%	36	06-Oct-14	10-May-18	22-Jun-18	1098	0																			

-  Actual Work
-  Planned Bar
-  Critical Bar
-  Milestone

Project ID: J3518DWP-PrD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 27 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014																
											August				September				October				November				
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03	10
PD080040	D8 (D3d) - Set up piling platform	10	07-Oct-14	0%	10	20-Oct-14	23-Jun-18	07-Jul-18	990	0	[Gantt bar: 23-Jun-18 to 07-Jul-18]																
Socketted H-Pile Installation																											
GFXX470	D8 (D3d) - Predrilling (2 Nr)	17	25-Jul-14 A	47.06%	9	01-Sep-14	31-Jul-14	09-Aug-14	-19	0	[Gantt bar: 25-Jul-14 to 09-Aug-14]																
GFXX470-1	D8 (D3d) - Confirm Rockhead Levels	8	02-Sep-14	0%	8	11-Sep-14	11-Aug-14	19-Aug-14	-19	2	[Gantt bar: 11-Aug-14 to 19-Aug-14]																
GFXX471	D8 (D3d) - Installation of SH Pile (16 nr)	122	15-Sep-14	0%	122	09-Feb-15	20-Aug-14	15-Jan-15	-21	0	[Gantt bar: 20-Aug-14 to 15-Jan-15]																
Pier D9 (D3c)																											
Preliminary Works for Land Piling																											
GFXX433-2	D9 (D3c) - Pregrouting Works	30	23-Jul-14 A	100%	0	23-Jul-14 A					[Milestone: 23-Jul-14 A]																
PD090010	D9 (D3c) - Erect MTR boundary fence / remove existing fence	12	28-Aug-14	0%	12	13-Sep-14	03-Aug-18	17-Aug-18	1049	1049	[Gantt bar: 13-Sep-14 to 17-Aug-18]																
PD090012	D9 (D3c) - Install Geo. Instru. & Baseline Monitoring	36	10-Jul-14 A	100%	0	22-Jul-14 A					[Milestone: 22-Jul-14 A]																
PD090020	D9 (D3c) - Set up piling platform	10	10-Jul-14 A	100%	0	22-Jul-14 A					[Milestone: 22-Jul-14 A]																
PD090030	D9 (D3c) - Complete Civil Preparation Works for piling to commence	0		100%	0	23-Jul-14 A					[Milestone: 23-Jul-14 A]																
Socketted H-Pile Installation																											
GFXX465	D9 (D3c) - Predrilling	18	08-Aug-14 A	100%	0	12-Aug-14 A					[Milestone: 12-Aug-14 A]																
GFXX465-1	D9 (D3c) - Confirm Rockhead Levels	8	22-Aug-14	0%	8	30-Aug-14	24-Jul-14	01-Aug-14	-25	70	[Gantt bar: 24-Jul-14 to 01-Aug-14]																
Pier D10 (D3b)																											
Preliminary Works for Land Piling																											
PD100012	D10 (D3b) - Install Geo. Instru. & Baseline Monitoring	36	10-Jul-14 A	100%	0	22-Jul-14 A					[Milestone: 22-Jul-14 A]																
PD100020	D10 (D3b) - Set up piling platform	10	23-Jul-14 A	0%	10	04-Sep-14	06-Aug-18	17-Aug-18	1055	0	[Gantt bar: 04-Sep-14 to 17-Aug-18]																
PD100030	D10 (D3b) - Complete Civil Preparation Works for piling to commence	0		0%	0	04-Sep-14		17-Aug-18	1055	1055	[Milestone: 04-Sep-14]																
Socketted H-Pile Installation																											
GFXX460-1	D10 (D3b) - Predrilling (2 Nr)	17	14-Aug-14 A	50%	9	01-Sep-14	19-May-14	28-May-14	-80	0	[Gantt bar: 19-May-14 to 28-May-14]																
GFXX460-4	D10 (D3b) - Confirm Rockhead Levels	8	01-Sep-14	0%	8	11-Sep-14	22-Jul-14	30-Jul-14	-36	0	[Gantt bar: 22-Jul-14 to 30-Jul-14]																
GFXX461-1	D10 (D3b) - Installation of SH Pile (12 nr)	153	11-Sep-14	0%	153	18-Mar-15	31-Jul-14	31-Jan-15	-36	0	[Gantt bar: 31-Jul-14 to 31-Jan-15]																
Pier D11 (D3a)																											
Preliminary Works for Land Piling																											
PD110012	D11 (D3a) - Install Geo. Instru. & Baseline Monitoring	36	10-Jul-14 A	100%	0	22-Jul-14 A					[Milestone: 22-Jul-14 A]																
PD110020	D11 (D3a) - Set up piling platform	10	23-Jul-14 A	0%	10	04-Sep-14	02-May-14	17-May-14	-70	0	[Gantt bar: 04-Sep-14 to 17-May-14]																
PD110030	D11 (D3a) - Complete Civil Preparation Works for piling to commence	0		0%	0	04-Sep-14		17-May-14	-70	0	[Milestone: 04-Sep-14]																
Socketted H-Pile Installation																											
GFXX460-2	D11 (D3a) - Predrilling	17	05-Sep-14	0%	17	25-Sep-14	19-May-14	07-Jun-14	-92	0	[Gantt bar: 19-May-14 to 07-Jun-14]																
GFXX460-5	D11 (D3a) - Confirm Rockhead Levels	8	26-Sep-14	0%	8	07-Oct-14	09-Jun-14	17-Jun-14	-92	0	[Gantt bar: 09-Jun-14 to 17-Jun-14]																
GFXX461-2	D11 (D3a) - Installation of SH Pile (14 nr)	153	08-Oct-14	0%	153	15-Apr-15	18-Jun-14	17-Dec-14	-92	0	[Gantt bar: 18-Jun-14 to 17-Dec-14]																
Pier D12 (D2e)																											
Preliminary Works for Land Piling																											
PD120010	D12 (D2e) - Erect boundary fence / water filled barrier / remove existing fence	10	04-Jun-14 A	100%	0	10-Aug-14 A					[Milestone: 10-Aug-14 A]																
PD120012	D12 (D2e) - Install Geo. Instru. & Baseline Monitoring	36	22-Aug-14	0%	36	06-Oct-14	07-Jul-18	17-Aug-18	1145	1145	[Gantt bar: 06-Oct-14 to 17-Aug-18]																
PD120020	D12 (D2e) - Set up piling platform	10	11-Aug-14 A	100%	0	14-Aug-14 A					[Milestone: 14-Aug-14 A]																
PD120030	D12 (D2e) - Complete Civil Preparation Works for piling to commence	0		0%	0	21-Aug-14		15-Aug-14	-4	10	[Milestone: 21-Aug-14]																
Socketted H-Pile Installation																											
GFXX460-3	D12 (D2e) - Predrilling	17	05-Sep-14	0%	17	25-Sep-14	16-Aug-14	04-Sep-14	-17	0	[Gantt bar: 16-Aug-14 to 04-Sep-14]																
GFXX460-6	D12 (D2e) - Confirm Rockhead Levels	8	26-Sep-14	0%	8	07-Oct-14	05-Sep-14	15-Sep-14	-17	0	[Gantt bar: 05-Sep-14 to 15-Sep-14]																
GFXX461-3	D12 (D2e) - Installation of SH Pile (16 nr)	153	08-Oct-14	0%	153	15-Apr-15	16-Sep-14	21-Mar-15	-17	0	[Gantt bar: 16-Sep-14 to 21-Mar-15]																
Pier D13 (D2d)																											
Socketted H-Pile Installation																											
GFXX452-8	D13 (D2d) - Confirm Rockhead Levels	8	31-May-14 A	0%	8	30-Aug-14	03-Feb-15	11-Feb-15	135	0	[Gantt bar: 30-Aug-14 to 11-Feb-15]																
GFXX454	D13 (D2d) - Installation of SH Pile (16 nos)	71	01-Sep-14	0%	71	25-Nov-14	12-Feb-15	14-May-15	135	0	[Gantt bar: 12-Feb-15 to 14-May-15]																

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWPd1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 28 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014													
											August				September				October				November	
											21	28	04	11	18	25	01	08	15	22	29	06	13	20
Bridge D1																								
Pier D14 (D2c)																								
Socketted H-Pile Installation																								
GFXX445-	D14 (D2c) - Confirm Rockhead Levels	8	17-Jun-14 A	0%	8	30-Aug-14	08-Jul-14	16-Jul-14	-39	0														
GFXX446-	D14 (D2c) - Installation of SH Pile (10 nr)	121	01-Sep-14	0%	121	26-Jan-15	17-Jul-14	08-Dec-14	-39	0														
Pier D15 (D2b)																								
Preliminary Works for Land Piling																								
PD150012	D15 (D2b) - Install Geo. Instru. & Baseline Monitoring	36	26-Jul-14 A	0%	36	06-Oct-14	14-Apr-14	30-May-14	-105	0														
PD150020	D15 (D2b) - Set up piling platform	20	07-Oct-14	0%	20	31-Oct-14	31-May-14	07-Jul-14	-84	0														
PD150030	D15 (D2b) - Complete Civil Preparation Works for piling to commence	0		0%	0	31-Oct-14		07-Jul-14	-84	0														
Socketted H-Pile Installation																								
GFXX445-2	D15 (D2b) - Predrilling	18	01-Nov-14	0%	18	21-Nov-14	08-Jul-14	28-Jul-14	-97	0														
Pier D16 (D2a)																								
Preliminary Works for Land Piling																								
PD160012	D16 (D2a) - Install Geo. Instru. & Baseline Monitoring	36	26-Jul-14 A	0%	36	06-Oct-14	11-Jun-18	24-Jul-18	1124	22														
PD160020	D16 (D2a) - Set up piling platform	20	01-Nov-14	0%	20	24-Nov-14	25-Jul-18	17-Aug-18	992	992														
Socketted H-Pile Installation																								
GFXX445-3	D16 (D2a) - Predrilling	18	21-Jul-14 A	100%	0	22-Jul-14 A																		
GFXX445-5	D16 (D2a) - Confirm Rockhead Levels	8	23-Jul-14 A	0%	8	30-Aug-14	05-Jul-14	14-Jul-14	-41	0														
GFXX446-3	D16 (D2a) - Installation of SH Pile (13 nr)	121	01-Sep-14	0%	121	26-Jan-15	15-Jul-14	05-Dec-14	-41	0														
Pier D17 (D1d)																								
Socketted H-Pile Installation																								
GFXX438-6	D17 (D1d) - Confirm Rockhead Levels	8	30-Jun-14 A	100%	0	13-Aug-14 A																		
GFXX439-1	D17 (D1d) - Installation of SH Pile (10 nr)	70	14-Aug-14 A	17.14%	58	31-Oct-14	04-Dec-14	12-Feb-15	86	0														
Pier D18 (D1c)																								
Socketted H-Pile Installation																								
GFXX438-7	D18 (D1c) - Confirm Rockhead Levels	8	25-Jun-14 A	100%	0	08-Aug-14 A																		
GFXX439-2	D18 (D1c) - Installation of SH Pile (10 nr)	70	09-Aug-14 A	17.14%	58	31-Oct-14	07-Nov-14	16-Jan-15	63	0														
GFXX439-5	D18 (D1c) - Selction of pile for Loading test	24	15-Nov-14	0%	24	12-Dec-14	31-Jan-15	03-Mar-15	63	0														
Pier D19 (D1b) & Abutment D																								
Socketted H-Pile Installation																								
GFXX438-8	D19 (D1b) - Confirm Rockhead Levels	8	05-Jul-14 A	100%	0	26-Jul-14 A																		
GFXX439-3	D19 (D1b) - Installation of SH Pile (6 nr)	70	29-Jul-14 A	44.29%	39	09-Oct-14	18-Nov-14	05-Jan-15	72	0														
Viaduct E																								
Viaduct E1																								
Bridge E1 - Piling & Substructure																								
Milestones																								
GFXX023A	E1D (E1a1) - Start date for piling	0	22-Aug-14	0%	0		10-Oct-14		39	0														
GFXX023A	E1C (E1a2) - Start date for piling	0	22-Aug-14	0%	0		10-Oct-14		39	0														
GFXX023A	E1B (E1a3) - Start date for piling	0	22-Aug-14	0%	0		10-Oct-14		39	0														
GFXX023A	E1A (E1a4) - Start date for piling	0	22-Aug-14	0%	0		10-Oct-14		39	0														
GFXX028A	E2C/E2D (E1b2/E1b1) - Start date for piling	0	09-Oct-14	0%	0		17-Jul-14		-69	0														
GFXX028A	E2B (E1b3) - Start date for piling	0	09-Oct-14	0%	0		17-Jul-14		-69	0														
GFXX028A	E2A (E1b4) - Start date for piling	0	09-Oct-14	0%	0		17-Jul-14		-69	0														
GFXX031-1	E1D (E1a1) - Piling Works Completion	0		0%	0	15-Oct-14		20-Jan-16	376	273														
GFXX031-2	E1C (E1a2) - Piling Works Completion	0		0%	0	15-Oct-14		17-Mar-15	125	134														
GFXX031-3	E1B (E1a3) - Piling Works Completion	0		0%	0	15-Oct-14		09-Jan-15	71	123														

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWP-PrD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
 3-Month Rolling Programme (Page 29 of 34 Pages)
 (Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
Foundation Works - E5A & E5B																										
Foundation Works																										
GFXX04	E5 (E2c) - Inst.Temp.Working Platform (Light)	7	22-Aug-14	0%	7	29-Aug-14	17-Jul-14	24-Jul-14	-31	0																
GFXX046	E5 (E2c) - Predrilling (4 nos)	22	30-Aug-14	0%	22	25-Sep-14	13-Oct-14	06-Nov-14	34	0																
GFXX04	E5 (E2c) - Confirm Rockhead levels	8	26-Sep-14	0%	8	07-Oct-14	07-Nov-14	15-Nov-14	34	103																
E6A & E6B (E2d - 1/2)																										
Foundation Works - E6A & E6B																										
Foundation Works																										
GFXX050	E6 (E2d) - Inst.Temp.Working Platform (Heavy)	18	22-Aug-14	0%	18	12-Sep-14	04-Jul-14	24-Jul-14	-42	0																
GFXX05	E6 (E2d) - Inst.Temp.Working Platform (Light)	7	13-Sep-14	0%	7	20-Sep-14	25-Jul-14	01-Aug-14	-42	0																
GFXX051	E6 (E2d) - Predrilling (4 nos)	18	22-Sep-14	0%	18	14-Oct-14	27-Nov-14	17-Dec-14	55	0																
GFXX05	E6 (E2d) - Confirm Rockhead levels	8	15-Oct-14	0%	8	23-Oct-14	18-Dec-14	29-Dec-14	55	183																
E7A & E7B (E2e - 1/2)																										
Foundation Works - E7A & E7B																										
Foundation Works																										
GFXX055	E7 (E2e) - Inst.Temp.Working Platforms (Heavy)	19	22-Sep-14	0%	19	15-Oct-14	02-Aug-14	23-Aug-14	-42	0																
GFXX05	E7 (E2e) - Inst.Temp.Working Platforms (Light)	7	16-Oct-14	0%	7	23-Oct-14	25-Aug-14	01-Sep-14	-42	0																
GFXX056	E7 (E2e) - Predrilling (5 nos)	26	24-Oct-14	0%	26	22-Nov-14	18-Oct-14	17-Nov-14	-5	0																
E8A & E8B (E2f - 1/2)																										
Foundation Works - E8A & E8B																										
Foundation Works																										
GFXX060	E8 (E2f) - Inst.Temp.Working Platforms (Heavy)	32	24-Oct-14	0%	32	29-Nov-14	02-Sep-14	11-Oct-14	-42	0																
GFXX06	E8 (E2f) - Relocation & Install Temporary Removable Platform from E3, Plant & Equipment fr	7	27-Oct-14	0%	7	03-Nov-14	12-Nov-14	19-Nov-14	14	56																
E9A & E9B (E2g - 1/2)																										
Foundation Works - E9A & E9B																										
Foundation Works																										
GFXX067	E9 (E2g) - Bored Piles (2.00m dia. x 6 nr)	105	17-May-14 A	84.76%	16	10-Sep-14	11-Feb-15	04-Mar-15	142	0																
GFXX068	E9 (E2g) - Sonic & Interface Coring	12	11-Sep-14	0%	12	24-Sep-14	05-Mar-15	18-Mar-15	142	0																
GFXX069	E9 (E2g) - Dismantle temp. removable piling platform	7	25-Sep-14	0%	7	04-Oct-14	19-Mar-15	26-Mar-15	142	0																
Pile Cap Works - E9A & E9B																										
Pile Cap Works																										
SE2G00	E9 (E2g1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	8	15-Nov-14	0%	8	24-Nov-14	27-Mar-15	11-Apr-15	107	41																
E10A & E10B (E2h - 1/2)																										
Foundation Works - E10A & E10B																										
Foundation Works																										
GFXX072	E10 (E2h) - Bored Piles (2.20m dia. x 6 nr)	132	15-May-14 A	77.27%	30	26-Sep-14	29-Sep-14	04-Nov-14	31	0																
GFXX073	E10 (E2h) - Sonic & Interface Coring	12	22-Oct-14	0%	12	04-Nov-14	05-Nov-14	18-Nov-14	12	0																
GFXX074	E10 (E2h) - Dismantle temp. removable piling platform	7	05-Nov-14	0%	7	12-Nov-14	19-Nov-14	26-Nov-14	12	0																
Pile Cap Works - E10A & E10B																										
Pile Cap Works																										
SE2H00	E10 (E2h1/2) - Marine Pile Cap - Inst.Floating Seal & Casing Head Steelwork	8	15-Nov-14	0%	8	24-Nov-14	27-Nov-14	05-Dec-14	10	41																
Viaduct E5, E6, E7 & E8																										
Milestones - Marine Foundation																										
GFXX084-1	E11 (E5E6a/E7E8a) - Start date for piling	0	22-Aug-14	0%	0		21-Mar-14		-124	0																
GFXX089-1	E12 (E5b/E6b/E7b/E8b + Dolphins) - Start date for piling	0	22-Aug-14	0%	0		17-Mar-14		-128	0																
GFXX095-1	E13C/D (E6c/E5c+ dolphin) - Start date for piling	0	22-Aug-14	0%	0		10-Apr-14		-108	0																
Milestones - Land Foundation																										

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWPd1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 31 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August				September				October				November			
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
GFXX012	Land Access to BCF (Available in Month 17)	0	03-Nov-14	0%	0		05-Nov-14		2	0																
E11A & E11B (E5E6a/E7E8a)																										
Foundation Works - E11A & E11B																										
Foundation Works																										
GFXX083	E11 (E5E6a/E7E8a) - Predrilling (7 nos)	17	08-Jun-14 A	100%	0	21-Jul-14 A																				
GFXX083	E11 (E5E6a/E7E8a) - Confirm Rockhead levels	8	12-Jun-14 A	75%	2	23-Aug-14	16-Aug-18	17-Aug-18	1179	1179																
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 7 nr)	130	10-Jul-14 A	59.23%	53	25-Oct-14	21-Mar-14	28-May-14	-124	0																
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 2 nr (Total 7 Nr))	130	10-Jul-14 A	59.23%	53	25-Oct-14	21-Mar-14	28-May-14	-124	0																
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 2 nr (Total 7 Nr))	130	10-Jul-14 A	59.23%	53	25-Oct-14	21-Mar-14	28-May-14	-124	0																
GFXX084	E11 (E5E6a/E7E8a) - Bored Piles (2.35m dia. x 1 nr (Total 7 Nr))	130	10-Jul-14 A	59.23%	53	25-Oct-14	21-Mar-14	28-May-14	-124	0																
E12A, E12B, E12C & E12D (E8b/E7b/E6b/E5b)																										
Foundation Works - E12																										
Foundation Works																										
GFXX088	E12 (E5b/E6b, E7b/E8b + Dolphins) - Predrilling (20 nos)	27	07-Jun-14 A	100%	0	07-Aug-14 A																				
GFXX088	E12 (E5b/E6b, E7b/E8b + Dolphins) - Confirm Rockhead levels	8	21-Jun-14 A	0%	8	30-Aug-14	09-Aug-18	17-Aug-18	1173	1173																
GFXX089	E12 (E5b/E6b/E7b/E8b + Dolphins) - Bored Piles (2.35m dia. x 14 nr ; 2.00m dia x 6 nr)	216	11-Jul-14 A	35.19%	140	07-Feb-15	17-Mar-14	04-Sep-14	-128	0																
GFXX089	E12D (E5b+ Dolphins) - Bored Piles (2.35m dia. x 4 nr (total 14) ; 2.00m dia x 3 nr (total 6))	216	11-Jul-14 A	35.19%	140	07-Feb-15	17-Mar-14	04-Sep-14	-128	0																
GFXX089	E12C (E6b) - Bored Piles (2.35m dia. x 3 nr)	216	11-Jul-14 A	35.19%	140	07-Feb-15	17-Mar-14	04-Sep-14	-128	0																
GFXX089	E12B (E7b) - Bored Piles (2.35m dia. x 3 nr)	216	11-Jul-14 A	35.19%	140	07-Feb-15	17-Mar-14	04-Sep-14	-128	0																
GFXX089	E12A (E8b + Dolphins) - Bored Piles (2.35m dia. x 4 nr (total 14) ; 2.00m dia x 3 nr (total 6))	216	11-Jul-14 A	35.19%	140	07-Feb-15	17-Mar-14	04-Sep-14	-128	0																
E13A, E13B, E13C & E13D (E8c/E7c/E6c/E5c)																										
Foundation Works - E13																										
Foundation Works - E13A (E8c) & E13B (E7c)																										
GFXX099	E13A/B (E8c/E7c) Inst.Temp.Working Platform (Heavy)	39	10-Jul-14 A	74.36%	10	02-Sep-14	27-Aug-14	06-Sep-14	4	0																
GFXX100	E13A/B (E8c/E7c & Dolphin) - Predrilling	26	03-Sep-14	0%	26	06-Oct-14	08-Sep-14	10-Oct-14	4	0																
GFXX100	E13A/B (E8c/E7c & Dolphin) - Confirm Rockhead levels	8	07-Oct-14	0%	8	15-Oct-14	11-Oct-14	20-Oct-14	4	108																
Foundation Works - E13C (E6c) & E13D (E5c)																										
GFXX094	E13C/D (E6c/E5c + Dolphin) - Predrilling	13	14-Jul-14 A	100%	0	07-Aug-14 A																				
GFXX094	E13C/D (E6c/E5c + Dolphin) - Confirm Rockhead levels	8	21-Jul-14 A	12.5%	7	29-Aug-14	10-Aug-18	17-Aug-18	1174	1174																
GFXX095	E13C/D (E6c/E5c + Dolphin) - Bored Piles (2.20m dia. x 8 nr; 2.00m dia x 3nr)	128	14-Aug-14 A	8.59%	117	12-Jan-15	10-Apr-14	01-Sep-14	-108	0																
GFXX095	E13D (E5c + Dolphin) - Bored Piles (2.20m dia. x 4 nr; 2.00m dia x 3nr)	128	14-Aug-14 A	8.59%	117	12-Jan-15	10-Apr-14	01-Sep-14	-108	0																
GFXX615	E13C (E6c) - Bored Piles (2.20m dia. x 4 nr)	128	14-Aug-14 A	8.59%	117	12-Jan-15	10-Apr-14	01-Sep-14	-108	0																
E14A, E14B, E14C & E14D (E8d/E7d/E6d/E5d)																										
Foundation Works - E14																										
GFXX545	Mobilization & Assembling Bored Pile Plant & Equipment for Viaducts in HKBCF	5	03-Nov-14	0%	5	07-Nov-14	05-Nov-14	10-Nov-14	2	0																
Foundation Works - E14A (E8d)																										
GFXX544	E14A (E8d) - Pre-drilling for Piles (4 nos)	24	14-Nov-14	0%	24	11-Dec-14	26-Nov-14	23-Dec-14	10	0																
Foundation Works - E14B (E7d)																										
GFXX544	E14B (E7d) - Pre-drilling for Piles (3 nos)	24	14-Nov-14	0%	24	11-Dec-14	05-Nov-14	02-Dec-14	-8	0																
Viaduct F																										
Viaduct F1																										
F1 (F1b)																										
Foundation Works																										
GFXX553-1	F1 (F1b) - Pre-drilling for Piles (2 nos)	19	08-Nov-14	0%	19	29-Nov-14	18-Nov-14	09-Dec-14	8	0																
Viaduct F4																										
F17 (F4b)																										

Project ID: J3518DWPPrD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 32 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014															
											August					September					October			November		
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27	03
Foundation Works																										
GFX579-2	F17 (F4b) - Pre-drilling for Piles (2 nos)	12	03-Nov-14	0%	12	15-Nov-14	04-Jun-15	17-Jun-15	171	0																
GFX579-6	F17 (F4b) - Confirm Rockhead Levels	8	17-Nov-14	0%	8	25-Nov-14	18-Jun-15	27-Jun-15	171	8																
F18 (F4c) & Abutment																										
Foundation Works																										
GFX579-3	F18 (F4c) - Pre-drilling for Piles (2 nos)	12	17-Nov-14	0%	12	29-Nov-14	10-Sep-15	23-Sep-15	241	0																
Approach Ramp F																										
Approach Ramp Land Foundation - HKBCF																										
Approach Ramp F Piling																										
GFX593	AR-F - Pre-drilling for Piles (28 nos)	24	03-Nov-14	0%	24	29-Nov-14	13-Dec-14	13-Jan-15	35	0																
SUPERSTRUCTURE																										
Viaduct B Superstructure																										
Bridge B3 Superstructure																										
Milestones																										
Milestones Ready for PH Segment Erection																										
B300050-1	Pier B2 (B3e) ready for Viaduct B3 PH segment erection	0		0%	0	19-Nov-14		18-Oct-14	-27	58																
Bridge B1 Superstructure																										
Milestones																										
Milestones Ready for PH Segment Erection																										
B100030-1	Pier B16 (B1d) ready for Viaduct B1 PH segment erection	0		0%	0	20-Oct-14		10-Jun-15	187	0																
At-Grade Roadworks & Other Works along NLH																										
Viaduct D Slope Works																										
Slope 10NW-C/F10																										
M201215	10NW-C/F10 - Install Geo. Instru. & Baseline Monitoring	30	26-Jul-14 A	0%	30	30-Sep-14	28-Jul-16	08-Sep-16	511	422																
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	30-Jun-14 A	16.67%	50	28-Oct-14	12-Mar-14	26-May-14	-104	0																
RP00030	Inst. new equip. & testing / commissioning of new ESS	60	29-Oct-14	0%	60	09-Jan-15	27-May-14	29-Aug-14	-104	0																
Viaduct B Slope Works																										
Slope 9SE-B/C9																										
Zone A																										
SWVB1050	9SE-B/C9 Zone A - Excav. to +23.00	0	22-Jul-14 A	100%	0	22-Jul-14 A																				
SWVB1060	9SE-B/C9 Zone A - Soil nail 24 nr. @ +24.5	0	22-Jul-14 A	100%	0	22-Jul-14 A																				
SWVB1070	9SE-B/C9 Zone A - Excav. to +22.00	3	22-Jul-14 A	100%	0	04-Aug-14 A																				
SWVB1080	9SE-B/C9 Zone A - Raking Drain 11 nr @ +23.5	0	22-Jul-14 A	100%	0	22-Jul-14 A																				
SWVB1090	9SE-B/C9 Zone A - Excav. to +21.00	5	04-Aug-14 A	80%	1	22-Aug-14	01-Apr-17	01-Apr-17	704	173																
SWVB1100	9SE-B/C9 Zone A - Inst. 300UC @ +22.5	0	04-Aug-14 A	100%	0	04-Aug-14 A																				
SWVB1110	9SE-B/C9 Zone A - Excav. to +19.00 Zone A/B	5	04-Aug-14 A	60%	2	23-Aug-14	08-Jul-14	10-Jul-14	-31	4																
SWVB1120	9SE-B/C9 Zone A - Soil nail 32 nr. @ +20.5	11	30-Aug-14	0%	11	15-Sep-14	04-Aug-18	17-Aug-18	1048	1048																
SWVB1130	9SE-B/C9 Zone A - Excav. to +17.0	5	31-Jul-14 A	100%	0	31-Jul-14 A																				
SWVB1140	9SE-B/C9 Zone A - Soil nail 37 nr. @ +18.5	12	01-Aug-14 A	50%	6	29-Aug-14	23-Sep-14	29-Sep-14	23	0																
SWVB1150	9SE-B/C9 Zone A - Excav. to +15.0	5	30-Aug-14	0%	5	05-Sep-14	30-Sep-14	07-Oct-14	23	72																
Zone B & C																										
SWVB1410	9SE-B/C9 Zone B & C - Excav. to +21.00 (Zone B/C)	8	18-Aug-14 A	25%	6	29-Aug-14	05-Jun-14	17-Jun-14	-49	0																
SWVB1420	9SE-B/C9 Zone B & C - Soil nail 61 nr. @ +22.5 (Zone B/C)	14	30-Aug-14	0%	14	18-Sep-14	19-Jun-14	10-Jul-14	-49	0																
SWVB1430	9SE-B/C9 Zone B & C - Excav. to +19.00	8	19-Sep-14	0%	8	27-Sep-14	11-Jul-14	21-Jul-14	-49	0																
SWVB1440	9SE-B/C9 Zone B & C - Soil nail 87 nr. @ +20.5	17	29-Sep-14	0%	17	22-Oct-14	22-Jul-14	15-Aug-14	-49	0																

■ Actual Work
■ Planned Bar
■ Critical Bar
◆ Milestone

Project ID: J3518DWPPrD1-M15
Layout: J3518-DWP-3MRP Submission - M15
Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 33 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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	2014														
											August				September				October				November		
											21	28	04	11	18	25	01	08	15	22	29	06	13	20	27
SWVB1450	9SE-B/C9 Zone B & C - Excav. to +17.00	8	23-Oct-14	0%	8	31-Oct-14	16-Aug-14	26-Aug-14	-49	0															
SWVB1460	9SE-B/C9 Zone B & C - Soil nail 92 nr. @ +18.5	17	01-Nov-14	0%	17	20-Nov-14	28-Aug-14	19-Sep-14	-49	0															
Slope 9SE-B/C8																									
SWVB2030	9SE-B/C8 -Soil nail 39 nr. @ +21.0	10	02-Jul-14 A	60%	4	26-Aug-14	15-May-14	19-May-14	-63	0															
SWVB2040	9SE-B/C8 -Excav. to +18.50	4	28-Aug-14	0%	4	01-Sep-14	20-May-14	24-May-14	-63	0															
SWVB2050	9SE-B/C8 -Soil nail 44 nr. @ +19.0	11	02-Sep-14	0%	11	17-Sep-14	26-May-14	14-Jun-14	-63	0															
SWVB2060	9SE-B/C8 -Excav. to +16.50	5	18-Sep-14	0%	5	23-Sep-14	17-Jun-14	25-Jun-14	-63	0															
SWVB2070	9SE-B/C8 -Soil nail 53 nr. @ +17.0	12	24-Sep-14	0%	12	10-Oct-14	26-Jun-14	12-Jul-14	-63	0															
SWVB2080	9SE-B/C8 -Raking Drain 9 nr	12	18-Oct-14	0%	12	31-Oct-14	21-Jul-14	07-Aug-14	-63	0															
SWVB2090	9SE-B/C8 -Excav. to +15.50	5	11-Oct-14	0%	5	17-Oct-14	14-Jul-14	19-Jul-14	-63	0															
SWVB2100	9SE-B/C8 -Inst. 225UC & railings @ approx +15.0	14	18-Oct-14	0%	14	03-Nov-14	30-Aug-14	18-Sep-14	-35	28															
SWVB2110	9SE-B/C8 -Rock excav. to +7.00	30	01-Nov-14	0%	30	05-Dec-14	08-Aug-14	18-Sep-14	-63	0															
SWVB2140	9SE-B/C8 - Install Geo. Instru. & Baseline Monitoring	30	09-Jun-14 A	0%	30	30-Sep-14	08-Sep-14	18-Oct-14	12	75															
Slope 9SE-B/F9																									
SWVB3010	9SE-B/F9 - Form access track over crest of slope & remove loose fill less than 1m thick	6	22-Aug-14	0%	6	29-Aug-14	27-Jun-14	05-Jul-14	-38	0															
SWVB3020	9SE-B/F9 - Excav. to +10.5	8	30-Aug-14	0%	8	11-Sep-14	07-Jul-14	17-Jul-14	-38	0															
SWVB3030	9SE-B/F9 - Soil nail pull out test	3	12-Sep-14	0%	3	15-Sep-14	18-Jul-14	21-Jul-14	-38	0															
SWVB3040	9SE-B/F9 - Soil nail 16 nr.	8	16-Sep-14	0%	8	24-Sep-14	22-Jul-14	01-Aug-14	-38	0															
SWVB3050	9SE-B/F9 - Excav. to +8.5	4	25-Sep-14	0%	4	29-Sep-14	02-Aug-14	08-Aug-14	-38	0															
SWVB3060	9SE-B/F9 - Soil nail 22 nr.	8	30-Sep-14	0%	8	11-Oct-14	09-Aug-14	19-Aug-14	-38	0															
SWVB3070	9SE-B/F9 - Raking Drain 4 nr	5	13-Oct-14	0%	5	18-Oct-14	21-Aug-14	26-Aug-14	-38	0															
SWVB3080	9SE-B/F9 - Excav. to +7.5	8	20-Oct-14	0%	8	28-Oct-14	28-Aug-14	06-Sep-14	-38	0															
SWVB3090	9SE-B/F9 - Inst. 600 width conc. maintenance staircase w/ railings & 450UC	18	29-Oct-14	0%	18	18-Nov-14	24-Sep-14	18-Oct-14	-26	12															
SWVB3100	9SE-B/F9 - Inst. 225UC	12	29-Oct-14	0%	12	11-Nov-14	03-Oct-14	18-Oct-14	-20	18															
SWVB3110	9SE-B/F9 - Install Geo. Instru. & Baseline Monitoring	30	29-Oct-14	0%	30	02-Dec-14	08-Sep-14	18-Oct-14	-38	0															
Re-alignment of Cheung Tung Road adjacent to Viaduct C																									
East Portion																									
Emergency Gates G6 & G7																									
RP10060	Prepare /submit TTM (NLH W/B & CTR (E/B) for installing gate G6 & G7	72	22-Sep-14	0%	72	18-Dec-14	17-Feb-15	03-Jun-15	120	0															
ESS Sub-Station																									
RP10020	Construct new ESS-C Sub.Stn. adjacent to Viaduct C	48	30-Jun-14 A	20.83%	38	13-Oct-14	22-Sep-14	08-Nov-14	22	0															
RP10030	Inst.Eqpt. & Testing / commissioning of new ESS	60	14-Oct-14	0%	60	23-Dec-14	10-Nov-14	21-Jan-15	22	0															
Natural Terrain Hazard Mitigation Works																									
NTHM Works - West Portion																									
NTW0010	DDA Approval for Natural Terrain Hazard Mitigation Measures	0		0%	0	13-Nov-14		20-Mar-15	91	0															
Check Dam no. 1 (CD1)																									
GFXX497	Predrilling Works for Check Dams	25	14-Nov-14	0%	25	12-Dec-14	23-Mar-15	29-Apr-15	104	0															
Watermains & All Assoc Works from Tung Chung to Southern Landfall																									
WM00100	Prepare / submit TTMS for watermain laying along realigned CTR	72	22-Aug-14	0%	72	22-Nov-14	08-Sep-14	06-Dec-14	12	0															

Actual Work
 Planned Bar
 Critical Bar
 Milestone

Project ID: J3518DWP rD1-M15
 Layout: J3518-DWP-3MRP Submission - M15
 Filter: TASK filters: 3-Month Lookahead, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 34 of 34 Pages)
(Progress as of 21-Aug-14)

Date	Revision	Checked	Approved
28-Jun-14		FZ	
29-Jul-14		FZ	
29-Aug-14		FZ	

DWG. No.:
J3518/GCL/PGM/3MRP-M15

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		Δ

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 off site 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	✓
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			✓
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		✓
8.15	6.5	Audit coral translocation success	Yam Tsui Wan (receptor site)/Post translocation	Contractor	TMEIA		Y		n/a
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		n/a
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			✓
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 = 178	260
1 Hour TSP Level in $\mu\text{g}/\text{m}^3$	ASR9A/ASR8A = 394 ASR9C/ASR8 = 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

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 8(A)
 Calibrated by : P.F.Yeung
 Date : 05/07/2014

Sampler

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

Calibration Office 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) : 1004
 Ta(K) : 306

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	11.8	3.375	1.626	55	54.03
2 13 holes	9.8	3.076	1.482	50	49.12
3 10 holes	6.9	2.581	1.244	43	42.25
4 7 holes	4.6	2.107	1.016	36	35.37
5 5 holes	2.8	1.644	0.792	29	28.49

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): 30.344 Intercept(b): 4.470 Correlation Coefficient(r): 0.9998

Checked by: Magnum Fan

Date: 06/07/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR8
 Calibrated by : P.F.Yeung
 Date : 05/07/2014

Sampler

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

Calibration Office 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) : 1004
 Ta(K) : 396

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12.2	3.432	1.654	61	59.93
2 13 holes	10.0	3.107	1.497	56	55.02
3 10 holes	7.2	2.636	1.270	50	49.12
4 7 holes	5.1	2.219	1.069	44	43.23
5 5 holes	3.0	1.702	0.820	36	35.37

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): 29.096 Intercept(b): 11.811 Correlation Coefficient(r): 0.9994

Checked by: Magnum Fan

Date: 06/07/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR 8(A)
 Calibrated by : P.F.Yeung
 Date : 05/09/2014

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) : 1007
 Ta(K) : 305

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	12	3.414	1.645	57	56.18
2 13 holes	9.8	3.085	1.487	53	52.23
3 10 holes	7.1	2.626	1.265	47	46.32
4 7 holes	5.0	2.204	1.062	42	41.39
5 5 holes	2.9	1.678	0.809	35	34.49

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 25.873 Intercept(b): 13.687 Correlation Coefficient(r): 0.9998

Checked by: Magnum Fan

Date: 07/09/2014

High-Volume TSP Sampler
5-Point Calibration Record

Location : ASR8
 Calibrated by : P.F.Yeung
 Date : 05/09/2014

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) : 1005
 Ta(K) : 305

Resistance Plate	dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1 18 holes	11.6	3.357	1.617	55	54.20
2 13 holes	9.7	3.069	1.479	50	49.28
3 10 holes	7.0	2.607	1.257	44	43.36
4 7 holes	4.8	2.159	1.041	38	37.45
5 5 holes	2.7	1.619	0.781	30	29.57

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

Sampler Calibration Relationship (Linear Regression)

Slope(m): 28.870 Intercept(b): 7.122 Correlation Coefficient(r): 0.9993

Checked by: Magnum Fan

Date: 07/09/2014



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)]

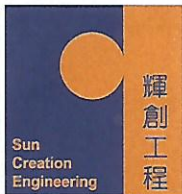
CALCULATIONS

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 }



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.

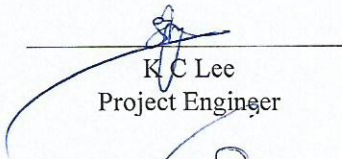
The results are detailed in the subsequent page(s).

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

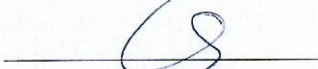
Tested By :

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.

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

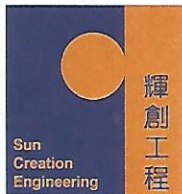
c/o 香港新界屯門興安里一號青山灣機樓四樓

Tel/電話: 2927 2606

Fax/傳真: 2744 8986

E-mail/電郵: callab@suncreation.com

Website/網址: www.suncreation.com



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.

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。



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.

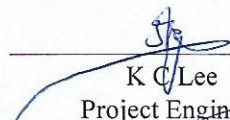
The results are detailed in the subsequent page(s).

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.

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 4

Certificate of Calibration

校正證書

Certificate No. : C144558

證書編號

1. 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.
2. Self-calibration was performed before the test.
3. The results presented are the mean of 3 measurements at each calibration point.
4. 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

5. Test procedure : MA101N.

6. 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

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書面批准。

Certificate of Calibration

校正證書

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)

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所書面批准。



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.

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



Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/010 Manufacturer : HACH
Model No. : 2100Q Serial No. : 11110 C 014260
Date of Calibration : 07/07/2014 Due Date : 06/10/2014

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

005/6.1/001/6


Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	20.2	1.00
100	104	4.00
800	794	-0.75

(*) 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 : 

Checked by : 



Internal Calibration & Performance Check of pH Meter

Equipment Ref. No. : ET/EW/007/004 Manufacturer : HANNA
 Model No. : HI 8314 Serial No. : 8263193
 Date of Calibration : 09/08/2014 Calibration Due Date : 08/10/2014

Liquid Junction Error

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/001/18
 Temperature of Solution : 20.0 $\Delta\text{pH}_{1/2} = \underline{+0.08}$
 pH value of diluted buffer : 6.79 pH (S) = 6.881
 $\Delta\text{pH} = \text{pH(S)} - \text{pH of diluted buffer} = \underline{0.091}$ (Observed Deviation)
 Liquid Junction Error (ΔpH_j) = $\Delta\text{pH} - \Delta\text{pH}_{1/2} = \underline{0.011}$

Shift on Stirring

pH of buffer solution (with stirring), $\text{pH}_s = \underline{6.91}$
 Shift on stirring, $\Delta\text{pH}_s = \text{pH}_s - \text{pH(S)} - \Delta\text{pH}_j = \underline{0.018}$

Noise

Noise, $\Delta\text{pH}_n = \text{difference between max and min reading} : \underline{0.01}$

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/008
 Temperature record from the reference thermometer (T_R): 19.6 °C
 Temperature record from the ATC (T_{ATC}): 19.5 °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 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>18/06/2014</u>	Calibration Due Date : <u>17/09/2014</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	19.6
DO Meter reading	Measured	19.5	Difference	0.1

Standardization of sodium thiosulphate (Na₂S₂O₃) solution

Reagent No. of Na ₂ S ₂ O ₃ titrant	CPE/012/4.5/001/8	Reagent No. of 0.025N K ₂ Cr ₂ O ₇	CPE/012/4.4/001/27
		Trial 1	Trial 2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)		0.00	10.20
Final Vol. of Na ₂ S ₂ O ₃ (ml)		10.20	20.35
Vol. of Na ₂ S ₂ O ₃ used (ml)		10.20	10.15
Normality of Na ₂ S ₂ O ₃ solution (N)		0.02451	0.02463
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

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 ₂ S ₂ O ₃ (ml)	0.00	11.90	23.80	0.00	7.70	12.80
Final Vol. of Na ₂ S ₂ O ₃ (ml)	11.90	23.80	31.40	7.70	12.80	17.80
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	11.90	11.90	7.60	7.70	5.10	5.00
Dissolved Oxygen (DO), mg/L	7.85	7.85	5.01	5.08	3.36	3.30
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	7.68	7.72	7.70	7.85	7.85	7.85	1.93
5	5.12	5.14	5.13	5.01	5.08	5.05	1.57
10	3.28	3.24	3.26	3.36	3.30	3.33	2.12
Linear regression coefficient				0.9979			



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/012/4.7/002/21	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/21
-----------------------------	--------------------	-----------------------------	--------------------

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

Salinity (ppt)	10		30	
Trial	1	2	1	2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)	0.00	12.20	24.40	35.40
Final Vol. of Na ₂ S ₂ O ₃ (ml)	12.20	24.40	35.40	46.50
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	12.20	12.20	11.00	11.10
Dissolved Oxygen (DO), mg/L	8.05	8.05	7.26	7.32
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	7.95	7.98	7.97	8.05	8.05	8.05	1.00
30	7.12	7.15	7.14	7.26	7.32	7.29	2.08

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 : 18/06/2014 Due Date : 17/09/2014

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

S/001/5


Salinity Standard (ppt)	Measured Salinity (ppt)	Difference %
30.0	29.7	-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>17/09/2014</u>	Calibration Due Date : <u>16/12/2014</u>

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/008
 Ref. No. of Water Bath : ---

Reference Thermometer reading	Temperature (°C)			
	Measured	20.6	Corrected	20.0
DO Meter reading	Measured	19.8	Difference	0.2

Standardization of sodium thiosulphate (Na₂S₂O₃) solution

Reagent No. of Na ₂ S ₂ O ₃ titrant	CPE/012/4.5/001/8	Reagent No. of 0.025N K ₂ Cr ₂ O ₇	CPE/012/4.4/001/27
		Trial 1	Trial 2
Initial Vol. of Na ₂ S ₂ O ₃ (ml)		0.00	10.40
Final Vol. of Na ₂ S ₂ O ₃ (ml)		10.40	20.80
Vol. of Na ₂ S ₂ O ₃ used (ml)		10.40	10.40
Normality of Na ₂ S ₂ O ₃ solution (N)		0.02404	0.02404
Average Normality (N) of Na ₂ S ₂ O ₃ solution (N)		0.02404	
Acceptance criteria, Deviation		Less than ± 0.001N	

Calculation: Normality of Na₂S₂O₃, N = 0.25 / ml Na₂S₂O₃ 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 ₂ S ₂ O ₃ (ml)	0.00	11.90	23.60	0.00	6.60	10.10
Final Vol. of Na ₂ S ₂ O ₃ (ml)	11.90	23.60	30.20	6.60	10.10	13.60
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	11.90	11.70	6.60	6.60	3.50	3.50
Dissolved Oxygen (DO), mg/L	7.68	7.55	4.26	4.26	2.26	2.26
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	7.71	7.67	7.69	7.68	7.55	7.62	0.91
5	4.20	4.18	4.19	4.26	4.26	4.26	1.66
10	2.36	2.38	2.37	2.26	2.26	2.26	4.75
Linear regression coefficient				0.9988			



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/012/4.7/002/25	Reagent No. of NaCl (30ppt)	CPE/012/4.8/002/25
-----------------------------	--------------------	-----------------------------	--------------------

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	12.20	24.50	35.40
Final Vol. of Na ₂ S ₂ O ₃ (ml)	12.20	24.50	35.40	46.30
Vol. (V) of Na ₂ S ₂ O ₃ used (ml)	12.20	12.30	10.90	10.90
Dissolved Oxygen (DO), mg/L	7.87	7.94	7.03	7.03
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	7.79	7.81	7.8	7.87	7.94	7.91	1.40
30	6.92	6.94	6.93	7.03	7.03	7.03	1.43

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 : 17/09/2014 Due Date : 16/12/2014

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

S/001/5

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

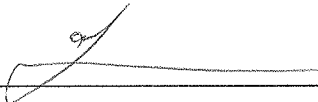
(*) Difference (%) = (Measured Salinity – Salinity Standard value) / Salinity Standard value x 100

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 : 

ENVIROTECH SERVICES CO.

Calibration Report of Wind Meter

Date of Calibration : 29 May 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)
0.23	0.2
1.25	1.2
2.06	2.2

Wind Direction Test

Global Wate (o)	Marine Compass (o)
269.99	270
0.00	0
90.01	90
180.01	180

Calibrated by:

Fai
Yeung Ping Fai
(Technical Officer)

Checked by :

Fat
Ho Kam Fat
(Senior Technical Officer)

Certificate of Calibration 校正證書

Certificate No. : C143205
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC14-1304)

Date of Receipt / 收件日期 : 19 May 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 : $(23 \pm 2)^{\circ}\text{C}$
Line Voltage / 電壓 : ---

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

TEST SPECIFICATIONS / 測試規範

Calibration check

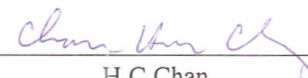
DATE OF TEST / 測試日期 : 26 May 2014

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 : _____
H S Chung
Technician

Certified By : 
核證 : _____
H C Chan
Engineer

Date of Issue : 27 May 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所書面批准。

Certificate of Calibration

校正證書

Certificate No. : C143205
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 10 measurements at each calibration point.
- Test equipment :

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

- Test procedure : MA130N.
- Results :

Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.1	1.8	+0.3	0.2	2.0
4.1	4.0	+0.1	0.3	2.0
6.1	6.1	0.0	0.3	2.0
8.2	8.4	-0.2	0.3	2.0
10.1	10.4	-0.3	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。局部複印本書需先獲本實驗室所書面批准。

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 (September 14)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
	1-Sep	2-Sep	3-Sep	4-Sep	5-Sep	6-Sep
		WQM Mid-Flood 12:49 (11:04 - 14:34) Mid-Ebb 18:15 (16:30 - 20:00)		WQM Mid-Ebb 8:20 (6:35 - 10:05) Mid-Flood 16:07 (14:22 - 17:52)		WQM Mid-Ebb 10:33 (8:48 - 12:18) Mid-Flood 17:47 (16:02 - 19:32)
7-Sep	8-Sep	P. Holiday 9-Sep	10-Sep	11-Sep	12-Sep	13-Sep
		Cancelled (Site closed)		WQM Mid-Flood 8:13 (6:28 - 9:58) Mid-Ebb 14:25 (12:40 - 16:10)		WQM Mid-Flood 9:59 (8:14 - 11:44) Mid-Ebb 15:47 (14:02 - 17:32)
14-Sep	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep
		Cancelled (Adverse weather T3 & T8)		WQM Mid-Ebb 8:58 (7:13 - 10:43) Mid-Flood 16:47 (15:02 - 18:32)		WQM Mid-Ebb 10:48 (9:03 - 12:33) Mid-Flood 17:42 (15:57 - 19:27)
21-Sep	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep
		WQM Mid-Ebb 12:45 (10:50 - 14:20) Mid-Flood 18:50 (17:05 - 20:35)		WQM Mid-Ebb 13:37 (11:52 - 15:22) Mid-Flood 19:37 (17:52 - 21:22)		WQM Mid-Flood 8:44 (6:59 - 10:29) Mid-Ebb 14:43 (12:58 - 16:28)
28-Sep	29-Sep	30-Sep				
		WQM Mid-Flood 11:28 (9:43 - 13:13) Mid-Ebb 17:00 (15:15 - 18:45)				

**HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Marine Water Quality Monitoring (WQM) Schedule (October 14)**

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			01-Oct	02-Oct	03-Oct	04-Oct
				WQM Mid-Flood 14:37 (12:52 - 16:22) Mid-Ebb 20:04 (19:50 - 21:15)		WQM Mid-Ebb 9:04 (07:19 - 10:49) Mid-Flood 16:31 (14:46 - 18:16)
05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct
		WQM Mid-Ebb 11:52 (10:07 - 13:37) Mid-Flood 18:19 (16:34 - 20:04)		WQM Mid-Ebb 13:21 (11:36 - 15:06) Mid-Flood 19:20 (17:35 - 21:05)		WQM Mid-Flood 9:02 (07:17 - 10:47) Mid-Ebb 14:46 (13:01 - 16:31)
12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct
		WQM Mid-Flood 11:51 (10:06 - 13:36) Mid-Ebb 16:57 (15:12 - 18:42)		WQM Mid-Ebb 6:17 (04:32 - 08:02) Mid-Flood 19:02 (17:17 - 20:47)		WQM Mid-Ebb 9:06 (07:21 - 10:51) Mid-Flood 16:25 (14:40 - 18:10)
19-Oct	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct
		WQM Mid-Ebb 11:27 (09:42 - 13:12) Mid-Flood 17:38 (15:53 - 19:23)		WQM Mid-Ebb 12:36 (10:51 - 14:21) Mid-Flood 18:27 (16:42 - 20:12)		WQM Mid-Flood 7:59 (06:14 - 09:44) Mid-Ebb 13:49 (12:04 - 15:34)
26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	
		WQM Mid-Flood 10:26 (08:41 - 12:11) Mid-Ebb 16:00 (14:15 - 17:45)		WQM Mid-Flood 12:42 (10:57 - 14:27) Mid-Ebb 18:08 (16:30 - 19:45)		

**HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Noise Monitoring Schedule (1 September to 30 September 2014)**

Noise Monitoring at rooftop of Pak Mong Village Watch Tower

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

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 Air Quality Monitoring Schedule (1 September to 30 September 2014)**

Air Quality Monitoring at WA4 and rooftop of Pak Mong Village Watch Tower

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

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 31 October 2014)**

Noise Monitoring at rooftop of Pak Mong Village Watch Tower

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Public Holiday 01-Oct	Public Holiday 02-Oct	03-Oct	04-Oct
					Noise Impact Monitoring	
05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct
				Noise Impact Monitoring		
12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct
			Noise Impact Monitoring			
19-Oct	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct
		Noise Impact Monitoring				
26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	
	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 31 October 2014)**

Air Quality Monitoring at WA4 and rooftop of Pak Mong Village Watch Tower

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			Public Holiday 01-Oct	Public Holiday 02-Oct	03-Oct	04-Oct
					1-hr TSP Monitoring 24-hr TSP Monitoring	
05-Oct	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct
				1-hr TSP Monitoring 24-hr TSP Monitoring		
12-Oct	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct
			1-hr TSP Monitoring 24-hr TSP Monitoring			
19-Oct	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct
		1-hr TSP Monitoring 24-hr TSP Monitoring				
26-Oct	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	
	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 September to 30 September 2014)**

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

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section Impact Dolphin Monitoring Survey Schedule (1 October to 31 October 2014)

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

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	2014-09-01	ASR8A	8:48	1-hr TSP	90	394	500		
TMCLKL	HY/2012/07	2014-09-01	ASR8A	9:50	1-hr TSP	67				
TMCLKL	HY/2012/07	2014-09-01	ASR8A	10:52	1-hr TSP	62				
TMCLKL	HY/2012/07	2014-09-05	ASR8A	8:50	1-hr TSP	62				
TMCLKL	HY/2012/07	2014-09-05	ASR8A	9:52	1-hr TSP	65				
TMCLKL	HY/2012/07	2014-09-05	ASR8A	10:54	1-hr TSP	60				
TMCLKL	HY/2012/07	2014-09-11	ASR8A	8:33	1-hr TSP	114				
TMCLKL	HY/2012/07	2014-09-11	ASR8A	9:35	1-hr TSP	98				
TMCLKL	HY/2012/07	2014-09-11	ASR8A	10:37	1-hr TSP	71				
TMCLKL	HY/2012/07	2014-09-17	ASR8A	13:10	1-hr TSP	98				
TMCLKL	HY/2012/07	2014-09-17	ASR8A	14:12	1-hr TSP	73				
TMCLKL	HY/2012/07	2014-09-17	ASR8A	15:14	1-hr TSP	91				
TMCLKL	HY/2012/07	2014-09-23	ASR8A	8:50	1-hr TSP	103				
TMCLKL	HY/2012/07	2014-09-23	ASR8A	9:52	1-hr TSP	91				
TMCLKL	HY/2012/07	2014-09-23	ASR8A	10:54	1-hr TSP	109				
TMCLKL	HY/2012/07	2014-09-27	ASR8A	9:42	1-hr TSP	106				
TMCLKL	HY/2012/07	2014-09-27	ASR8A	10:44	1-hr TSP	148				
TMCLKL	HY/2012/07	2014-09-27	ASR8A	11:46	1-hr TSP	94				
				Average		89				
				Min.		60				
				Max.		148				

1-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8

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	2014-09-01	ASR8	8:35	1-hr TSP	59	393	500		
TMCLKL	HY/2012/07	2014-09-01	ASR8	9:37	1-hr TSP	75				
TMCLKL	HY/2012/07	2014-09-01	ASR8	10:39	1-hr TSP	59				
TMCLKL	HY/2012/07	2014-09-05	ASR8	9:02	1-hr TSP	60				
TMCLKL	HY/2012/07	2014-09-05	ASR8	10:04	1-hr TSP	63				
TMCLKL	HY/2012/07	2014-09-05	ASR8	11:06	1-hr TSP	67				
TMCLKL	HY/2012/07	2014-09-11	ASR8	8:45	1-hr TSP	93				
TMCLKL	HY/2012/07	2014-09-11	ASR8	9:47	1-hr TSP	72				
TMCLKL	HY/2012/07	2014-09-11	ASR8	10:49	1-hr TSP	70				
TMCLKL	HY/2012/07	2014-09-17	ASR8	13:22	1-hr TSP	91				
TMCLKL	HY/2012/07	2014-09-17	ASR8	14:24	1-hr TSP	85				
TMCLKL	HY/2012/07	2014-09-17	ASR8	15:26	1-hr TSP	63				
TMCLKL	HY/2012/07	2014-09-23	ASR8	9:01	1-hr TSP	105				
TMCLKL	HY/2012/07	2014-09-23	ASR8	10:03	1-hr TSP	63				
TMCLKL	HY/2012/07	2014-09-23	ASR8	11:05	1-hr TSP	94				
TMCLKL	HY/2012/07	2014-09-27	ASR8	9:50	1-hr TSP	130				
TMCLKL	HY/2012/07	2014-09-27	ASR8	10:52	1-hr TSP	85				
TMCLKL	HY/2012/07	2014-09-27	ASR8	11:54	1-hr TSP	110				
				Average		80				
				Min.		59				
				Max.		130				

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

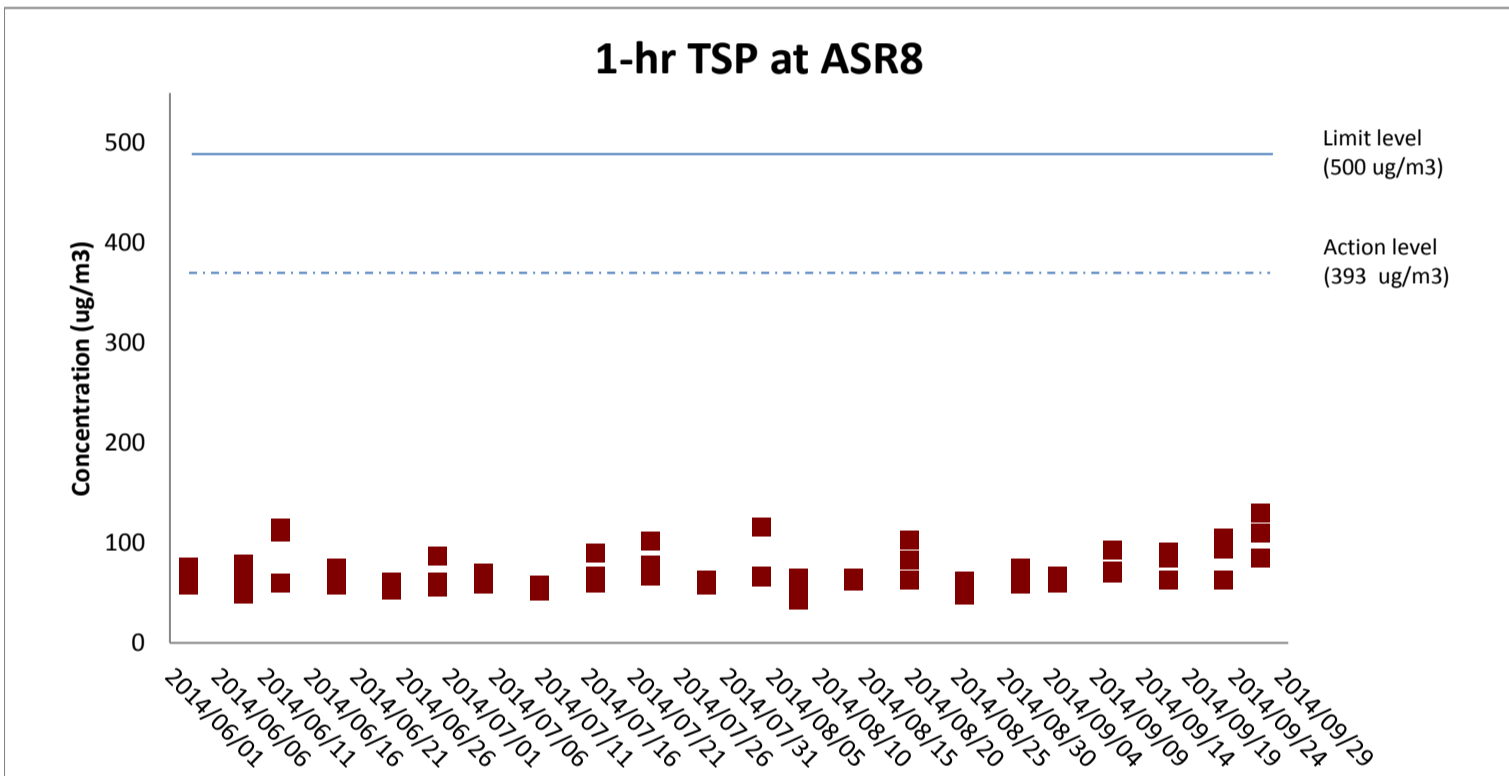
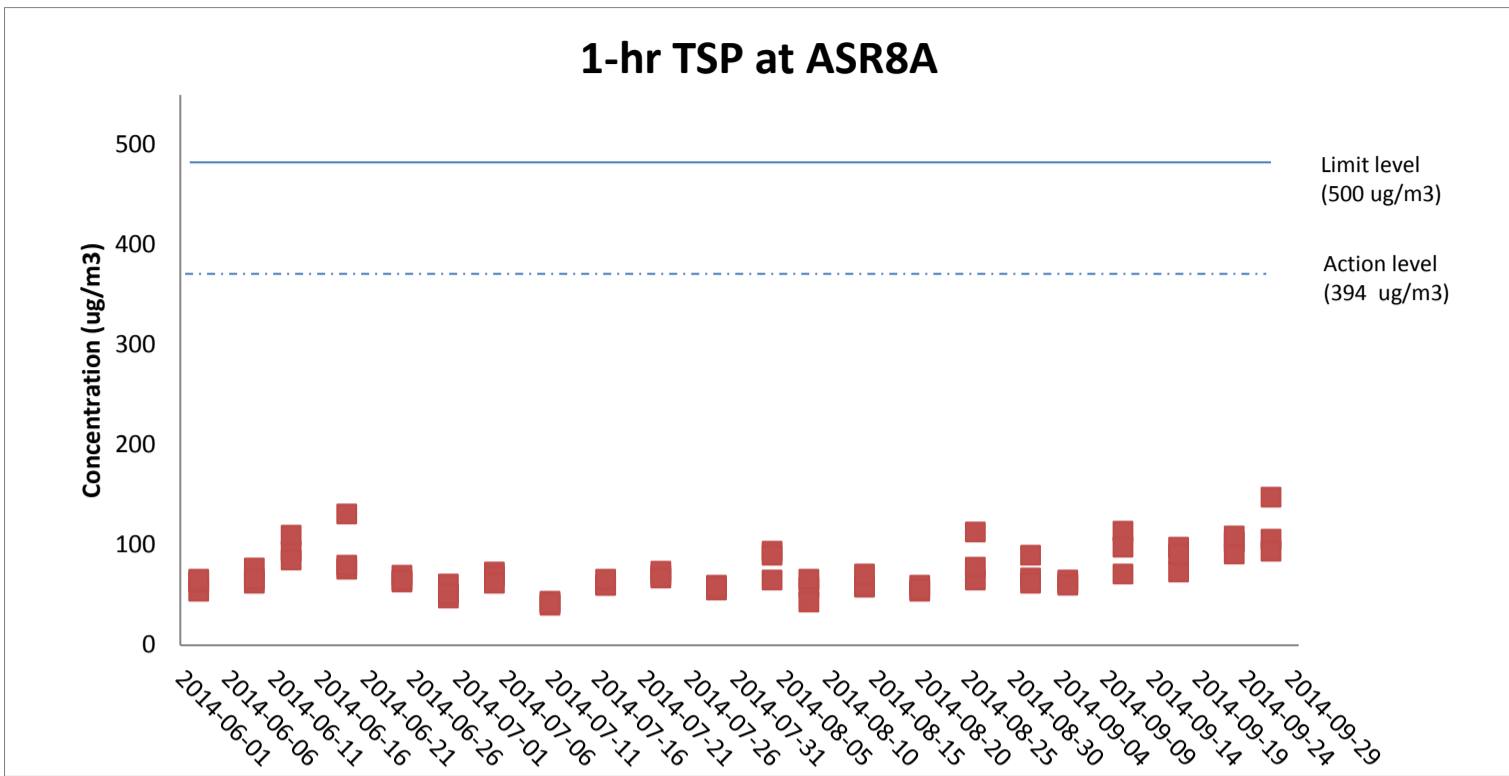
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)
TMCLKL	HY/2012/07	2014-09-01	ASR8A	11:54	24-hr TSP	41	178	260
TMCLKL	HY/2012/07	2014-09-05	ASR8A	11:56	24-hr TSP	45		
TMCLKL	HY/2012/07	2014-09-11	ASR8A	11:39	24-hr TSP	43		
TMCLKL	HY/2012/07	2014-09-17	ASR8A	16:16	24-hr TSP	55		
TMCLKL	HY/2012/07	2014-09-23	ASR8A	11:56	24-hr TSP	60		
TMCLKL	HY/2012/07	2014-09-27	ASR8A	12:46	24-hr TSP	59		
						Average	51	
						Min.	41	
						Max.	60	

24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8

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	2014-09-01	ASR8	11:41	24-hr TSP	39	178	260
TMCLKL	HY/2012/07	2014-09-05	ASR8	12:08	24-hr TSP	43		
TMCLKL	HY/2012/07	2014-09-11	ASR8	11:51	24-hr TSP	42		
TMCLKL	HY/2012/07	2014-09-17	ASR8	16:28	24-hr TSP	43		
TMCLKL	HY/2012/07	2014-09-23	ASR8	12:07	24-hr TSP	65		
TMCLKL	HY/2012/07	2014-09-27	ASR8	12:56	24-hr TSP	61		
						Average	49	
						Min.	39	
						Max.	65	

Action Level Exceedance

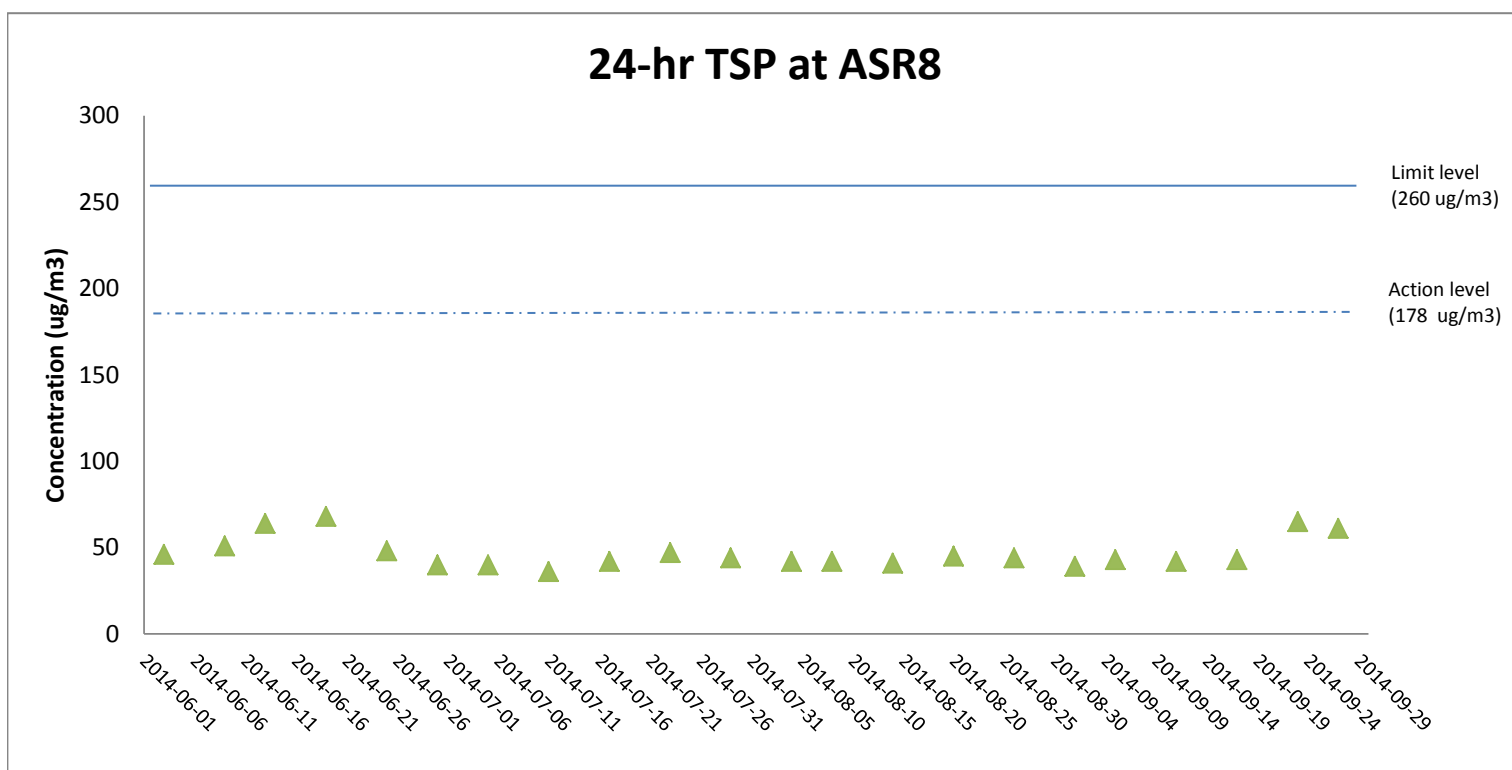
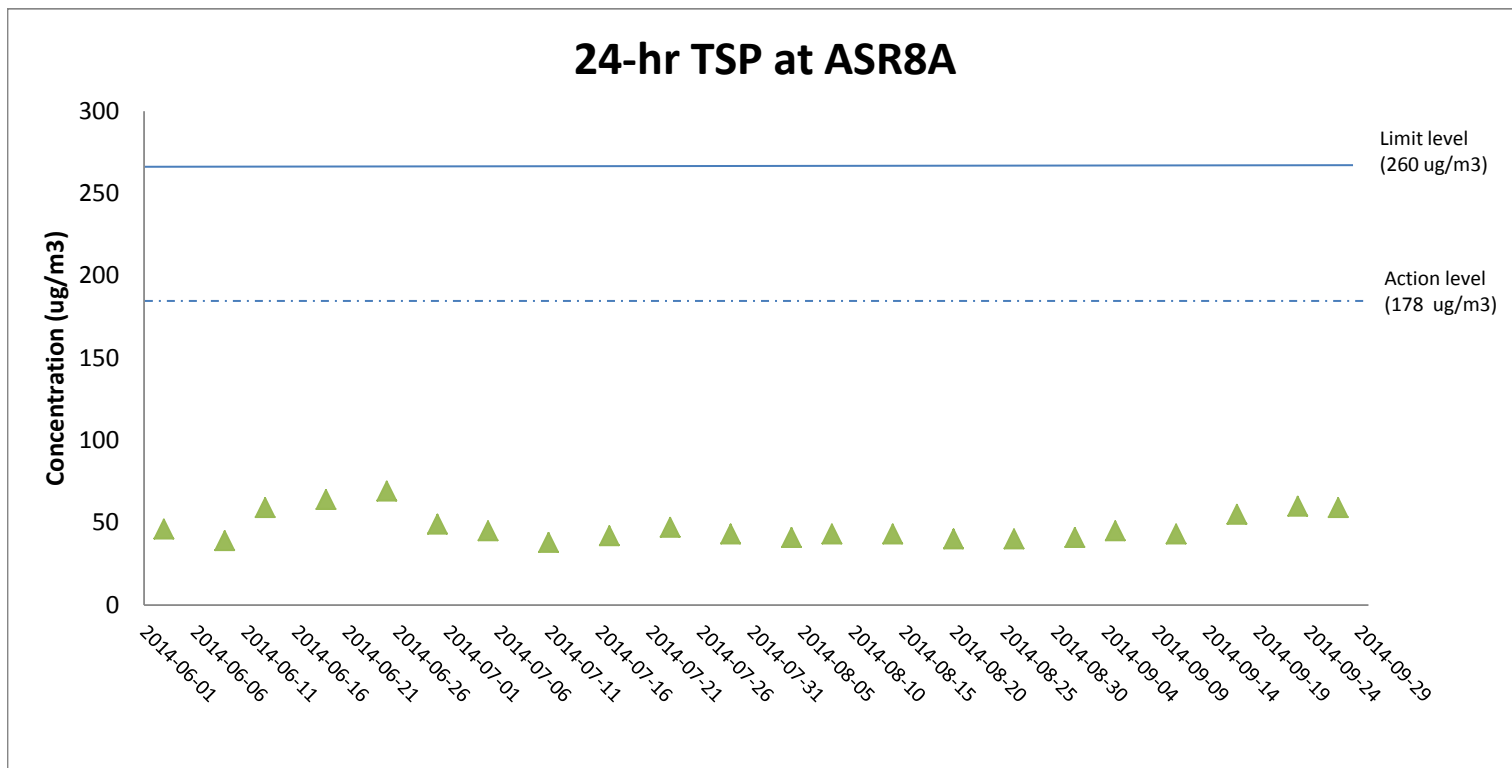
Limit Level Exceedance



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; Fence installation and relocation of Area 2, Viaduct A, B, C & D; Land Piling at Viaduct B & C; Piling platform installation for Viaduct B, C, D & E; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slope 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

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



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; Fence installation and relocation of Area 2, Viaduct A, B, C & D; Land Piling at Viaduct B & C; Piling platform installation for Viaduct B, C, D & E; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slope 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

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

Appendix H

Meteorological Data for the Reporting Month

Date	Time (hour)	Average wind speed (m/s)	Average wind direction (degree)
01-09-2014	0	0.16	115
01-09-2014	1	0.16	110
01-09-2014	2	0.15	145
01-09-2014	3	0.11	146
01-09-2014	4	0.20	115
01-09-2014	5	0.21	119
01-09-2014	6	0.06	95
01-09-2014	7	0.10	80
01-09-2014	8	0.43	129
01-09-2014	9	0.49	112
01-09-2014	10	0.27	123
01-09-2014	11	0.97	105
01-09-2014	12	0.76	100
01-09-2014	13	0.89	114
01-09-2014	14	1.61	168
01-09-2014	15	1.06	105
01-09-2014	16	0.46	177
01-09-2014	17	0.10	146
01-09-2014	18	0.07	150
01-09-2014	19	0.02	149
01-09-2014	20	0.13	149
01-09-2014	21	0.02	117
01-09-2014	22	0.10	168
01-09-2014	23	0.04	152
02-09-2014	0	0.03	166
02-09-2014	1	0.03	167
02-09-2014	2	0.06	202
02-09-2014	3	0.11	202
02-09-2014	4	0.09	161
02-09-2014	5	0.07	197
02-09-2014	6	0.07	166
02-09-2014	7	0.02	105
02-09-2014	8	0.00	144
02-09-2014	9	0.35	121
02-09-2014	10	0.19	106
02-09-2014	11	0.09	254
02-09-2014	12	0.30	144
02-09-2014	13	0.11	151
02-09-2014	14	0.17	101
02-09-2014	15	0.45	67
02-09-2014	16	0.20	62
02-09-2014	17	0.11	212
02-09-2014	18	0.09	181
02-09-2014	19	0.10	208
02-09-2014	20	0.25	216
02-09-2014	21	0.17	206
02-09-2014	22	0.08	186
02-09-2014	23	0.19	152
05-09-2014	0	0.07	145

Date	Time (hour)	Average wind speed (m/s)	Average wind direction (degree)
05-09-2014	1	0.16	74
05-09-2014	2	0.14	91
05-09-2014	3	0.39	165
05-09-2014	4	0.10	127
05-09-2014	5	0.11	98
05-09-2014	6	0.02	206
05-09-2014	7	0.02	82
05-09-2014	8	0.17	120
05-09-2014	9	0.36	112
05-09-2014	10	0.39	119
05-09-2014	11	0.72	151
05-09-2014	12	1.15	117
05-09-2014	13	1.17	115
05-09-2014	14	0.56	106
05-09-2014	15	0.36	182
05-09-2014	16	0.24	166
05-09-2014	17	0.02	144
05-09-2014	18	0.06	116
05-09-2014	19	0.06	89
05-09-2014	20	0.10	147
05-09-2014	21	0.05	178
05-09-2014	22	0.02	148
05-09-2014	23	0.05	121
06-09-2014	0	0.27	113
06-09-2014	1	0.07	89
06-09-2014	2	0.08	152
06-09-2014	3	0.05	192
06-09-2014	4	0.03	181
06-09-2014	5	0.03	182
06-09-2014	6	0.05	158
06-09-2014	7	0.02	76
06-09-2014	8	0.10	255
06-09-2014	9	0.01	94
06-09-2014	10	0.01	201
06-09-2014	11	0.10	210
06-09-2014	12	0.05	191
06-09-2014	13	0.33	170
06-09-2014	14	0.31	110
06-09-2014	15	0.24	150
06-09-2014	16	0.61	125
06-09-2014	17	0.13	144
06-09-2014	18	0.20	114
06-09-2014	19	0.06	139
06-09-2014	20	0.35	158
06-09-2014	21	0.38	161
06-09-2014	22	0.74	165
06-09-2014	23	0.63	93
11-09-2014	0	0.03	210
11-09-2014	1	0.04	214

Date	Time (hour)	Average wind speed (m/s)	Average wind direction (degree)
11-09-2014	2	0.16	185
11-09-2014	3	0.02	189
11-09-2014	4	0.04	206
11-09-2014	5	0.03	196
11-09-2014	6	0.02	96
11-09-2014	7	0.04	55
11-09-2014	8	0.07	136
11-09-2014	9	0.02	281
11-09-2014	10	0.02	301
11-09-2014	11	0.18	268
11-09-2014	12	0.20	178
11-09-2014	13	0.19	124
11-09-2014	14	0.14	96
11-09-2014	15	0.22	131
11-09-2014	16	0.43	149
11-09-2014	17	0.27	153
11-09-2014	18	0.17	172
11-09-2014	19	0.30	116
11-09-2014	20	0.26	113
11-09-2014	21	0.02	101
11-09-2014	22	0.20	85
11-09-2014	23	0.60	111
12-09-2014	0	0.48	115
12-09-2014	1	0.35	73
12-09-2014	2	0.35	120
12-09-2014	3	0.10	139
12-09-2014	4	0.07	138
12-09-2014	5	0.42	96
12-09-2014	6	0.12	136
12-09-2014	7	0.07	100
12-09-2014	8	0.33	110
12-09-2014	9	0.27	77
12-09-2014	10	0.74	95
12-09-2014	11	0.64	82
12-09-2014	12	0.32	120
12-09-2014	13	0.73	99
12-09-2014	14	0.60	87
12-09-2014	15	0.23	72
12-09-2014	16	0.32	112
12-09-2014	17	0.34	120
12-09-2014	18	0.07	120
12-09-2014	19	0.03	111
12-09-2014	20	0.26	131
12-09-2014	21	0.05	104
12-09-2014	22	0.05	117
12-09-2014	23	0.25	113
17-09-2014*	0	-	-
17-09-2014*	1	-	-
17-09-2014*	2	-	-

Date	Time (hour)	Average wind speed (m/s)	Average wind direction (degree)
17-09-2014*	3	-	-
17-09-2014*	4	-	-
17-09-2014*	5	-	-
17-09-2014*	6	-	-
17-09-2014*	7	-	-
17-09-2014*	8	-	-
17-09-2014*	9	-	-
17-09-2014*	10	-	-
17-09-2014*	11	-	-
17-09-2014	12	2.39	130
17-09-2014	13	2.10	142
17-09-2014	14	1.19	113
17-09-2014	15	1.03	108
17-09-2014	16	0.76	88
17-09-2014	17	0.68	137
17-09-2014	18	0.55	107
17-09-2014	19	0.36	125
17-09-2014	20	0.36	82
17-09-2014	21	0.26	128
17-09-2014	22	0.24	140
17-09-2014	23	0.32	127
18-09-2014	0	0.14	138
18-09-2014	1	0.05	128
18-09-2014	2	0.02	154
18-09-2014	3	0.02	172
18-09-2014	4	0.05	157
18-09-2014	5	0.09	161
18-09-2014	6	0.03	155
18-09-2014	7	0.02	121
18-09-2014	8	0.02	105
18-09-2014	9	0.07	169
18-09-2014	10	0.18	77
18-09-2014	11	0.03	114
18-09-2014	12	0.02	191
18-09-2014	13	0.31	124
18-09-2014	14	0.10	220
18-09-2014	15	0.18	191
18-09-2014	16	0.08	146
18-09-2014	17	0.02	186
18-09-2014	18	0.02	177
18-09-2014	19	0.18	202
18-09-2014	20	0.05	200
18-09-2014	21	0.14	196
18-09-2014	22	0.04	177
18-09-2014	23	0.02	185
23-09-2014	0	0.03	172
23-09-2014	1	0.10	174
23-09-2014	2	0.13	186
23-09-2014	3	0.10	180

Date	Time (hour)	Average wind speed (m/s)	Average wind direction (degree)
23-09-2014	4	0.08	162
23-09-2014	5	0.05	196
23-09-2014	6	0.18	187
23-09-2014	7	0.04	179
23-09-2014	8	0.02	122
23-09-2014	9	0.01	183
23-09-2014	10	0.05	223
23-09-2014	11	0.08	287
23-09-2014	12	0.09	263
23-09-2014	13	0.07	211
23-09-2014	14	0.06	221
23-09-2014	15	0.06	141
23-09-2014	16	0.13	113
23-09-2014	17	0.16	82
23-09-2014	18	0.03	96
23-09-2014	19	0.17	102
23-09-2014	20	0.09	151
23-09-2014	21	0.02	159
23-09-2014	22	0.02	139
23-09-2014	23	0.08	160
24-09-2014	0	0.09	179
24-09-2014	1	0.02	149
24-09-2014	2	0.02	152
24-09-2014	3	0.02	147
24-09-2014	4	0.05	179
24-09-2014	5	0.03	211
24-09-2014	6	0.02	206
24-09-2014	7	0.02	281
24-09-2014	8	0.05	204
24-09-2014	9	0.05	118
24-09-2014	10	0.02	222
24-09-2014	11	0.14	241
24-09-2014	12	0.11	191
24-09-2014	13	0.02	260
24-09-2014	14	0.14	121
24-09-2014	15	0.05	137
24-09-2014	16	0.07	130
24-09-2014	17	0.07	144
24-09-2014	18	0.11	194
24-09-2014	19	0.28	201
24-09-2014	20	0.31	191
24-09-2014	21	0.23	192
24-09-2014	22	0.11	182
24-09-2014	23	0.06	193
27-09-2014	0	0.02	150
27-09-2014	1	0.02	201
27-09-2014	2	0.05	214
27-09-2014	3	0.06	188
27-09-2014	4	0.02	157

Date	Time (hour)	Average wind speed (m/s)	Average wind direction (degree)
27-09-2014	5	0.02	121
27-09-2014	6	0.02	167
27-09-2014	7	0.02	148
27-09-2014	8	0.21	131
27-09-2014	9	0.10	194
27-09-2014	10	0.05	199
27-09-2014	11	0.03	235
27-09-2014	12	0.08	227
27-09-2014	13	0.70	100
27-09-2014	14	0.56	123
27-09-2014	15	0.15	102
27-09-2014	16	0.58	125
27-09-2014	17	0.38	148
27-09-2014	18	0.22	116
27-09-2014	19	0.07	120
27-09-2014	20	0.04	135
27-09-2014	21	0.03	147
27-09-2014	22	0.02	150
27-09-2014	23	0.03	180
28-09-2014	0	0.18	209
28-09-2014	1	0.20	203
28-09-2014	2	0.11	184
28-09-2014	3	0.08	214
28-09-2014	4	0.02	204
28-09-2014	5	0.05	220
28-09-2014	6	0.02	174
28-09-2014	7	0.02	193
28-09-2014	8	0.06	80
28-09-2014	9	0.06	102
28-09-2014	10	0.07	174
28-09-2014	11	0.04	240
28-09-2014	12	0.08	260
28-09-2014	13	0.18	97
28-09-2014	14	0.58	90
28-09-2014	15	0.42	84
28-09-2014	16	0.21	121
28-09-2014	17	0.10	125
28-09-2014	18	0.23	146
28-09-2014	19	0.24	133
28-09-2014	20	0.06	125
28-09-2014	21	0.15	156
28-09-2014	22	0.04	116
28-09-2014	23	0.02	170

*Note:

Due to adverse weather condition, no meteorological data was collected on 17 September 2014 .

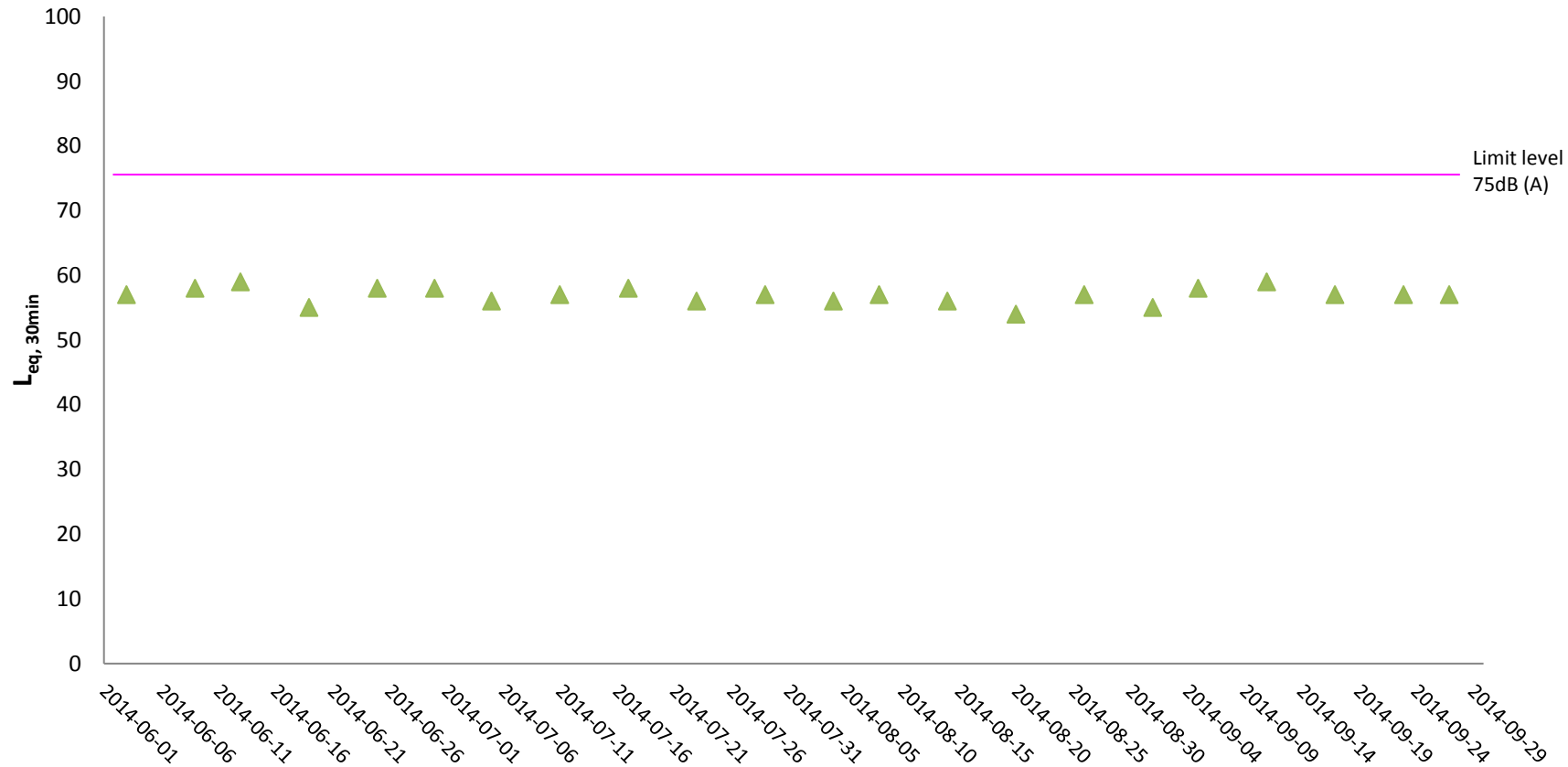
Appendix I

Impact Noise Monitoring Results and Graphical Presentation

Appendix I1 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)	Temp (° C)	Wind Speed (m/s)	Noise Meter Model/ID	Calibrator Model/ID
						Leq	L10	L90					
TMCLKL	HY/2012/07	2014-09-01	NSR1	Sunny	9:55	55	57	53	75	29	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2014-09-05	NSR1	Sunny	10:10	58	61	52	75	29	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2014-09-11	NSR1	Sunny	9:56	59	61	53	75	28	0.1	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2014-09-17	NSR1	Couldy	13:25	57	59	52	75	32	2.5	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2014-09-23	NSR1	Sunny	10:08	57	59	55	75	26	0.1	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2014-09-27	NSR1	Sunny	9:55	57	60	52	75	26	0.2	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
						Min.	55						
						Max.	59						
						Average	57						

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



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; Fence installation and relocation of Area 2, Viaduct A, B, C & D; Land Piling at Viaduct B & C; Piling platform installation for Viaduct B, C, D & E; Additional land GI, trial pits & lab testing; Utility surveys; and Slope work of Slope 9SE-B/C8, 9SE-B/C9 & 9SE-B/F9.

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

Appendix J

Impact Water Quality Monitoring Results and Graphical Presentation

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	11:04	29.3	7.84	19.3	6.13	4.65	5.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	11:04	29.2	7.85	19.4	6.1	4.61	5.1	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	1	11:04	28.9	7.85	19.7	5.84	4.53	5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	2	11:04	29	7.86	19.8	5.81	4.5	4.8	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)5	Bottom	8.8	3	1	11:04	28.8	7.87	19.8	5.74	4.85	5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)5	Bottom	8.8	3	2	11:04	28.7	7.88	19.9	5.7	4.8	4.9	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4a	Surface	1	1	1	11:30	29.4	7.87	19.4	6.05	4.49	4.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4a	Surface	1	1	2	11:30	29.3	7.88	19.5	6.03	4.46	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4a	Middle		2	1	11:30							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4a	Middle		2	2	11:30							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4a	Bottom	3.8	3	1	11:30	28.7	7.89	19.8	5.87	4.63	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4a	Bottom	3.8	3	2	11:30	28.6	7.88	19.9	5.84	4.59	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4	Surface	1	1	1	11:56	29.4	7.85	19.2	6.03	4.45	4.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4	Surface	1	1	2	11:56	29.5	7.86	19.3	6.06	4.41	4.7	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4	Middle		2	1	11:56							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4	Middle		2	2	11:56							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4	Bottom	4.2	3	1	11:56	28.9	7.87	19.5	5.79	4.65	4.8	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	SR4	Bottom	4.2	3	2	11:56	29	7.86	19.6	5.82	4.7	4.7	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS8	Surface	1	1	1	12:22	29.4	7.84	19.4	5.9	4.2	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS8	Surface	1	1	2	12:22	29.3	7.85	19.3	5.93	4.17	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS8	Middle		2	1	12:22							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS8	Middle		2	2	12:22							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS8	Bottom	4.4	3	1	12:22	29.1	7.87	19.7	5.74	4.53	4.1	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS8	Bottom	4.4	3	2	12:22	29	7.86	19.8	5.7	4.47	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	12:48	29.3	7.83	19.4	5.97	4.29	3.8	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	12:48	29.4	7.84	19.5	6.01	4.26	3.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)16	Middle	4.3	2	1	12:48	28.9	7.86	19.6	5.78	4.36	3.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)16	Middle	4.3	2	2	12:48	28.8	7.87	19.7	5.74	4.31	3.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)16	Bottom	7.6	3	1	12:48	28.8	7.87	19.8	5.81	4.71	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)16	Bottom	7.6	3	2	12:48	28.7	7.86	19.9	5.85	4.77	4.3	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	13:14	29.3	7.83	19.3	6.18	4.6	4.1	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	13:14	29.2	7.84	19.4	6.21	4.54	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	13:14							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	13:14							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	1	13:14	28.9	7.86	19.8	5.68	4.69	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	2	13:14	28.8	7.85	19.9	5.64	4.66	4.3	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	13:40	29.2	7.82	19.4	6.04	4.45	3.3	2014-09-04

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	13:40	29.3	7.81	19.3	6.01	4.49	3.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	1	13:40	28.9	7.85	19.7	5.8	4.4	3.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	2	13:40	29	7.86	19.8	5.83	4.36	3.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	1	13:40	29.8	7.88	19.9	5.89	4.73	3.8	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	2	13:40	29.7	7.87	19.8	5.85	4.77	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	16:30	29.3	7.72	19.3	5.99	4.67	4.1	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	16:30	29.3	7.7	19.2	5.97	4.58	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)3	Middle	5.5	2	1	16:30	28.8	7.81	19.8	5.72	4.77	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)3	Middle	5.5	2	2	16:30	28.7	7.74	19.9	5.77	4.8	4.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)3	Bottom	10	3	1	16:30	28.5	7.82	20.1	5.33	4.88	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)3	Bottom	10	3	2	16:30	28.3	7.88	20.3	5.42	5.03	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4a	Surface	1	1	1	18:20	29.3	7.72	19.5	6.02	4.52	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4a	Surface	1	1	2	18:20	29.3	7.68	19.6	5.97	4.54	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4a	Middle		2	1	18:20							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4a	Middle		2	2	18:20							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4a	Bottom	3.2	3	1	18:20	28.6	7.77	19.9	5.31	4.82	4.3	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4a	Bottom	3.2	3	2	18:20	28.4	7.83	20.1	5.38	4.97	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4	Surface	1	1	1	17:58	29.3	7.88	19.3	5.81	4.62	4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4	Surface	1	1	2	17:58	29.5	7.79	19.3	5.88	4.68	4.2	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4	Middle		2	1	17:58							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4	Middle		2	2	17:58							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4	Bottom	3.8	3	1	17:58	28.9	7.85	19.6	5.52	5.02	4.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	SR4	Bottom	3.8	3	2	17:58	28.6	7.8	19.7	5.59	5.17	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS8	Surface	1	1	1	17:25	29.4	7.72	19.4	5.81	4.67	4.1	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS8	Surface	1	1	2	17:25	29.3	7.69	19.2	5.73	4.71	3.9	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS8	Middle		2	1	17:25							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS8	Middle		2	2	17:25							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS8	Bottom	4	3	1	17:25	28.9	7.81	19.8	5.62	5.24	4.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS8	Bottom	4	3	2	17:25	29	7.88	19.9	5.56	5.4	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	17:14	29.4	7.81	19.4	5.71	4.51	3.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	17:14	29.5	7.72	19.3	5.73	4.55	3.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)16	Middle	4.1	2	1	17:14	28.9	7.81	19.7	5.62	4.72	4.1	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)16	Middle	4.1	2	2	17:14	28.8	7.84	19.6	5.66	4.79	3.9	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.1	3	1	17:14	28.2	7.88	20.1	5.51	5.21	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.1	3	2	17:14	28.2	7.87	20.2	5.47	5.09	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	16:52	29.3	7.71	19.3	6.12	4.81	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	16:52	29.2	7.77	19.3	6.14	4.88	4.2	2014-09-04

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	16:52							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	16:52							2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.1	3	1	16:52	28.4	7.81	19.8	5.58	5.03	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.1	3	2	16:52	28.6	7.8	19.9	5.6	5.12	4.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	18:42	29.3	7.72	19.3	6.03	4.92	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	18:42	29.3	7.74	19.2	6.06	4.99	4.6	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)5	Middle	4.7	2	1	18:42	28.9	7.78	19.7	5.71	4.93	4.4	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)5	Middle	4.7	2	2	18:42	28.9	7.77	19.9	5.77	4.96	4.5	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.3	3	1	18:42	28.6	7.86	19.9	5.69	5.14	4.8	2014-09-04
TMCLKL	HY/2012/07	2014-09-02	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.3	3	2	18:42	28.6	7.79	20	5.62	5.2	4.8	2014-09-04
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	14:22	28.6	7.66	19	6.17	4.99	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	14:22	28.7	7.62	18.9	6.22	4.91	5.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.1	2	1	14:22	28.4	7.69	19.6	5.89	4.93	5.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	CS(Mf)5	Middle	5.1	2	2	14:22	28.4	7.71	19.7	5.93	4.97	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	CS(Mf)5	Bottom	9.1	3	1	14:22	28.1	7.82	19.4	5.82	5.18	6.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	CS(Mf)5	Bottom	9.1	3	2	14:22	28.2	7.76	19.6	5.76	5.22	6.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	14:43	28.8	7.63	19.3	6.09	4.34	5	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	14:43	28.7	7.57	19.4	6.11	4.28	4.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4a	Middle		2	1	14:43							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4a	Middle		2	2	14:43							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4a	Bottom	3.7	3	1	14:43	28.1	7.69	19.7	5.61	4.73	5.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4a	Bottom	3.7	3	2	14:43	28.2	7.66	19.2	5.52	4.69	5.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4	Surface	1	1	1	15:05	28.8	7.84	19	5.99	4.54	5.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4	Surface	1	1	2	15:05	28.9	7.86	18.9	5.94	4.59	5.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4	Middle		2	1	15:05							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4	Middle		2	2	15:05							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4	Bottom	4	3	1	15:05	28.4	7.79	19.4	5.72	4.93	5.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	SR4	Bottom	4	3	2	15:05	28.3	7.74	19.7	5.75	4.98	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS8	Surface	1	1	1	15:26	28.7	7.7	18.8	5.88	4.63	5.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS8	Surface	1	1	2	15:26	28.7	7.74	19.1	5.93	4.56	5.6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS8	Middle		2	1	15:26							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS8	Middle		2	2	15:26							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS8	Bottom	4.6	3	1	15:26	28.3	7.86	19.5	5.69	5.25	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS8	Bottom	4.6	3	2	15:26	28.3	7.81	19.2	5.74	5.29	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	15:47	29.2	7.83	19.1	5.82	4.43	5.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	15:47	29.1	7.82	18.7	5.87	4.38	5.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.5	2	1	15:47	28.6	7.87	19.5	5.72	4.8	5.6	2014-09-05

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS8	Bottom	4.2	3	1	09:15	29	7.87	19.8	5.67	5.25	6.6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS8	Bottom	4.2	3	2	09:15	28.9	7.92	19.7	5.6	5.36	6.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	09:00	29.4	7.84	19.4	5.75	4.43	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	09:00	29.5	7.85	19.4	5.79	4.5	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)16	Middle	4.2	2	1	09:00	29	7.89	19.8	5.69	4.83	6.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)16	Middle	4.2	2	2	09:00	28.9	7.93	19.7	5.67	4.96	6.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.4	3	1	09:00	28.3	7.95	20.2	5.56	5.27	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.4	3	2	09:00	28.2	7.97	20.1	5.51	5.16	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	08:45	29.2	7.65	19.3	6.16	4.83	5.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	08:45	29.2	7.71	19.2	6.19	4.74	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	08:45							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	08:45							2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.6	3	1	08:45	28.5	7.72	19.9	5.62	5.08	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.6	3	2	08:45	28.6	7.76	20	5.64	5.16	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	09:51	29.3	7.7	19.2	6.11	4.97	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	09:51	29.2	7.71	19.2	6.15	5.04	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	CS(Mf)5	Middle	4.8	2	1	09:51	28.9	7.73	19.9	5.83	4.98	5.8	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	CS(Mf)5	Middle	4.8	2	2	09:51	29	7.75	19.8	5.85	5.06	6	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.5	3	1	09:51	28.6	7.84	20	5.78	5.21	6.2	2014-09-05
TMCLKL	HY/2012/07	2014-09-04	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.5	3	2	09:51	28.7	7.83	20.1	5.72	5.28	6.4	2014-09-05
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	16:02	29.2	7.75	19.1	6.23	4.88	6.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	16:02	29.2	7.77	19	6.24	4.81	6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	1	16:02	29	7.8	19.5	5.97	4.84	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	2	16:02	29	7.86	19.6	6.02	4.77	6.1	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)5	Bottom	8.7	3	1	16:02	28.6	7.88	19.6	5.85	5.11	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)5	Bottom	8.7	3	2	16:02	28.5	7.93	19.6	5.87	5.23	6.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4a	Surface	1	1	1	16:25	29.3	7.72	19.3	6.14	4.27	5.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4a	Surface	1	1	2	16:25	29.2	7.7	19.4	6.18	4.31	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4a	Middle		2	1	16:25							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4a	Middle		2	2	16:25							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4a	Bottom	3.5	3	1	16:25	28.6	7.76	19.5	5.63	4.7	6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4a	Bottom	3.5	3	2	16:25	28.6	7.81	19.4	5.67	4.56	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4	Surface	1	1	1	16:44	29.4	7.9	19	6.04	4.5	5.7	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4	Surface	1	1	2	16:44	29.3	7.82	19	6.1	4.57	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4	Middle		2	1	16:44							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4	Middle		2	2	16:44							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4	Bottom	4.2	3	1	16:44	28.7	7.81	19.3	5.8	4.91	6.8	2014-09-11

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	SR4	Bottom	4.2	3	2	16:44	28.7	7.75	19.2	5.76	4.77	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS8	Surface	1	1	1	17:05	29.3	7.73	19	5.83	4.72	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS8	Surface	1	1	2	17:05	29.4	7.75	19.1	5.86	4.81	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS8	Middle		2	1	17:05							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS8	Middle		2	2	17:05							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS8	Bottom	4.5	3	1	17:05	28.9	7.82	19.3	5.64	5.29	6.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS8	Bottom	4.5	3	2	17:05	28.9	7.74	19.3	5.58	5.33	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	17:23	29.4	7.79	18.9	5.75	4.38	5.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	17:23	29.4	7.84	19	5.76	4.3	5.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)16	Middle	4.5	2	1	17:23	28.9	7.86	19.4	5.65	4.81	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)16	Middle	4.5	2	2	17:23	28.8	7.83	19.3	5.68	4.74	6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)16	Bottom	8	3	1	17:23	28.2	7.92	19.7	5.44	5.13	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)16	Bottom	8	3	2	17:23	28.2	7.89	19.7	5.52	4.95	6.7	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	17:45	29.3	7.66	19.1	6.32	4.71	6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	17:45	29.2	7.63	19.1	6.36	4.67	6.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	17:45							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	17:45							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)9	Bottom	3.8	3	1	17:45	28.8	7.69	19.5	5.74	4.97	6.5	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	IS(Mf)9	Bottom	3.8	3	2	17:45	28.7	7.74	19.4	5.77	4.85	6.7	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	18:03	29.2	7.55	18.8	6.08	4.58	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	18:03	29.3	7.58	18.9	6.13	4.5	5.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	1	18:03	28.6	7.65	19.4	5.85	4.68	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)3	Middle	5.7	2	2	18:03	28.6	7.67	19.5	5.88	4.75	5.7	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	1	18:03	28.2	7.73	20	5.64	5.09	6.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Flood	Fine	CS(Mf)3	Bottom	10.4	3	2	18:03	28.3	7.79	20.1	5.62	4.97	7	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	08:55	29.3	7.83	19.1	5.93	4.66	6.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	08:55	29.2	7.81	19.2	5.95	4.68	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	1	08:55	28.8	7.62	19.3	5.77	4.73	6.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)3	Middle	5.6	2	2	08:55	28.7	7.64	19.3	5.75	4.75	6.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.2	3	1	08:55	28.6	7.75	19.6	5.53	5.13	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.2	3	2	08:55	28.6	7.77	19.6	5.51	5.15	6.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4a	Surface	1	1	1	10:56	29.3	7.72	19	6.03	4.36	5.5	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4a	Surface	1	1	2	10:56	29.3	7.74	19.1	6.05	4.38	5.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4a	Middle		2	1	10:56							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4a	Middle		2	2	10:56							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4a	Bottom	10.1	3	1	10:56	28.8	7.65	19.3	5.52	4.82	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4a	Bottom	10.1	3	2	10:56	28.7	7.67	19.4	5.5	4.84	5.7	2014-09-11

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4	Surface	1	1	1	10:25	29.3	7.72	19.1	5.93	4.72	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4	Surface	1	1	2	10:25	29.2	7.7	19.2	5.95	4.7	6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4	Middle		2	1	10:25							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4	Middle		2	2	10:25							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4	Bottom	3.9	3	1	10:25	28.7	7.75	19.3	5.63	4.93	6.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	SR4	Bottom	3.9	3	2	10:25	28.8	7.77	19.4	5.65	4.96	6.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS8	Surface	1	1	1	10:00	29.2	7.7	19	5.77	4.83	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS8	Surface	1	1	2	10:00	29.2	7.68	19.1	5.75	4.85	6.7	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS8	Middle		2	1	10:00							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS8	Middle		2	2	10:00							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS8	Bottom	4.3	3	1	10:00	28.8	7.66	19.2	5.52	5.4	6.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS8	Bottom	4.3	3	2	10:00	28.9	7.64	19.3	5.54	5.38	6.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	09:44	29.2	7.66	19	5.62	4.46	5.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	09:44	29.1	7.68	19.1	5.64	4.47	5.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)16	Middle	4.4	2	1	09:44	28.9	7.75	19.3	5.55	4.92	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)16	Middle	4.4	2	2	09:44	29	7.77	19.4	5.57	4.9	6.2	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	1	09:44	28.5	7.83	19.7	5.33	5.22	6.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)16	Bottom	7.8	3	2	09:44	28.6	7.85	19.6	5.31	5.24	6.5	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	09:20	29.2	7.73	19	6.24	4.83	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	09:20	29.1	7.75	19	6.26	4.85	5.6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	09:20							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	09:20							2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.6	3	1	09:20	28.6	7.68	19.2	5.63	5.02	6.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.6	3	2	09:20	28.7	7.7	19.3	5.65	5.04	6.1	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	11:18	29.4	7.66	19	6.13	4.93	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	11:18	29.3	7.68	19	6.15	4.95	5.9	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)5	Middle	4.3	2	1	11:18	29	7.72	19.4	6.02	4.88	6	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)5	Middle	4.3	2	2	11:18	28.9	7.74	19.5	6	4.9	5.8	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)5	Bottom	3.5	3	1	11:18	28.6	7.81	19.6	5.72	5.23	6.4	2014-09-11
TMCLKL	HY/2012/07	2014-09-06	Mid-Ebb	Fine	CS(Mf)5	Bottom	3.5	3	2	11:18	28.7	7.83	19.7	5.74	5.21	6.5	2014-09-11
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	08:15	29.4	7.78	19.2	6.13	4.75	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	08:15	29.3	7.76	19.1	6.11	4.7	6.2	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)5	Middle	7.1	2	1	08:15	29	7.83	19.5	5.98	4.88	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)5	Middle	7.1	2	2	08:15	29	7.86	19.6	6.03	4.84	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)5	Bottom	13.2	3	1	08:15	28.6	7.94	19.8	5.74	5.21	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)5	Bottom	13.2	3	2	08:15	28.5	7.95	19.8	5.77	5.12	6.3	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	08:30	29.3	7.83	19.2	6.02	4.36	5.7	2014-09-13

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	08:30	29.3	7.88	19.3	6.05	4.28	5.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4a	Middle		2	1	08:30							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4a	Middle		2	2	08:30							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4a	Bottom	4.6	3	1	08:30	28.6	7.81	19.5	5.6	4.81	6.3	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4a	Bottom	4.6	3	2	08:30	28.5	7.78	19.5	5.54	4.76	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4	Surface	1	1	1	08:45	29.3	7.81	19.4	5.9	4.73	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4	Surface	1	1	2	08:45	29.2	7.84	19.3	5.87	4.66	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4	Middle		2	1	08:45							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4	Middle		2	2	08:45							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4	Bottom	3.7	3	1	08:45	28.8	7.86	19.6	5.62	4.88	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	SR4	Bottom	3.7	3	2	08:45	28.8	7.88	19.5	5.64	4.83	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS8	Surface	1	1	1	08:59	29.2	7.78	19.2	5.73	4.85	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS8	Surface	1	1	2	08:59	29.2	7.79	19.3	5.75	4.76	5.6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS8	Middle		2	1	08:59							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS8	Middle		2	2	08:59							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS8	Bottom	4.1	3	1	08:59	28.9	7.72	19.5	5.48	5.39	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS8	Bottom	4.1	3	2	08:59	28.8	7.74	19.4	5.53	5.34	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	09:14	29.2	7.76	19.3	5.62	4.47	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	09:14	29.1	7.75	19.2	5.65	4.41	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.7	2	1	09:14	29.1	7.86	19.6	5.69	4.92	6.2	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.7	2	2	09:14	29.2	7.85	19.5	5.7	4.87	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)16	Bottom	8.4	3	1	09:14	28.8	7.94	19.9	5.33	5.21	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)16	Bottom	8.4	3	2	09:14	28.7	7.9	20	5.25	5.15	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	09:29	29.2	7.82	19.3	6.22	4.83	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	09:29	29.1	7.85	19.2	6.16	4.76	5.7	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	09:29							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	09:29							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.5	3	1	09:29	28.7	7.79	19.4	5.66	4.97	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	IS(Mf)9	Bottom	3.5	3	2	09:29	28.6	7.83	19.5	5.7	4.9	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	09:44	29.3	7.94	19.3	5.95	4.69	5.6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	09:44	29.2	7.91	19.4	5.99	4.61	5.6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.5	2	1	09:44	28.8	7.75	19.5	5.72	4.78	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)3	Middle	5.5	2	2	09:44	28.7	7.76	19.4	5.75	4.74	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)3	Bottom	9.9	3	1	09:44	28.6	7.86	19.8	5.53	5.12	6.3	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Flood	Cloudy	CS(Mf)3	Bottom	9.9	3	2	09:44	28.6	7.82	19.8	5.5	5.05	6.2	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	12:40	29.4	7.89	19.3	5.84	4.72	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	12:40	29.3	7.87	19	5.86	4.74	5.9	2014-09-13

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.3	2	1	12:40	28.9	7.68	19.4	5.68	4.79	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)3	Middle	5.3	2	2	12:40	28.8	7.7	19.3	5.66	4.81	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.6	3	1	12:40	28.6	7.81	19.6	5.44	5.19	6.3	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	9.6	3	2	12:40	28.7	7.82	19.7	5.42	5.21	6.2	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	14:50	29.4	7.78	19.1	5.94	4.42	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	14:50	29.3	7.8	19.2	5.96	4.44	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4a	Middle		2	1	14:50							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4a	Middle		2	2	14:50							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4a	Bottom	4.2	3	1	14:50	28.6	7.71	19.4	5.43	4.88	6.4	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4a	Bottom	4.2	3	2	14:50	28.7	7.73	19.5	5.41	4.9	6.6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	14:24	29.4	7.78	19.2	5.84	4.78	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	14:24	29.3	7.76	19.3	5.86	4.76	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4	Middle		2	1	14:24							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4	Middle		2	2	14:24							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	1	14:24	28.8	7.81	19.5	5.54	4.99	6.7	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	SR4	Bottom	3.4	3	2	14:24	28.9	7.83	19.4	5.56	5.02	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	13:58	29.2	7.76	19.1	5.68	4.89	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	13:58	29.3	7.74	19.2	5.66	4.91	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS8	Middle		2	1	13:58							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS8	Middle		2	2	13:58							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS8	Bottom	3.8	3	1	13:58	29	7.72	19.4	5.43	5.46	6.4	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS8	Bottom	3.8	3	2	13:58	28.9	7.7	19.4	5.45	5.44	6.6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	13:32	29.3	7.72	19.1	5.53	4.52	5.4	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	13:32	29.3	7.74	19.2	5.55	4.53	5.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.6	2	1	13:32	29.1	7.81	19.4	5.61	4.98	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.6	2	2	13:32	29.2	7.83	19.5	5.63	4.96	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	8.2	3	1	13:32	28.7	7.89	19.8	5.24	5.28	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	8.2	3	2	13:32	28.6	7.9	19.9	5.22	5.3	6.5	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	13:06	29.2	7.79	19.1	6.15	4.89	5.9	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	13:06	29.3	7.81	19.2	6.17	4.91	5.8	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	13:06							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	13:06							2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.2	3	1	13:06	28.8	7.74	19.3	5.54	5.08	6.2	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	3.2	3	2	13:06	28.7	7.77	19.4	5.56	5.12	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	15:16	29.5	7.72	19.1	6.04	4.84	6	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	15:16	29.4	7.74	19	6.06	4.86	6.1	2014-09-13
TMCLKL	HY/2012/07	2014-09-11	Mid-Ebb	Cloudy	CS(Mf)5	Middle	6.9	2	1	15:16	29	7.78	19.4	5.93	4.94	6.5	2014-09-13

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	1	10:24	28.1	7.66	19.2	5.22	5.84	7.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	2	10:24	28	7.69	19.1	5.14	5.9	7.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	10:50	28.4	7.61	18.8	5.59	5.17	6.4	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	10:50	28.3	7.63	18.8	5.52	5.08	6.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	CS(Mf)3	Middle	6.1	2	1	10:50	28.1	7.7	19.3	5.11	5.72	7	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	CS(Mf)3	Middle	6.1	2	2	10:50	28.2	7.69	19.2	5.17	5.67	6.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	CS(Mf)3	Bottom	11.2	3	1	10:50	27.6	7.72	19.5	4.97	7.19	10.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Flood	Fine	CS(Mf)3	Bottom	11.2	3	2	10:50	27.6	7.73	19.6	4.92	7.24	10	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	14:02	28.5	7.65	19.1	5.42	5.13	7	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	14:02	28.5	7.63	19.1	5.48	5.22	7.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)3	Middle	6	2	1	14:02	28.2	7.7	19.5	5.11	5.73	8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)3	Middle	6	2	2	14:02	28.1	7.71	19.4	5.07	5.8	8.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.8	3	1	14:02	27.8	7.77	19.8	4.83	7.17	10.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.8	3	2	14:02	27.7	7.68	19.8	4.88	7.34	10.4	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4a	Surface	1	1	1	15:21	28.5	7.66	19.1	5.71	5.15	7	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4a	Surface	1	1	2	15:21	28.5	7.63	19	5.67	5.15	7	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4a	Middle		2	1	15:21							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4a	Middle		2	2	15:21							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	15:21	28.1	7.73	19.3	5.12	6.24	8.4	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	15:21	28	7.7	19.5	5.04	6.07	8.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4	Surface	1	1	1	15:05	28.5	7.61	19.1	5.42	6.03	8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4	Surface	1	1	2	15:05	28.4	7.67	19	5.38	6.11	8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4	Middle		2	1	15:05							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4	Middle		2	2	15:05							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4	Bottom	4.2	3	1	15:05	28.1	7.72	19.4	4.97	7.12	10.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	SR4	Bottom	4.2	3	2	15:05	28.7	7.7	19.5	4.96	6.93	9.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS8	Surface	1	1	1	14:49	28.5	7.69	19	5.51	5.73	7.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS8	Surface	1	1	2	14:49	28.5	7.66	18.9	5.46	5.88	7.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS8	Middle		2	1	14:49							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS8	Middle		2	2	14:49							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS8	Bottom	4.5	3	1	14:49	28	7.77	19.3	5.13	6.72	8.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS8	Bottom	4.5	3	2	14:49	28.1	7.72	19.3	5.02	6.81	8.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	14:32	28.6	7.61	19	5.42	5.72	7.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	14:32	28.6	7.53	18.9	5.5	5.77	7.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)16	Middle	4.5	2	1	14:32	28.2	7.6	19.4	5.12	6.31	8.4	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)16	Middle	4.5	2	2	14:32	28.2	7.64	19.3	5.2	6.28	8.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)16	Bottom	8	3	1	14:32	27.9	7.79	19.7	4.99	7.02	9.8	2014-09-15

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)16	Bottom	8	3	2	14:32	27.9	7.7	19.8	4.93	7.14	10	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	14:16	28.5	7.63	19	5.53	4.97	6.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	14:16	28.4	7.62	19.1	5.46	5.23	7.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	14:16							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	14:16							2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.1	3	1	14:16	28.2	7.72	19.3	5.12	5.97	7.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.1	3	2	14:16	28.1	7.71	19.4	5.13	5.91	7.6	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	15:39	28.5	7.71	19.1	5.62	5.03	7	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	15:39	28.5	7.76	19	5.66	5.02	6.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)5	Middle	4.9	2	1	15:39	28.2	7.8	19.3	5.37	5.87	7.8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)5	Middle	4.9	2	2	15:39	28.1	7.73	19.4	5.33	6.02	8	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.7	3	1	15:39	27.7	7.8	19.6	5.02	6.86	9	2014-09-15
TMCLKL	HY/2012/07	2014-09-13	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.7	3	2	15:39	27.6	7.83	19.6	4.97	6.99	9.2	2014-09-15
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	15:02	28.7	7.76	19.1	6.28	7.18	11.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	15:02	28.6	7.79	19.1	6.26	7.15	10	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	1	15:02	28.3	7.82	19.9	6.11	7.89	11.8	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	2	15:02	28.4	7.85	19.9	6.15	7.86	10.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)5	Bottom	8.8	3	1	15:02	28	7.9	20.9	5.98	8.54	12	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)5	Bottom	8.8	3	2	15:02	27.9	7.93	20.8	6.02	8.43	11.8	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4a	Surface	1	1	1	15:21	28.7	7.73	19.3	5.79	7.18	10.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4a	Surface	1	1	2	15:21	28.7	7.78	19.2	5.83	7.1	10.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4a	Middle		2	1	15:21							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4a	Middle		2	2	15:21							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4a	Bottom	4.6	3	1	15:21	28.4	7.85	19.6	5.42	8.13	10.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4a	Bottom	4.6	3	2	15:21	28.3	7.86	19.7	5.35	8.01	11.2	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4	Surface	1	1	1	15:41	28.7	7.74	19.4	5.74	7.34	11.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4	Surface	1	1	2	15:41	28.8	7.7	19.3	5.68	7.27	10.9	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4	Middle		2	1	15:41							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4	Middle		2	2	15:41							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4	Bottom	3.9	3	1	15:41	28.3	7.86	19.9	5.35	8.12	11.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	SR4	Bottom	3.9	3	2	15:41	28.3	7.9	19.9	5.39	8.16	11.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS8	Surface	1	1	1	16:02	28.7	7.7	19.3	5.63	7.28	10.9	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS8	Surface	1	1	2	16:02	28.6	7.71	19.3	5.67	7.31	10.2	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS8	Middle		2	1	16:02							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS8	Middle		2	2	16:02							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS8	Bottom	3.7	3	1	16:02	28.3	7.83	19.9	5.26	8.14	10.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS8	Bottom	3.7	3	2	16:02	28.3	7.88	19.8	5.24	8.05	12.1	2014-09-19

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	16:22	28.6	7.65	19.2	5.5	7.37	10.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	16:22	28.6	7.62	19.1	5.59	7.29	10.2	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)16	Middle	5	2	1	16:22	28.4	7.82	19.4	5.4	8.03	10.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)16	Middle	5	2	2	16:22	28.4	7.79	19.4	5.36	8.08	9.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)16	Bottom	8.9	3	1	16:22	28	7.81	20.2	5.11	8.93	13.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)16	Bottom	8.9	3	2	16:22	27.9	7.86	20.2	5.17	8.81	11.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	16:54	28.8	7.77	19.1	5.94	7.68	10	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	16:54	28.7	7.79	19.2	5.91	7.82	10.2	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	16:54							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	16:54							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)9	Bottom	4.8	3	1	16:54	28.3	7.85	19.7	5.38	8.19	12.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	IS(Mf)9	Bottom	4.8	3	2	16:54	28.4	7.84	19.6	5.34	8.14	12.2	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	17:10	28.7	7.74	19	5.65	7.21	9.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	17:10	28.8	7.76	19.1	5.73	7.26	8.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)3	Middle	6.5	2	1	17:10	28.3	7.79	19.3	5.29	8.11	10.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)3	Middle	6.5	2	2	17:10	28.2	7.8	19.3	5.37	8.07	10.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)3	Bottom	11.9	3	1	17:10	28	7.91	19.9	5.12	8.83	11.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Flood	Fine	CS(Mf)3	Bottom	11.9	3	2	17:10	27.9	7.93	19.8	5.14	8.77	10.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	08:02	28.9	7.8	19.2	5.58	7.3	11	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	08:02	28.9	7.81	19.2	5.64	7.34	8.8	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)3	Middle	6.3	2	1	08:02	28.4	7.86	19.5	5.21	8.18	10.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)3	Middle	6.3	2	2	08:02	28.3	7.88	19.4	5.3	8.13	9.8	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)3	Bottom	11.5	3	1	08:02	28.2	7.99	20.1	5.06	8.91	12.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)3	Bottom	11.5	3	2	08:02	28.2	8.01	20	5.09	8.85	14.2	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4a	Surface	1	1	1	10:05	28.8	7.8	19.4	5.71	7.25	9.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4a	Surface	1	1	2	10:05	28.8	7.85	19.3	5.74	7.19	10.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4a	Middle		2	1	10:05							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4a	Middle		2	2	10:05							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	10:05	28.5	7.93	19.8	5.36	8.21	10.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	10:05	28.5	7.95	19.8	5.3	8.1	13.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4	Surface	1	1	1	09:46	28.8	7.79	19.5	5.67	7.41	11.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4	Surface	1	1	2	09:46	28.9	7.78	19.6	5.62	7.35	9.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4	Middle		2	1	09:46							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4	Middle		2	2	09:46							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4	Bottom	2.4	3	1	09:46	28.4	7.92	20.1	5.28	8.18	13.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	SR4	Bottom	2.4	3	2	09:46	28.4	7.95	20	5.31	8.24	9.9	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS8	Surface	1	1	1	09:27	28.8	7.78	19.4	5.55	7.35	11	2014-09-19

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS8	Surface	1	1	2	09:27	28.8	7.8	19.4	5.6	7.39	11.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS8	Middle		2	1	09:27							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS8	Middle		2	2	09:27							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS8	Bottom	3.3	3	1	09:27	28.5	7.89	20	5.19	8.21	12.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS8	Bottom	3.3	3	2	09:27	28.5	7.84	20	5.17	8.13	10.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	09:08	28.7	7.74	19.3	5.44	7.46	10.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	09:08	28.8	7.7	19.3	5.5	7.38	9.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)16	Middle	4.8	2	1	09:08	28.6	7.88	19.6	5.32	8.09	9.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)16	Middle	4.8	2	2	09:08	28.5	7.84	19.6	5.28	8.14	10.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.5	3	1	09:08	28.1	7.88	20.3	5.04	8.99	13.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.5	3	2	09:08	28	7.9	20.4	5.08	8.88	11.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	08:49	28.9	7.84	19.3	5.86	7.75	9.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	08:49	28.9	7.86	19.3	5.84	7.9	11.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	08:49							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	08:49							2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	1	08:49	28.4	7.93	19.9	5.31	8.25	11.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	2	08:49	28.5	7.95	19.9	5.27	8.2	10.7	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	10:24	28.8	7.8	19.2	6.2	7.25	9.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	10:24	28.8	7.84	19.2	6.18	7.21	10.1	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)5	Middle	4.7	2	1	10:24	28.4	7.86	20	6.05	7.95	9.5	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)5	Middle	4.7	2	2	10:24	28.5	7.9	20.1	6.07	7.99	10.4	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.4	3	1	10:24	28.1	7.98	21	5.91	8.6	10.3	2014-09-19
TMCLKL	HY/2012/07	2014-09-18	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.4	3	2	10:24	28.1	8.01	21.1	5.95	8.51	13.6	2014-09-19
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	15:57	28.8	7.84	19.3	6.24	5.97	8.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	15:57	28.8	7.83	19.3	6.27	5.92	8.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	CS(Mf)5	Middle	5.1	2	1	15:57	28.2	7.87	19.5	6.07	6.43	9.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	CS(Mf)5	Middle	5.1	2	2	15:57	28.1	7.86	19.4	6.05	6.4	9.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	CS(Mf)5	Bottom	9.2	3	1	15:57	28.1	7.88	20.6	5.92	7.07	10.1	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	CS(Mf)5	Bottom	9.2	3	2	15:57	28.1	7.88	20.6	5.87	7.01	10.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4a	Surface	1	1	1	16:15	28.9	7.88	19.2	6.03	6.1	8.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4a	Surface	1	1	2	16:15	28.9	7.87	19.2	6.07	6.14	8.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4a	Middle		2	1	16:15							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4a	Middle		2	2	16:15							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4a	Bottom	4.8	3	1	16:15	28.3	7.89	19.9	5.75	6.88	9.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4a	Bottom	4.8	3	2	16:15	28.3	7.88	19.9	5.78	6.85	9.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4	Surface	1	1	1	16:40	28.9	7.85	19.3	6.19	6.17	8.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Flood	Fine	SR4	Surface	1	1	2	16:40	28.9	7.86	19.3	6.15	6.14	8.7	2014-09-24

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4a	Middle		2	2	11:13							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	11:13	28.3	7.91	19.8	5.33	7.19	9.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	11:13	28.2	7.92	19.7	5.26	7.14	10.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4	Surface	1	1	1	10:47	28.6	7.8	19.4	5.65	6.4	8.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4	Surface	1	1	2	10:47	28.7	7.76	19.5	5.59	6.33	8.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4	Middle		2	1	10:47							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4	Middle		2	2	10:47							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4	Bottom	2.5	3	1	10:47	28.2	7.92	19.9	5.26	7.18	9.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	SR4	Bottom	2.5	3	2	10:47	28.1	7.96	20	5.2	7.22	9.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS8	Surface	1	1	1	10:21	28.6	7.76	19.3	5.54	6.34	8.9	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS8	Surface	1	1	2	10:21	28.5	7.77	19.4	5.58	6.37	8.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS8	Middle		2	1	10:21							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS8	Middle		2	2	10:21							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS8	Bottom	3.4	3	1	10:21	28.2	7.89	20	5.17	7.2	9.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS8	Bottom	3.4	3	2	10:21	28.3	7.9	19.9	5.15	7.11	9.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	09:55	28.5	7.71	19.2	5.41	6.43	8.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	09:55	28.6	7.68	19.3	5.5	6.35	8.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)16	Middle	4.6	2	1	09:55	28.3	7.88	19.4	5.31	7.09	10.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)16	Middle	4.6	2	2	09:55	28.2	7.85	19.5	5.27	7.14	9.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.2	3	1	09:55	27.9	7.87	20.2	5.02	7.99	10.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.2	3	2	09:55	27.8	7.92	20.3	5.08	7.87	11.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	09:29	28.7	7.83	19.2	5.85	6.74	9.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	09:29	28.6	7.85	19.3	5.82	6.88	9.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	09:29							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	09:29							2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	1	09:29	28.3	7.91	19.7	5.29	7.25	10.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	2	09:29	28.2	7.9	19.8	5.25	7.2	9.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	11:45	28.6	7.82	19.2	6.19	6.21	8.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	11:45	28.5	7.85	19.1	6.17	6.25	8.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	CS(Mf)5	Middle	4.7	2	1	11:45	28.2	7.88	19.9	6.02	6.95	9.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	CS(Mf)5	Middle	4.7	2	2	11:45	28.3	7.91	20	6.06	7.02	9.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.4	3	1	11:45	27.8	7.96	20.8	5.89	7.6	10.0	2014-09-24
TMCLKL	HY/2012/07	2014-09-20	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.4	3	2	11:45	27.9	7.99	20.7	5.93	7.54	10.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	17:05	28.6	7.73	19.1	6.23	7.31	11.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	17:05	28.6	7.77	19	6.12	7.2	8.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)5	Middle	5	2	1	17:05	28.3	7.77	19.9	6.05	8.02	10.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)5	Middle	5	2	2	17:05	28.2	7.81	20	6.07	8	10.4	2014-09-24

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)5	Bottom	9	3	1	17:05	27.9	7.83	21	5.96	9.23	12.9	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)5	Bottom	9	3	2	17:05	27.9	7.88	20.9	5.93	9.06	11.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4a	Surface	1	1	1	17:27	28.6	7.71	19.3	5.82	7.21	10.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4a	Surface	1	1	2	17:27	28.6	7.74	19.2	5.88	7.14	9.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4a	Middle		2	1	17:27							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4a	Middle		2	2	17:27							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4a	Bottom	4.5	3	1	17:27	28.3	7.81	19.7	5.31	8.11	10.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4a	Bottom	4.5	3	2	17:27	28.4	7.79	19.7	5.37	8.04	11.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4	Surface	1	1	1	17:49	28.6	7.71	19.3	5.67	7.33	11.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4	Surface	1	1	2	17:49	28.6	7.66	19.2	5.63	7.21	8.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4	Middle		2	1	17:49							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4	Middle		2	2	17:49							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4	Bottom	4.5	3	1	17:49	28.1	7.81	19.8	5.32	8.03	12.1	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	SR4	Bottom	4.5	3	2	17:49	28.2	7.88	19.9	5.27	8.16	9.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS8	Surface	1	1	1	18:11	28.5	7.67	19.1	5.67	7.44	10.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS8	Surface	1	1	2	18:11	28.6	7.72	19.2	5.52	7.21	8.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS8	Middle		2	1	18:11							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS8	Middle		2	2	18:11							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS8	Bottom	4.6	3	1	18:11	28.1	7.81	19.7	5.21	8.17	10.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS8	Bottom	4.6	3	2	18:11	28.1	7.84	19.9	5.17	8.03	12.1	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	18:33	28.5	7.69	19.1	5.62	7.44	9.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	18:33	28.5	7.72	19.2	5.55	7.36	9.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)16	Middle	4.8	2	1	18:33	28.3	7.88	19.5	5.32	8.11	9.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)16	Middle	4.8	2	2	18:33	28.2	7.83	19.5	5.27	8.03	11.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)16	Bottom	8.7	3	1	18:33	27.9	7.92	20.1	5.03	8.93	14.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)16	Bottom	8.7	3	2	18:33	27.9	7.86	20.2	5.16	8.99	14.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	18:55	28.7	7.72	19.1	5.88	7.62	11.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	18:55	28.6	7.81	19	5.83	7.77	10.1	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	18:55							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	18:55							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	1	18:55	28.2	7.84	19.7	5.32	8.23	12.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	IS(Mf)9	Bottom	4.6	3	2	18:55	28.3	7.88	19.7	5.35	8.12	12.2	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	19:18	28.6	7.72	19	5.62	7.17	8.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	19:18	28.6	7.73	18.9	5.7	7.2	10.1	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)3	Middle	6.2	2	1	19:18	28.2	7.81	19.3	5.33	8.03	10.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)3	Middle	6.2	2	2	19:18	28.3	7.79	19.2	5.26	8	10.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)3	Bottom	11.4	3	1	19:18	27.8	7.83	19.8	5.17	8.86	12.4	2014-09-24

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-23	Mid-Flood	Fine	CS(Mf)3	Bottom	11.4	3	2	19:18	27.9	7.88	19.8	5.1	8.79	12.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	10:50	28.5	7.66	19.1	5.58	7.23	9.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	10:50	28.4	7.68	19.2	5.56	7.25	11.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)3	Middle	6.1	2	1	10:50	28.3	7.85	20	5.24	8.11	10.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)3	Middle	6.1	2	2	10:50	28.2	7.87	19.9	5.26	8.13	11.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)3	Bottom	11.1	3	1	10:50	27.9	7.75	21	5.11	8.92	11.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)3	Bottom	11.1	3	2	10:50	28	7.77	21.1	5.13	8.94	12.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4a	Surface	1	1	1	13:15	28.6	7.83	19.1	5.77	7.28	11.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4a	Surface	1	1	2	13:15	28.5	7.81	19	5.79	7.3	11	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4a	Middle		2	1	13:15							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4a	Middle		2	2	13:15							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4a	Bottom	4.3	3	1	13:15	28.3	7.75	19.8	5.28	8.16	10.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4a	Bottom	4.3	3	2	13:15	28.2	7.77	19.9	5.3	8.18	10.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4	Surface	1	1	1	12:32	28.7	7.75	19.1	5.52	7.41	11.9	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4	Surface	1	1	2	12:32	28.6	7.77	19.2	5.5	7.43	10.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4	Middle		2	1	12:32							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4	Middle		2	2	12:32							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4	Bottom	4.3	3	1	12:32	28.1	7.61	19.8	5.26	8.13	10.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	SR4	Bottom	4.3	3	2	12:32	28	7.63	19.9	5.24	8.11	11.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS8	Surface	1	1	1	12:07	28.6	7.84	19	5.63	7.55	11.4	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS8	Surface	1	1	2	12:07	28.5	7.82	19.1	5.6	7.57	10.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS8	Middle		2	1	12:07							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS8	Middle		2	2	12:07							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS8	Bottom	4.4	3	1	12:07	28	7.55	19.7	5.17	8.24	10.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS8	Bottom	4.4	3	2	12:07	27.9	7.57	19.8	5.15	8.26	10.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	11:42	28.8	7.69	18.9	5.55	7.51	9.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	11:42	28.7	7.71	19	5.57	7.53	11.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)16	Middle	4.8	2	1	11:42	28.5	7.66	19.9	5.26	8.24	10.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)16	Middle	4.8	2	2	11:42	28.5	7.65	20	5.28	8.22	10.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.5	3	1	11:42	28.2	7.81	21.1	4.95	9.03	13.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.5	3	2	11:42	28.1	7.83	21	4.97	9.01	11.7	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	11:17	28.6	7.71	19	5.73	7.69	11.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	11:17	28.5	7.67	19.1	5.7	7.7	11.6	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	11:17							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	11:17							2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	1	11:17	28.3	7.82	19.2	5.26	8.33	10	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	IS(Mf)9	Bottom	4.4	3	2	11:17	28.2	7.8	19.3	5.28	8.31	10	2014-09-24

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	13:35	28.5	7.64	19	6.15	7.35	10.3	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	13:35	28.4	7.66	19	6.13	7.37	8.8	1900-01-10
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)5	Middle	4.9	2	1	13:35	28.3	7.72	20	5.93	8.12	10.6	
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)5	Middle	4.9	2	2	13:35	28.4	7.7	20.1	5.95	8.1	13	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.9	3	1	13:35	27.9	7.83	20.9	5.88	9.35	10.5	2014-09-24
TMCLKL	HY/2012/07	2014-09-23	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.9	3	2	13:35	28	7.81	21	5.86	9.37	10.8	2014-09-24
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	1	17:52	28.6	7.73	19.1	6.11	6.32	8.2	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)5	Surface	1	1	2	17:52	28.5	7.75	19.2	6.13	6.3	8.2	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	1	17:52	28.4	7.68	20	5.93	7.03	11.2	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)5	Middle	4.9	2	2	17:52	28.3	7.66	20.1	5.95	7.05	9.2	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)5	Bottom	8.7	3	1	17:52	28.2	7.83	21.1	5.88	7.32	11	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)5	Bottom	8.7	3	2	17:52	28.1	7.81	21	5.86	7.3	11	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4a	Surface	1	1	1	18:14	28.7	7.66	19	5.78	6.22	8.1	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4a	Surface	1	1	2	18:14	28.6	7.64	19.1	5.8	6.24	8.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4a	Middle		2	1	18:14							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4a	Middle		2	2	18:14							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4a	Bottom	4.5	3	1	18:14	28.5	7.7	19.9	5.31	7.11	10.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4a	Bottom	4.5	3	2	18:14	28.4	7.72	20	5.29	7.13	8.6	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4	Surface	1	1	1	18:36	28.7	7.66	19	5.56	6.33	7.6	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4	Surface	1	1	2	18:36	28.6	7.68	19	5.54	6.35	7.6	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4	Middle		2	1	18:36							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4	Middle		2	2	18:36							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4	Bottom	3.8	3	1	18:36	28.3	7.73	19.9	5.23	7.03	9.8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	SR4	Bottom	3.8	3	2	18:36	28.2	7.75	19.8	5.25	7.05	9.9	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS8	Surface	1	1	1	18:58	28.7	7.82	19.1	5.92	6.44	9.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS8	Surface	1	1	2	18:58	28.8	7.84	19	5.94	6.42	8.3	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS8	Middle		2	1	18:58							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS8	Middle		2	2	18:58							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS8	Bottom	3.9	3	1	18:58	28.4	7.75	19.9	5.17	6.92	9.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS8	Bottom	3.9	3	2	18:58	28.3	7.77	20	5.19	6.9	9	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	1	19:20	28.6	7.69	19.1	5.63	6.4	9	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)16	Surface	1	1	2	19:20	28.5	7.71	19.2	5.65	6.38	7.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)16	Middle	4.8	2	1	19:20	28.4	7.62	20	5.31	6.92	9.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)16	Middle	4.8	2	2	19:20	28.3	7.6	20.1	5.29	6.9	9	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)16	Bottom	8.5	3	1	19:20	28.2	7.85	20.9	4.99	7.83	11	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)16	Bottom	8.5	3	2	19:20	28.1	7.87	21	5.01	7.85	11.8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	1	19:42	28.6	7.71	19	5.74	6.43	8.4	2014-09-25

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)9	Surface	1	1	2	19:42	28.5	7.73	19.1	5.72	6.45	9.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)9	Middle		2	1	19:42							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)9	Middle		2	2	19:42							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)9	Bottom	4.1	3	1	19:42	28.3	7.65	19.2	5.24	7.93	10.3	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	IS(Mf)9	Bottom	4.1	3	2	19:42	28.2	7.67	19.3	5.22	7.95	10.3	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	1	20:04	28.5	7.66	19.1	5.57	6.13	8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)3	Surface	1	1	2	20:04	28.5	7.68	19.2	5.59	6.11	9.8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)3	Middle	6	2	1	20:04	28.4	7.59	19.9	5.22	6.92	9.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)3	Middle	6	2	2	20:04	28.3	7.61	20	5.2	6.94	8.3	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)3	Bottom	11	3	1	20:04	28.2	7.72	20.9	5.09	8.77	10.5	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Flood	Fine	CS(Mf)3	Bottom	11	3	2	20:04	28.1	7.74	21	5.11	8.79	12.3	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	1	11:52	28.5	7.75	19.2	5.49	6.29	8.8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	CS(Mf)3	Surface	1	1	2	11:52	28.6	7.77	19.3	5.47	6.31	10.1	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	CS(Mf)3	Middle	5.9	2	1	11:52	28.4	7.94	20	5.15	7.11	10	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	CS(Mf)3	Middle	5.9	2	2	11:52	28.3	7.95	20.1	5.17	7.19	10.8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.8	3	1	11:52	28.1	7.84	21.2	5.02	8.98	11.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	CS(Mf)3	Bottom	10.8	3	2	11:52	28	7.86	21.1	5.04	8.9	10.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4a	Surface	1	1	1	14:02	28.6	7.89	19.1	5.68	6.34	8.9	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4a	Surface	1	1	2	14:02	28.7	7.87	19.2	5.7	6.36	9.5	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4a	Middle		2	1	14:02							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4a	Middle		2	2	14:02							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	1	14:02	28.4	7.81	20	5.19	7.22	10.8	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4a	Bottom	4.2	3	2	14:02	28.3	7.83	19.9	5.21	7.24	8.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4	Surface	1	1	1	13:36	28.7	7.81	19.2	5.43	6.47	9.1	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4	Surface	1	1	2	13:36	28.8	7.83	19.3	5.41	6.49	9.7	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4	Middle		2	1	13:36							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4	Middle		2	2	13:36							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4	Bottom	4	3	1	13:36	28.2	7.67	20	5.17	7.19	10.1	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	SR4	Bottom	4	3	2	13:36	28.1	7.69	19.9	5.15	7.17	10	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS8	Surface	1	1	1	13:10	28.6	7.85	19.2	5.54	6.61	8.6	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS8	Surface	1	1	2	13:10	28.7	7.84	19.1	5.51	6.63	9.9	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS8	Middle		2	1	13:10							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS8	Middle		2	2	13:10							2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS8	Bottom	3.6	3	1	13:10	28.1	7.61	19.8	5.08	7.3	11	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS8	Bottom	3.6	3	2	13:10	28	7.63	19.9	5.06	7.32	10.2	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	12:44	28.9	7.78	19	5.46	6.51	10.4	2014-09-25
TMCLKL	HY/2012/07	2014-09-25	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	12:44	28.8	7.8	19.1	5.48	6.59	7.9	2014-09-25

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	SR4	Bottom	4.3	3	1	14:55	28.1	7.72	20	5.14	7.24	10.1	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	SR4	Bottom	4.3	3	2	14:55	28	7.7	19.9	5.12	7.2	10.2	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS8	Surface	1	1	1	14:30	28.6	7.81	19.2	5.5	6.56	9.2	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS8	Surface	1	1	2	14:30	28.6	7.83	19.2	5.57	6.6	10.6	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS8	Middle		2	1	14:30							2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS8	Middle		2	2	14:30							2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS8	Bottom	3.4	3	1	14:30	28.1	7.58	19.8	5.13	7.22	10.8	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS8	Bottom	3.4	3	2	14:30	28.1	7.63	19.7	5.17	7.29	10.2	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	1	13:53	28.8	7.76	19.1	5.53	6.46	9.7	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)16	Surface	1	1	2	13:53	28.7	7.75	19.2	5.47	6.44	9.7	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)16	Middle	4.6	2	1	13:53	28.5	7.79	20.2	5.25	7.29	10.2	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)16	Middle	4.6	2	2	13:53	28.4	7.82	20.1	5.28	7.25	10.9	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.1	3	1	13:53	28.1	7.93	21.1	4.83	8.14	11.4	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)16	Bottom	8.1	3	2	13:53	28.2	7.95	21	4.81	8.08	10.5	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	1	13:28	28.6	7.72	19.2	5.56	6.58	9.9	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)9	Surface	1	1	2	13:28	28.7	7.68	19.1	5.53	6.56	9.2	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)9	Middle		2	1	13:28							2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)9	Middle		2	2	13:28							2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.7	3	1	13:28	28.4	7.84	19.3	5.15	8.12	13	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	IS(Mf)9	Bottom	3.7	3	2	13:28	28.4	7.8	19.4	5.11	8.04	12.9	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	1	15:33	28.7	7.68	19.1	6.1	6.47	8.7	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	CS(Mf)5	Surface	1	1	2	15:33	28.7	7.71	19.1	6.09	6.4	8.1	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	CS(Mf)5	Middle	4.6	2	1	15:33	28.5	7.74	20.2	5.88	7.21	11.4	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	CS(Mf)5	Middle	4.6	2	2	15:33	28.5	7.76	20.3	5.84	7.24	11.4	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.2	3	1	15:33	28	7.91	21	5.75	7.45	12.5	2014-09-30
TMCLKL	HY/2012/07	2014-09-27	Mid-Ebb	Fine	CS(Mf)5	Bottom	8.2	3	2	15:33	28	7.85	21	5.73	7.47	11.5	2014-09-30
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	1	09:45	28.6	7.86	19.4	6.24	7.19	9.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)5	Surface	1	1	2	09:45	28.7	7.87	19.3	6.21	7.24	9.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)5	Middle	4.9	2	1	09:45	28.5	7.84	19.9	6.1	7.84	10.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)5	Middle	4.9	2	2	09:45	28.5	7.85	19.8	6.07	7.91	10.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)5	Bottom	8.8	3	1	09:45	28.2	7.88	21.2	5.93	9.04	12	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)5	Bottom	8.8	3	2	09:45	28.1	7.89	21.3	5.88	9.09	12.3	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4a	Surface	1	1	1	10:15	28.7	7.81	19.4	5.95	7.34	9.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4a	Surface	1	1	2	10:15	28.7	7.82	19.4	5.88	7.29	9.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4a	Middle		2	1	10:15							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4a	Middle		2	2	10:15							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4a	Bottom	4.2	3	1	10:15	28.6	7.85	19.7	5.58	8.01	10.8	2014-10-04

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4a	Bottom	4.2	3	2	10:15	28.5	7.86	19.6	5.54	7.96	10.7	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4	Surface	1	1	1	10:42	28.8	7.79	19.5	5.98	7.16	9.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4	Surface	1	1	2	10:42	28.7	7.8	19.4	6.03	7.22	9.7	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4	Middle		2	1	10:42							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4	Middle		2	2	10:42							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4	Bottom	4.2	3	1	10:42	28.6	7.84	19.9	5.44	7.85	10.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	SR4	Bottom	4.2	3	2	10:42	28.6	7.85	20	5.48	7.96	10.4	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS8	Surface	1	1	1	11:05	28.8	7.8	19.4	5.78	7.33	10.3	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS8	Surface	1	1	2	11:05	28.8	7.81	19.4	5.83	7.27	10	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS8	Middle		2	1	11:05							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS8	Middle		2	2	11:05							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS8	Bottom	4.4	3	1	11:05	28.6	7.8	19.9	5.41	7.95	10.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS8	Bottom	4.4	3	2	11:05	28.5	7.86	19.9	5.37	8.03	10.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	1	11:30	28.8	7.79	19.5	5.77	7.3	9.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)16	Surface	1	1	2	11:30	28.7	7.8	19.4	5.74	7.38	9.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.8	2	1	11:30	28.6	7.84	19.6	5.46	7.96	11.2	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)16	Middle	4.8	2	2	11:30	28.5	7.85	19.7	5.41	8.04	11.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)16	Bottom	8.6	3	1	11:30	28.1	7.88	20.5	5.11	8.68	12	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)16	Bottom	8.6	3	2	11:30	28.2	7.89	20.6	5.07	8.74	11.7	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	1	11:56	28.8	7.8	19.4	5.94	7.46	10.3	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)9	Surface	1	1	2	11:56	28.7	7.81	19.3	5.91	7.42	10.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	1	11:56							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)9	Middle		2	2	11:56							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	1	11:56	28.5	7.9	19.6	5.47	7.87	11.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	IS(Mf)9	Bottom	4.4	3	2	11:56	28.5	7.89	19.7	5.51	7.95	11.4	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	1	12:20	28.7	7.76	19.3	5.67	7.28	10.3	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)3	Surface	1	1	2	12:20	28.7	7.77	19.3	5.62	7.34	10	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)3	Middle	6.2	2	1	12:20	28.6	7.8	19.4	5.34	8	11.3	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)3	Middle	6.2	2	2	12:20	28.5	7.79	19.4	5.3	7.94	11.2	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)3	Bottom	11.4	3	1	12:20	28	7.82	19.9	5.17	8.53	11.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Flood	Cloudy	CS(Mf)3	Bottom	11.4	3	2	12:20	28	7.83	20	5.14	8.6	12	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	1	15:15	28.7	7.79	19.2	5.55	7.25	10.2	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)3	Surface	1	1	2	15:15	28.7	7.81	19.1	5.6	7.29	10.4	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)3	Middle	6	2	1	15:15	28.4	7.88	19.4	5.27	8.1	11.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)3	Middle	6	2	2	15:15	28.4	7.85	19.4	5.2	8.08	11.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	11	3	1	15:15	27.9	7.89	19.9	5.1	8.95	12.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)3	Bottom	11	3	2	15:15	28	7.94	20	5.04	8.86	12.6	2014-10-04

Project	Works	Date (yyyy-mm-dd)	Tide	Weather	Stat	Level	Water Depth	Lev_Cod	Replicate	Start Time	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v	Received Date (SS)
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4a	Surface	1	1	1	17:27	28.7	7.8	19.4	5.75	7.29	10.2	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4a	Surface	1	1	2	17:27	28.7	7.84	19.5	5.8	7.2	10.2	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4a	Middle		2	1	17:27							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4a	Middle		2	2	17:27							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4a	Bottom	4	3	1	17:27	28.5	7.88	19.8	5.25	8.19	11.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4a	Bottom	4	3	2	17:27	28.5	7.85	19.8	5.3	8.12	11.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4	Surface	1	1	1	17:02	28.7	7.79	19.4	5.6	7.38	10.4	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4	Surface	1	1	2	17:02	28.7	7.72	19.4	5.55	7.3	10.3	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4	Middle		2	1	17:02							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4	Middle		2	2	17:02							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4	Bottom	4.1	3	1	17:02	28.3	7.87	20	5.26	8.09	11.4	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	SR4	Bottom	4.1	3	2	17:02	28.3	7.93	20.1	5.21	8.2	11.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS8	Surface	1	1	1	16:37	28.8	7.75	19.4	5.61	7.49	10.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS8	Surface	1	1	2	16:37	28.7	7.78	19.3	5.48	7.36	10.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS8	Middle		2	1	16:37							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS8	Middle		2	2	16:37							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS8	Bottom	4.2	3	1	16:37	28.2	7.89	19.8	5.15	8.2	11.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS8	Bottom	4.2	3	2	16:37	28.2	7.92	19.8	5.11	8.1	11.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	1	16:12	28.7	7.77	19.3	5.54	7.51	10.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)16	Surface	1	1	2	16:12	28.6	7.8	19.3	5.5	7.43	10.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.7	2	1	16:12	28.4	7.95	19.6	5.25	8.18	11.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)16	Middle	4.7	2	2	16:12	28.3	7.9	19.6	5.2	8.1	11.5	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	8.3	3	1	16:12	28	7.99	20.4	4.95	8.98	12.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)16	Bottom	8.3	3	2	16:12	28	7.95	20.3	5.06	9.05	12.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	1	15:47	28.8	7.79	19.2	5.8	7.69	10.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)9	Surface	1	1	2	15:47	28.8	7.85	19.3	5.77	7.8	10.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	1	15:47							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)9	Middle		2	2	15:47							2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4.2	3	1	15:47	28.4	7.9	19.8	5.25	8.29	11.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	IS(Mf)9	Bottom	4.2	3	2	15:47	28.4	7.95	19.8	5.27	8.2	11.6	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	1	17:52	28.7	7.8	19.2	6.15	7.38	9.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)5	Surface	1	1	2	17:52	28.7	7.84	19.2	6.08	7.28	9.8	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)5	Middle	4.8	2	1	17:52	28.4	7.85	20.1	5.97	8.1	10.9	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)5	Middle	4.8	2	2	17:52	28.3	7.87	20.2	5.99	8.09	11.2	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	8.6	3	1	17:52	28	7.89	21.2	5.88	9.25	12.7	2014-10-04
TMCLKL	HY/2012/07	2014-09-30	Mid-Ebb	Cloudy	CS(Mf)5	Bottom	8.6	3	2	17:52	28	7.95	21	5.85	9.15	13	2014-10-04

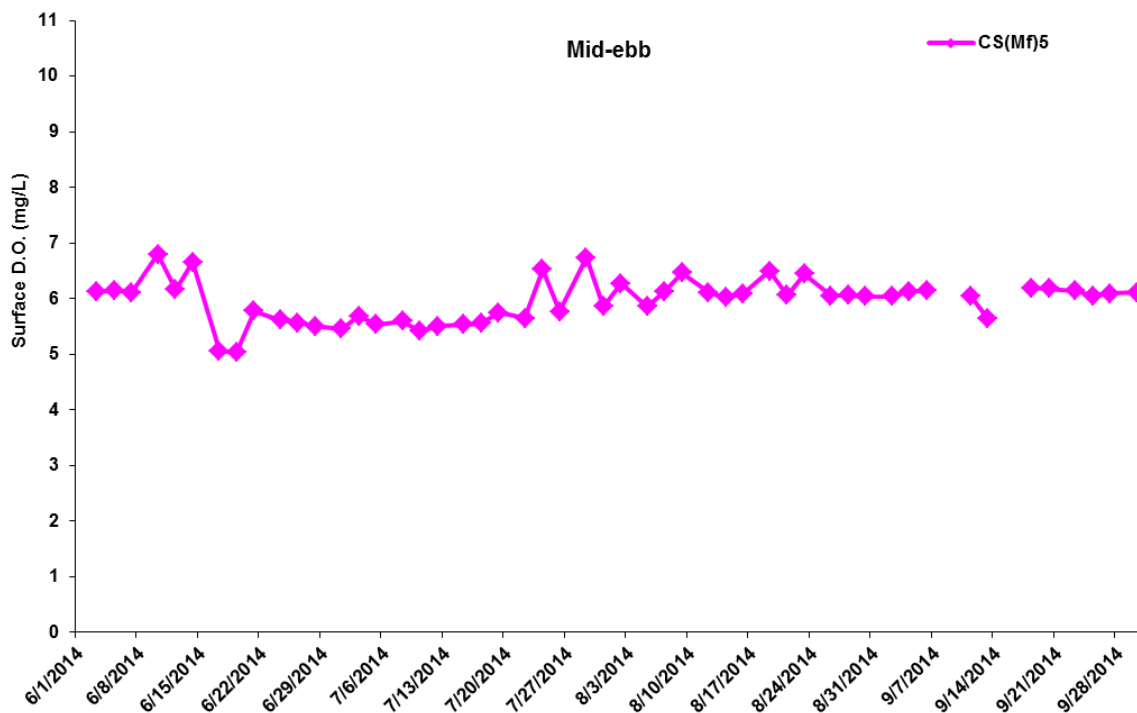
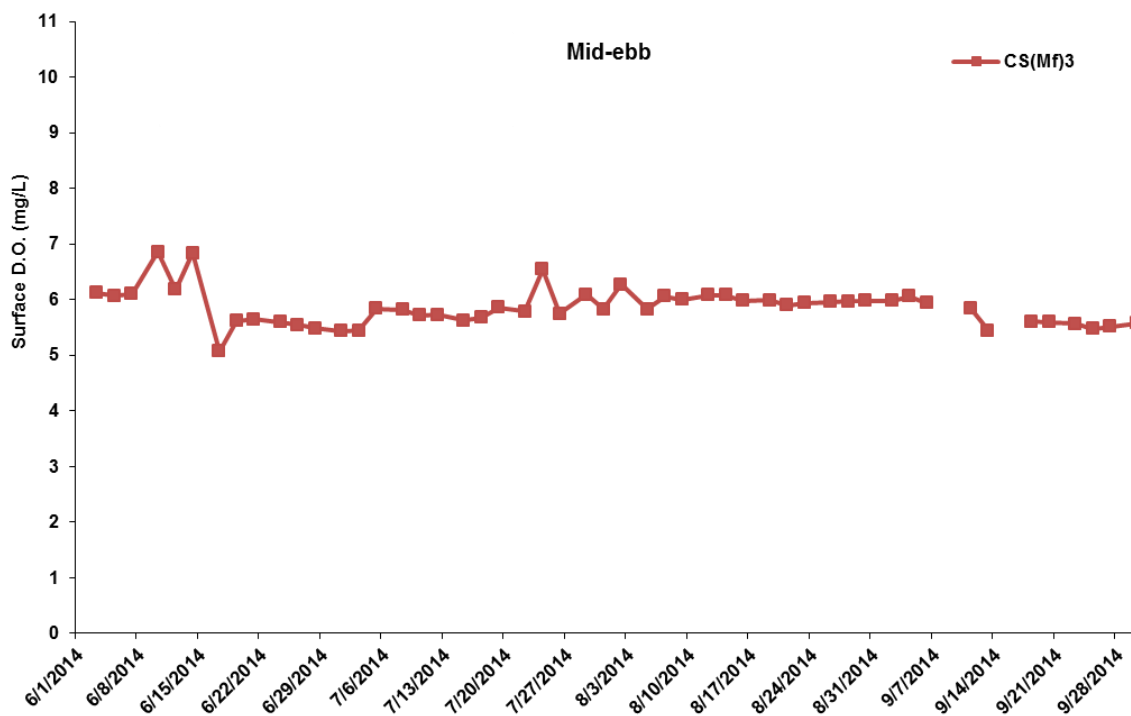


Figure J1 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



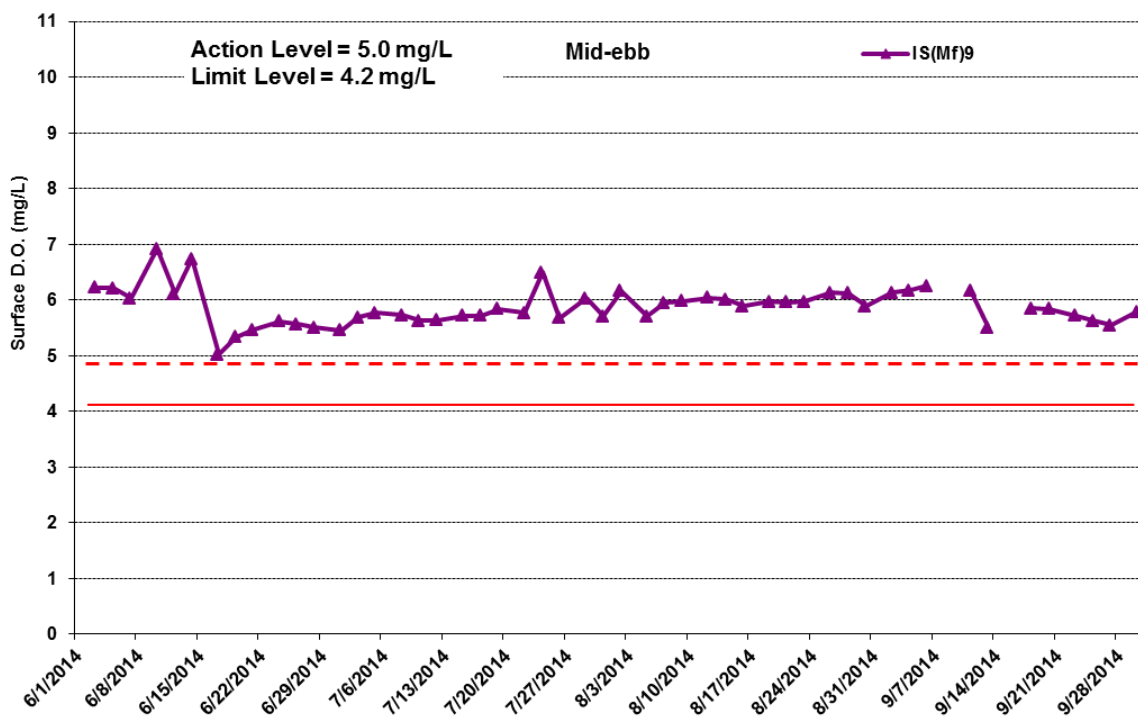
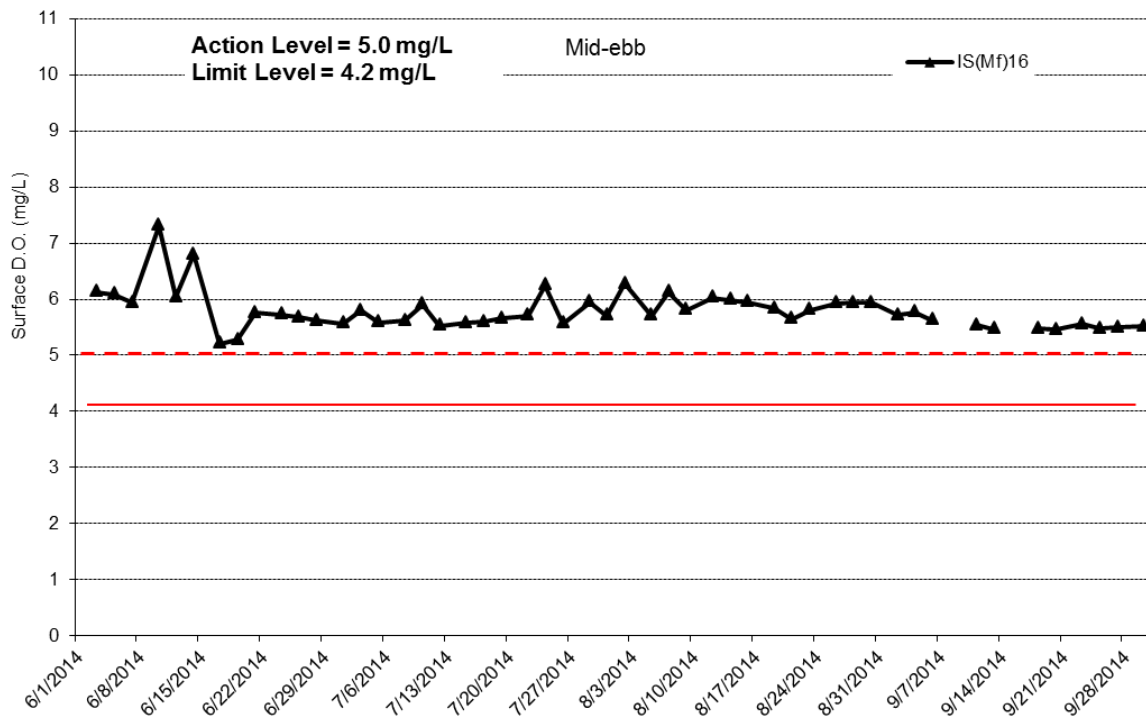


Figure J2 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



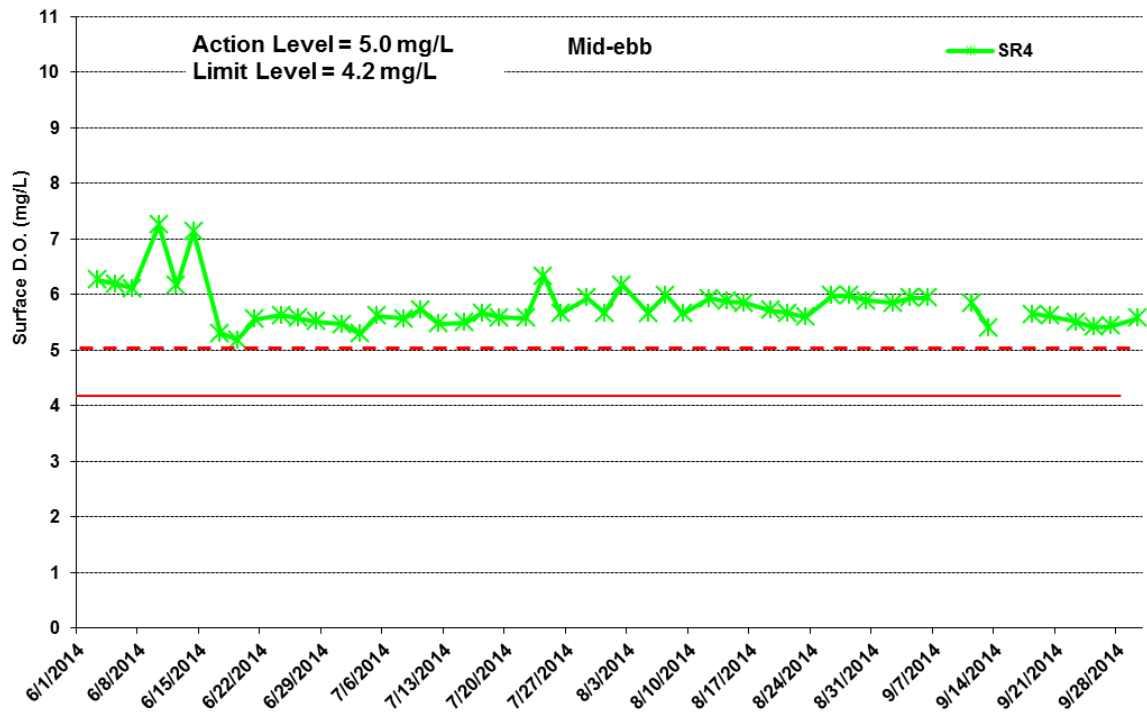
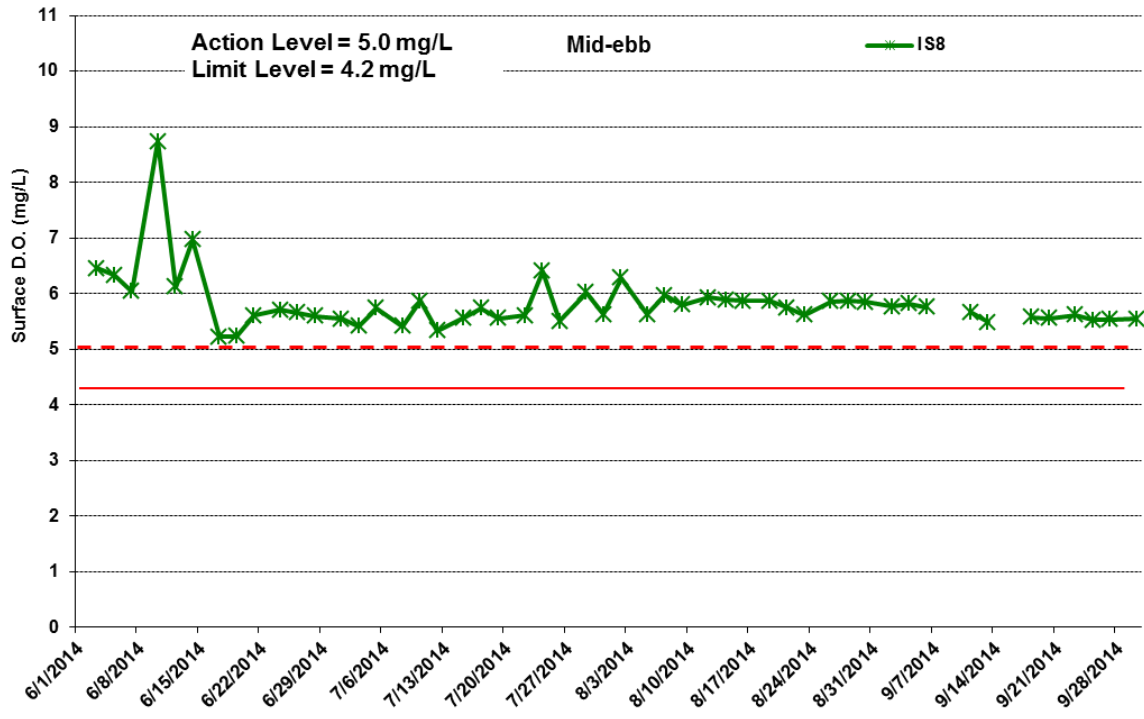


Figure J3 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



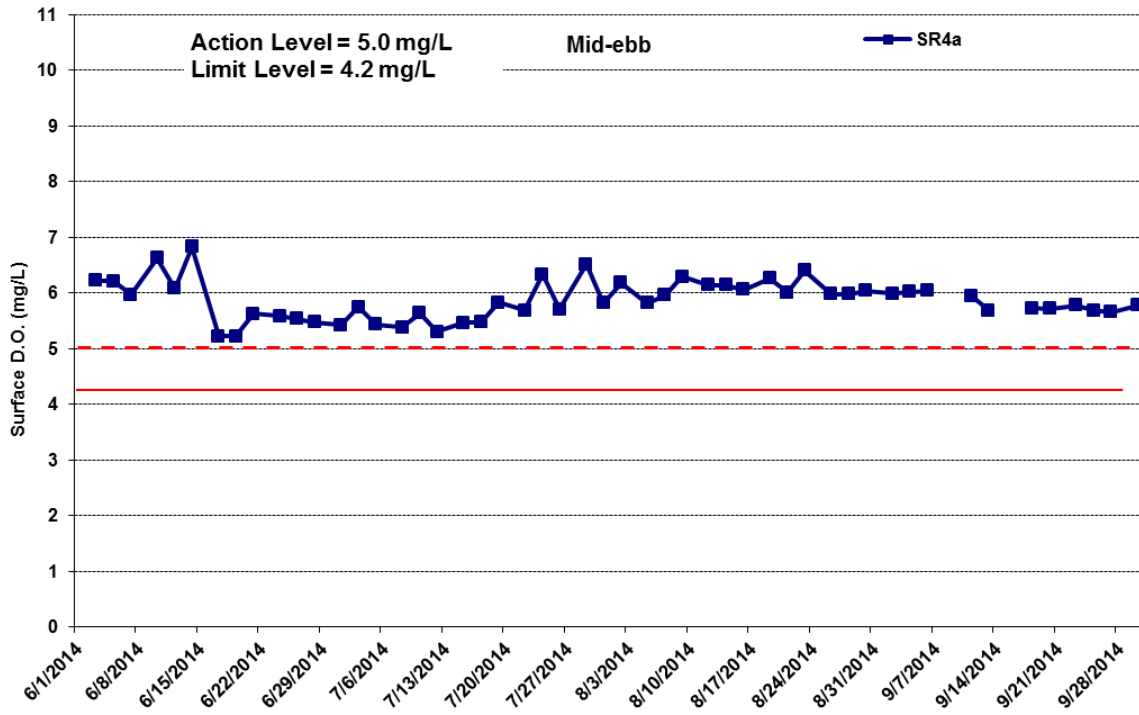


Figure J4 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



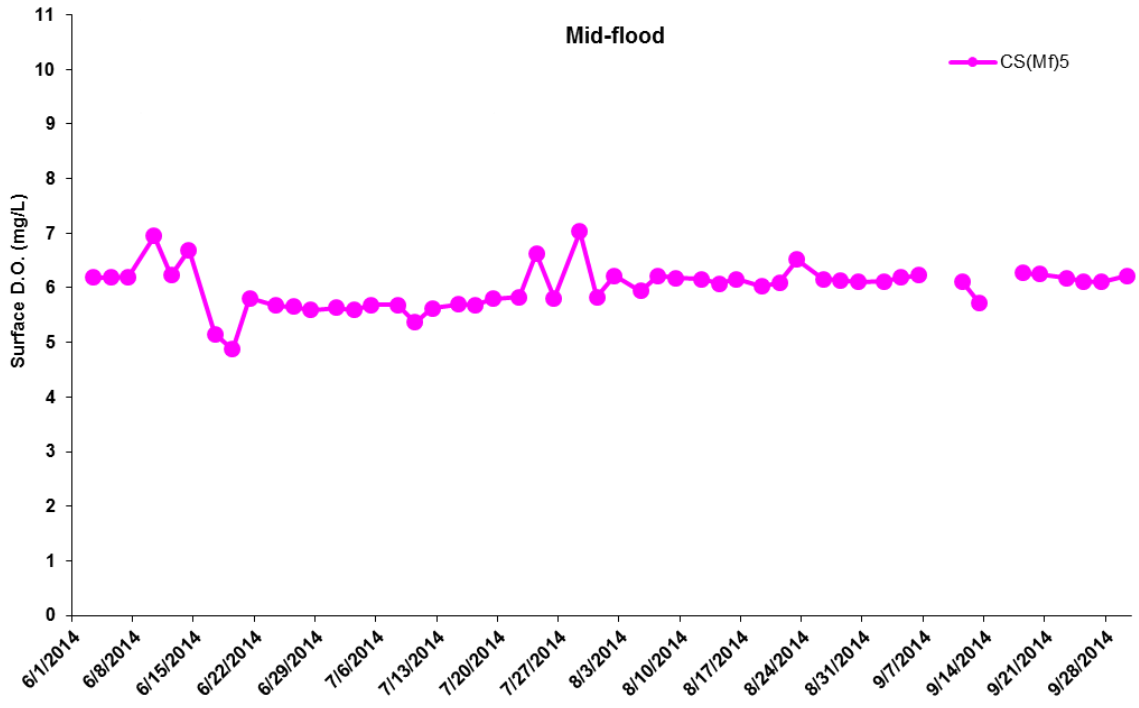
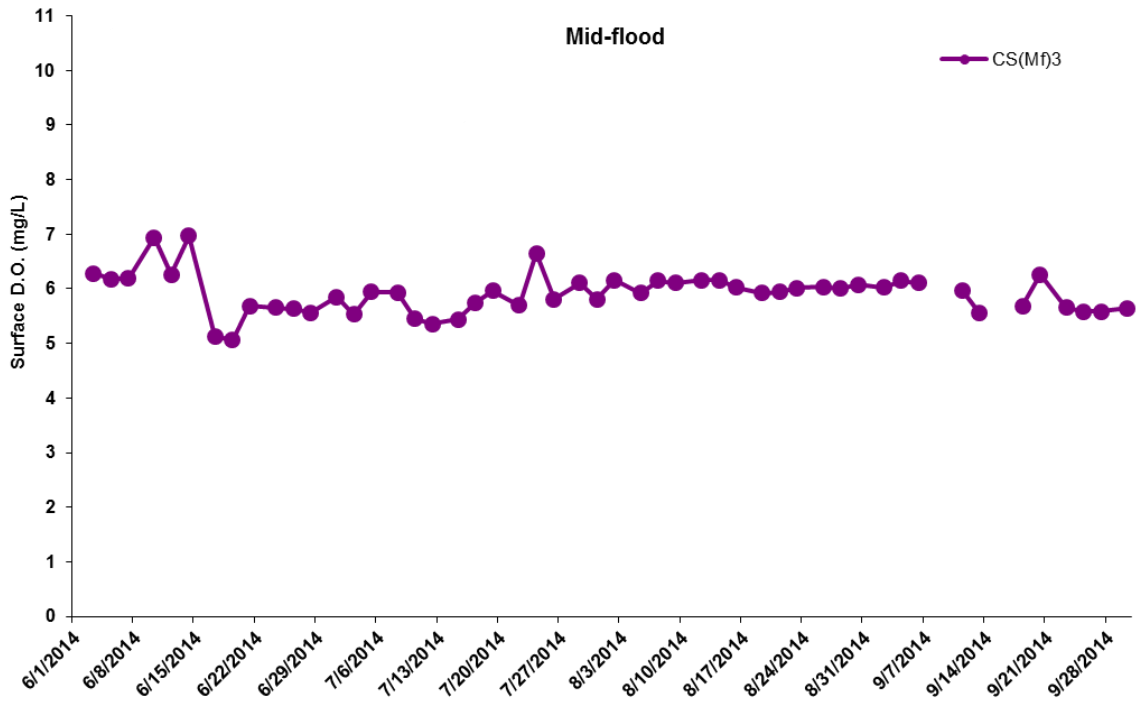


Figure J5 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



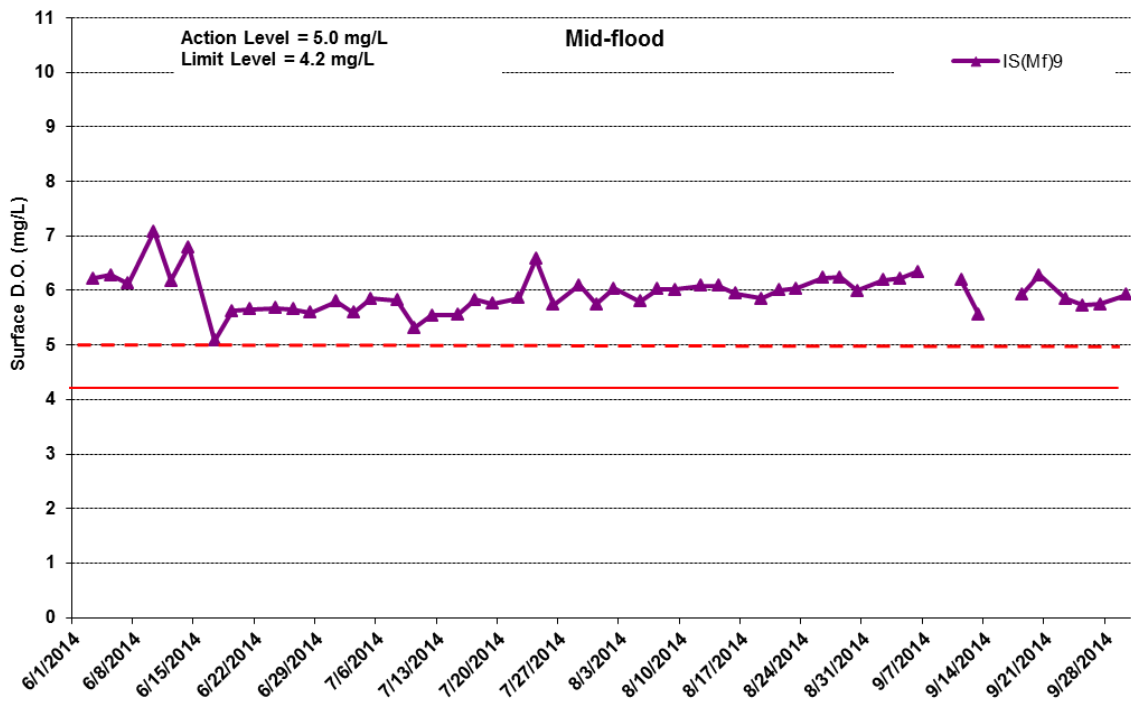
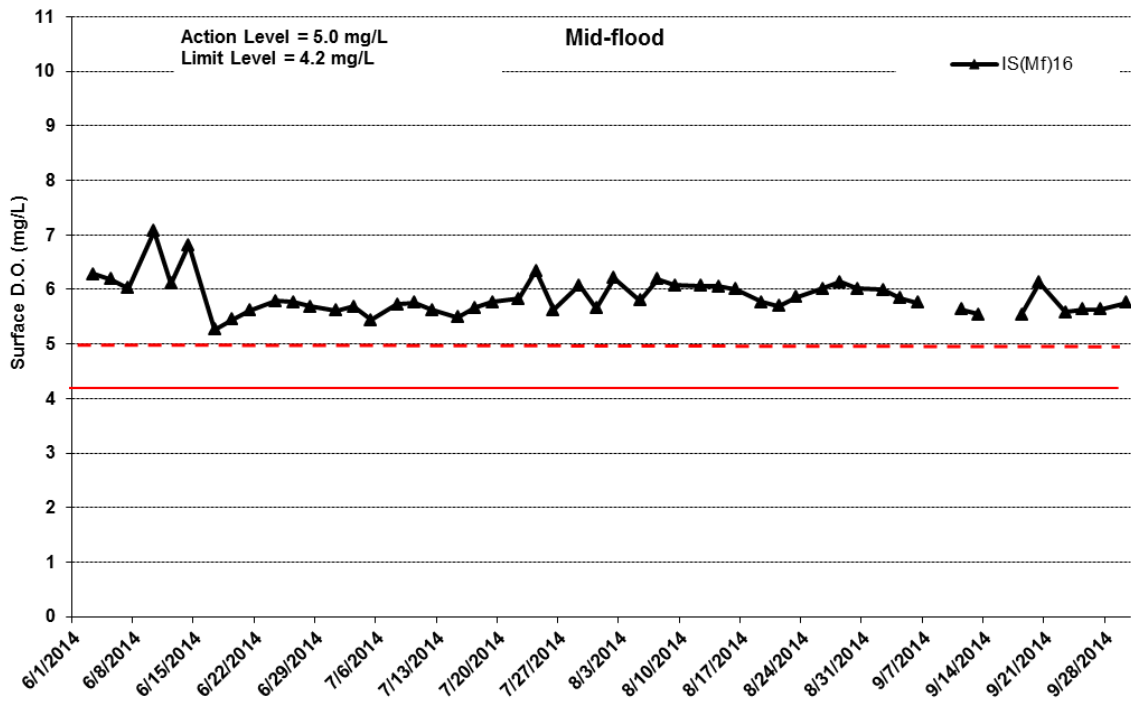


Figure J6 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



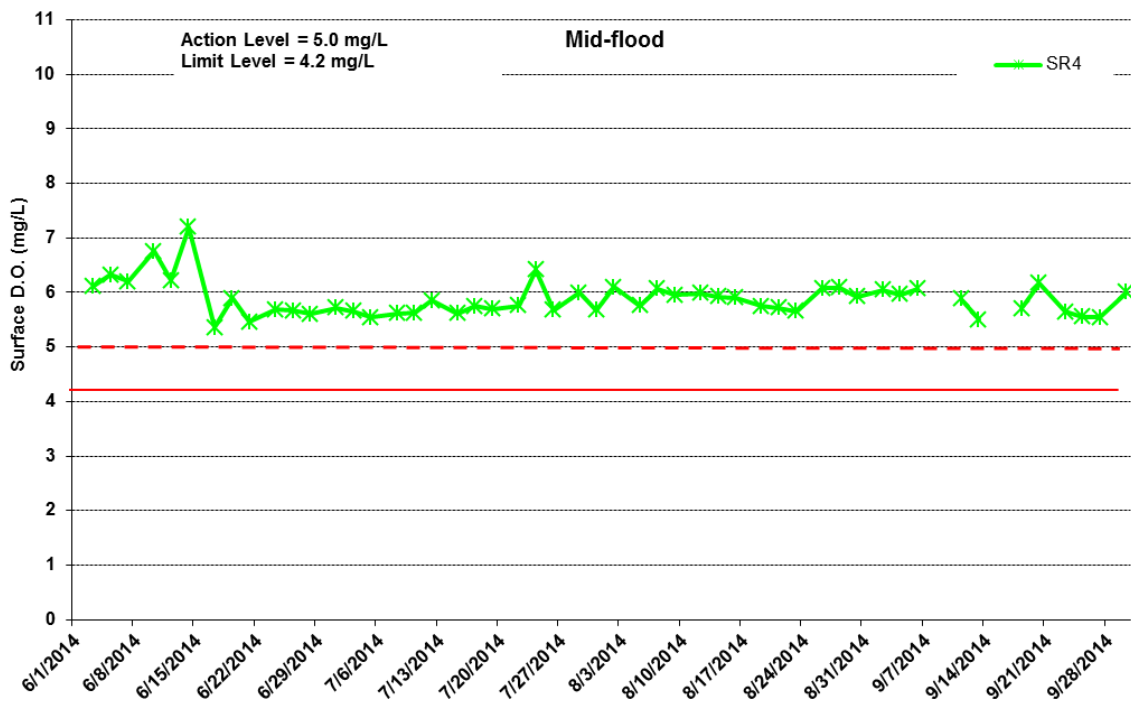
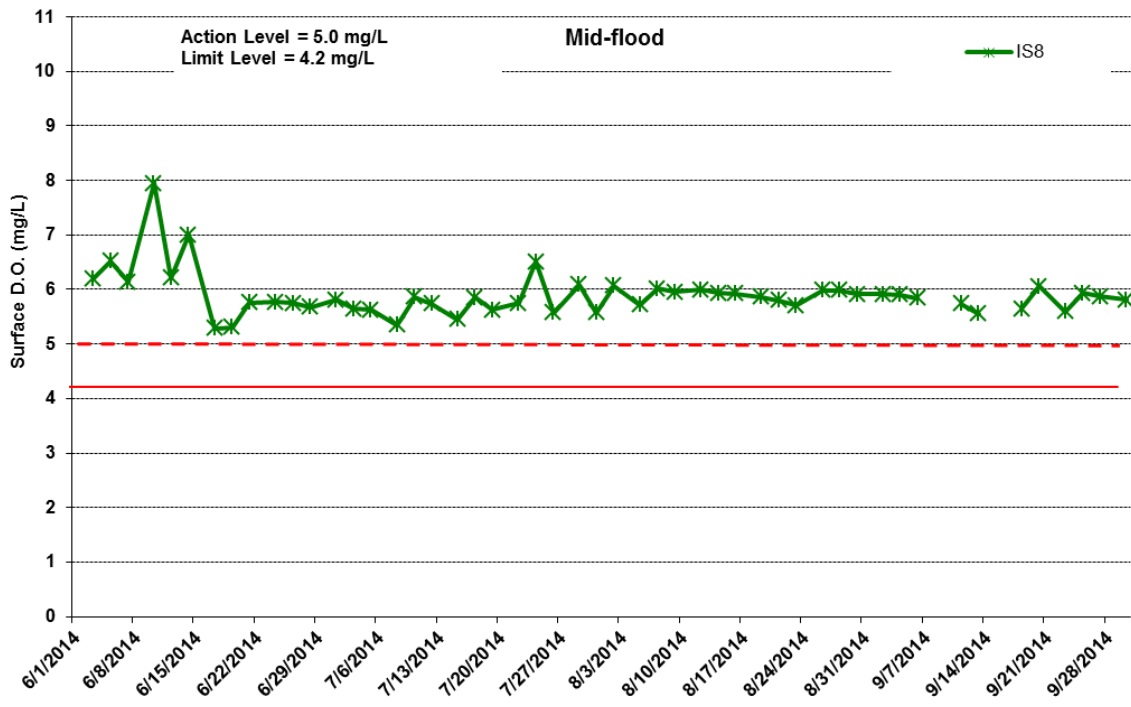


Figure J7 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



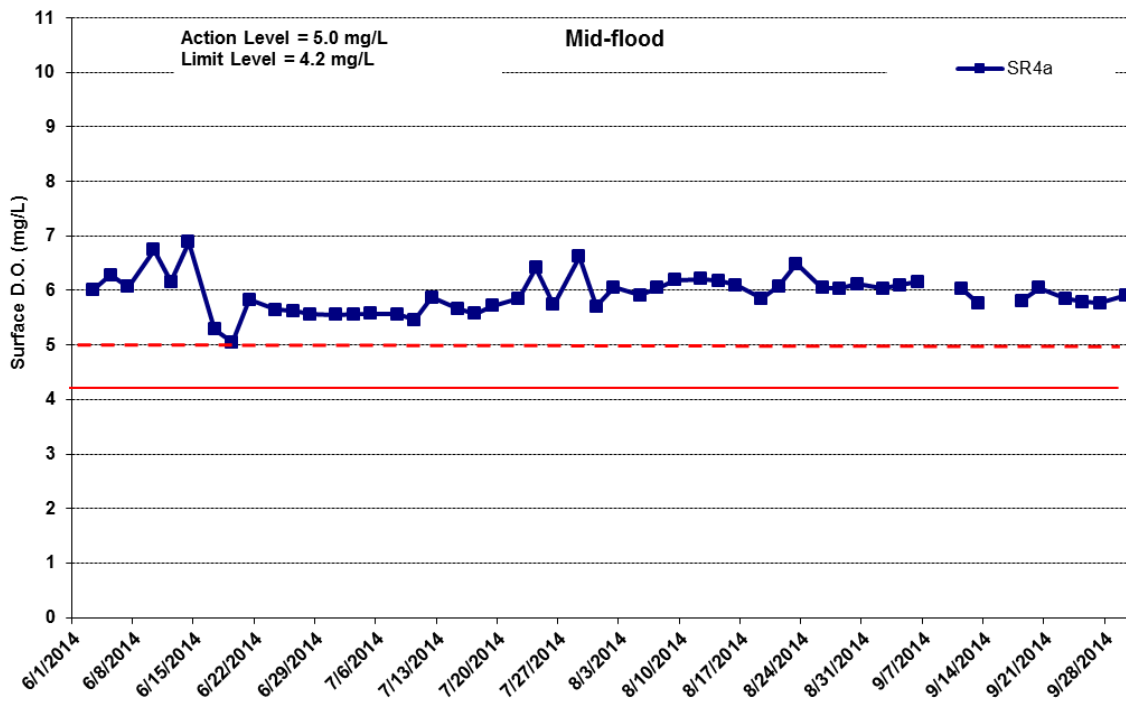


Figure J8 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



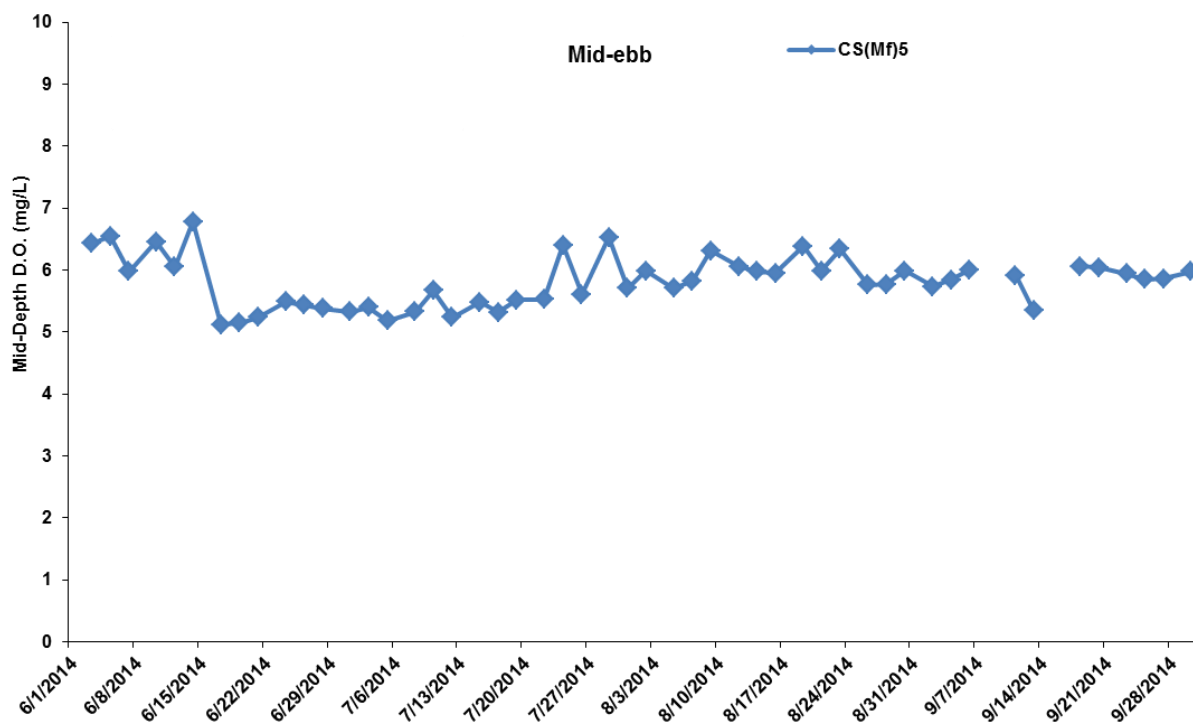
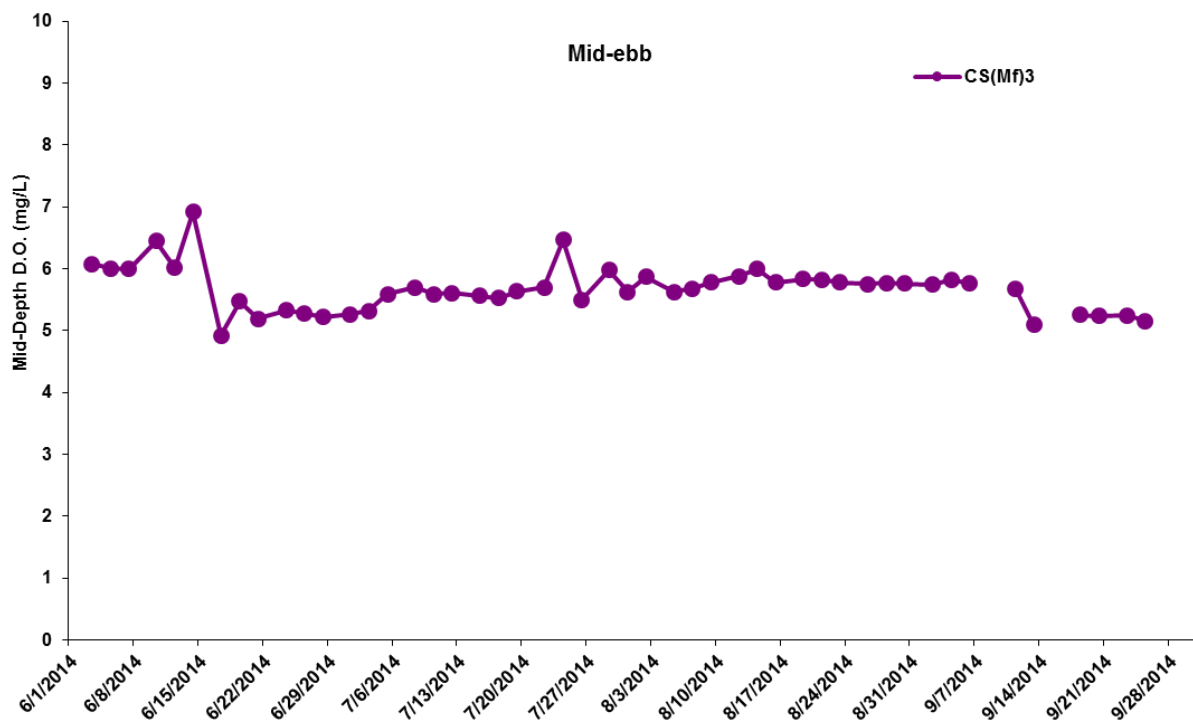


Figure J9 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



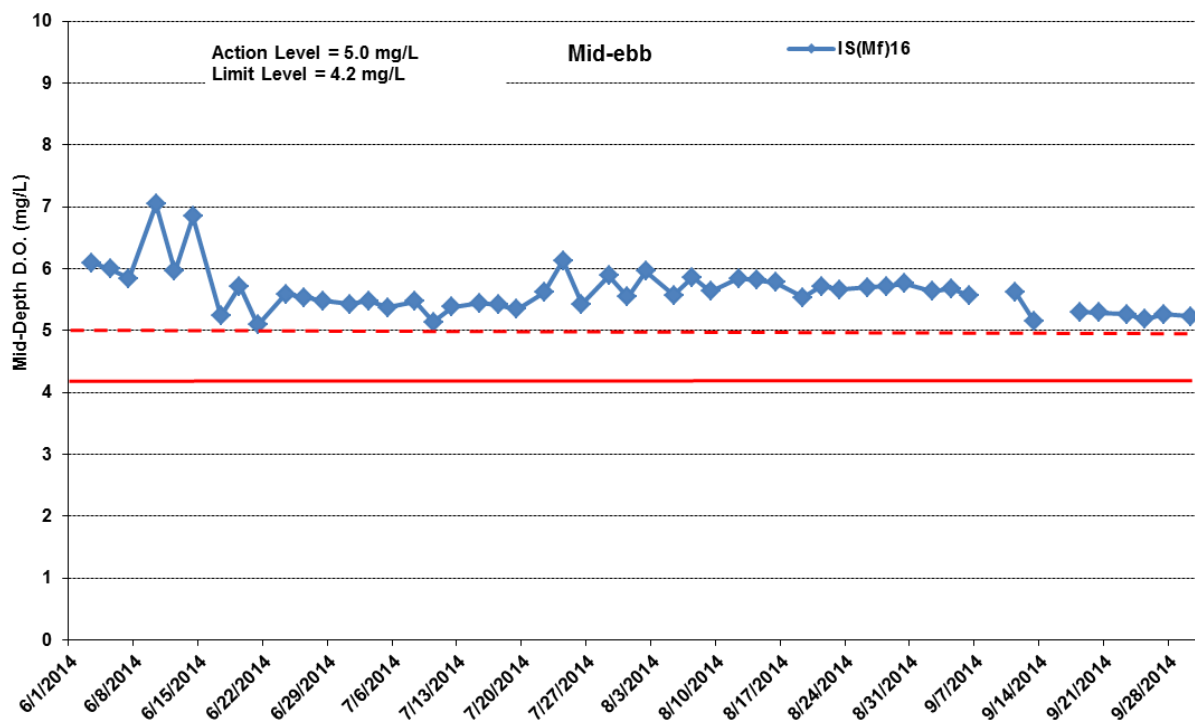


Figure J10 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 June and 30 September 2014 at IS(Mf)16.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



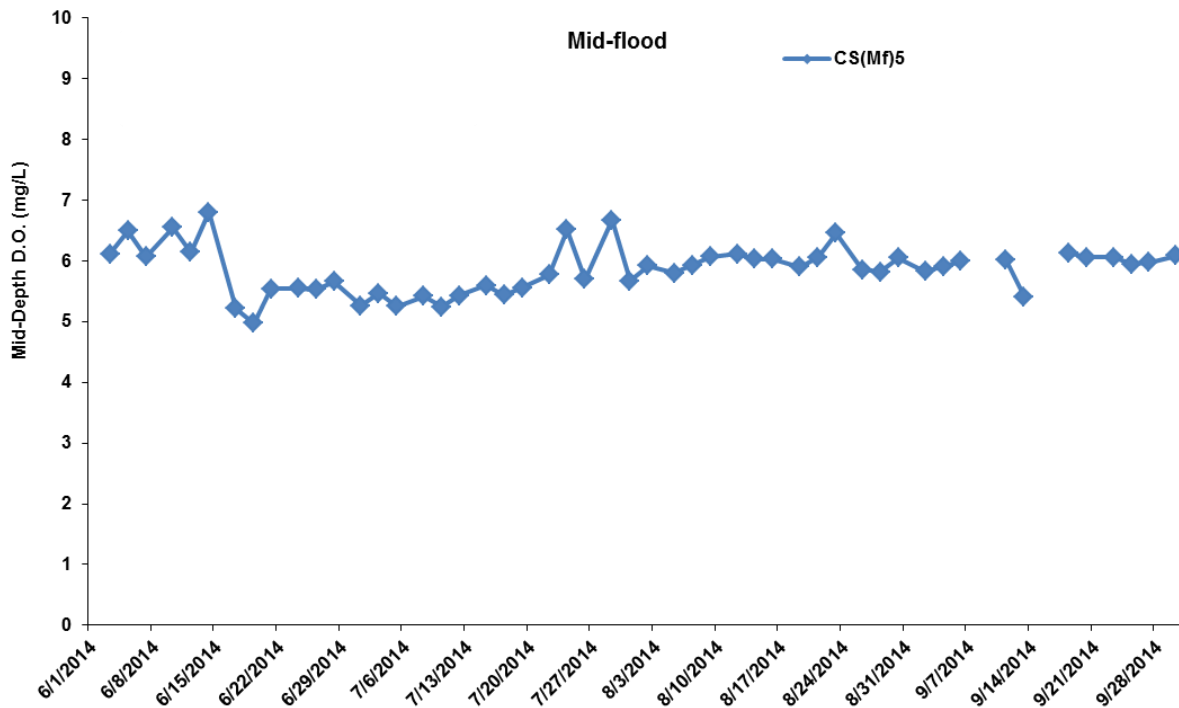
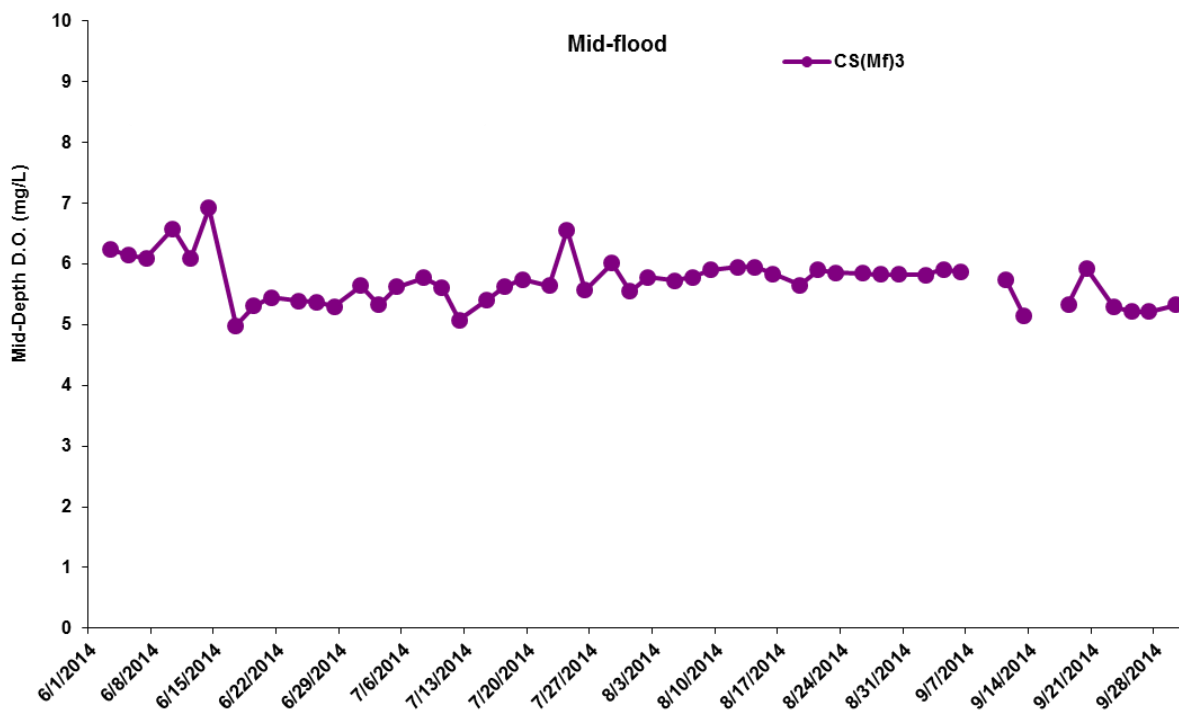


Figure J11 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



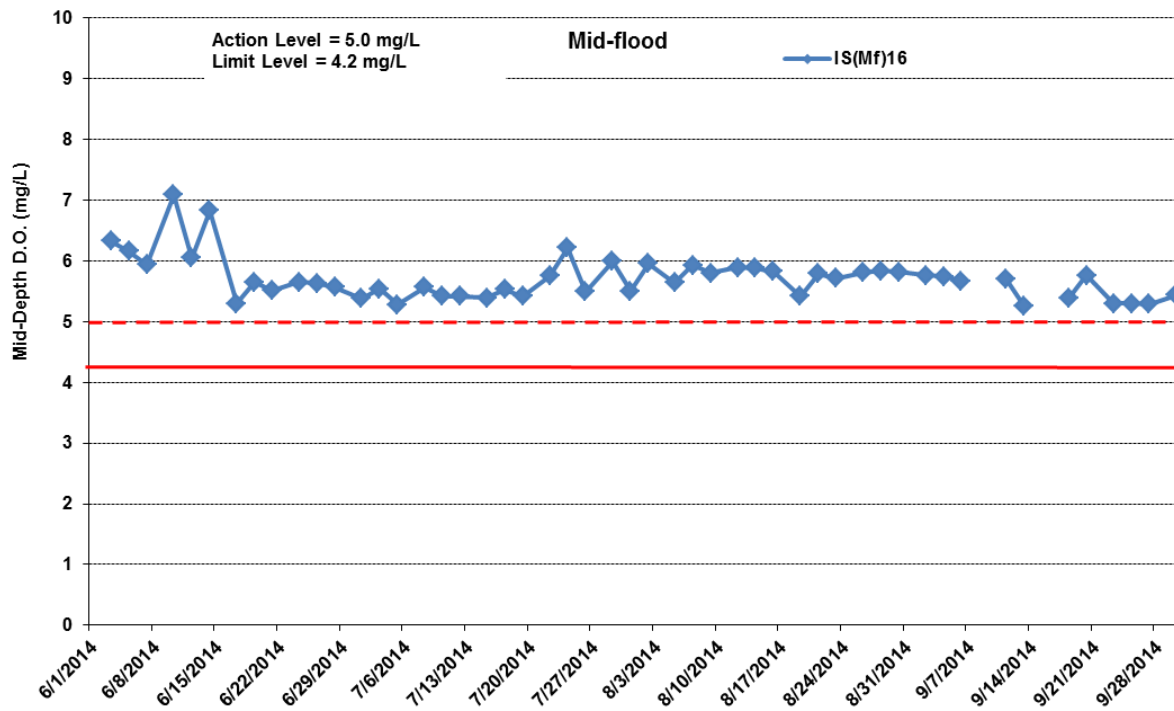


Figure J12 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 June and 30 September 2014 at IS(Mf)16.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



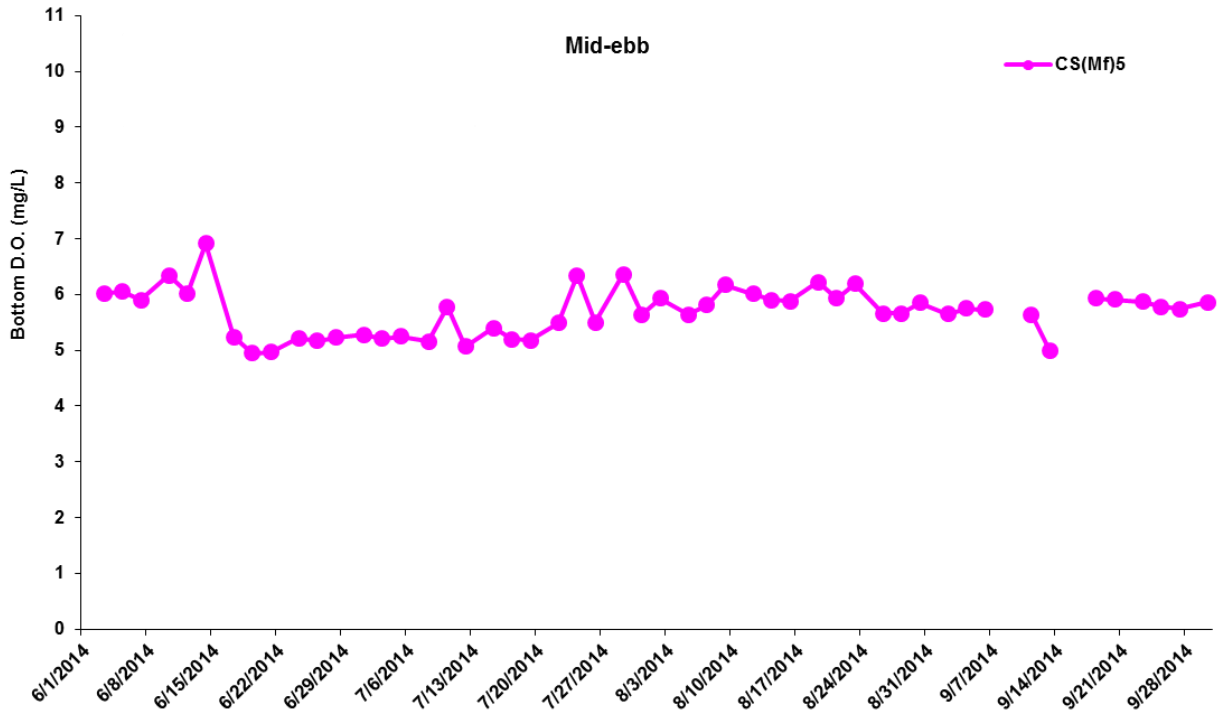
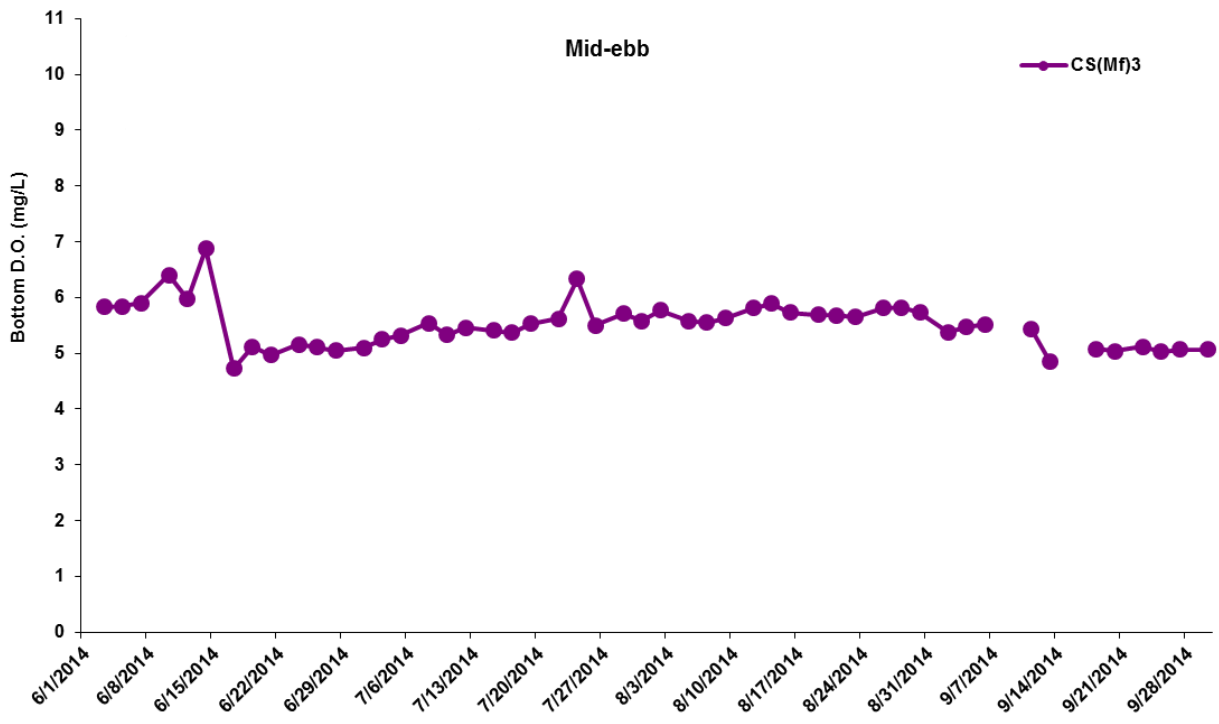


Figure J13 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



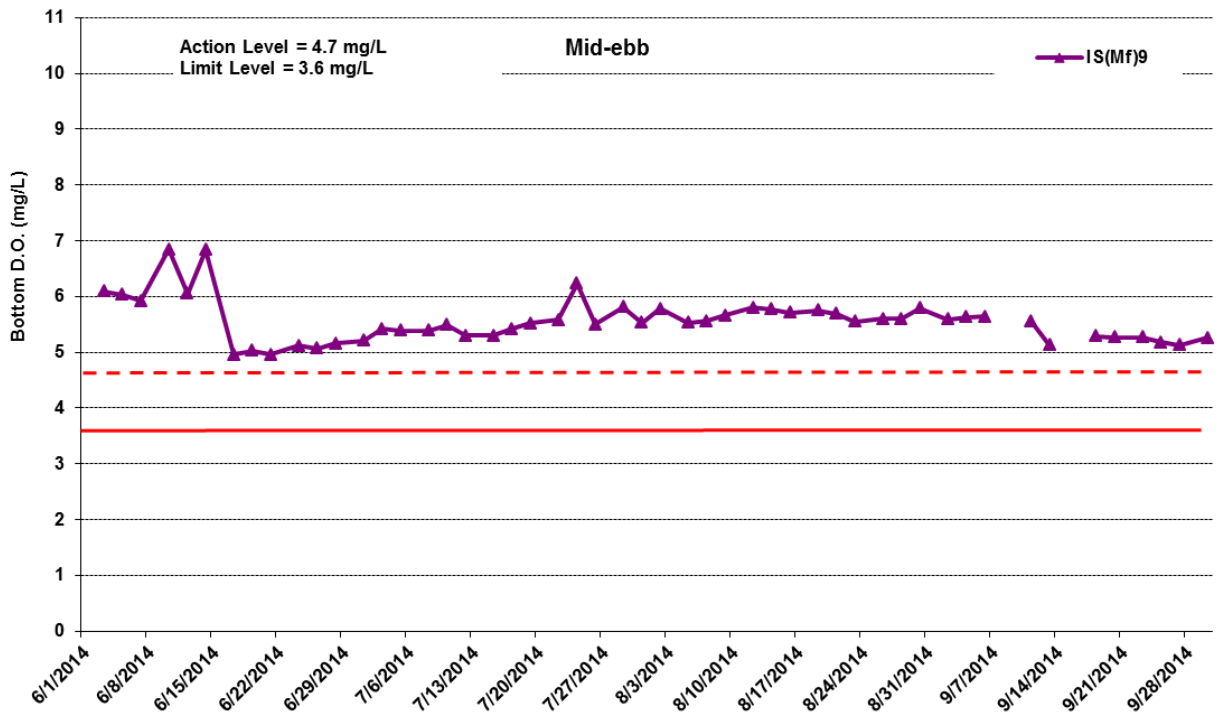
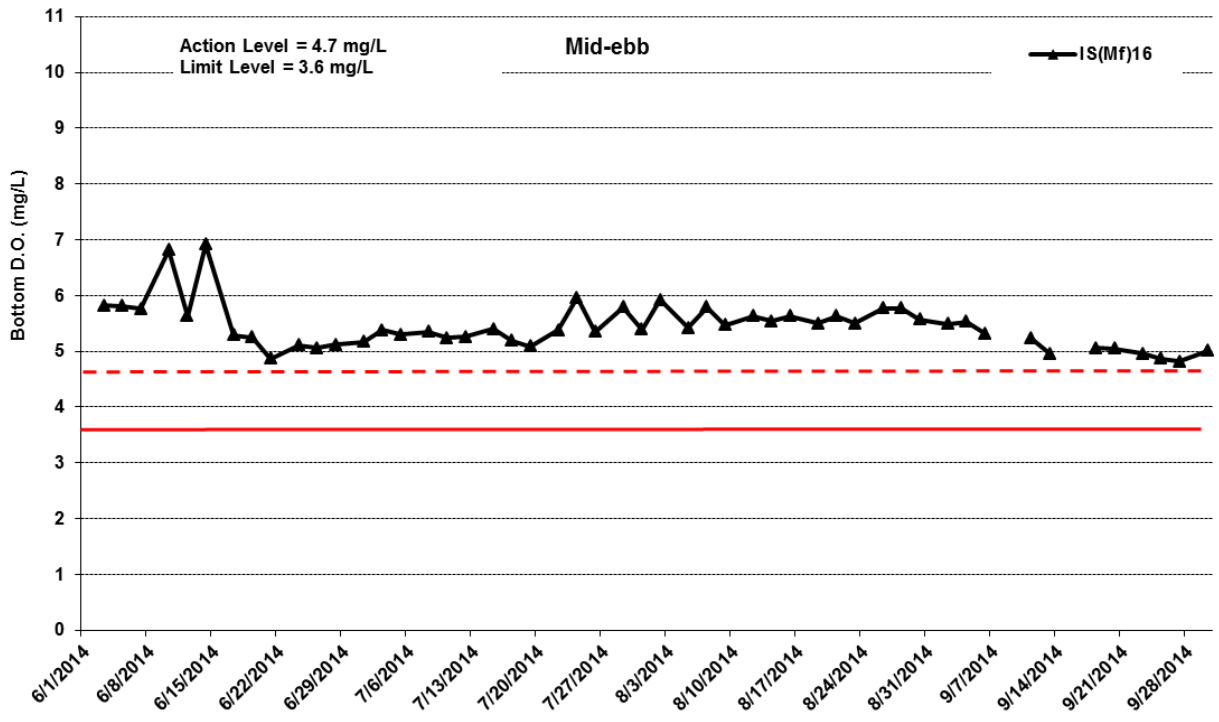


Figure J14 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



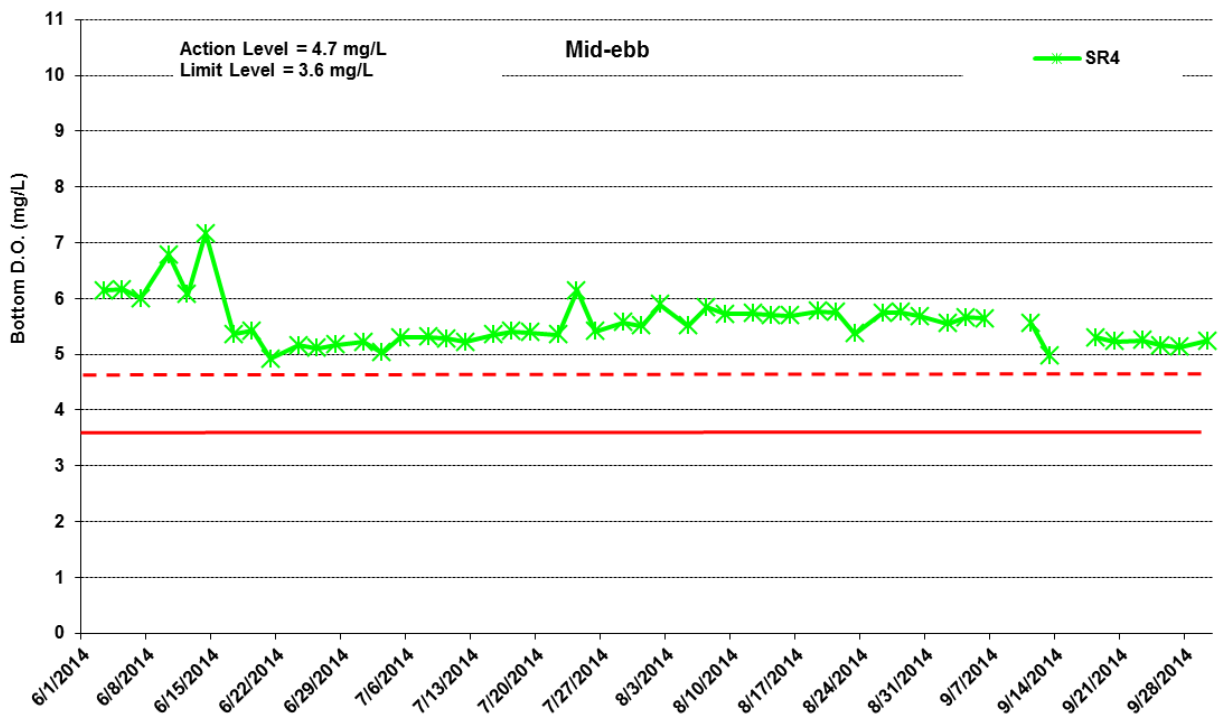
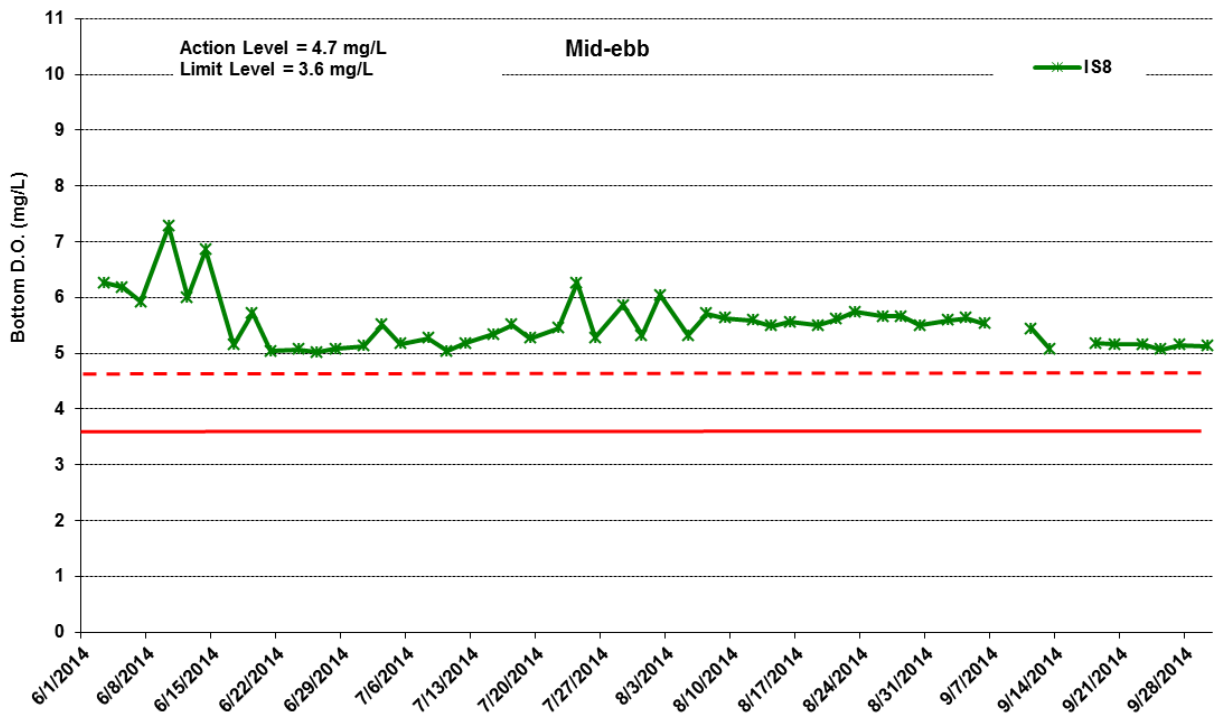


Figure J15 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



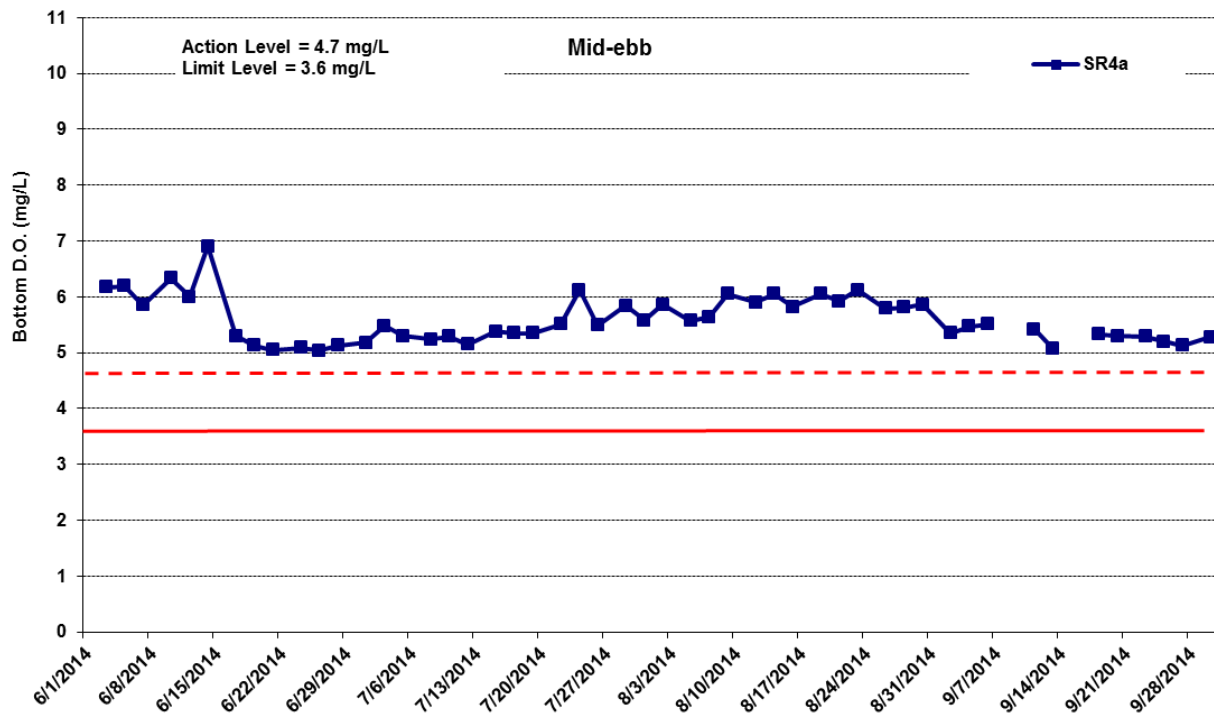


Figure J16 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



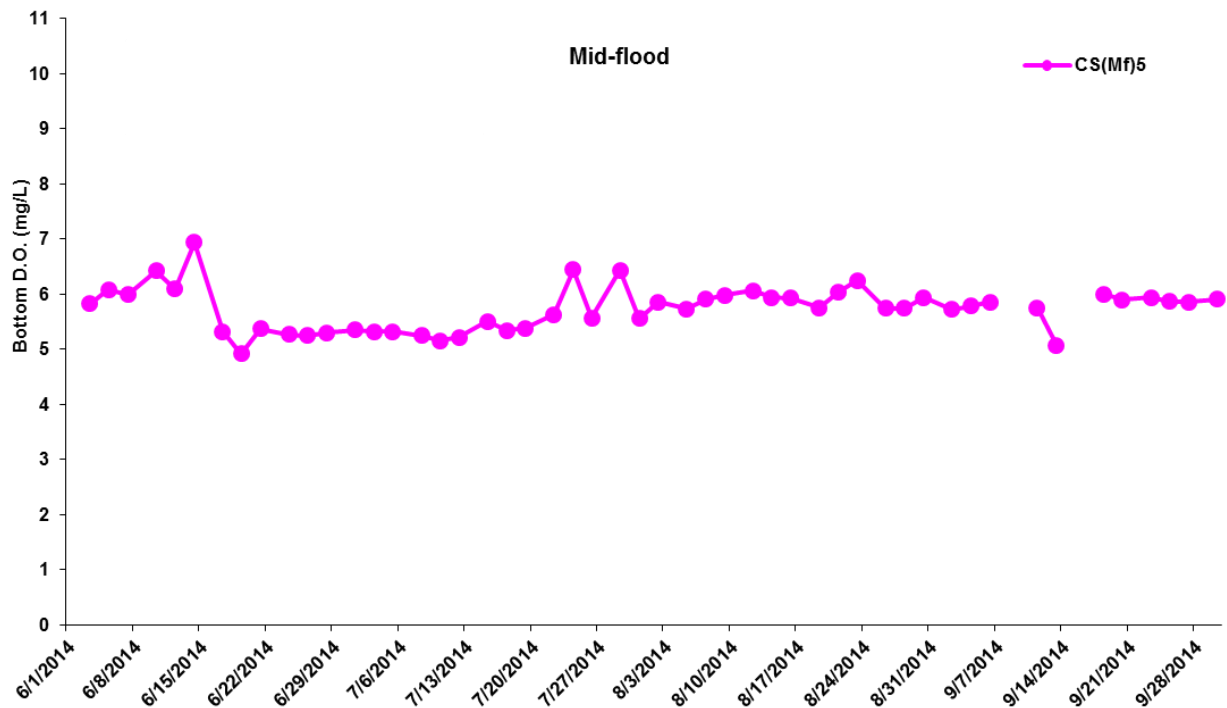
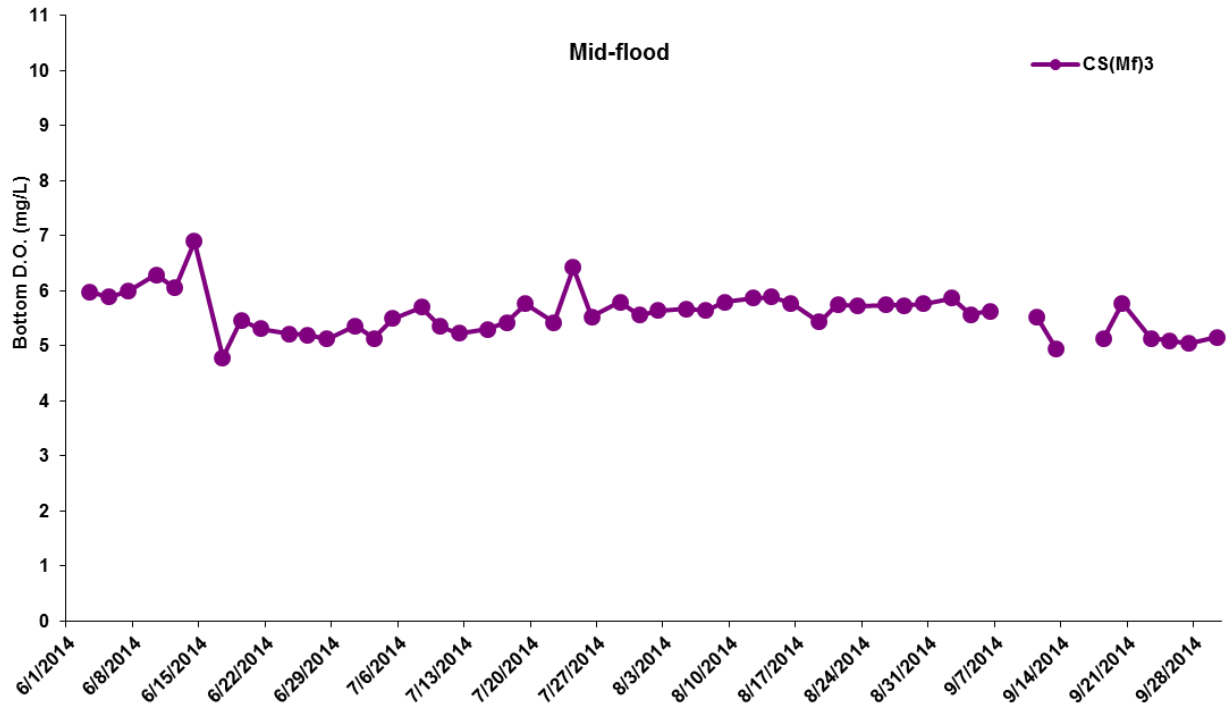


Figure J17 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



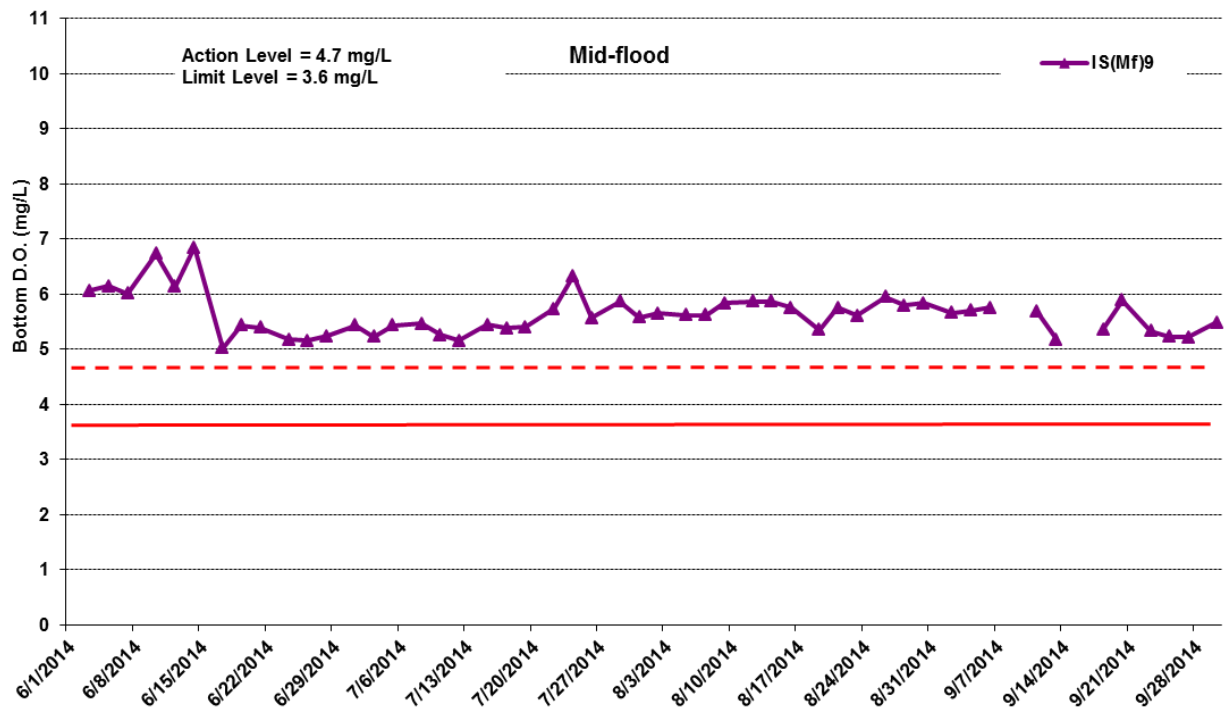
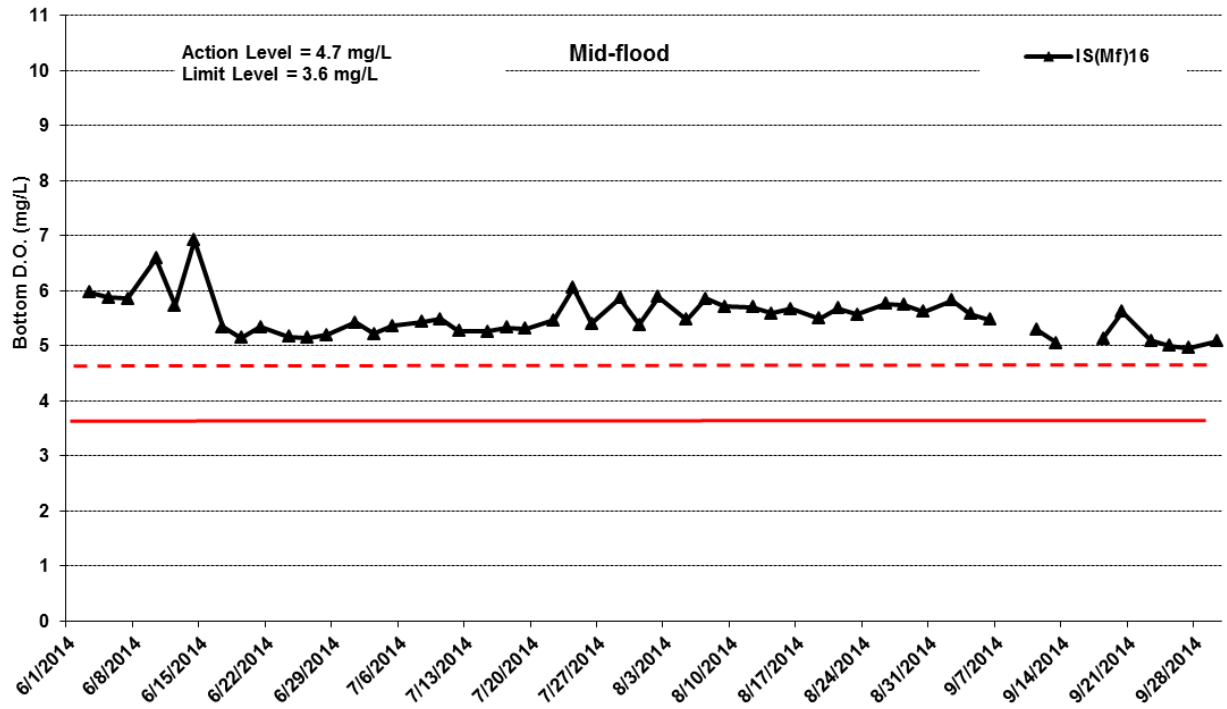


Figure J18 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



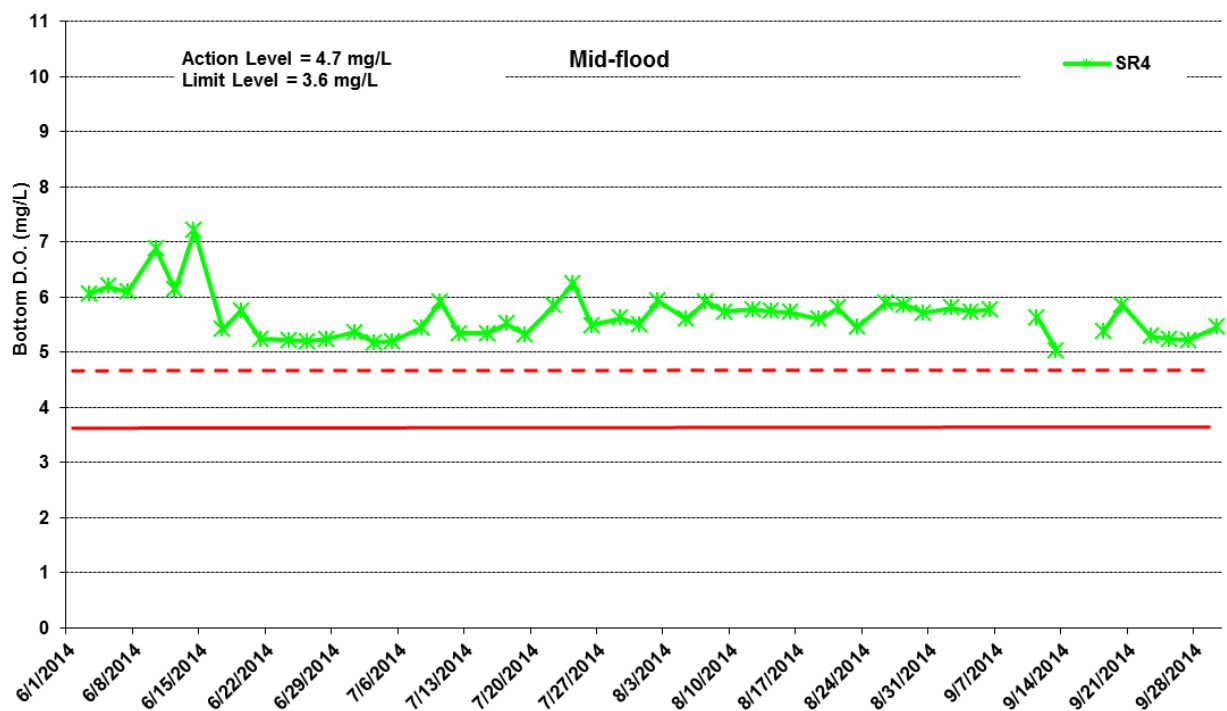
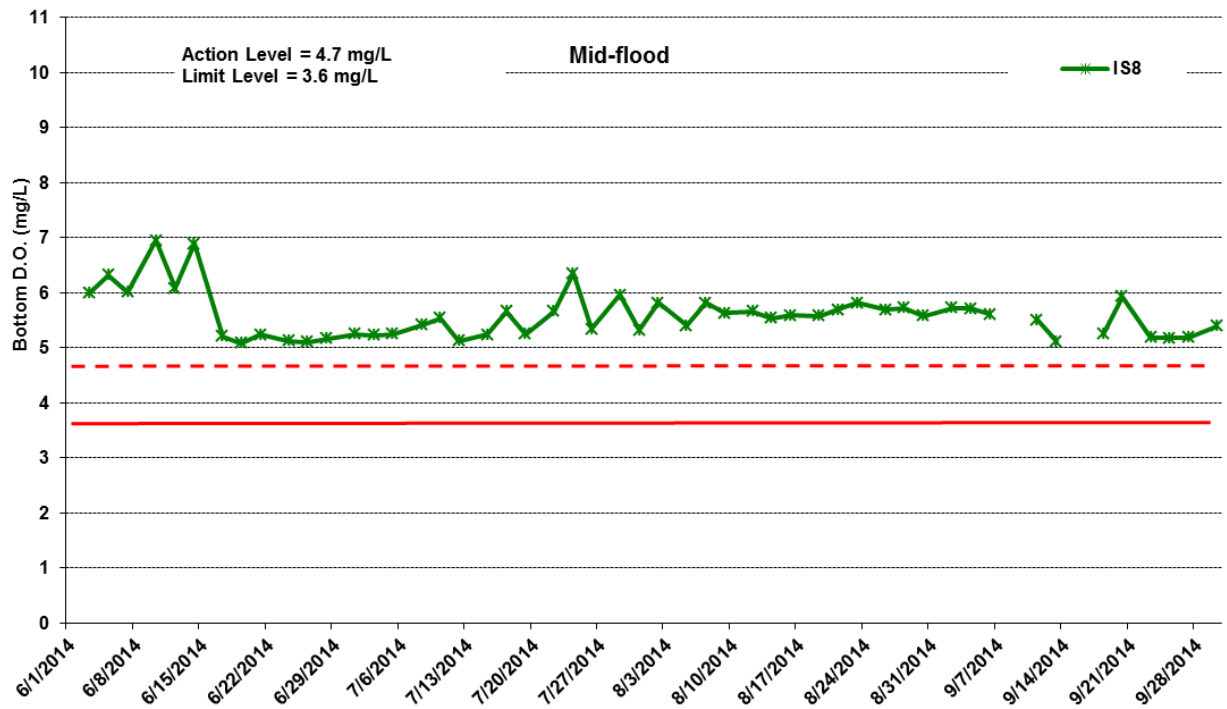


Figure J19 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



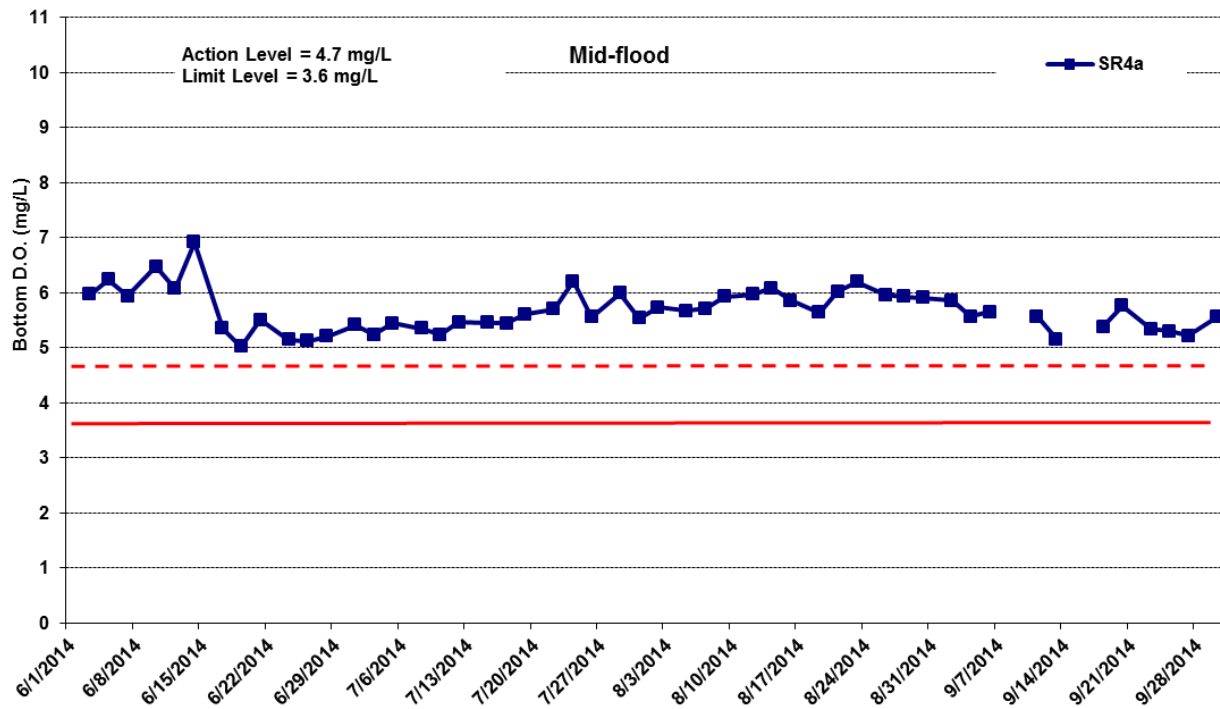


Figure J20 Impact Monitoring - Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



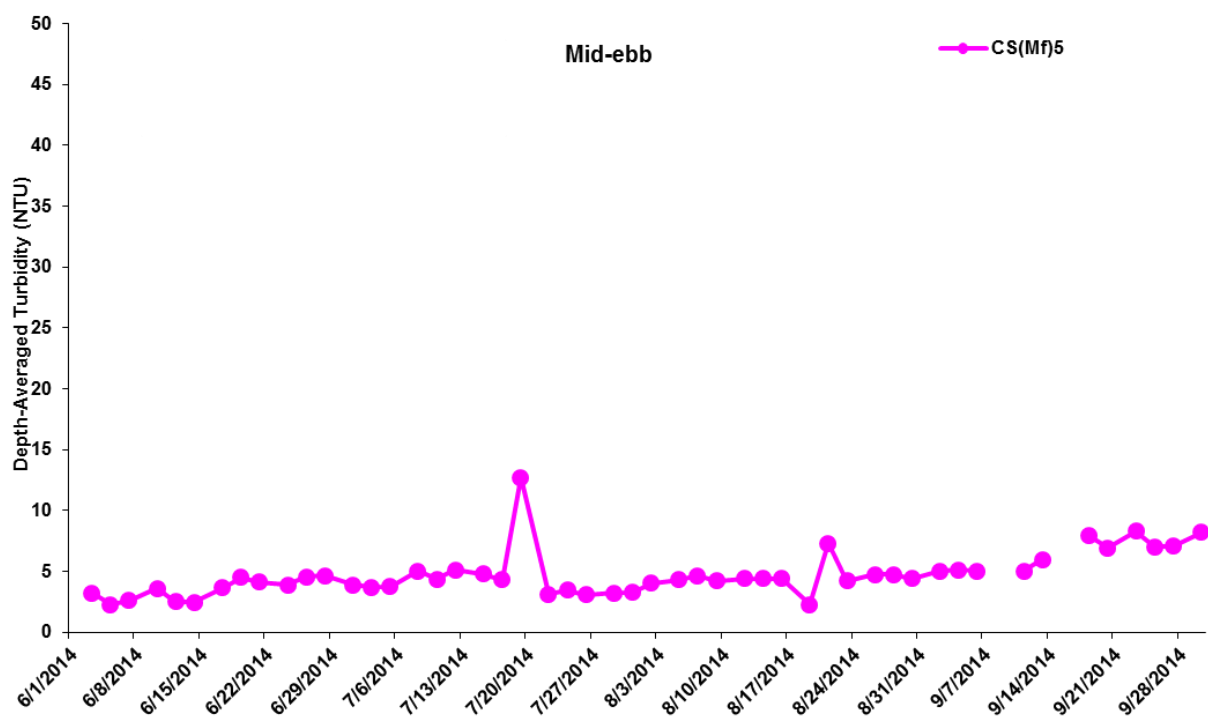
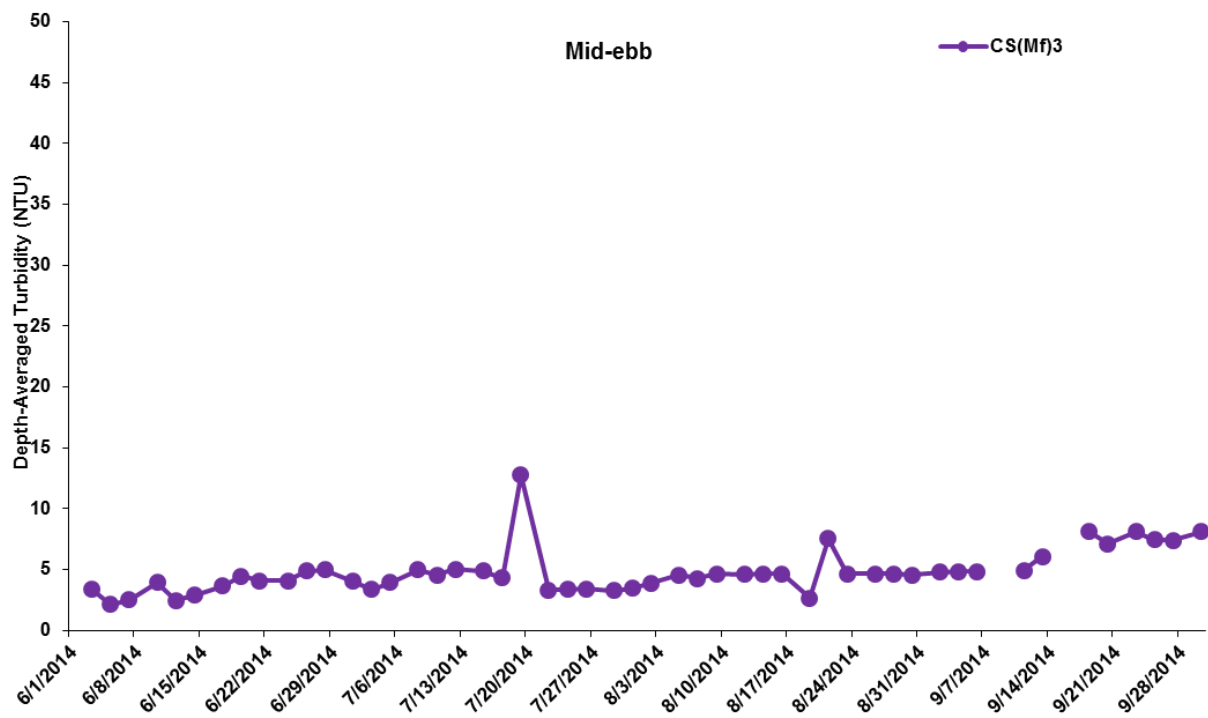


Figure J21 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



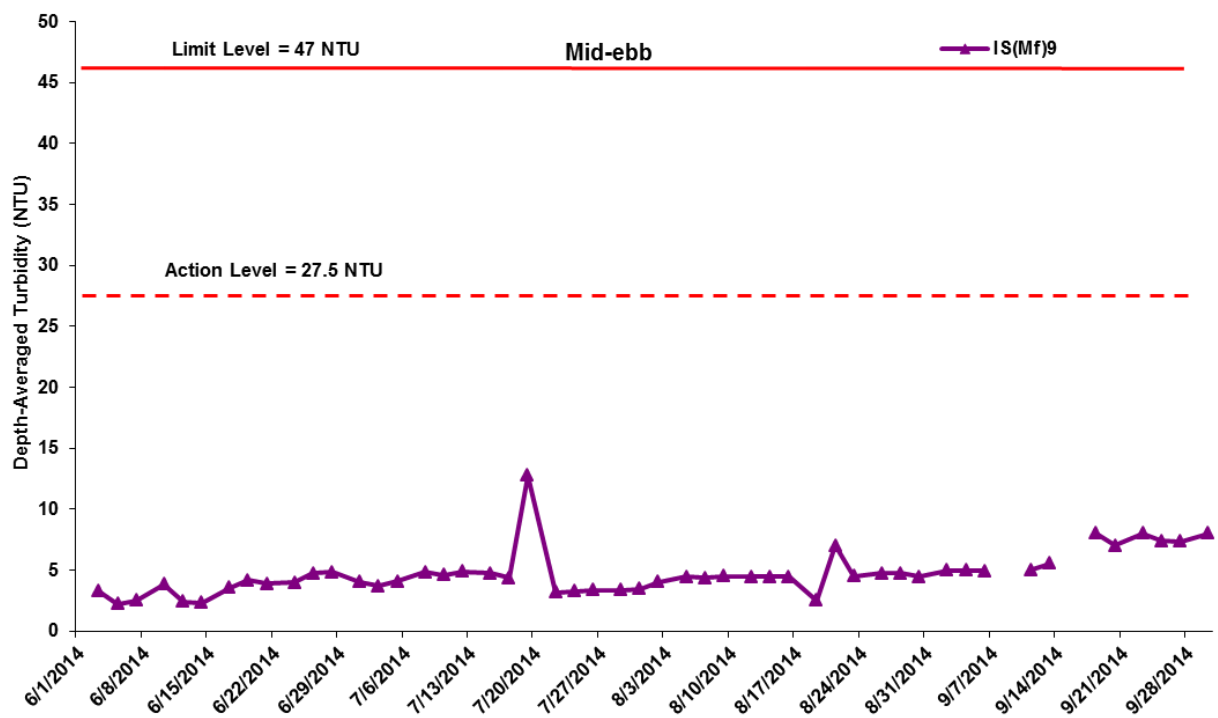
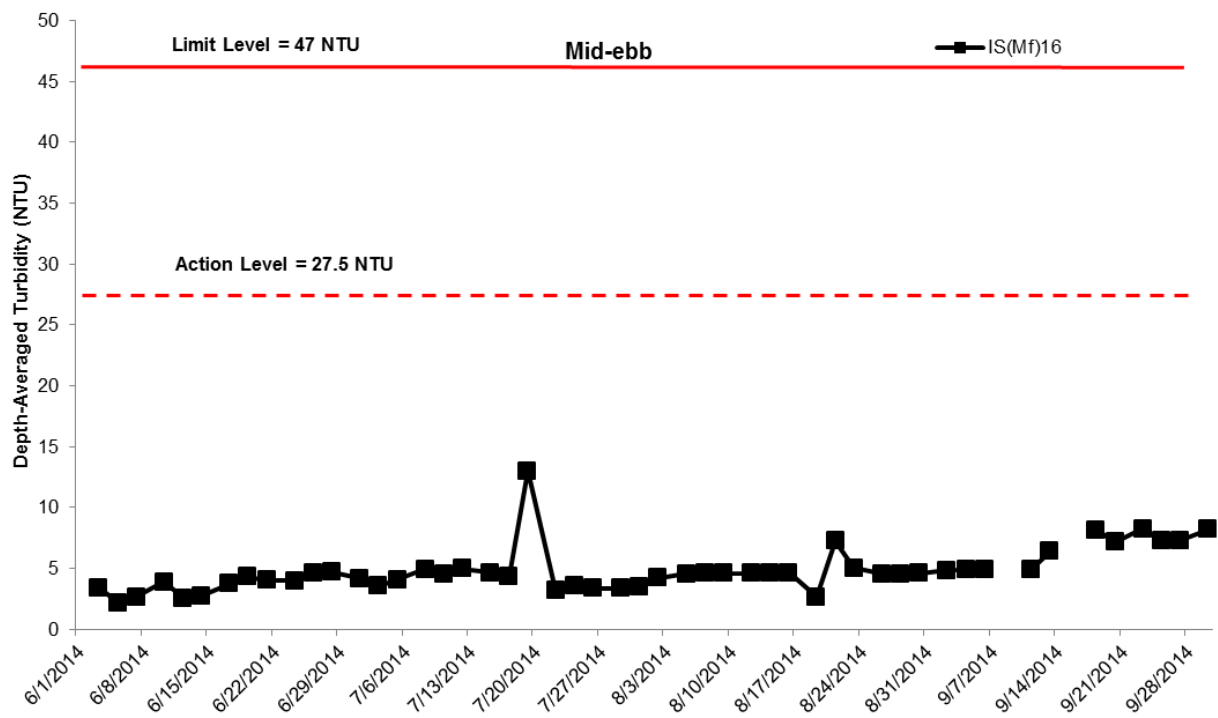


Figure J22 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



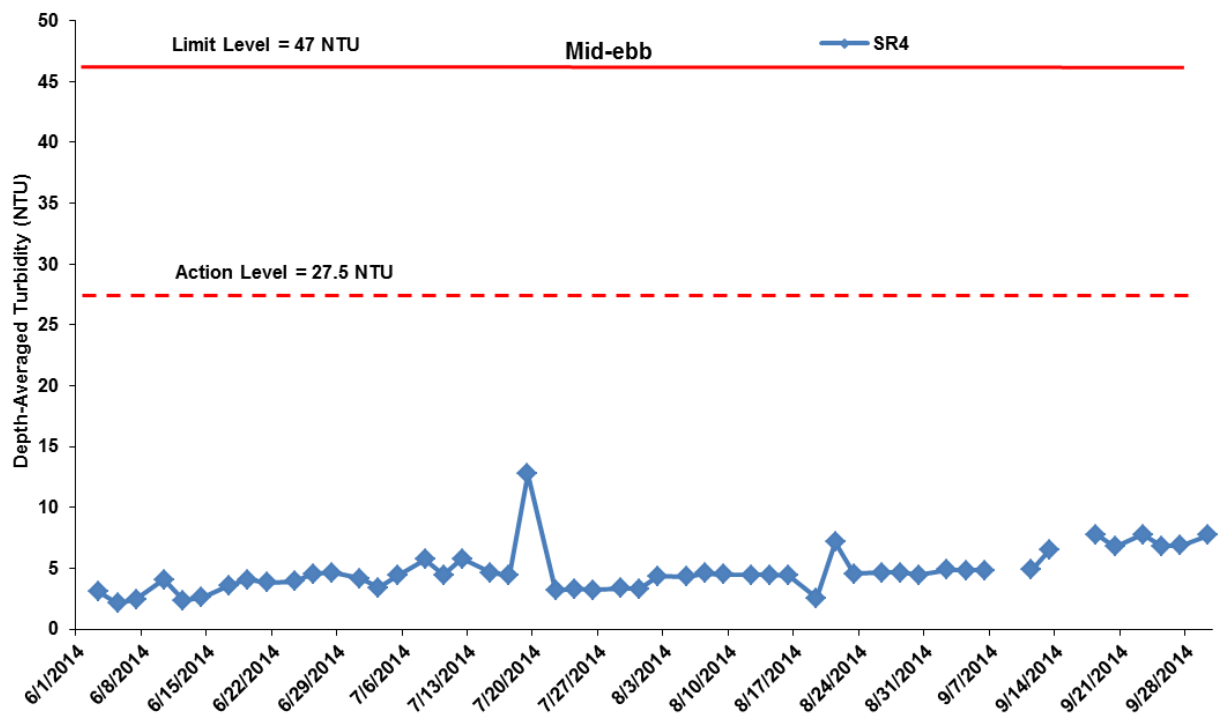
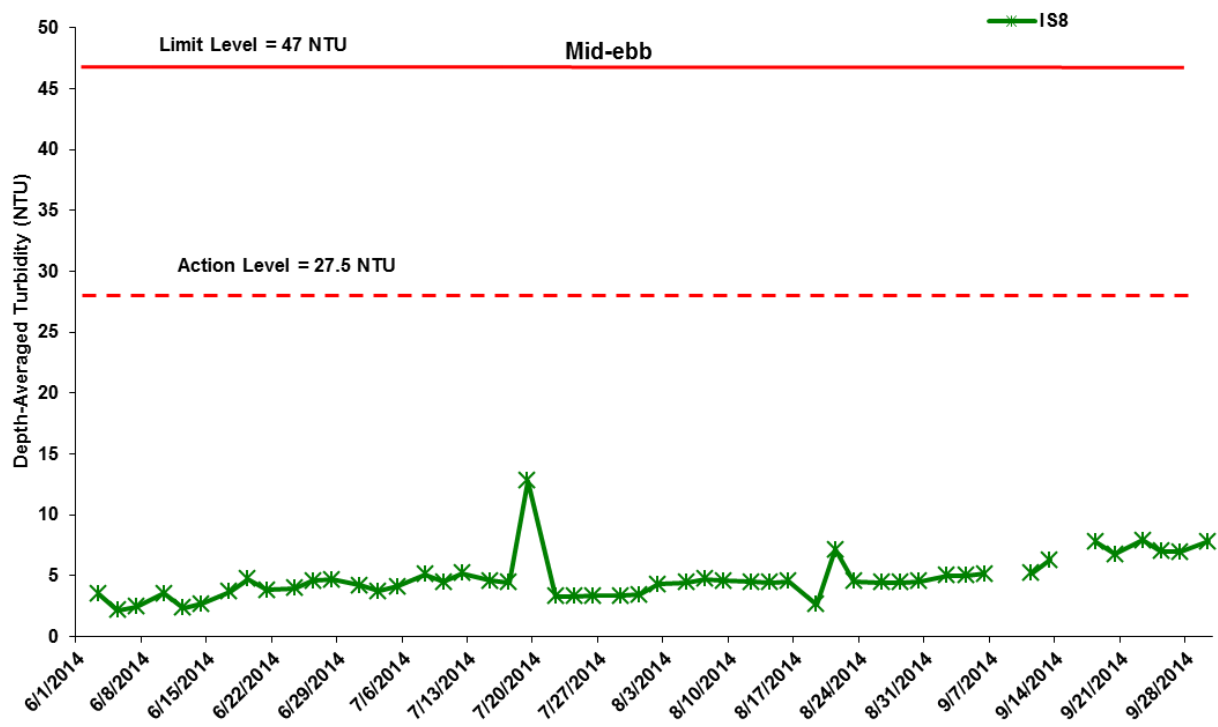


Figure J23 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



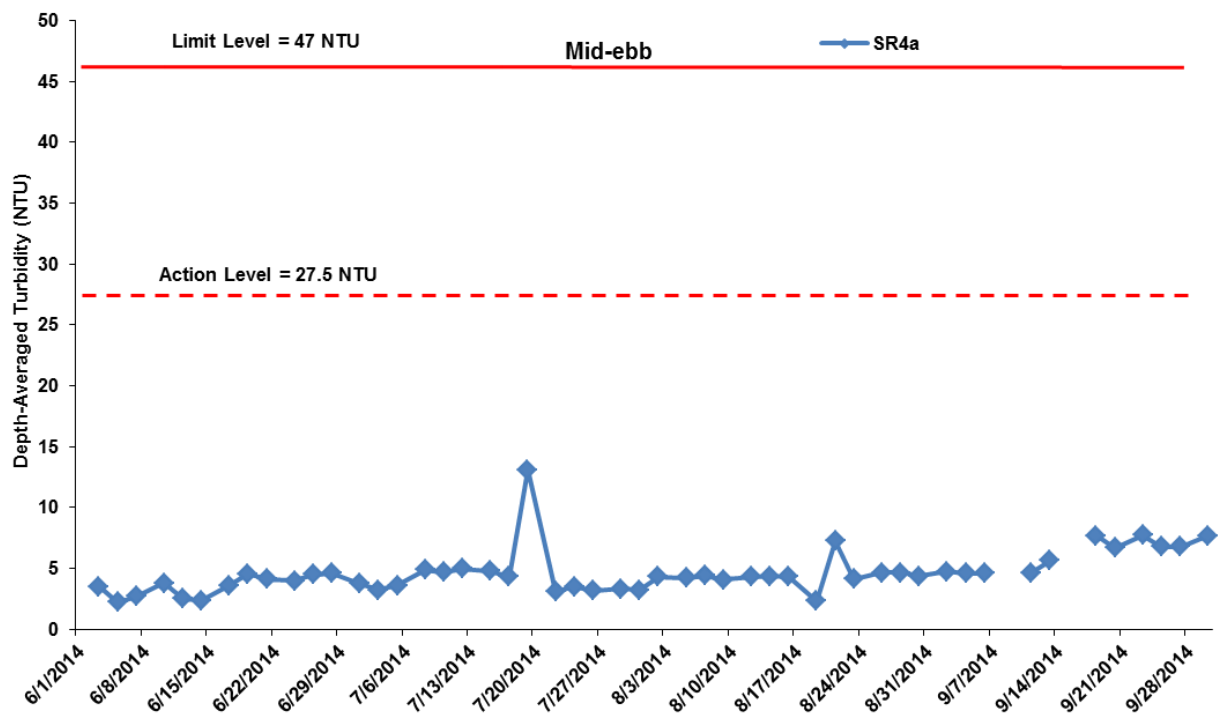


Figure J24 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



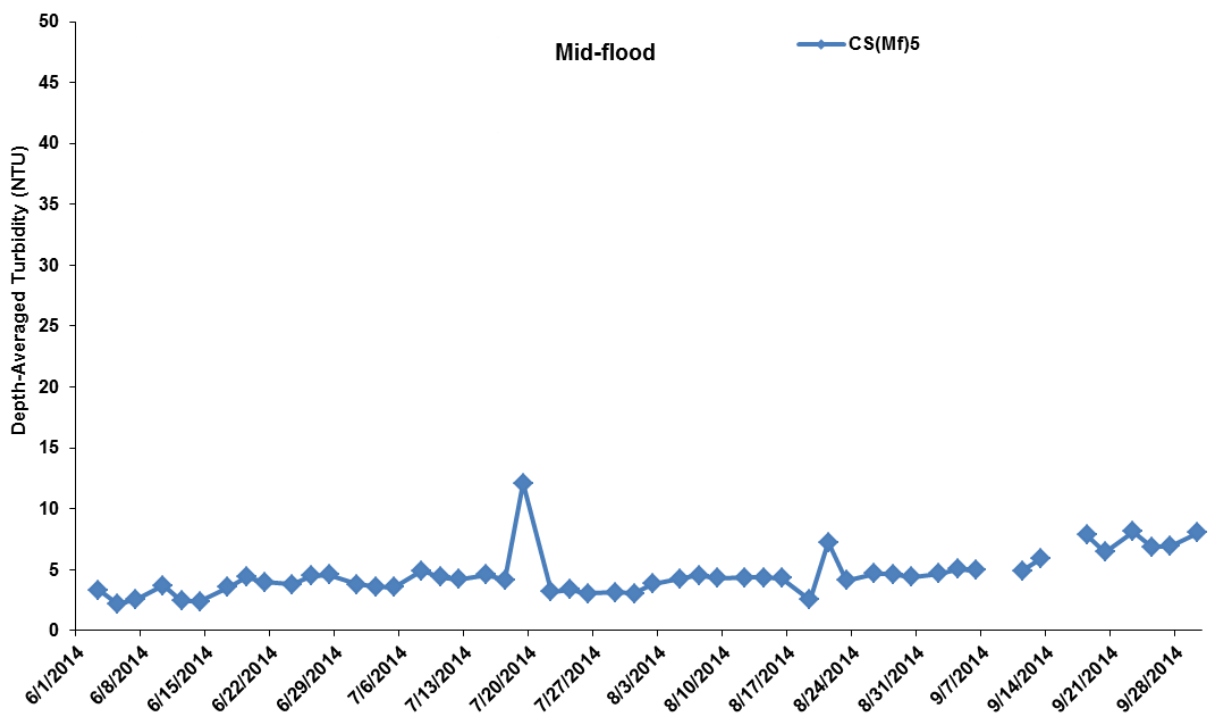
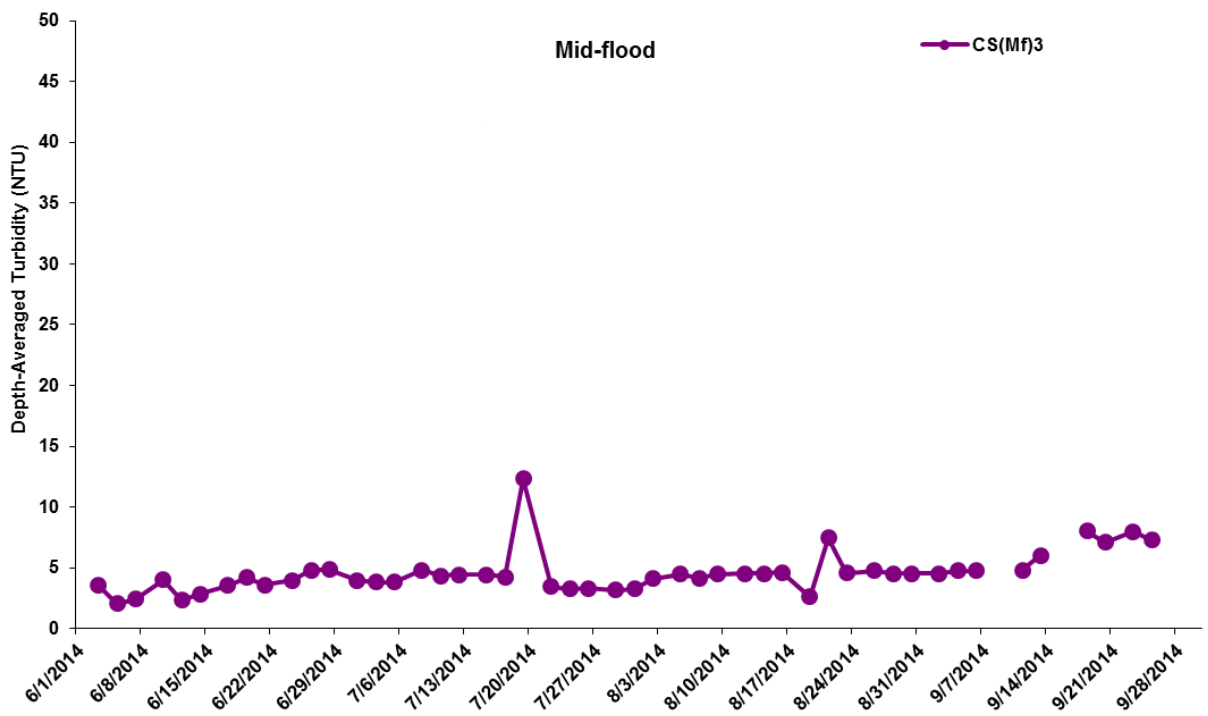


Figure J25 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(MF)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



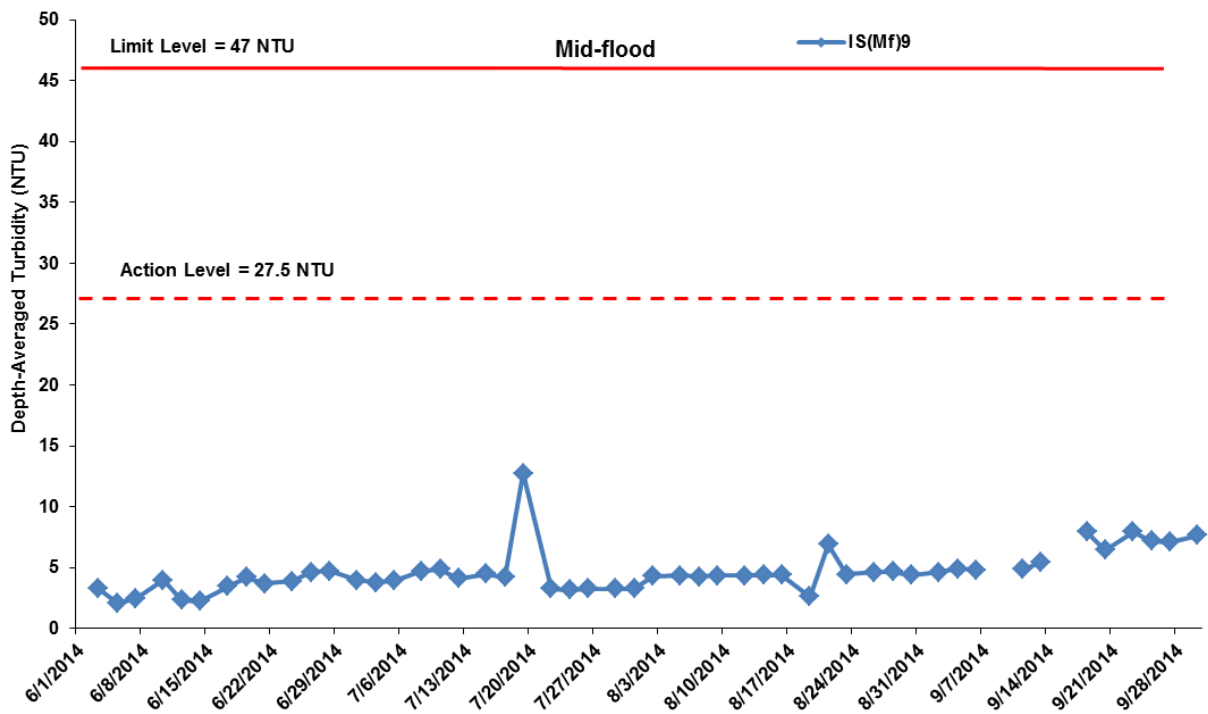
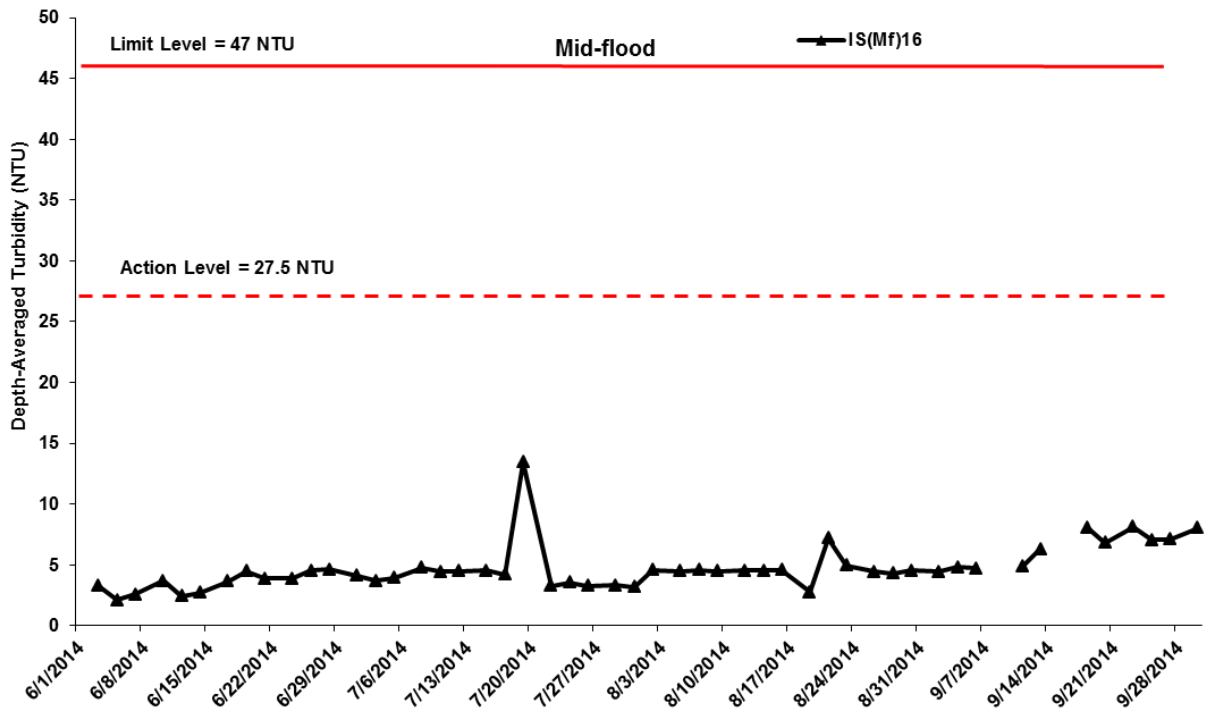


Figure J26 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



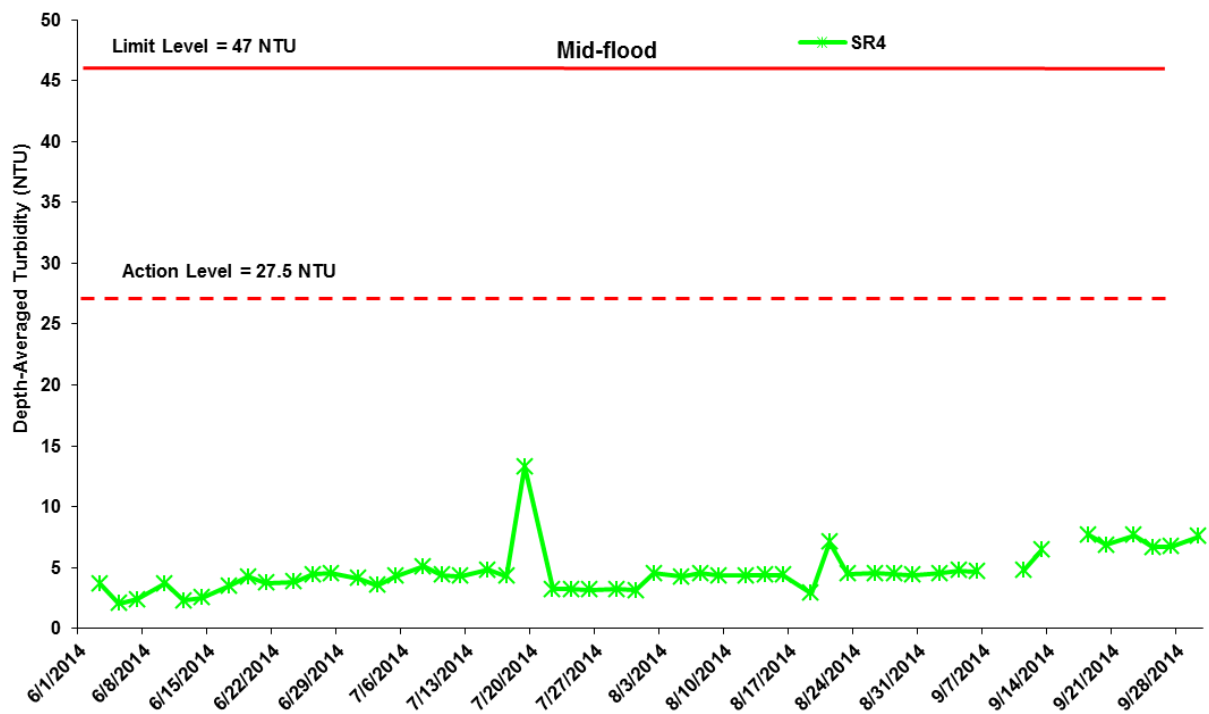
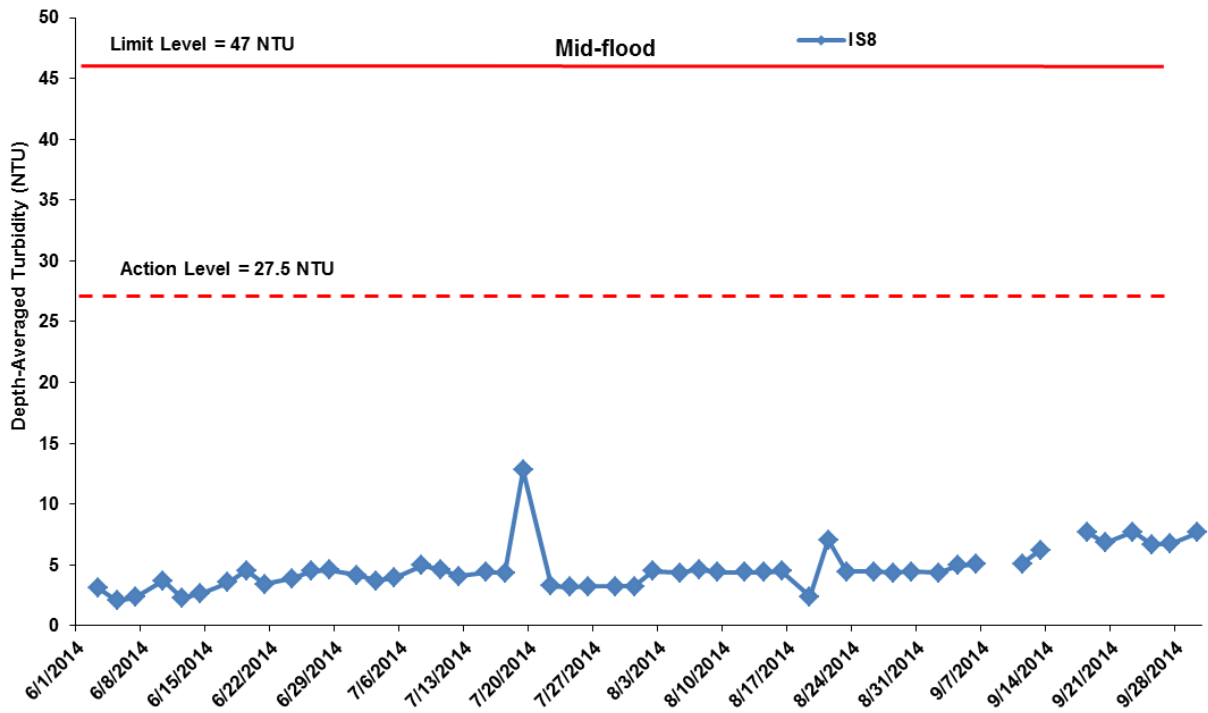


Figure J27 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



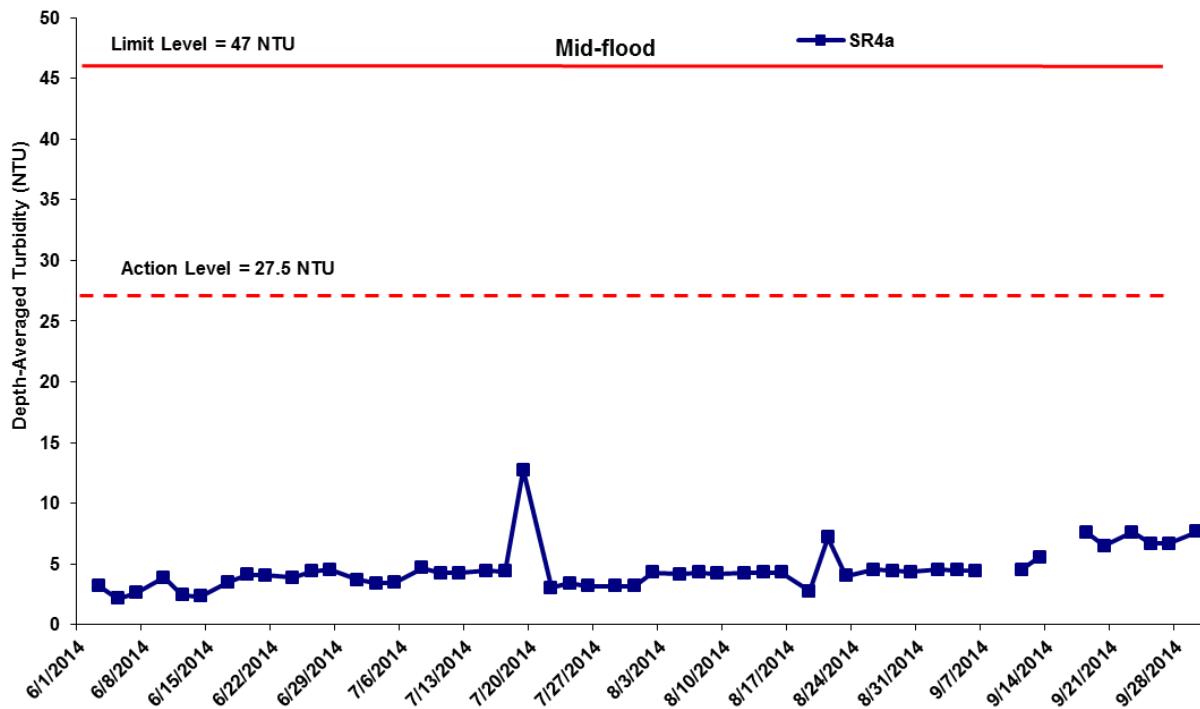


Figure J28 Impact Monitoring - Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



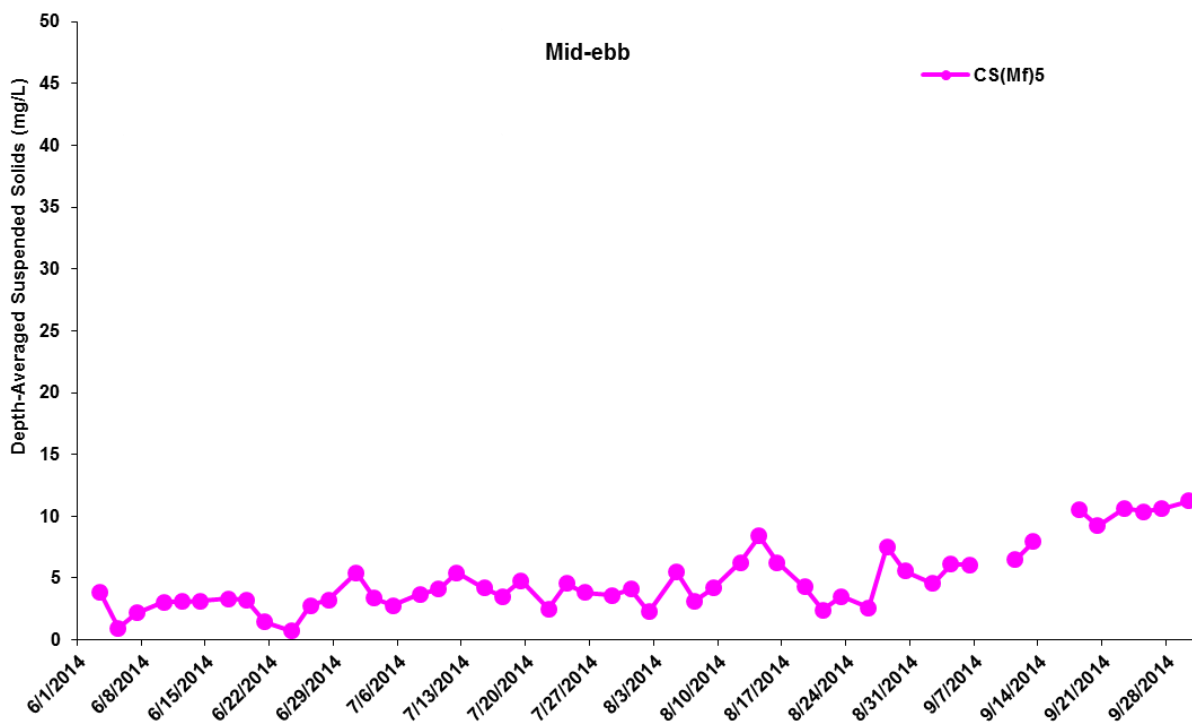
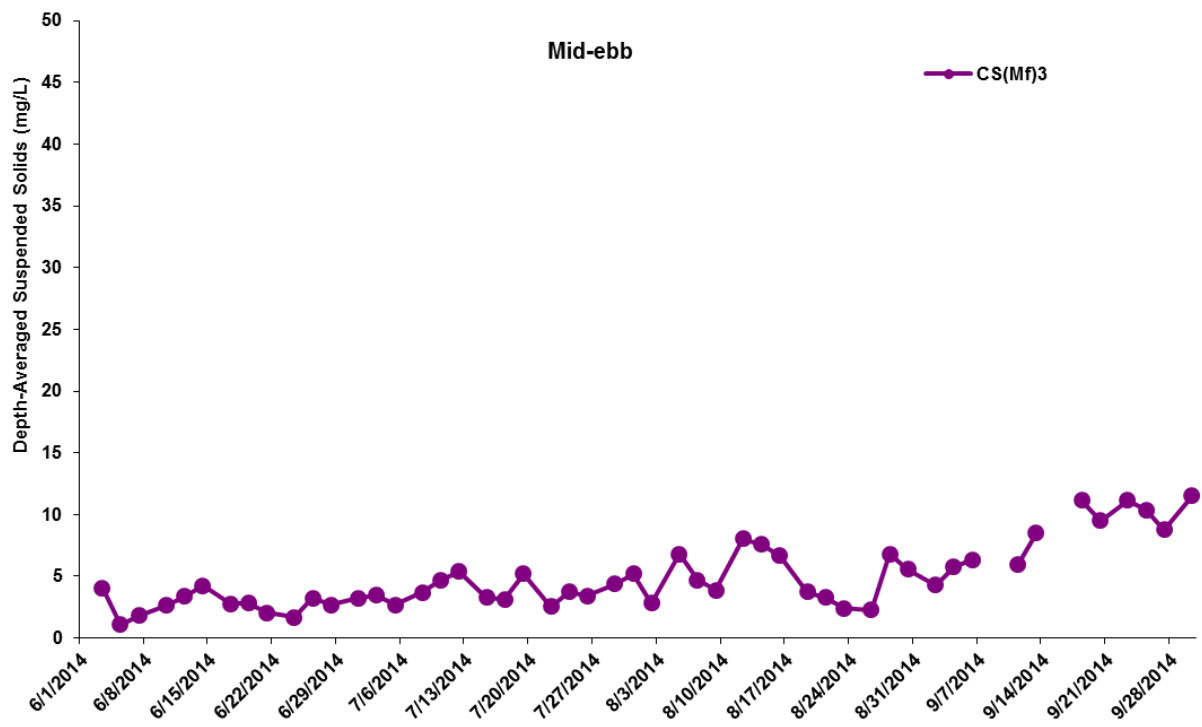


Figure J29 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



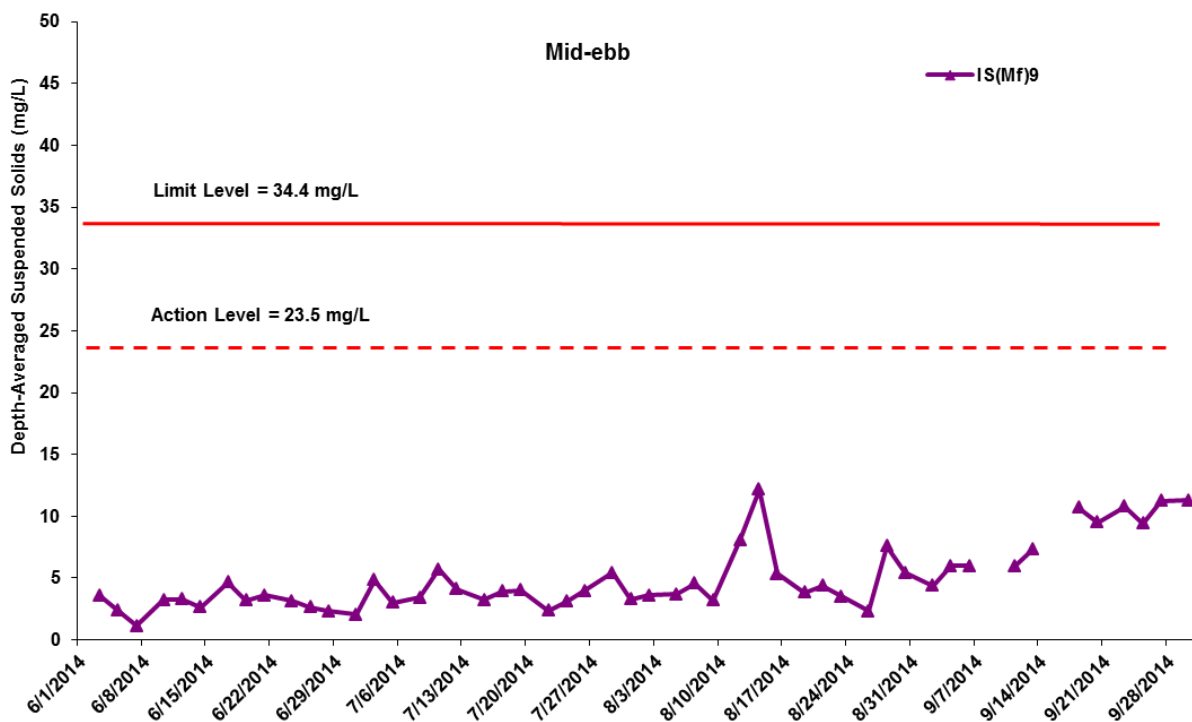
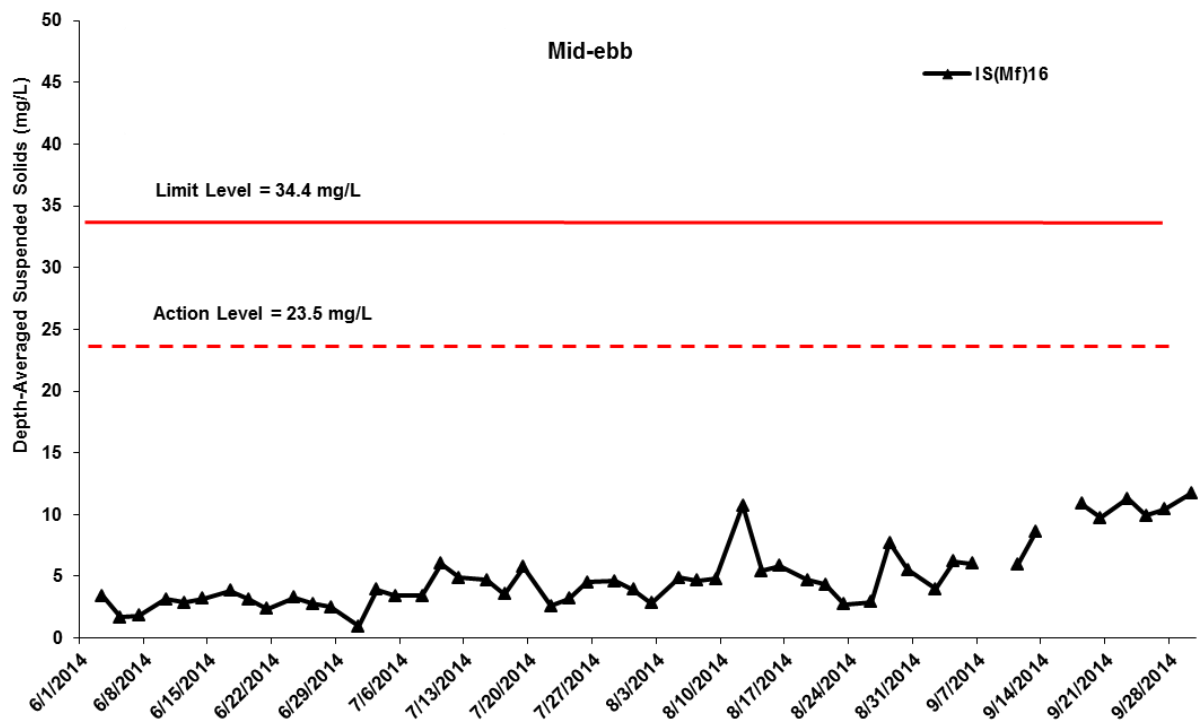


Figure J30 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



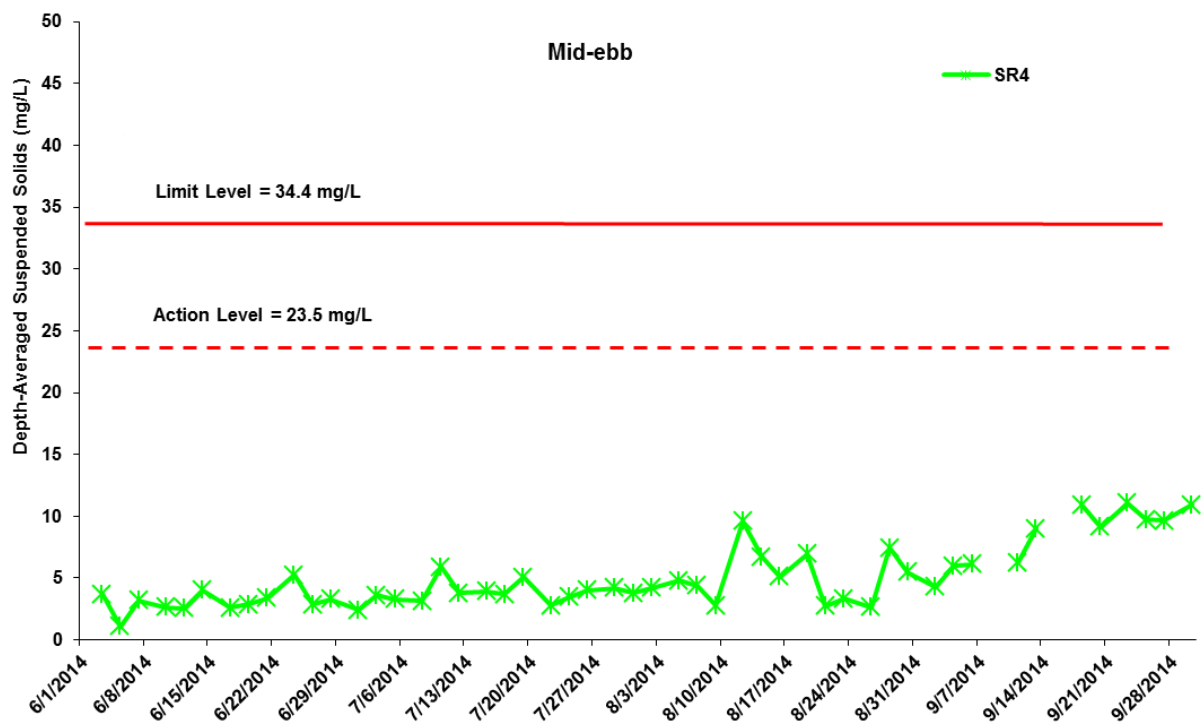
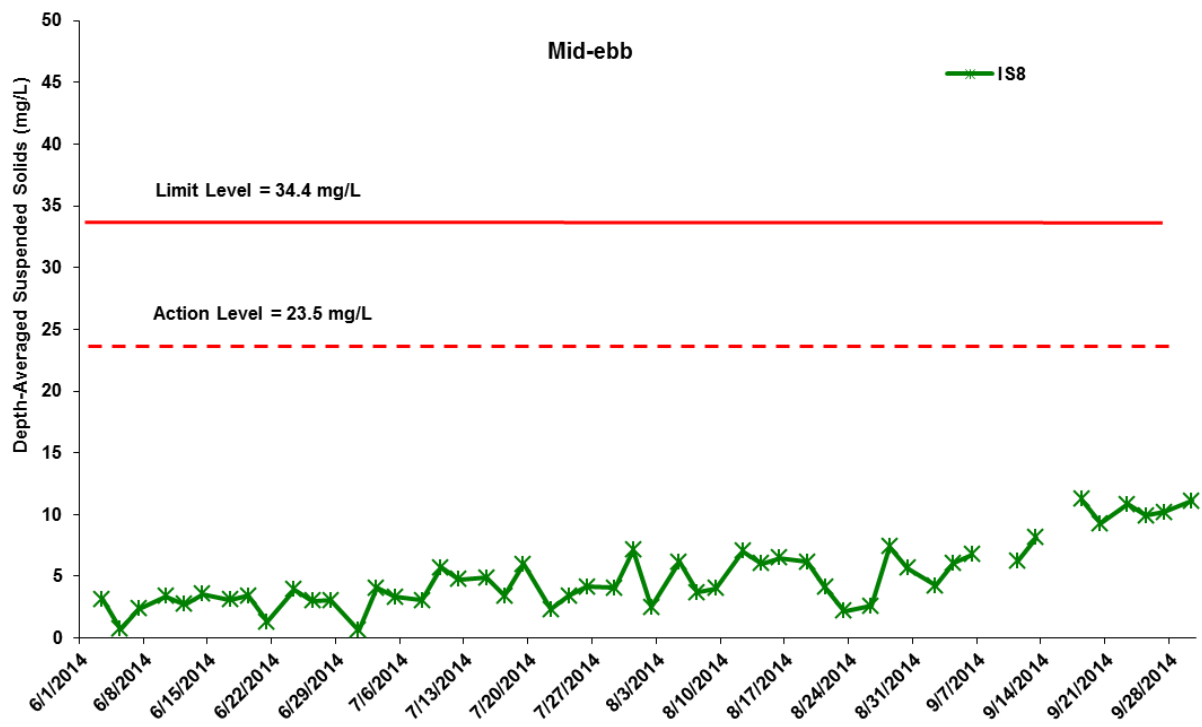


Figure J31 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



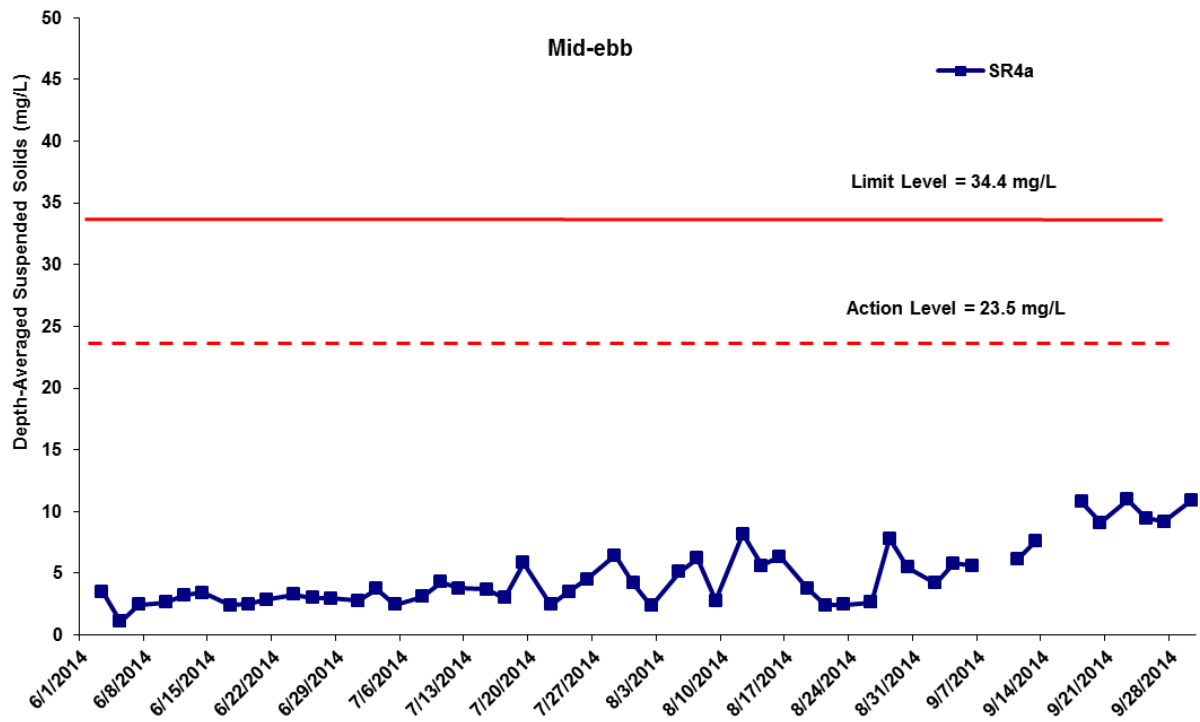


Figure J32 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



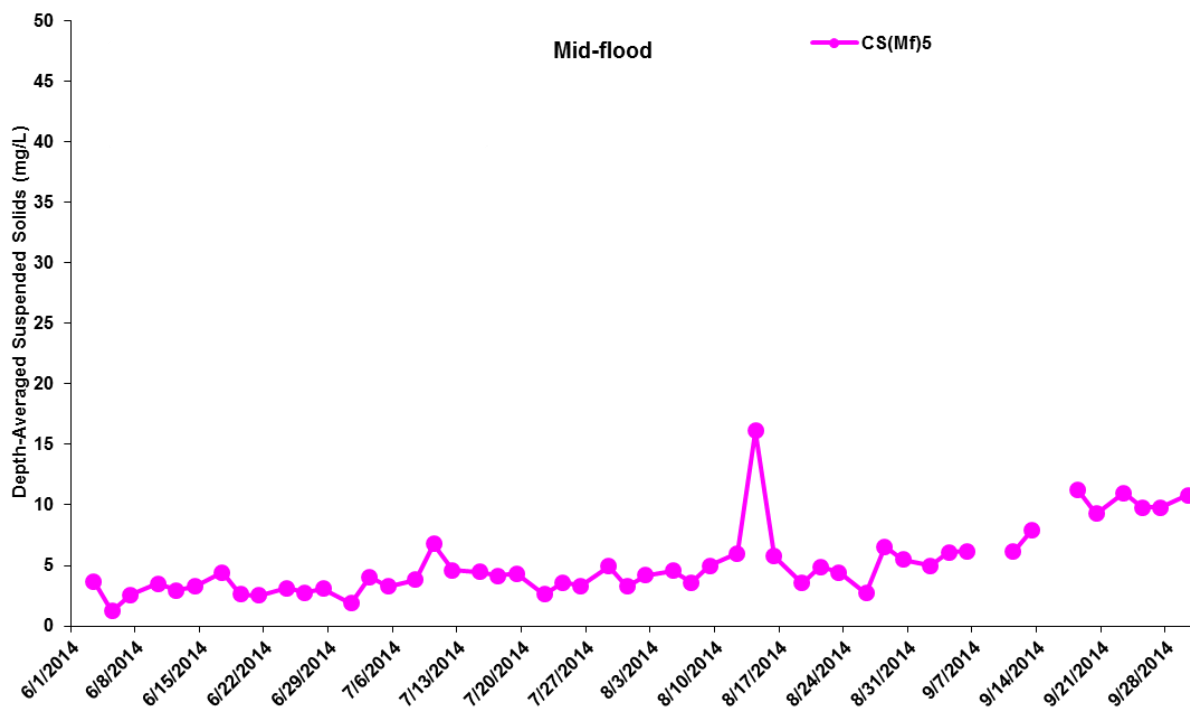
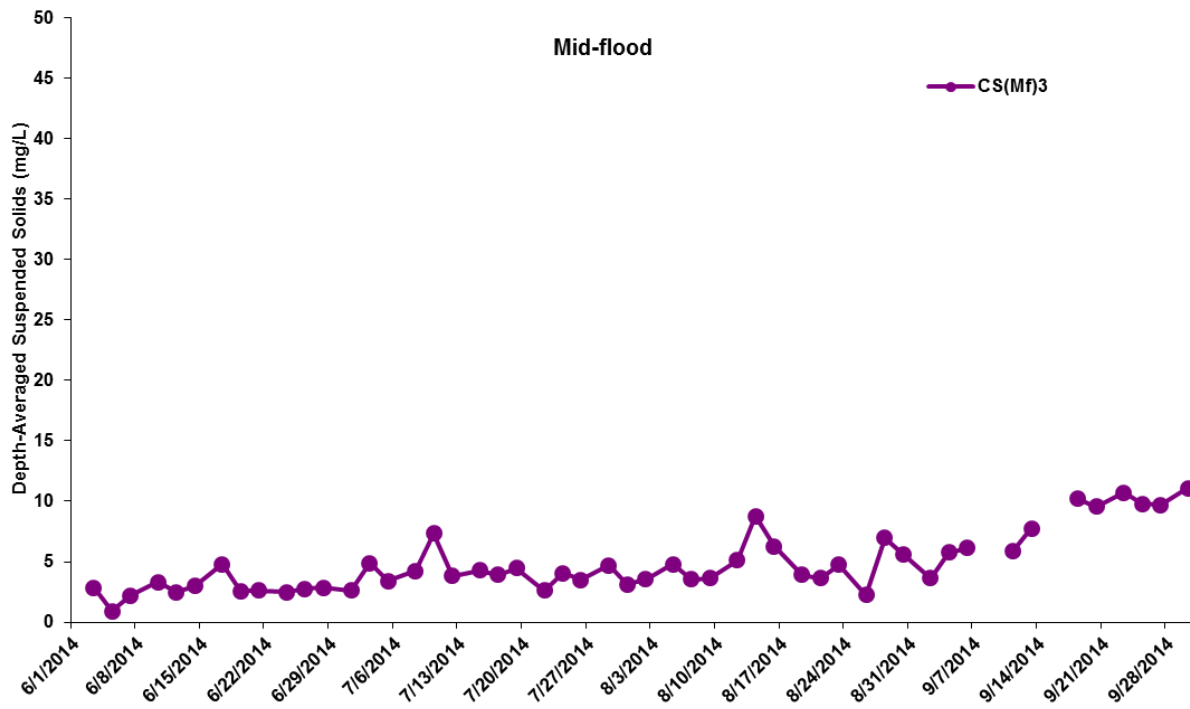


Figure J33 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 June and 30 September 2014 at CS(Mf)3 and CS(Mf)5.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



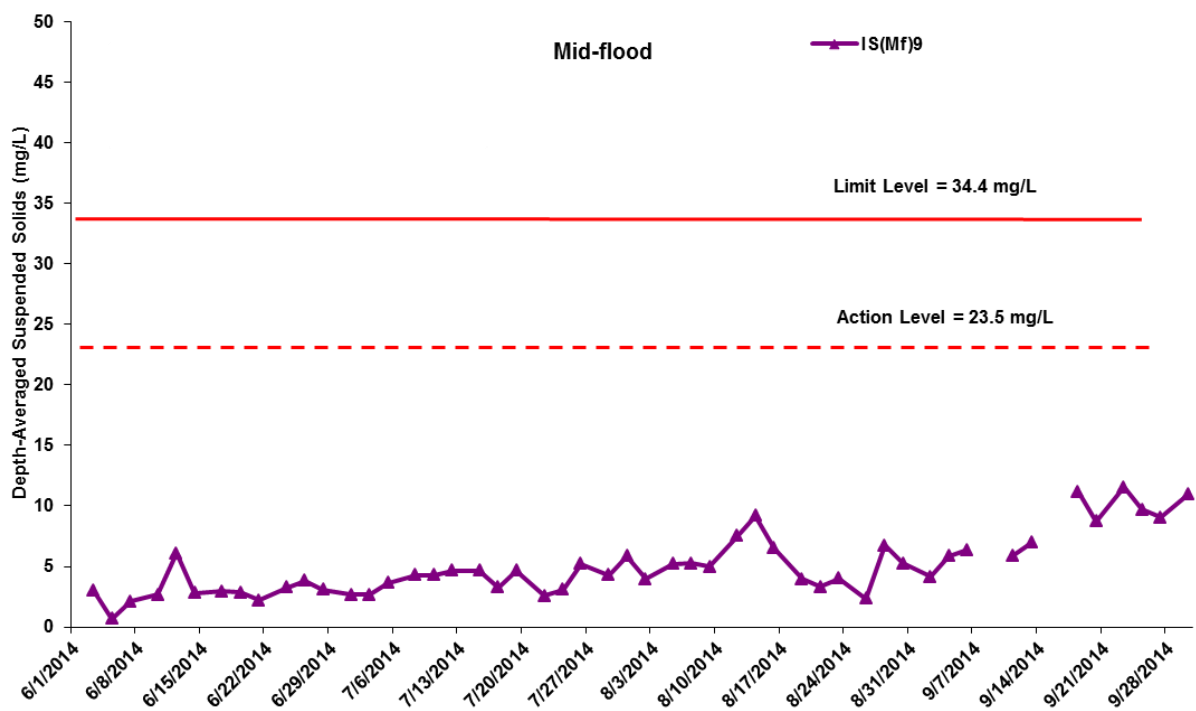
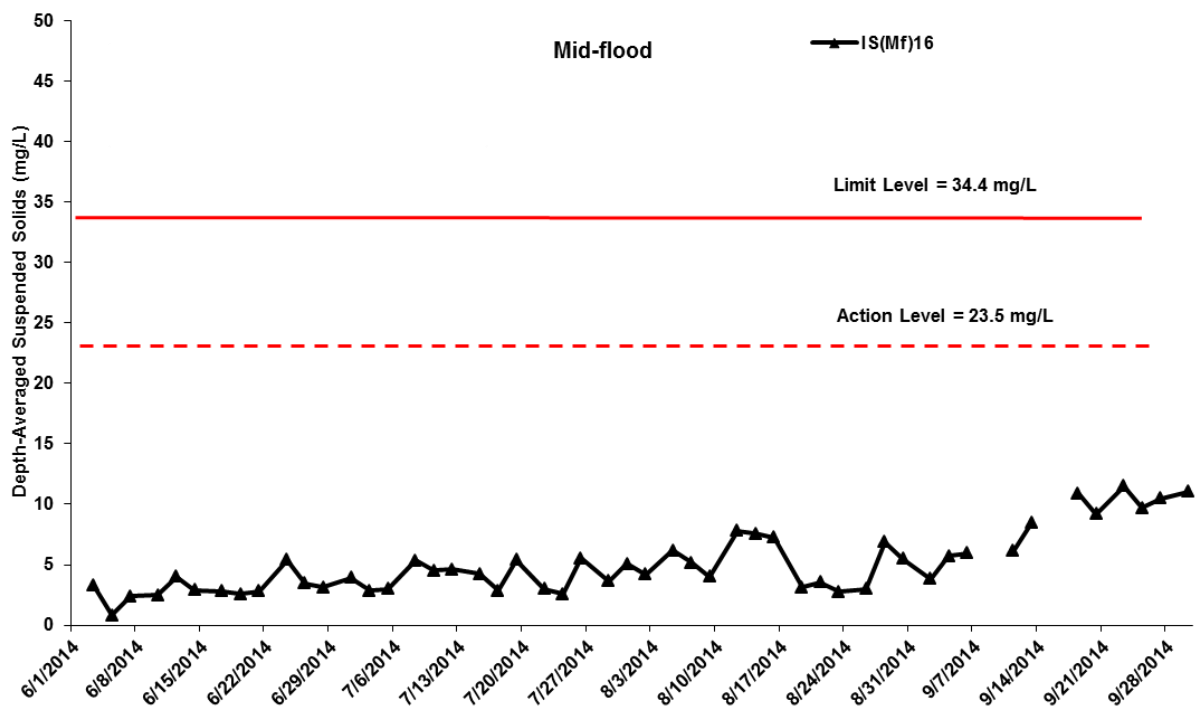


Figure J34 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 June and 30 September 2014 at IS(Mf)16 and IS(Mf)9.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



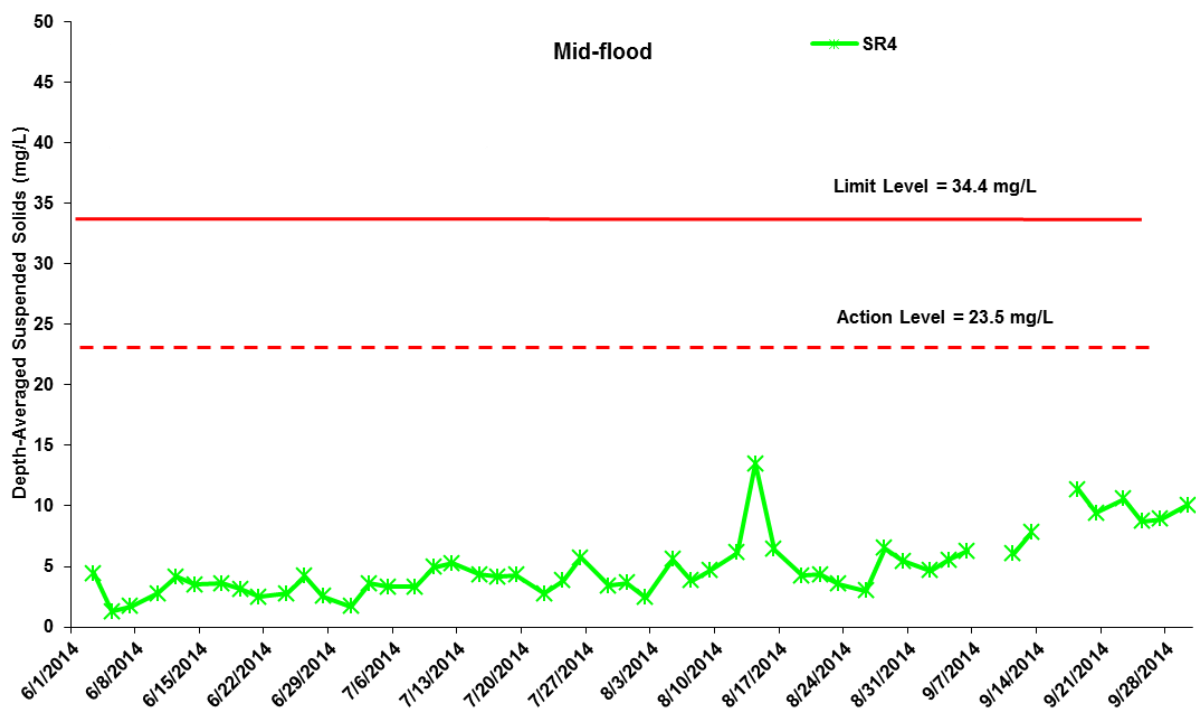
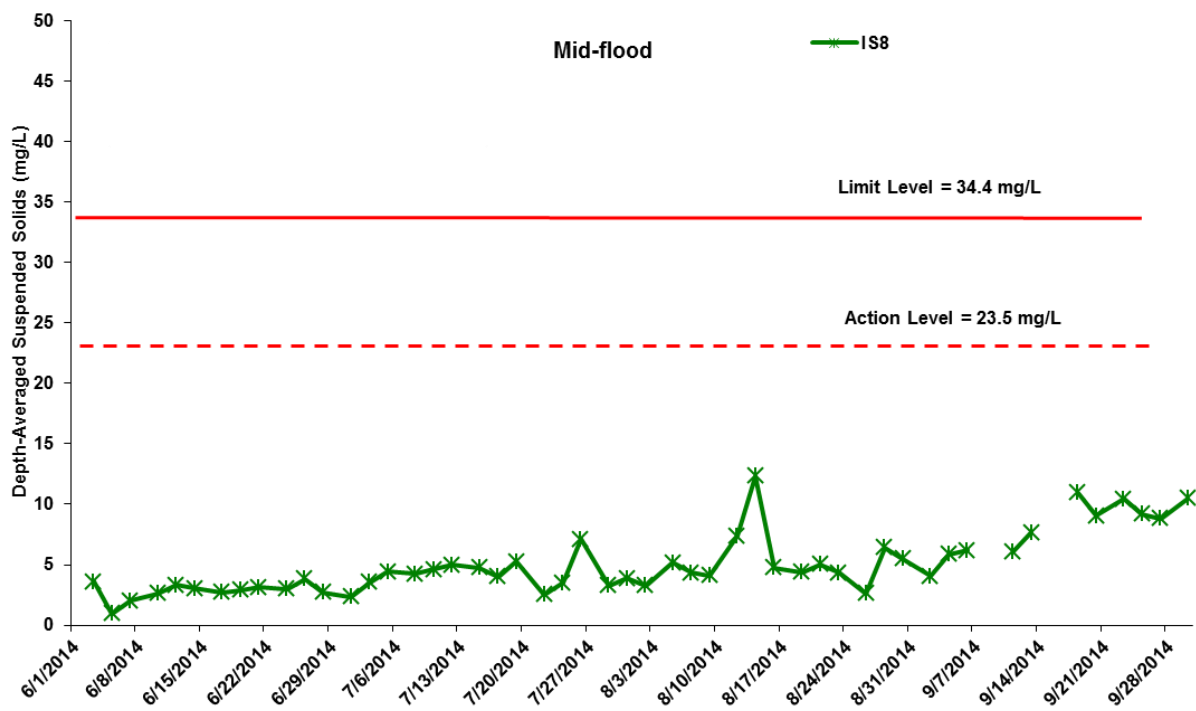


Figure J35 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 June and 30 September 2014 at IS8 and SR4.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



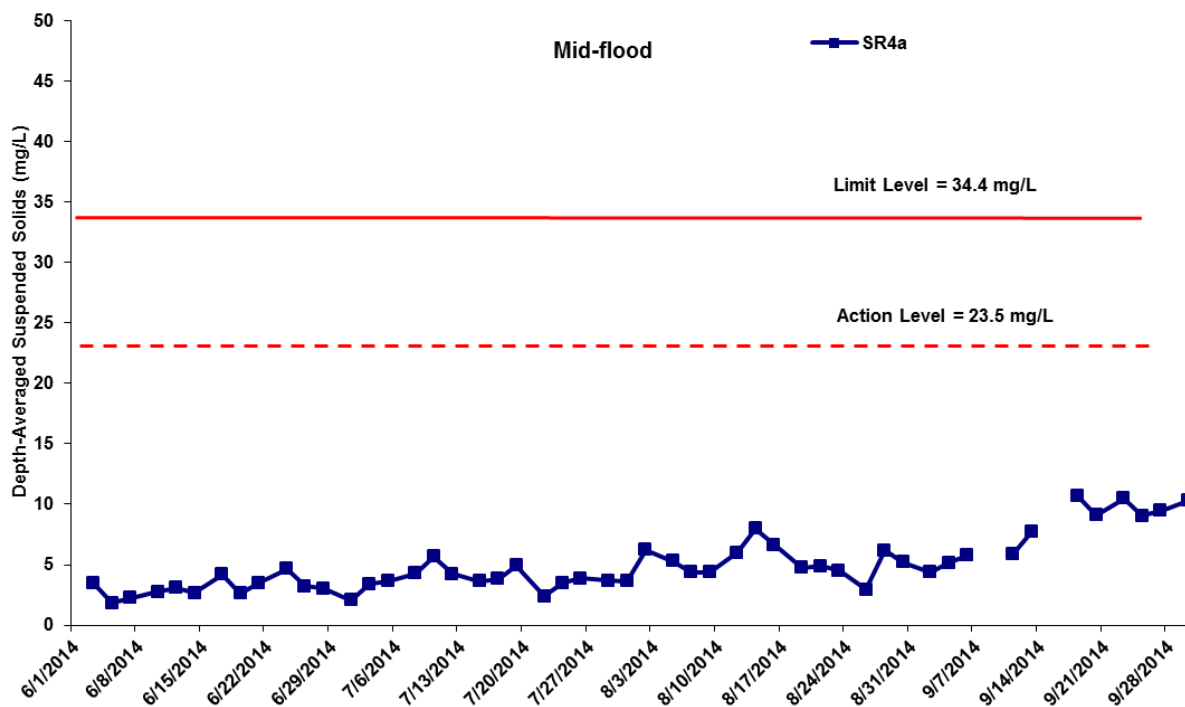


Figure J36 Impact Monitoring - Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 June and 30 September 2014 at SR4a.

(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 monitoring was conducted on 16 September 2014 due to adverse weather condition. Note no marine works was undertaken on 9 September 2014.)

**Environmental
Resources
Management**



Appendix K

Impact Dolphin Monitoring Survey Results

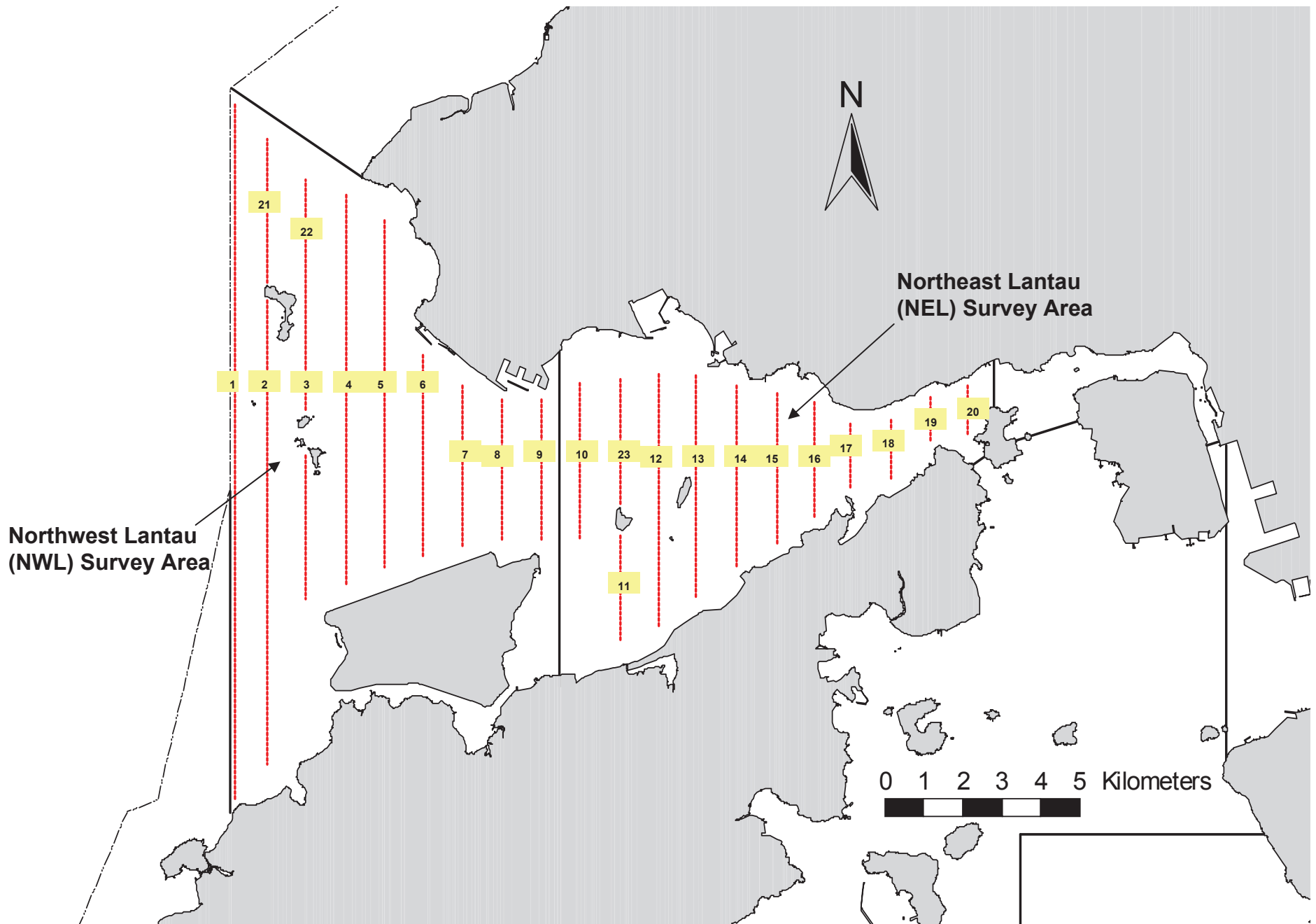


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas (from HKLR03 project)

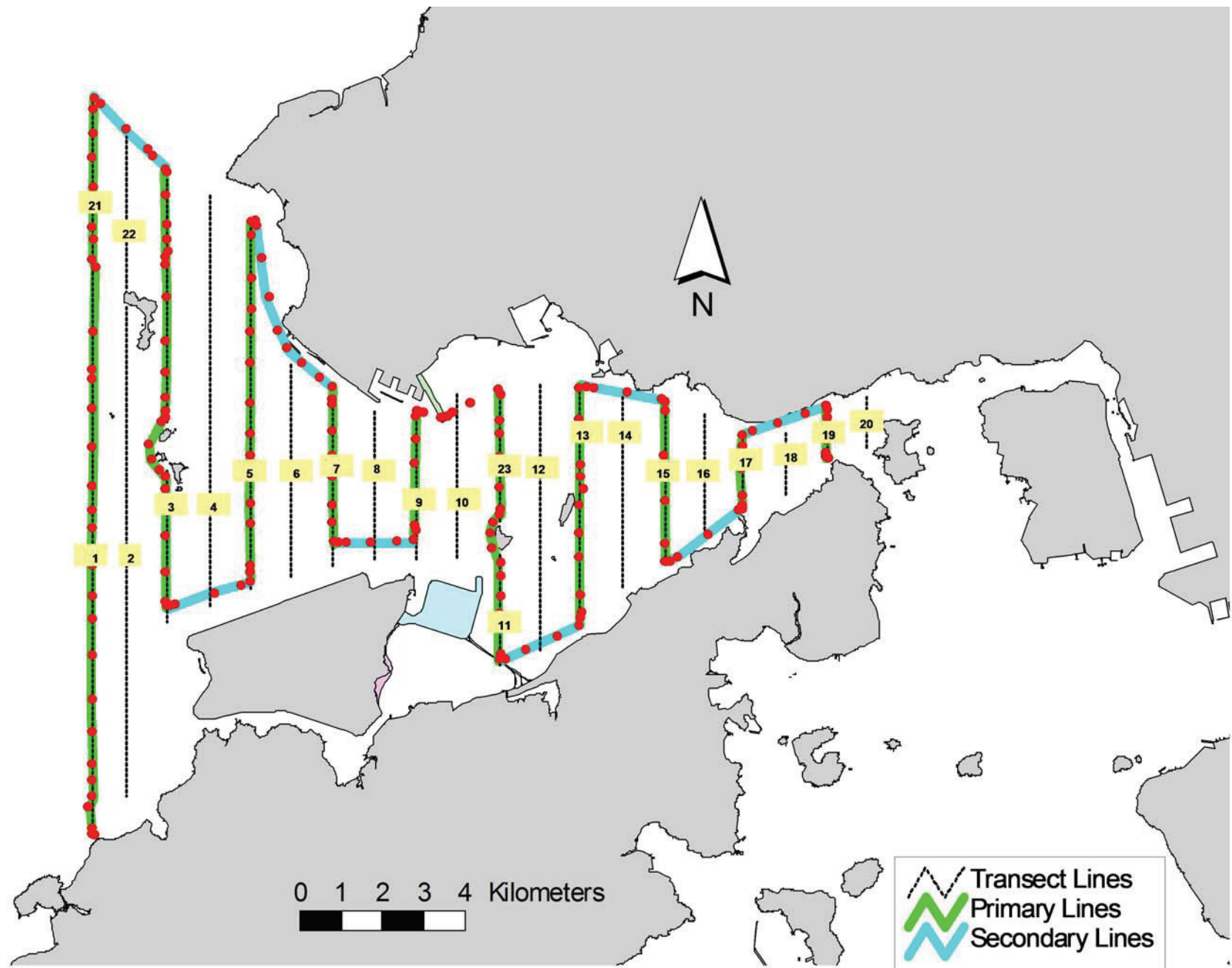


Figure 2. Survey Route on September 2nd, 2014 (from HKLR03 project)

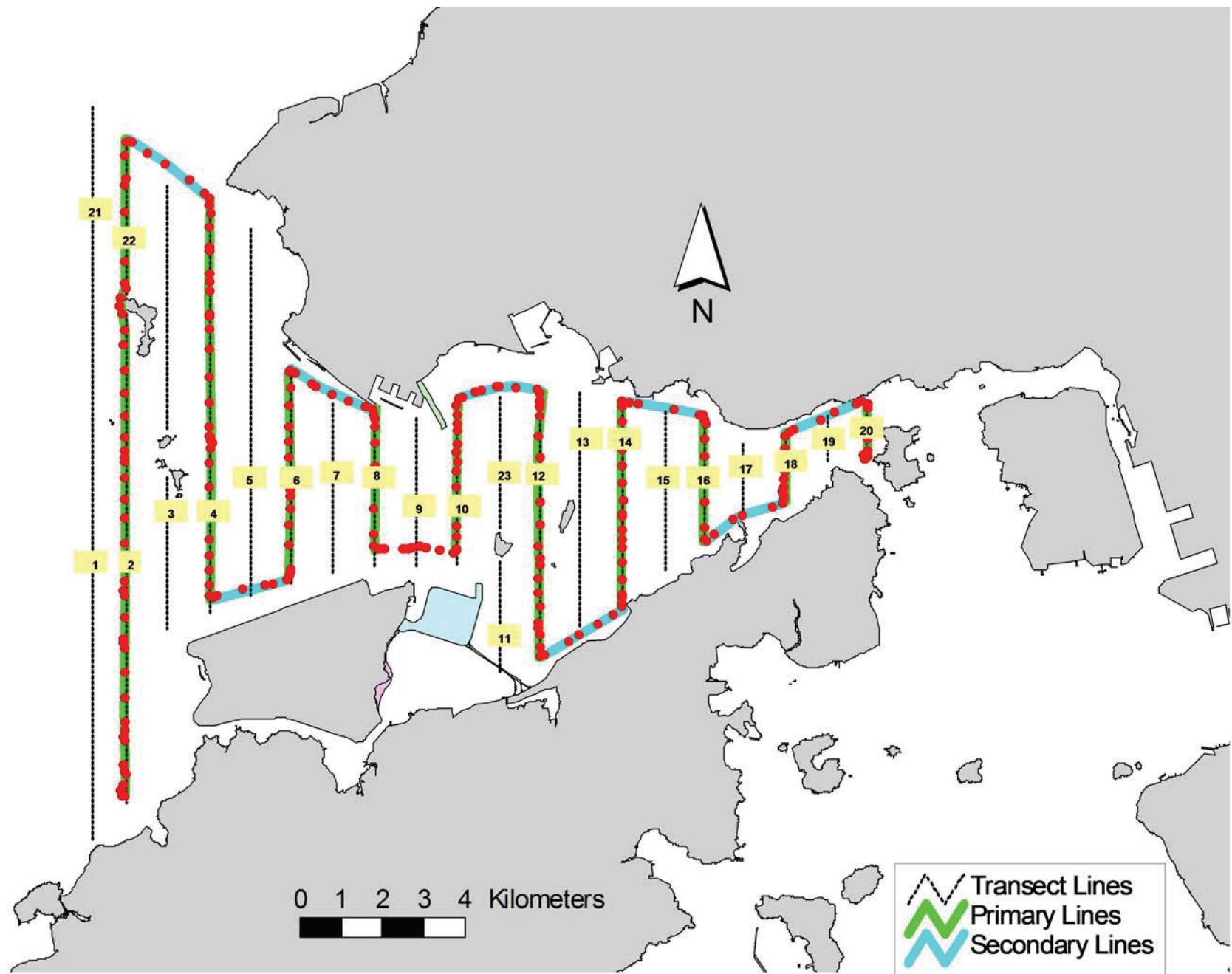


Figure 3. Survey Route on September 11th, 2014 (from HKLR03 project)

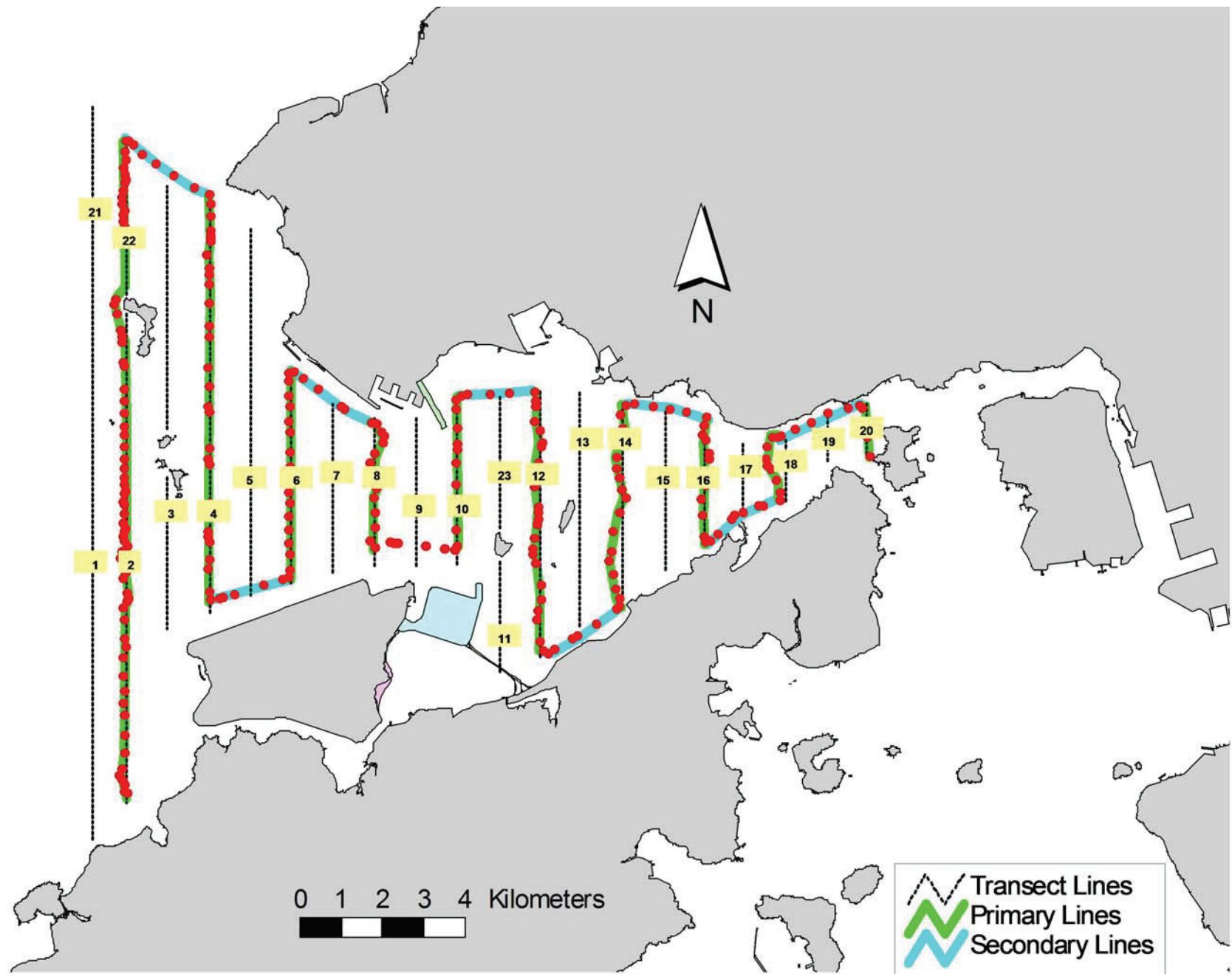


Figure 4. Survey Route on September 19th, 2014 (from HKLR03 project)

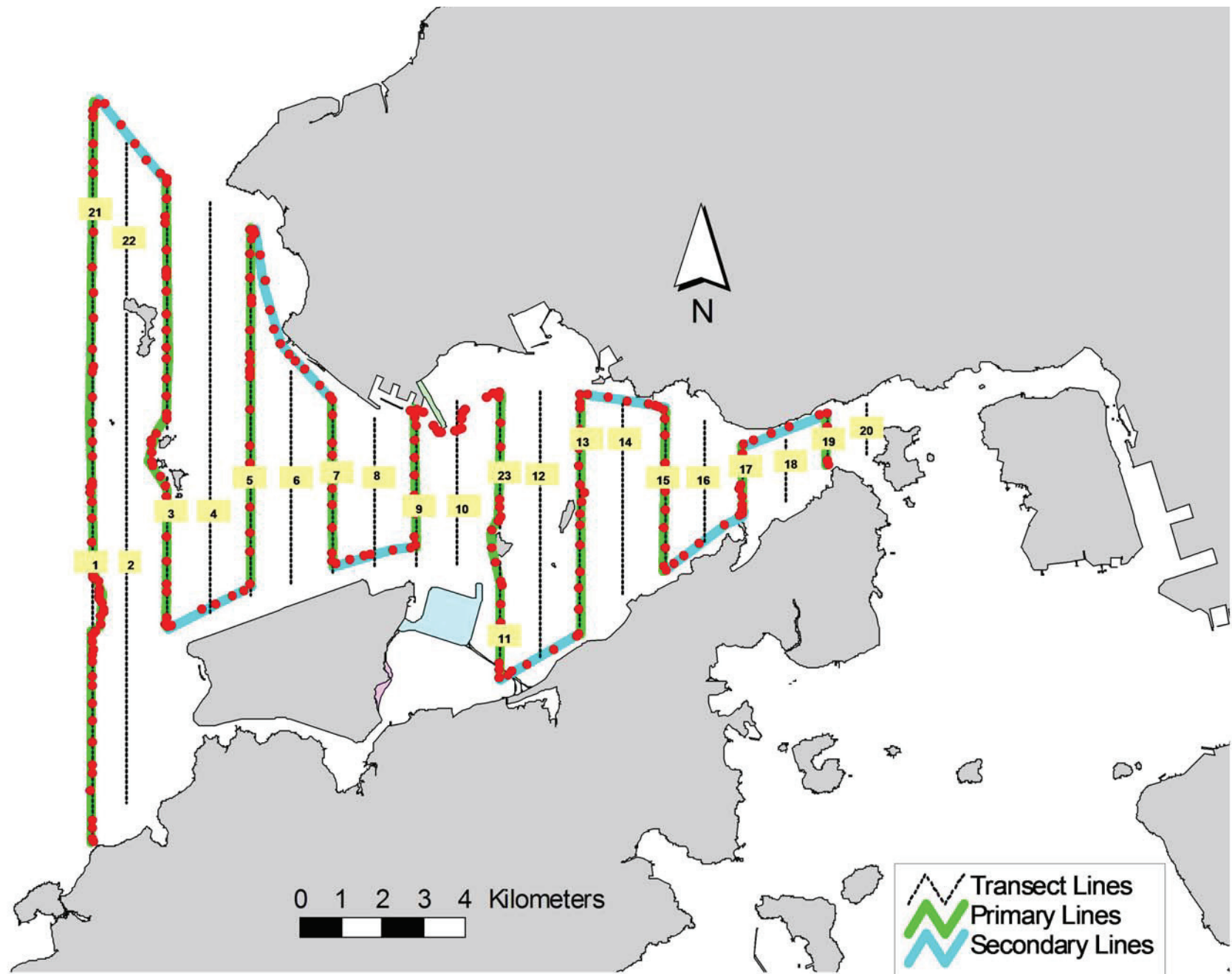


Figure 5. Survey Route on September 22nd, 2014 (from HKLR03 project)

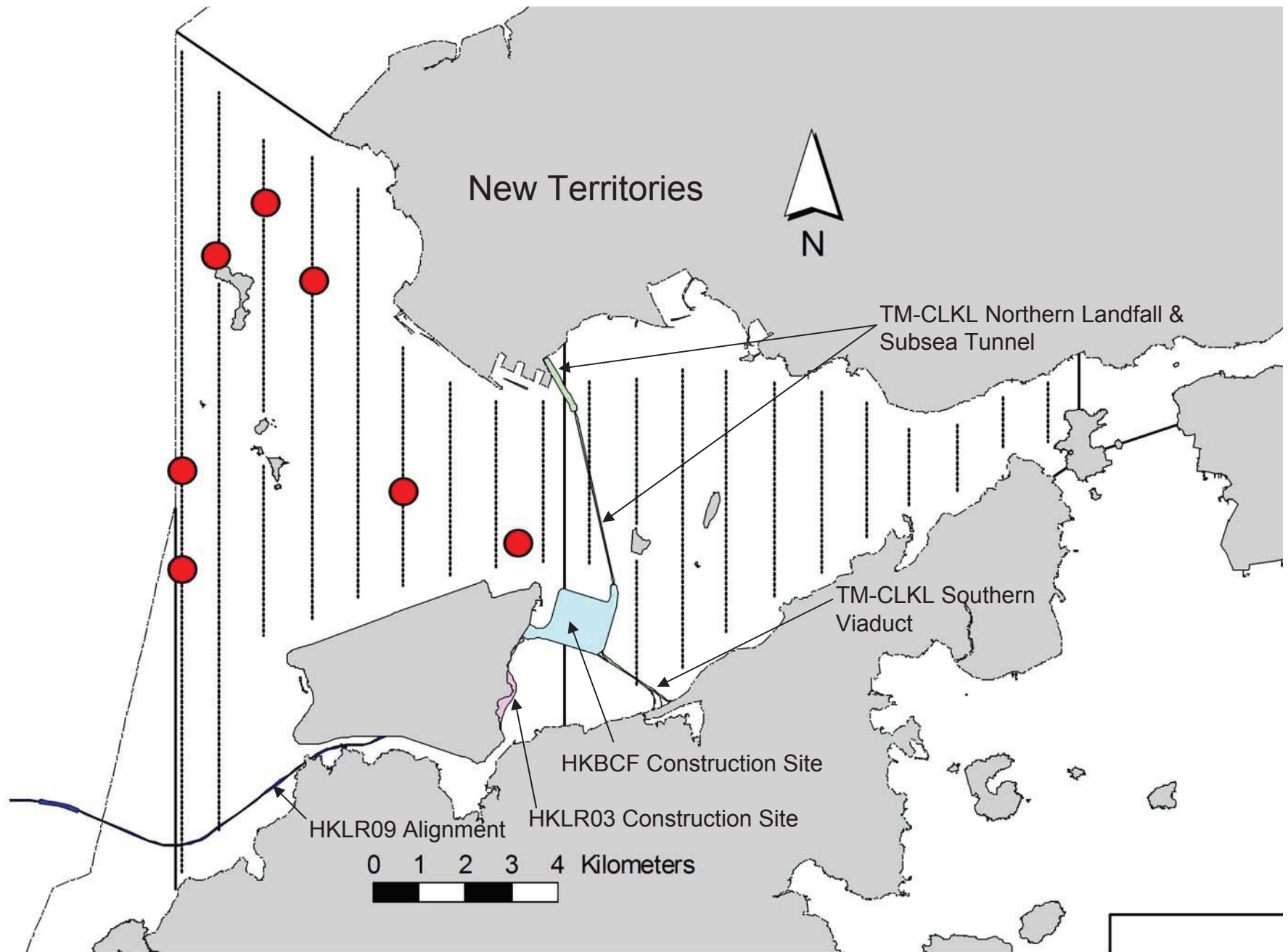


Figure 6. Distribution of Chinese White Dolphin Sightings During September 2014 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (September 2014)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
2-Sep-14	NW LANTAU	1	7.96	AUTUMN	STANDARD31516	HKLR	P
2-Sep-14	NW LANTAU	2	14.28	AUTUMN	STANDARD31516	HKLR	P
2-Sep-14	NW LANTAU	3	16.44	AUTUMN	STANDARD31516	HKLR	P
2-Sep-14	NW LANTAU	2	7.13	AUTUMN	STANDARD31516	HKLR	S
2-Sep-14	NW LANTAU	3	5.72	AUTUMN	STANDARD31516	HKLR	S
2-Sep-14	NE LANTAU	2	15.63	AUTUMN	STANDARD31516	HKLR	P
2-Sep-14	NE LANTAU	3	2.18	AUTUMN	STANDARD31516	HKLR	P
2-Sep-14	NE LANTAU	2	8.31	AUTUMN	STANDARD31516	HKLR	S
2-Sep-14	NE LANTAU	3	1.28	AUTUMN	STANDARD31516	HKLR	S
11-Sep-14	NW LANTAU	1	4.75	AUTUMN	STANDARD31516	HKLR	P
11-Sep-14	NW LANTAU	2	23.23	AUTUMN	STANDARD31516	HKLR	P
11-Sep-14	NW LANTAU	3	3.33	AUTUMN	STANDARD31516	HKLR	P
11-Sep-14	NW LANTAU	1	0.70	AUTUMN	STANDARD31516	HKLR	S
11-Sep-14	NW LANTAU	2	5.11	AUTUMN	STANDARD31516	HKLR	S
11-Sep-14	NW LANTAU	3	1.50	AUTUMN	STANDARD31516	HKLR	S
11-Sep-14	NE LANTAU	1	1.64	AUTUMN	STANDARD31516	HKLR	P
11-Sep-14	NE LANTAU	2	18.53	AUTUMN	STANDARD31516	HKLR	P
11-Sep-14	NE LANTAU	2	10.73	AUTUMN	STANDARD31516	HKLR	S
19-Sep-14	NW LANTAU	2	30.50	AUTUMN	STANDARD31516	HKLR	P
19-Sep-14	NW LANTAU	3	0.60	AUTUMN	STANDARD31516	HKLR	P
19-Sep-14	NW LANTAU	2	8.90	AUTUMN	STANDARD31516	HKLR	S
19-Sep-14	NW LANTAU	3	0.80	AUTUMN	STANDARD31516	HKLR	S
19-Sep-14	NE LANTAU	2	18.62	AUTUMN	STANDARD31516	HKLR	P
19-Sep-14	NE LANTAU	3	1.43	AUTUMN	STANDARD31516	HKLR	P
19-Sep-14	NE LANTAU	2	10.55	AUTUMN	STANDARD31516	HKLR	S
22-Sep-14	NE LANTAU	2	14.44	AUTUMN	STANDARD31516	HKLR	P
22-Sep-14	NE LANTAU	3	2.95	AUTUMN	STANDARD31516	HKLR	P
22-Sep-14	NE LANTAU	2	10.11	AUTUMN	STANDARD31516	HKLR	S
22-Sep-14	NW LANTAU	1	1.20	AUTUMN	STANDARD31516	HKLR	P
22-Sep-14	NW LANTAU	2	36.86	AUTUMN	STANDARD31516	HKLR	P
22-Sep-14	NW LANTAU	2	12.01	AUTUMN	STANDARD31516	HKLR	S
22-Sep-14	NW LANTAU	3	1.10	AUTUMN	STANDARD31516	HKLR	S

Appendix II. HKLR03 Chinese White Dolphin Sighting Database (September 2014)

(Abbreviations: 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
02-Sep-14	1	1106	3	NW LANTAU	1	201	ON	HKLR	827206	805396	AUTUMN	NONE	P
02-Sep-14	2	1215	5	NW LANTAU	2	562	ON	HKLR	828278	806459	AUTUMN	NONE	P
11-Sep-14	1	1132	6	NW LANTAU	2	374	ON	HKLR	826693	807517	AUTUMN	NONE	P
11-Sep-14	2	1215	6	NW LANTAU	2	1742	ON	HKLR	822381	809476	AUTUMN	NONE	P
19-Sep-14	1	1336	1	NW LANTAU	2	ND	OFF	HKLR	821325	811947	AUTUMN	NONE	N/A
22-Sep-14	1	1432	5	NW LANTAU	2	198	ON	HKLR	828289	806480	AUTUMN	NONE	P
22-Sep-14	2	1559	6	NW LANTAU	2	955	ON	HKLR	822811	804656	AUTUMN	NONE	P
22-Sep-14	3	1612	2	NW LANTAU	2	153	ON	HKLR	820785	804662	AUTUMN	NONE	P

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in September 2014

ID#	DATE	STG#	AREA
CH153	22/09/14	3	NW LANTAU
NL46	11/09/14	1	NW LANTAU
NL48	19/09/14	1	NW LANTAU
NL80	11/09/14	2	NW LANTAU
NL104	02/09/14	1	NW LANTAU
NL150	22/09/14	3	NW LANTAU
NL182	11/09/14	1	NW LANTAU
NL210	11/09/14	2	NW LANTAU
NL214	02/09/14	1	NW LANTAU
NL233	11/09/14	1	NW LANTAU
	22/09/14	1	NW LANTAU
NL236	22/09/14	3	NW LANTAU
NL301	11/09/14	2	NW LANTAU
NL302	11/09/14	2	NW LANTAU



Appendix IV. Photographs of Identified Individual Dolphins in September 2014 (HKLR03)



Appendix IV. (cont'd)

Appendix L

Event Action Plan

Appendix L1 *Event/ Action Plan for Air Quality*

EVENT	ACTION			
	ET ⁽¹⁾	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

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	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.	Check monitoring data submitted by ET and Contractor's working methods.	Confirm receipt of notification of non-compliance in writing; Notify Contractor.	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	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;	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.	Discuss with IEC on the proposed mitigation measures; Ensure mitigation measures are properly implemented; Assess the effectiveness of the implemented mitigation measures.	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	Repeat measurement on next day of exceedance to confirm findings; Identify source(s) of impact; Inform IEC, contractor, SOR and EPD;	Check monitoring data submitted by ET and Contractor's working method; Discuss with ET and Contractor on possible remedial actions;	Confirm receipt of notification of failure in writing; Discuss with IEC, ET and Contractor on the proposed mitigation measures;	Inform the SOR and confirm notification of the non-compliance in writing; Rectify unacceptable practice; Check all plant and equipment

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

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
<u>Action Level</u>				
With the numerical values presented in <i>Table 5.7</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</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	<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, 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), 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

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 2014 (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	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	0.033	0.011	0.003	-	0.030	-	-	-	-	22.380	-	10.240	-	-	-
Feb	4.716	0.010	0.031	-	0.010	4.674	-	-	-	10.670	-	0.780	-	-	-
Mar	2.559	0.009	0.240	-	0.221	2.098	-	-	0.275	12.390	-	46.050	-	-	-
Apr	1.051	0.000	0.020	-	0.118	0.914	-	-	-	87.650	-	15.760	-	-	-
May	2.008	-	0.010	-	1.546	0.451	0.386	0.267	0.055	98.030	-	8.460	0.126	-	-
Jun	5.318	0.025	0.030	2.473	0.357	2.457	0.338	-	-	77.290	-	25.340	0.140	-	-
SUB-TOTAL	15.685	0.055	0.334	2.473	2.283	10.595	0.724	0.267	0.055	0.275	308.410	-	106.630	0.266	-
Jul	6.303	0.129	0.020	-	4.654	1.629	0.847	0.252	0.051	87.810	-	27.370	0.126	-	-
Aug	4.136	0.003	0.265	1.142	2.441	0.288	-	0.131	0.033	98.220	-	21.680	0.126	0.475	-
Sep	8.037	0.213	0.175	-	7.722	0.140	0.400	0.073	0.059	238.01	-	34.190	0.161	-	-
Oct															
Nov															
Dec															
TOTAL	34.161	0.400	0.794	3.615	17.100	12.652	1.971	0.723	0.198	0.275	732.450	-	189.870	0.679	0.475

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.

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	5
	Limit	0	0

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 (August 2014)	0	0	0
Total No. received since project commencement	2	0	0