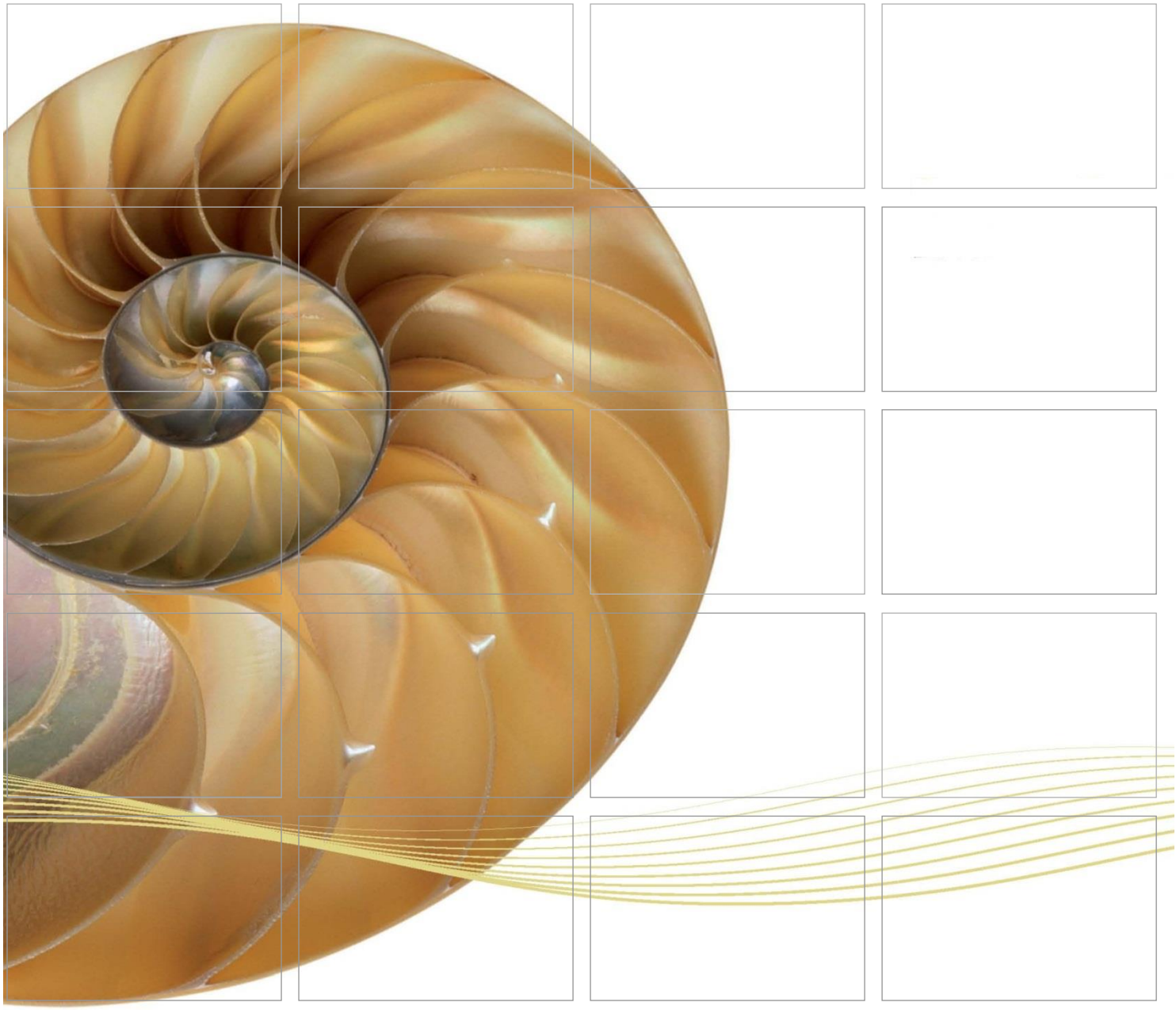
REPORT



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

Thirty-eighth Monthly EM&A Report

13 January 2017

Environmental Resources Management
16/F, Berkshire House
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The business of sustainability

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

Thirty-eighth Monthly EM&A Report

Environmental Resources Management

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Document Code: 0215660_38th Monthly EM&A_20170113.doc

Client: Gammon	Project No: 0215660
Summary: This document presents the Thirty-eighth Monthly EM&A Report for Tuen Mun – Chek Lap Kok Link – Southern Connection Viaduct Section.	Date: 13 January 2017 Approved by: *Mr Craig Reid* *Partner* Certified by: *Mr Jovy Tam* *ET Leader*

Revision	Description	By	Checked	Approved	Date
	Thirty-eighth Monthly EM&A Report	VAR	JT	CAR	13/01/17

Distribution

☐ Internal

☒ Public

☐ Confidential

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List of Appendices

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). Ramboll Environ Hong Kong Ltd. was employed by the HyD as the Independent Environmental Checker (IEC) and Environmental Project Office (ENPO) in accordance with *Environmental Permit No. EP-354/2009/A*. Further applications for variation of environmental permit (VEP), *EP-354/2009/B*, *EP-354/2009/C* and *EP-354/2009/D*, were granted on 28 January 2014, 10 December 2014 and 13 March 2015, respectively.

The southern landfall of TM-CLK Link lies alongside the Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) where a reclamation area is constructed by *Contract No. HY/2010/02* under *Environmental Permit No. EP-353/2009/K* and *EP-354/2009/D*. Upon the agreement and confirmation between the Supervising Officer Representatives and Contractors of *HY/2010/02* and *HY/2012/07* in September 2015, part of the reclamation area for southern landfall under *EP-353/2009/K* and *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07*. Another part of the southern landfall area under *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07* after completion of reclamation works by *Contract No. HY/2010/02* in June 2016.

The construction phase of the Contract commenced on 31 October 2013 and will be tentatively 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 Thirty-eighth Monthly EM&A report presenting the EM&A works carried out during the period from 1 to 31 December 2016 for the Southern Connection Viaduct Section in accordance with the Updated EM&A Manual of the TM-CLK Link Project. As informed by the Contractor, major activities in the reporting period included:

Marine Works

- Uninstallation of marine piling platform;
- Pier construction;
- Launching gantry operation; and

- Installation of deck segment and pier head segment.

Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

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	14 sessions
Impact Dolphin Monitoring	2 sessions
Joint Environmental Site Inspection	4 sessions

Breaches of Action and Limit Levels for Air Quality

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

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 Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) 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, in which comparison on distribution, group size and encounter rates of dolphins between the quarterly impact monitoring period and baseline monitoring period will be made.

Daily marine mammal exclusion zone monitoring was undertaken during the period of marine works under this Contract. No sighting of the Chinese White Dolphin was recorded in December 2016 during the exclusion zone monitoring.

Environmental Complaints, Non-compliance & Summons

There was one (1) complaint received from EPD on 13 December 2016 regarding hammering noise nuisance generated during midnights in the reporting period. Upon investigation, the complaint is considered not related to this Project.

There was no notification of summons or successful prosecution recorded in the reporting period.

Reporting Change

There was no reporting change in the reporting period.

Upcoming Works for the Next Reporting Period

Works to be undertaken in the next monitoring period of January 2017 include the following:

Marine Works

- Uninstallation of marine piling platform;
- Pier construction;
- Launching gantry operation; and
- Installation of deck segment and pier head segment.

Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

F**uture Key Issues**

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of January 2017 are mainly associated with dust, noise, marine water quality, marine ecology and waste management issues.

1 INTRODUCTION

1.1 BACKGROUND

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

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

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

The southern landfall of TM-CLK Link lies alongside the Hong Kong - Zhuhai - Macao Bridge Hong Kong Boundary Crossing Facilities (HKBCF) where a reclamation area is constructed by *Contract No. HY/2010/02* under *Environmental Permit No. EP-353/2009/K* and *EP-354/2009/D*. Upon the agreement and confirmation between the Supervising Officer Representatives and Contractors of *HY/2010/02* and *HY/2012/07* in September 2015, part of the reclamation area for southern landfall under *EP-353/2009/K* and *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07*. Another part of the

southern landfall area under *EP-354/2009/D* was handed-over to *Contract No. HY/2012/07* after completion of reclamation works by *Contract No. HY/2010/02* in June 2016.

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

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

1.2 SCOPE OF REPORT

This is the Thirty-eighth 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 December 2016.

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.

大小磨刀
THE BROTHERS

鹿頸灣
LUK KENG BAY

鹿頸村
Luk Keng Tsuen

陰仔灣
YAM TSAI WAN

欣澳灣
YAN O WAN

陰仔
Yam Tsai

打棚埔
Ta Pang Po

欣澳篤
YAN O TUK

Site Office WA5

匙羹洲
TSZ KAN CHAU

東葉坑
Tung Yip Hang

深水角
Sham Shui Kok

四白坳
SZE PAK AU

犁壁山
LAI PIK SHAN

三白坳
SAM PAK AU

大輋峒
TAI CHE TUNG

濾水廠
Water Treatment Works

污水處理廠
Sewage Treatment Works

小蠔灣
SIU HO WAN

三白
Sam Pak

三白灣
SAM PAK WAN

牛頭灣
NGAU TAU WAN

鐵路車廠
Railway Depot

二白坳
YI PAK AU

時峰
Neo Horizon

尚堤
Chianti

津堤
Amalfi

海澄湖畔
Siena

頤峰

大白灣
DISCOVERY BAY
(TAI PAK WAN)

榴花峒
LAU FA TUNG

二白灣
YI PAK WAN

Greenvale Village

明翠台
Parkridge Village

蟹鉗咀
Hai Kam Tsui

蔚陽
Headland Village

愉景灣
Discovery Bay

老虎頭
LO FU TAU

碧濤

畔峰
Midvale Village

Beach Village

大白咀
Tai Pak Tsui

菜園灣
TSOI YUEN WAN

海堤居
La Costa

寶峰
Parkvale Village

大蠔灣
TAI HO WAN

白芒
Pak Mong

大蠔

海蝶居
La Vista

Hillgrove Village

海鄰居
La Serene

N

Kilometers
0 0.5 1

Key
Site Boundary

Figure 1.1

General Layout Plan of the Project

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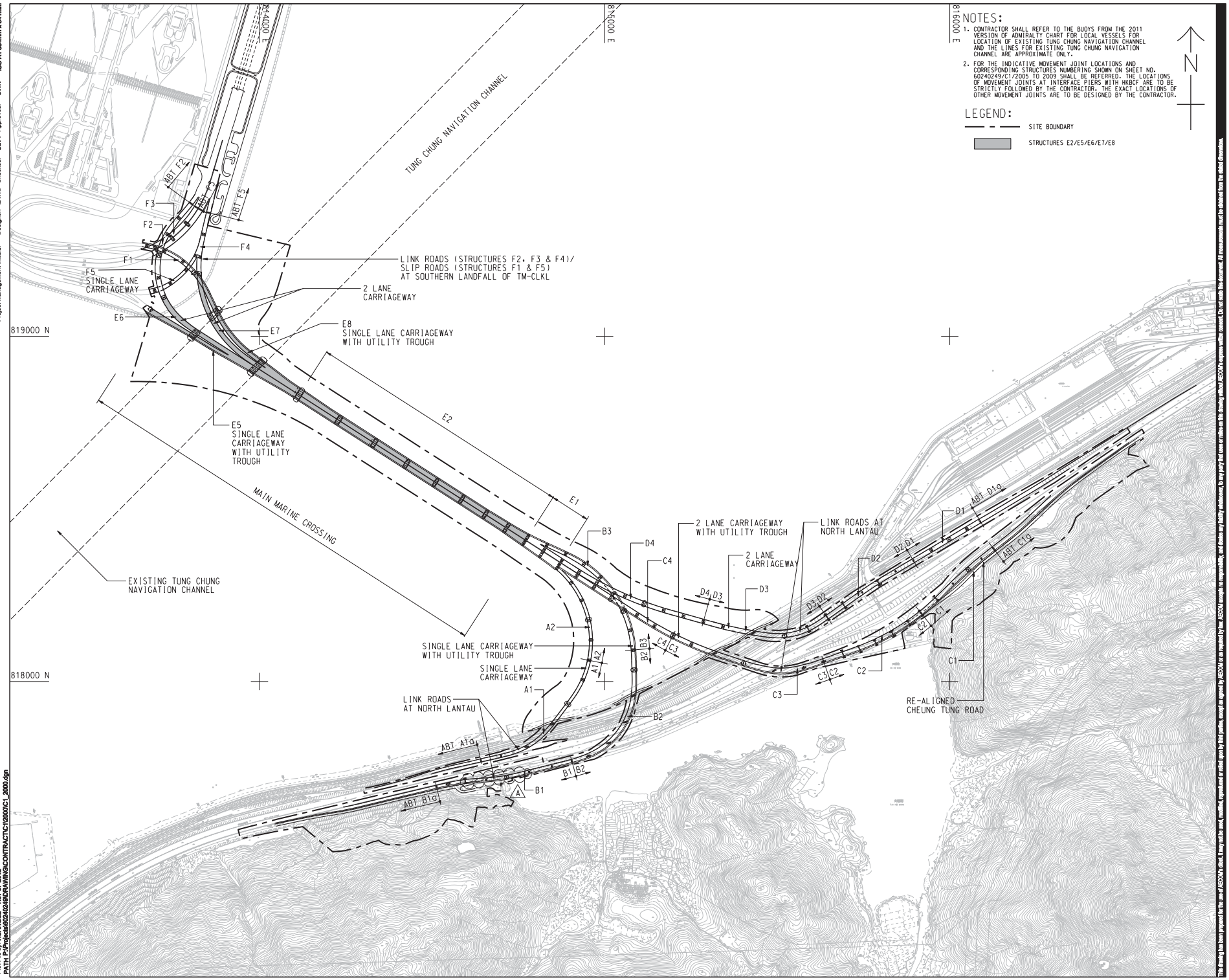
Environmental Resources Management

ERM



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
港珠澳大橋香港工程管理處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

Figure 1.2a

ISSUE/REVISION

IR	DATE	DESCRIPTION	CHK.
A	NOV. 12	TENDER ADDENDUM NO. 1	CWN
-	OCT. 12	TENDER DRAWING	CWN

STATUS

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DIMENSION UNIT: METRES

KEY PLAN

PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
SOUTHERN CONNECTION GENERAL LAYOUT PLAN

SHEET NUMBER
60240249/C1/2000A

Project Management Initials: Designer: LKWB Checked: SLYY Approved: CWN ISO A1 594mm x 841mm CWN

Plot File by: HUANGC2 Nov-07-2012
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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

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1 : 1000

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C	SUBMISSION	RC	09/13				

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Client: 路政署 HIGHWAYS DEPARTMENT, 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 1.2b**

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

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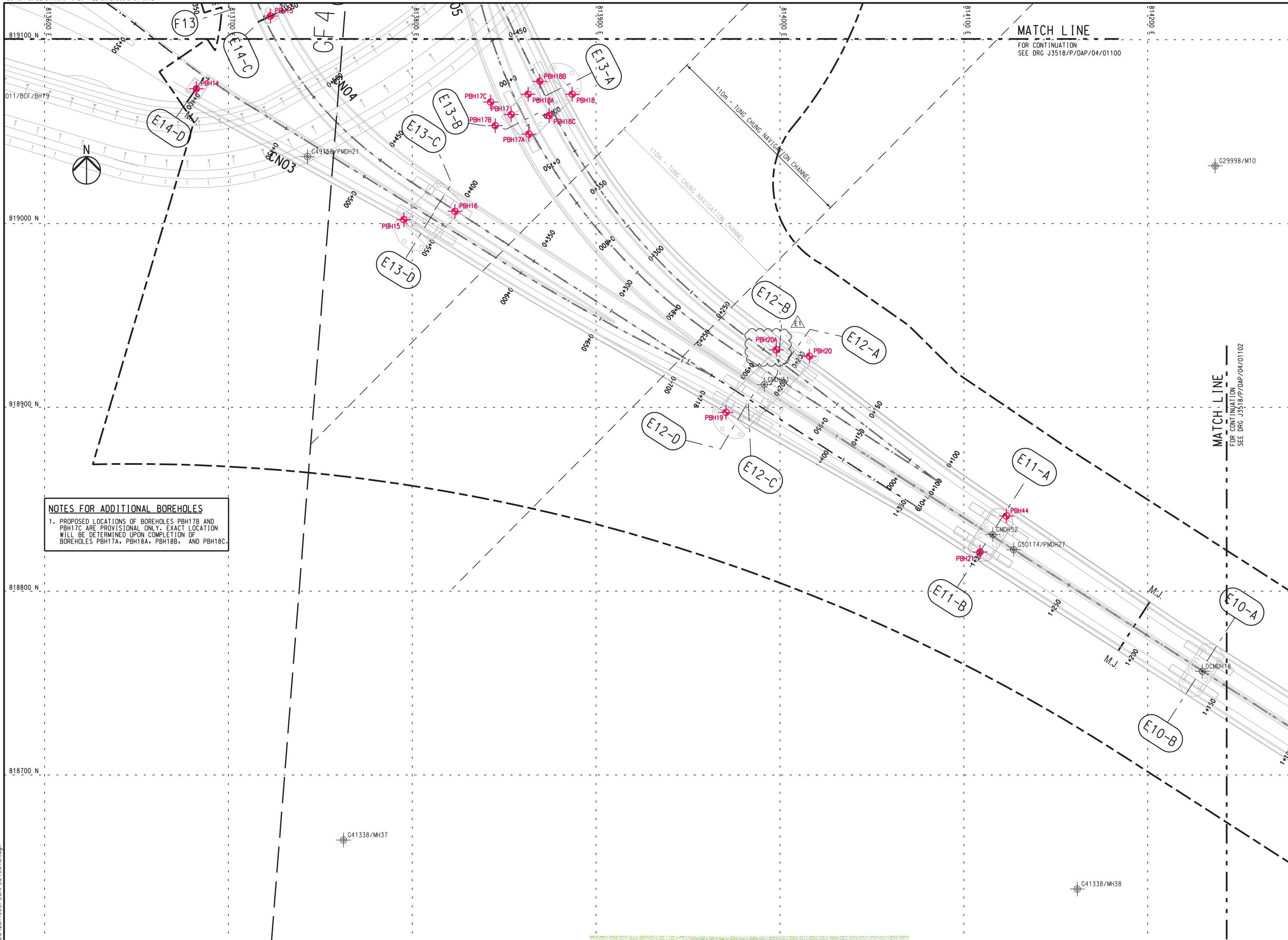
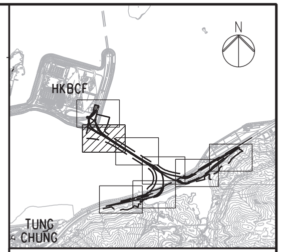


NOTES FOR ADDITIONAL BOREHOLES

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.



KEY PLAN

NOTES

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- GF1 [symbol] FAULT

EXISTING G.I.STATIONS :

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- [symbol] BOREHOLE BY GCL CONTRACT HY/2012/04
- [symbol] BOREHOLE BY GCL CONTRACT NL8/97
- [symbol] BOREHOLE BY GCL CONTRACT HY/2009/23
- [symbol] TRIAL PIT BY GCL CONTRACT HY/2012/04
- [symbol] SLOPE STRIPPING BY GCL CONTRACT HY/2012/04

PROPOSED G.I.STATIONS :

- PBH01 PROPOSED BOREHOLE
- TP01 PROPOSED TRIAL PIT
- CH01 PROPOSED COREHOLE
- SS01 SS02 PROPOSED SLOPE STRIPPING

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

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Client: 路政署 HIGHWAYS DEPARTMENT
港珠澳大橋香港工程管理處
Hong Kong - Zhuhai - Macao Bridge
Hong Kong Project Management Office

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 1.2c**

Drawing no. J3518/P/OAP/04/01101 | Rev. E1

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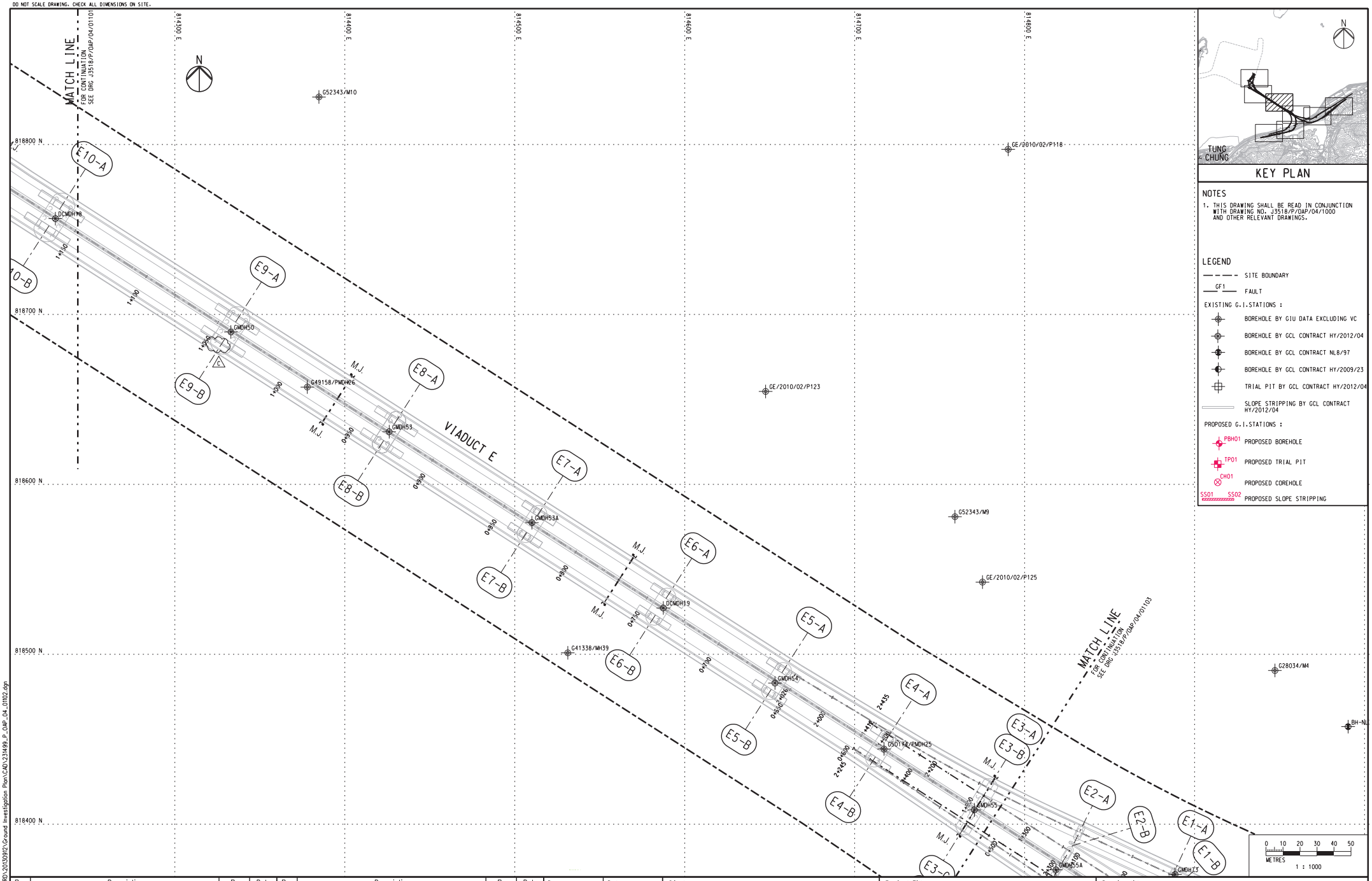

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Client: 路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 Hong Kong-Zhuhai-Macao Bridge Hong Kong Project Management Office

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

Supervising Officer: AECOM
Contractor: Gammon
Originator: ARUP

Drawing title: **Figure 1.2d**

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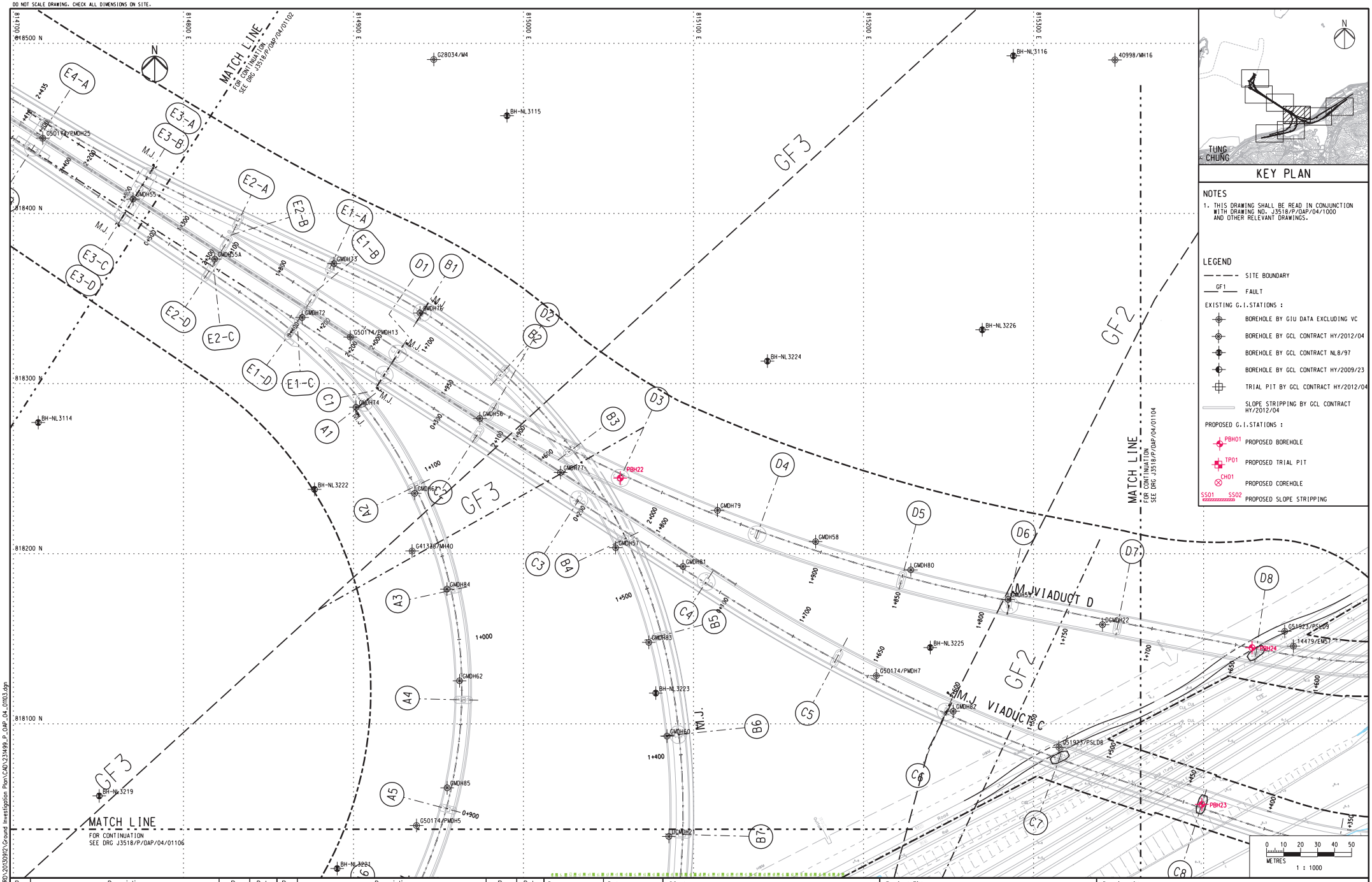

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Client: 路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

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

Supervising Officer: AECOM
Contractor: Gammon
Originator: ARUP

Drawing title: **Figure 1.2e**

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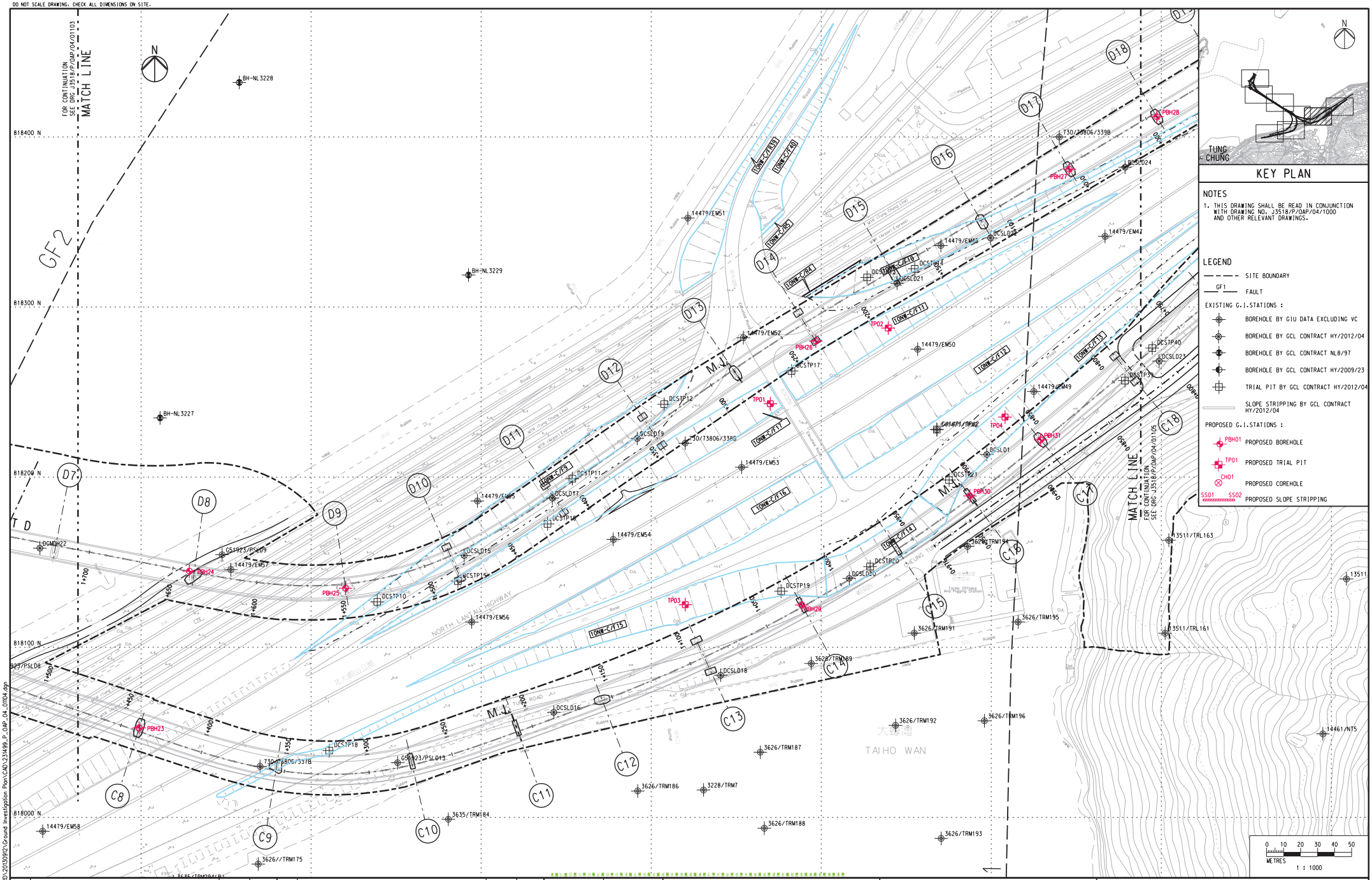

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Approved	DOP
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Client: 路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

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

Supervising Officer: AECOM

Contractor: Gammon

Originator: ARUP

Drawing title: **Figure 1.2f**

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

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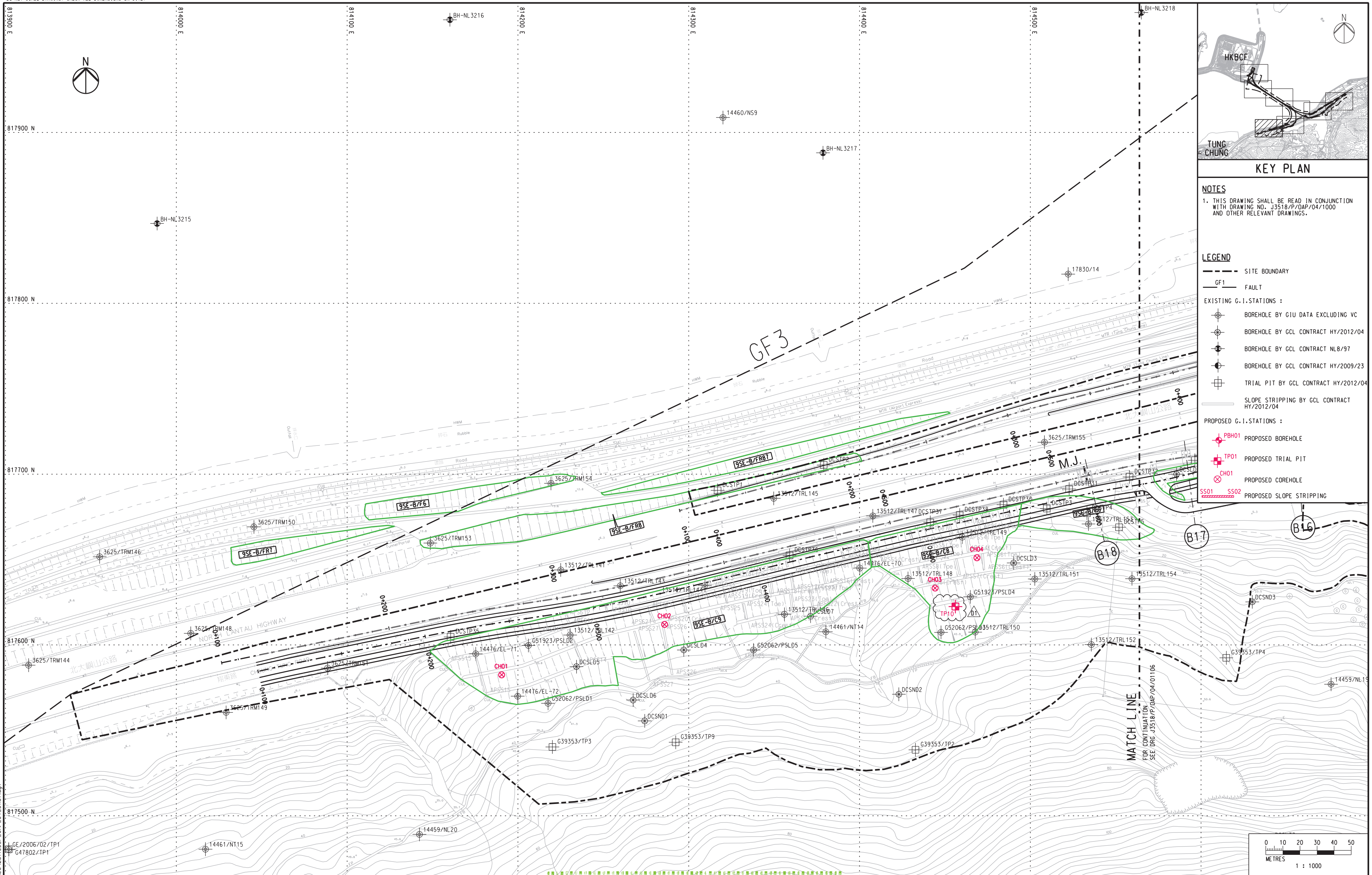

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C	SUBMISSION	RC	09/13				
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Drawn: RL | Date: 07/13
Checked: DS | Approved: DOP
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Client: 路政署 HIGHWAYS DEPARTMENT
港珠澳大橋香港工程管理處
Hong Kong - Zhuhai - 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 1.2g

Drawing no. J3518/P/OAP/04/01107 Rev. D1

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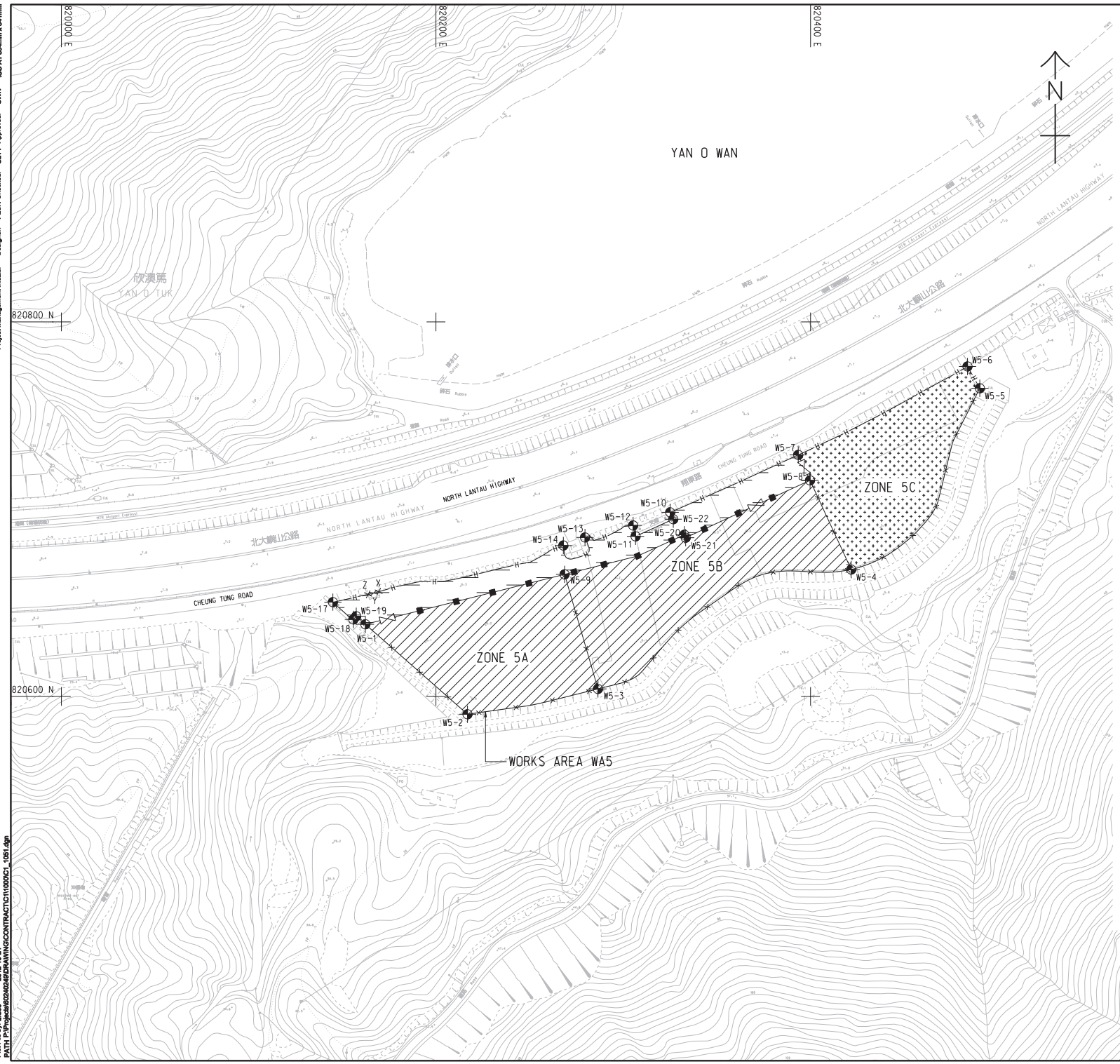

NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/1000.
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. TIS 619. 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. H6110 AND H6111 FOR DETAILS OF HOARDING.
5. REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NOS. H6121 AND H6122 FOR DETAILS OF CHAIN LINK FENCE.
6. REFER TO HIGHWAYS DEPARTMENT STANDARD DRAWING NO. H6121 FOR DETAILS OF GATE.
7. 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.
8. THE LOCATION AND WIDTH OF GATE SHOWN ARE INDICATIVE ONLY AND SHALL BE CONFIRMED BY THE SUPERVISING OFFICER.
9. 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.
10. THE TENTATIVE OCCUPATION PERIOD SHALL BE REFERRED TO EMPLOYER'S REQUIREMENTS PART 2 AND PART 14 SECTION 1 CLAUSE 1.45A.
11. THE WORKS AREAS SHOWN ON THIS DRAWING ARE TO BE SHARE-USED AMONG THE CONTRACTS OF TM-CLKL RELATED CONTRACTS.THE AREAS HATCHED WITH ▨ ARE TENTATIVELY ALLOCATED FOR THE USE BY THIS CONTRACT.
12. 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.
- H — 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 WA5

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

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

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

CLIENT
HIGHWAYS DEPARTMENT
路政署
Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

VR	DATE	DESCRIPTION	CHK.
-	OCT. 12	TENDER DRAWING	CWN

STATUS

SCALE: A1 1 : 1000
DIMENSION UNIT: METRES

KEY PLAN

Figure 1.2h

PROJECT NO.: 60240249
CONTRACT NO.: HY/2012/07

SHEET TITLE
WORKS AREA AND HOARDING PLAN

SHEET 1 OF 2

SHEET NUMBER
60240249/C1/1051

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: LIUJ3 2012-10-24
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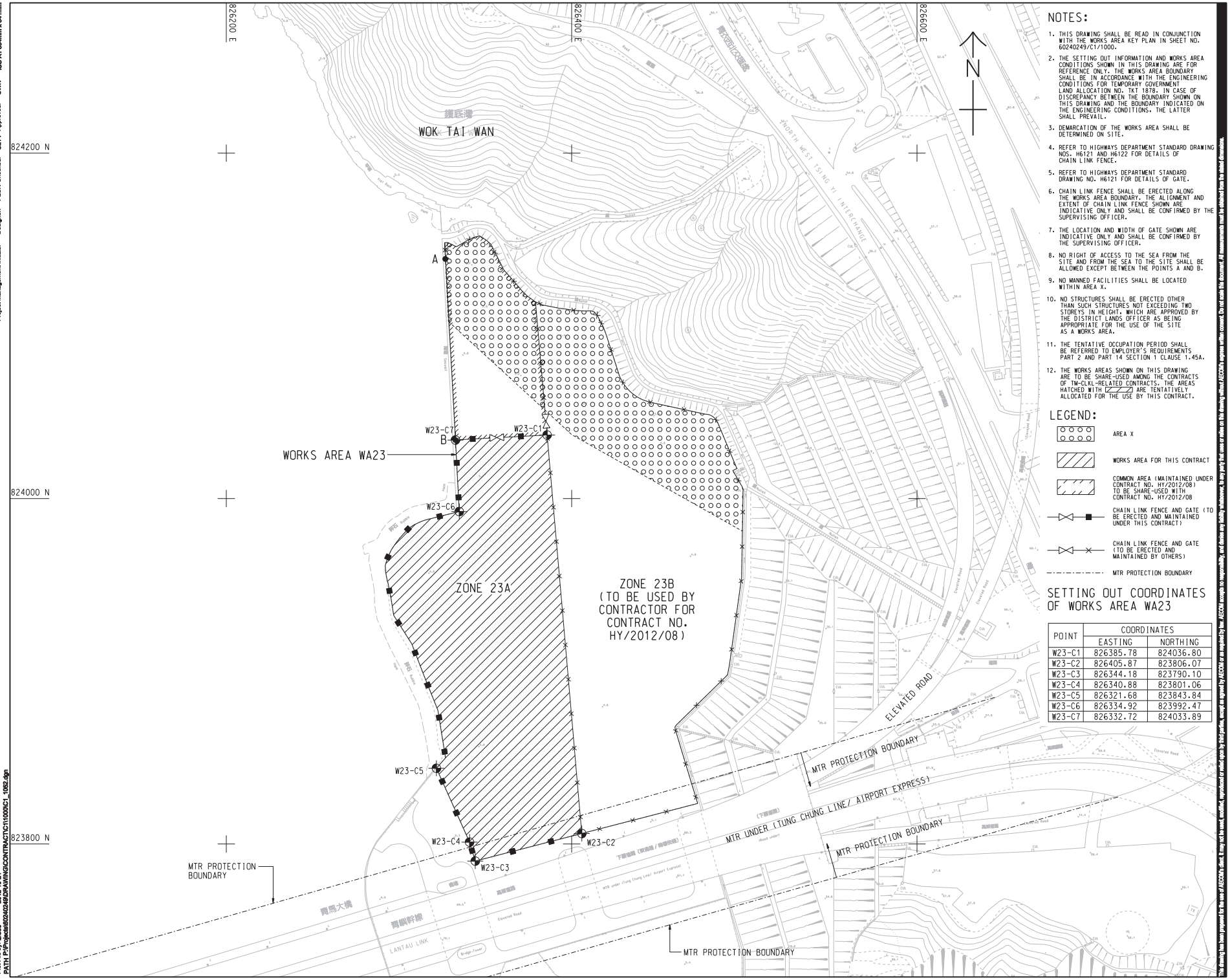


NOTES:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/1000.
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 1878. 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 SHARE-USED AMONG THE CONTRACTS OF TM-CLKL-RELATED CONTRACTS. THE AREAS HATCHED WITH ▨ ARE TENTATIVELY ALLOCATED FOR THE USE BY THIS CONTRACT.

LEGEND:

- AREA X
- WORKS AREA FOR THIS CONTRACT
- COMMON AREA (MAINTAINED UNDER CONTRACT NO. HY/2012/08) TO BE SHARE-USED WITH CONTRACT NO. HY/2012/08
- CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED UNDER THIS CONTRACT)
- CHAIN LINK FENCE AND GATE (TO BE ERECTED AND MAINTAINED BY OTHERS)
- 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	826334.92	823992.47
W23-C7	826332.72	824033.89

AECOM

PROJECT
TUEN MUN - CHEK LAP KOK LINK

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

CLIENT
HIGHWAYS DEPARTMENT
Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

CONSULTANT
AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS

ISSUE/REVISION

VR	DATE	DESCRIPTION	CHK.
-	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

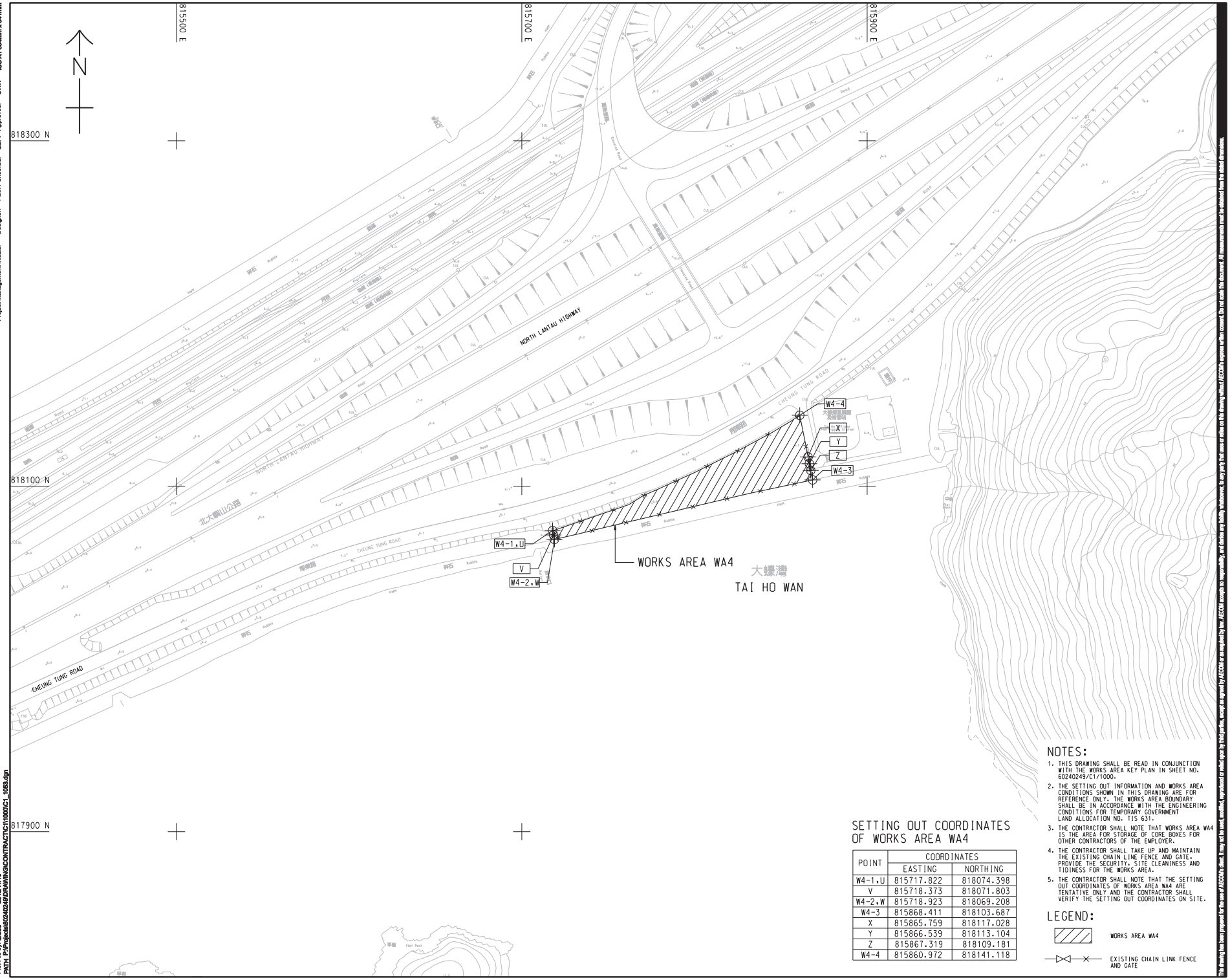
SHEET TITLE
WORKS AREA AND HOARDING PLAN

SHEET 2 OF 2

SHEET NUMBER
60240249/C1/1052

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: LIUJ3 2012-10-24
PATH: P:\Projects\60240249\DRAWING\CONTRACT\C1\1000\C1_1052.dgn



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:

1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH THE WORKS AREA KEY PLAN IN SHEET NO. 60240249/C1/1000.
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. TIS 631.
3. THE CONTRACTOR SHALL NOTE THAT WORKS AREA WA4 IS THE AREA FOR STORAGE OF CORE BOXES FOR OTHER CONTRACTORS OF THE EMPLOYER.
4. THE CONTRACTOR SHALL TAKE UP AND MAINTAIN THE EXISTING CHAIN LINE FENCE AND GATE. PROVIDE THE SECURITY, SITE CLEANINESS AND TIDINESS FOR THE WORKS AREA.
5. 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
HIGHWAYS DEPARTMENT
Hong Kong - Zhuhai - Macao Bridge Hong Kong Project Management Office

CONSULTANT
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Figure 1.2j

ISSUE/REVISION

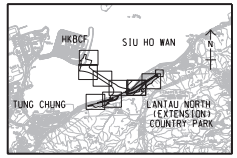
VR	DATE	DESCRIPTION	CHK.
-	NOV. 12	TENDER ADDENDUM NO. 1	CWN

STATUS

SCALE: A1 1 : 1000

DIMENSION UNIT: METRES

KEY PLAN



PROJECT NO.: 60240249

CONTRACT NO.: HY/2012/07

SHEET TITLE
WORKS AREA WA4

SHEET NUMBER
60240249/C1/1053

Project Management Initials: Designer: PLCK Checked: SLYY Approved: CWN ISO A1 594mm x 841mm

Plot File by: LIUJ3 2012/11/16
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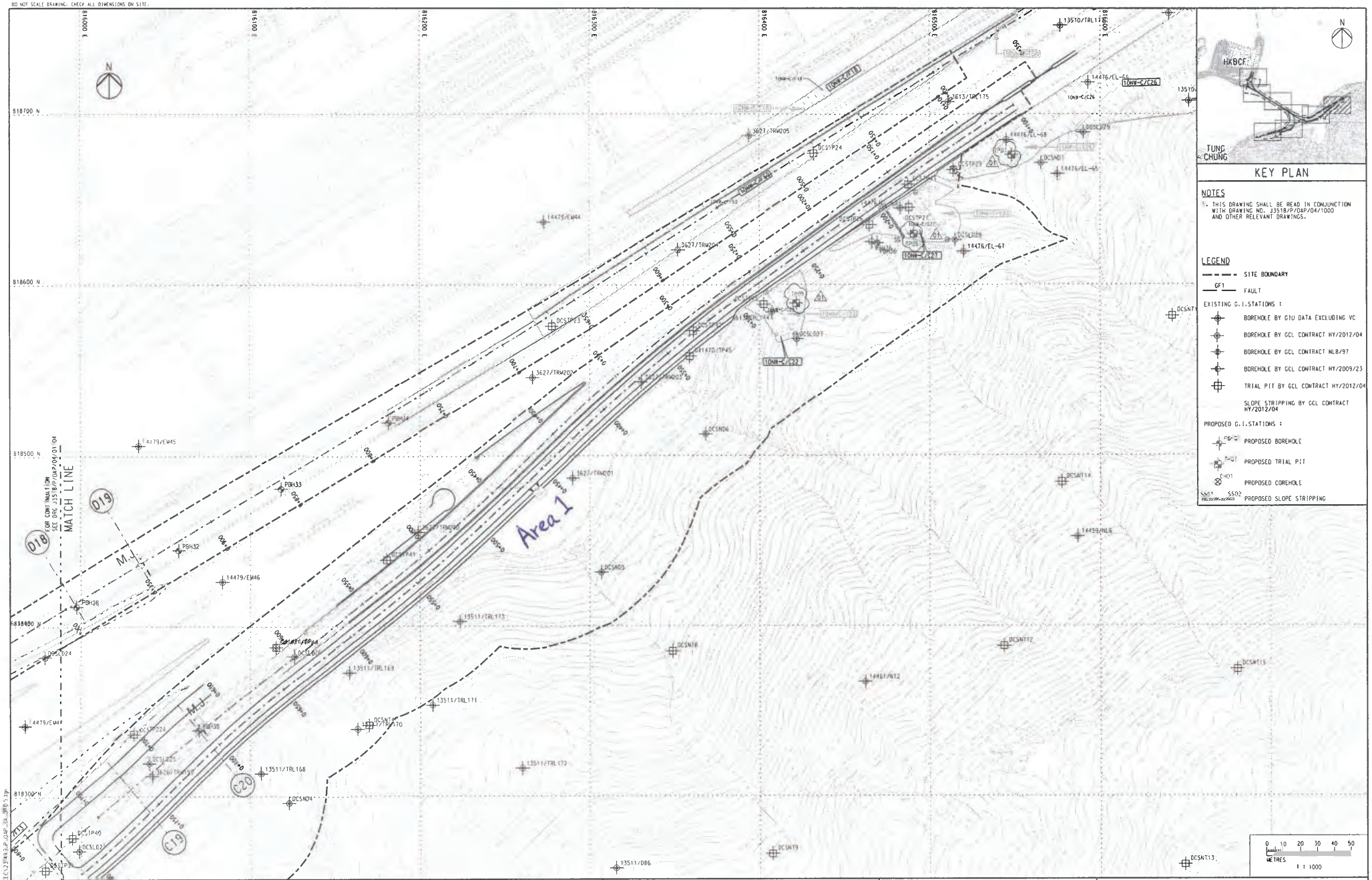


Rev.	Description	By	Date	Rev.	Description	By	Date
A	[illegible]	RL	07/13				
B	[illegible]	RL	07/13				
C	[illegible]	RL	09/13				
D1	ETA INTERNAL REVIEW	RL	10/13				

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

Client: 路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 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

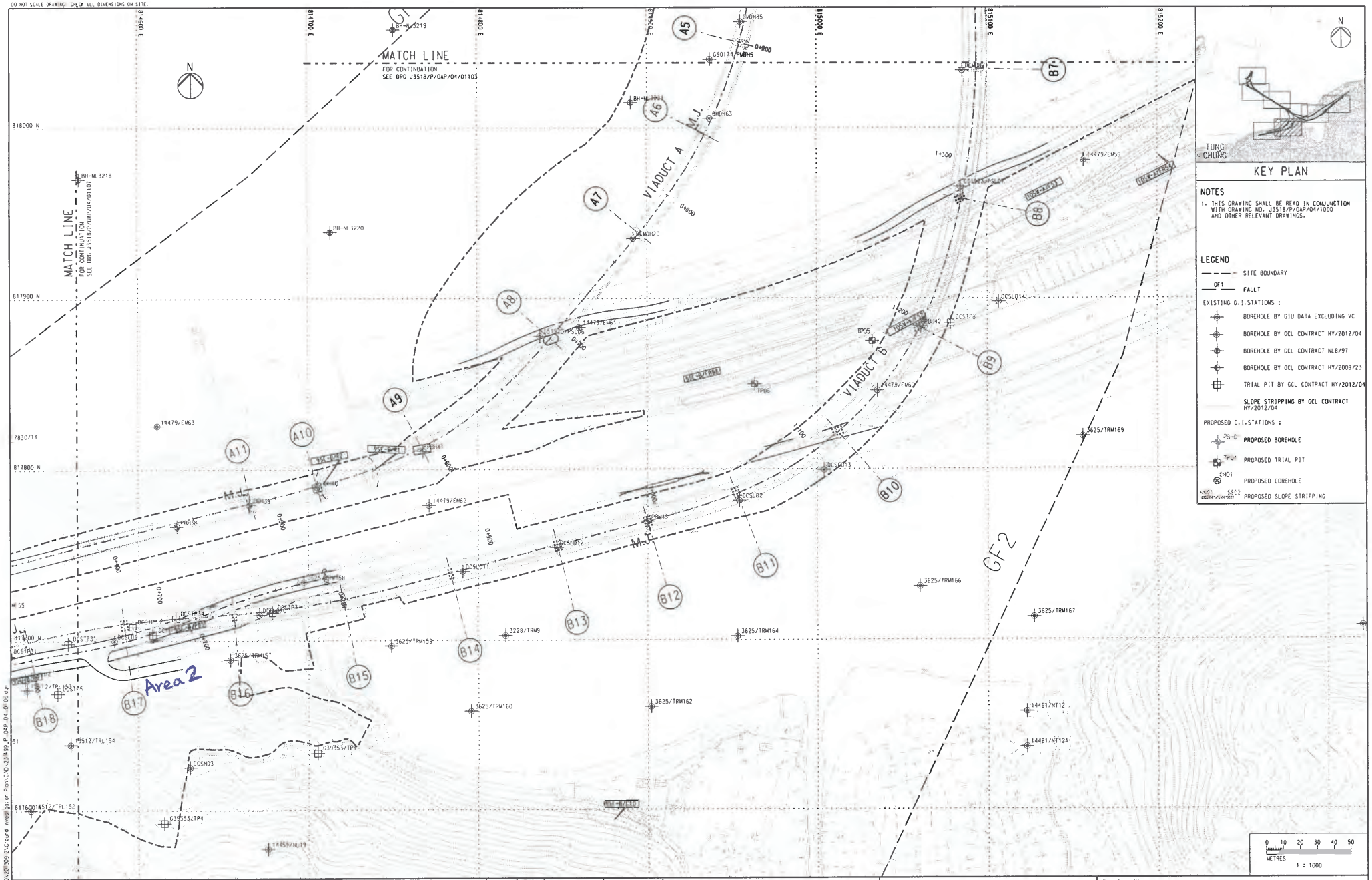
Supervising Officer: AECOM

Contractor: Gammon

Originator: ARUP

Drawing title: **Figure 1.2k**

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



Rev	Description	By	Date
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B	[illegible]	RC	07/13
C	[illegible]	RC	09/13

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

Client: 路政署 HIGHWAYS DEPARTMENT 港珠澳大橋香港工程管理處 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: AECOM

Contractor: Gammon

Originator: ARUP

Drawing title: **Figure 1.2I**

Drawing no. J3518/P/OAP/04/01106 Rev C

Plotted by [illegible] on 19/07/2013
J:\3518\P\OAP\04\01106 21\Ground investigation Plan\CAD\3518P_OAP_04_01106.dgn

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 (Ramboll Environ Hong Kong Ltd.)	ENPO Leader	Y.H. Hui	3465 2850	3465 2899
	IEC	Dr. F.C. Tsang	3465 2851	3465 2899
Contractor (Gammon Construction Limited)	Environmental Manager	Brian Kam	3520 0387	3520 0486
	Environmental Officer	Roy Leung	3520 0387	3520 0486
	24-hour Complaint Hotline		9738 4332	
ET (ERM-HK)	ET Leader	Jovy Tam	2271 3113	2723 5660

1.4 SUMMARY OF CONSTRUCTION WORKS

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

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

Marine Works

- Uninstallation of marine piling platform;
- Pier construction;
- Launching gantry operation; and
- Installation of deck segment and pier head segment.

Land-based Works

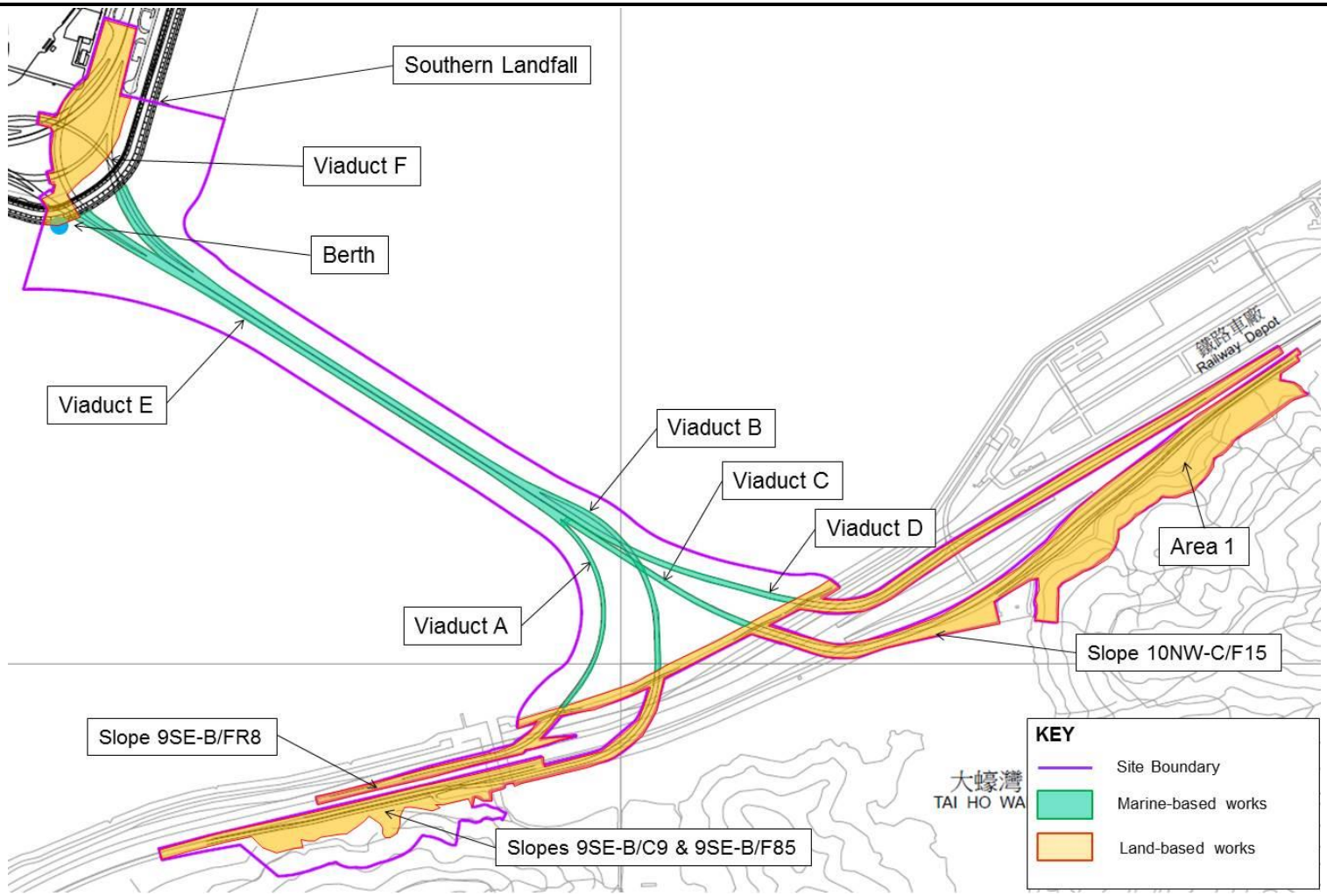
- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;

- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

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

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

Figure 1.3 Locations of Major Construction Activities in the Reporting Month



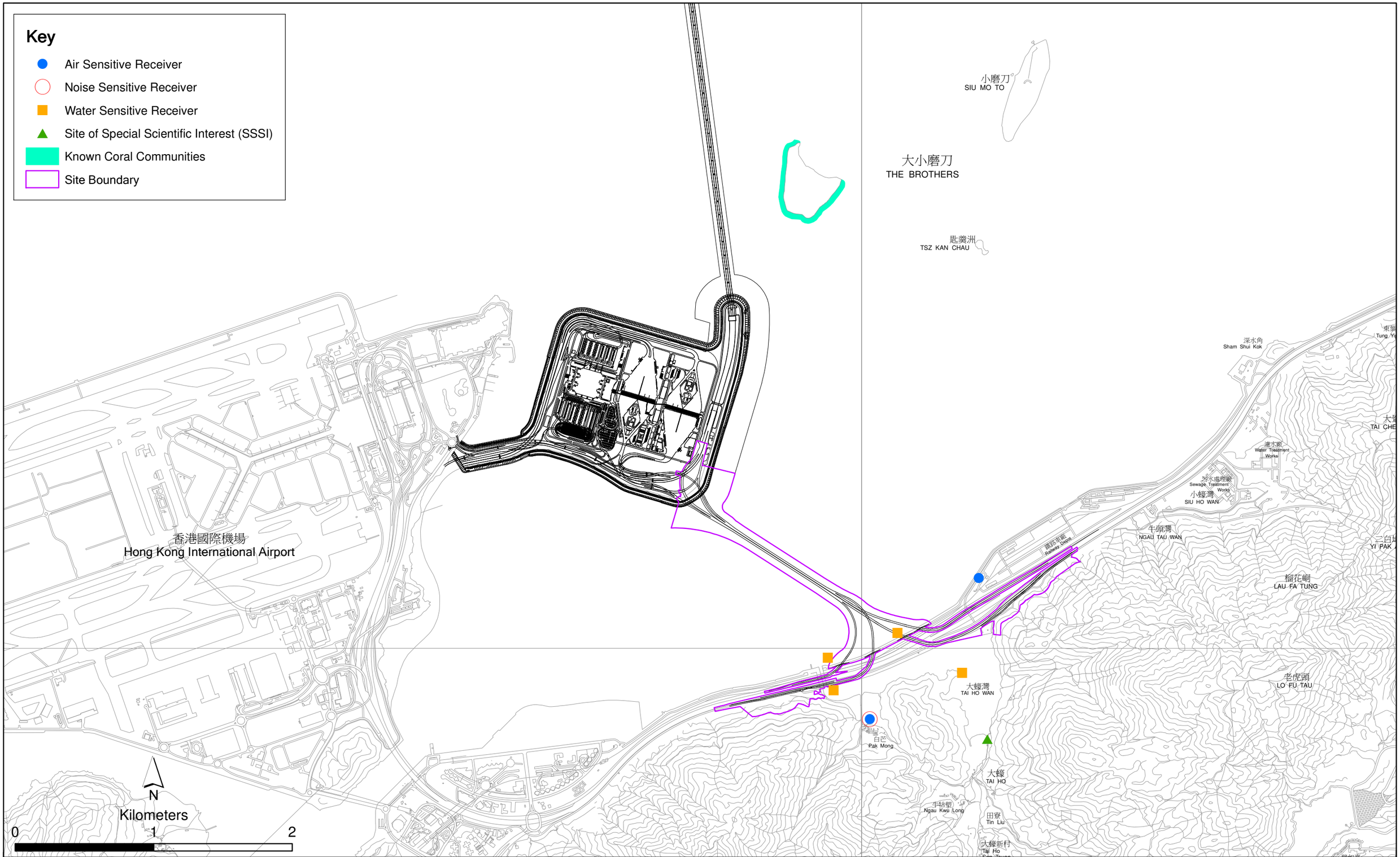


Figure 1.4

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

File: T:\GIS\CONTRACT\0215660\Mxd\0215660_Environmental_Sensitive_Receiver.mxd
Date: 18/5/2015

Environmental Resources Management

ERM

2 EM&A RESULTS

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

2.1 AIR QUALITY

2.1.1 Monitoring Requirements and Equipment

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

Table 2.1 Locations of Impact Air Quality Monitoring Stations

Monitoring Station	Location	Description	Monitoring Dates
ASR 9	MTR Depot	On the ground nearby MTR Depot Entrance	1, 7, 13, 19, 22 and 28 December 2016
ASR 8A	Area 4	On ground at the works area, Area 4	1, 7, 13, 19, 22 and 28 December 2016

High Volume Samplers (HVSs) were used for carried out 1-hour and 24-hour TSP monitoring on 1, 7, 13, 19, 22 and 28 December 2016 at ASR8A and ASR9 in accordance with the requirements of the Updated EM&A Manual. The TSP monitoring stations are illustrated in *Figure 2.1* and detailed in *Table 2.1*. Wind anemometer was deployed at Area 4 for logging wind speed and wind direction. Copies of the calibration certificates for the equipment are presented in *Appendix E*. Details of the deployed equipment are given in *Table 2.2*.

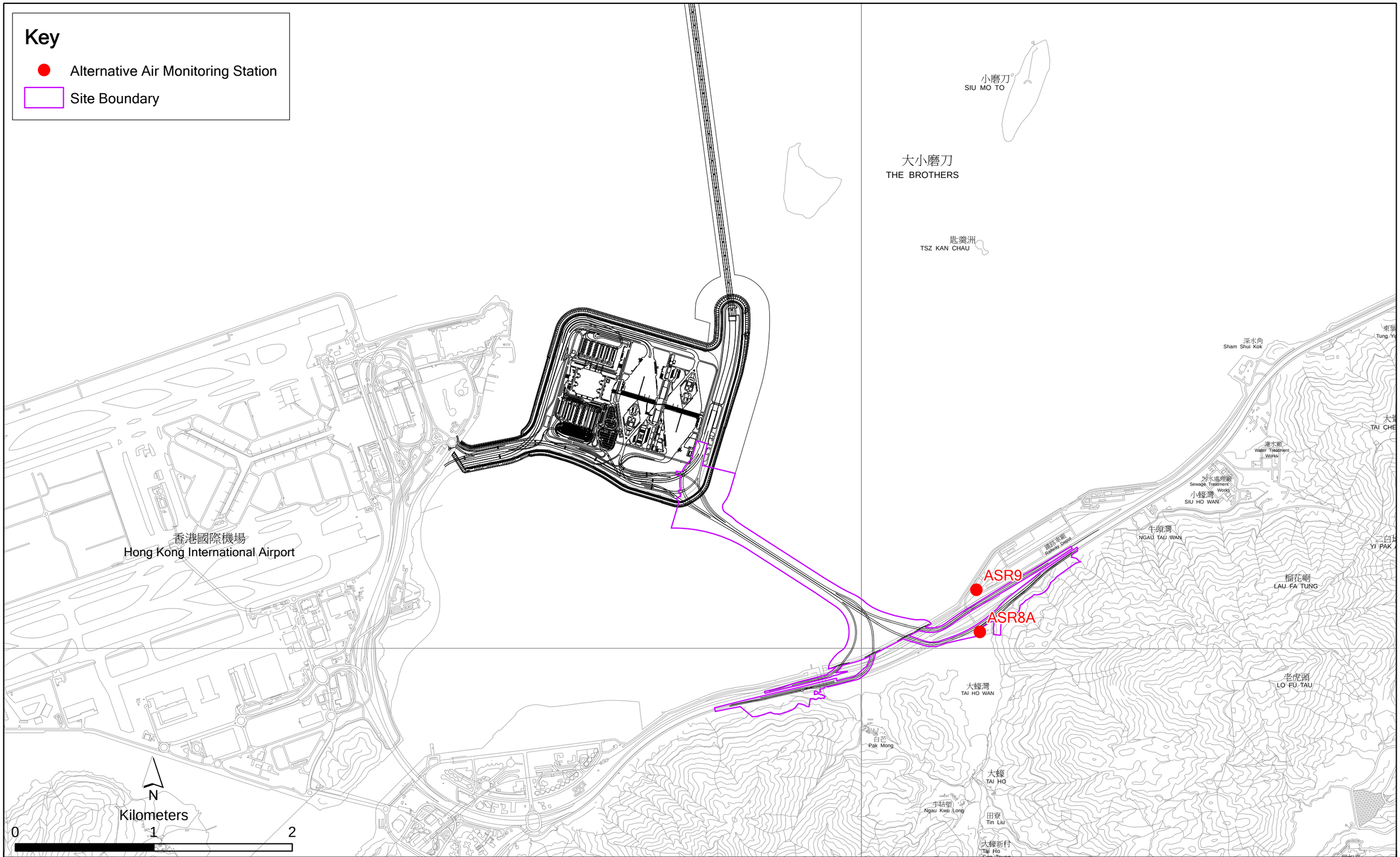


Figure 2.1

Locations of Air Quality Monitoring Stations

File: T:\GIS\CONTRACT\0215660\Mxd\0215660_AQMS.mxd
Date: 7/1/2015

Environmental Resources Management

ERM

Table 2.2 Air Quality Monitoring Equipment

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

2.1.2 Monitoring Schedule for the Reporting Month

The schedule for air quality monitoring in December 2016 is provided in *Appendix F*.

2.1.3 Results and Observations

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

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

Monitoring Station	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
ASR 8A	87	47 - 125	394	500
ASR 9	125	62 - 180	393	500

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

Monitoring Station	Average (μg/m³)	Range (μg/m³)	Action Level (μg/m³)	Limit Level (μg/m³)
ASR 8A	65	46 - 78	178	260
ASR 9	80	71 - 94	178	260

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

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

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

2.2 NOISE MONITORING

2.2.1 Monitoring Requirements and Equipment

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

Noise monitoring was performed on 1, 7, 13, 19, 22 and 28 December 2016 using sound level meter at the designated monitoring station NSR1A (*Figure 2.2; Table 2.5*) in accordance with the requirements stipulated in the Updated EM&A Manual. Acoustic calibrator was deployed to check the sound level meters at a known sound pressure level. Details of the deployed equipment are provided in *Table 2.6*. Copies of the calibration certificates for the equipment are presented in *Appendix E*.

Table 2.5 Location of Impact Noise Monitoring Station

Monitoring Station	Location	Description	Parameter	Frequency and Duration	Monitoring Dates
NSR 1A	Pak Mong Village Pavilion	On the ground at the village entrance	30-minute measurement at each monitoring station between 0700 and 1900 on normal weekdays (Monday to Saturday). L_{eq}, L_{10} and L_{90} would be recorded.	At least once per week	1, 7, 13, 19, 22 and 28 December 2016

Table 2.6 Noise Monitoring Equipment

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

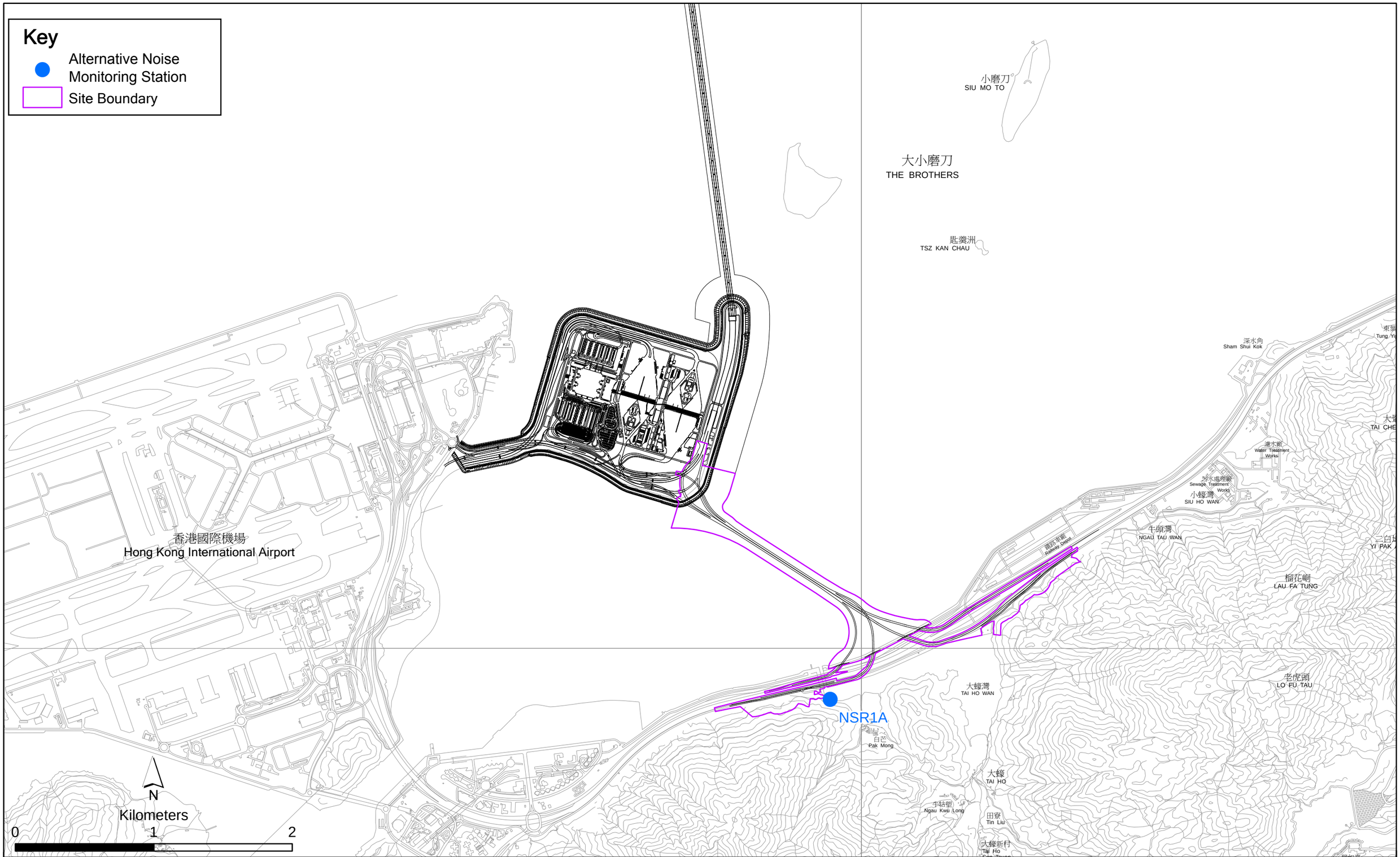


Figure 2.2

Location of Noise Monitoring Station

File: T:\GIS\CONTRACT\0215660\Mxd\0215660_NMS.mxd
Date: 7/1/2015

Environmental Resources Management

ERM

2.2.2 *Monitoring Schedule for the Reporting Month*

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

2.2.3 *Results and Observations*

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

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

	Average , dB(A), $L_{eq\ (30mins)}$	**Range, dB(A), $L_{eq\ (30mins)}$**	**Limit Level, dB(A), $L_{eq\ (30mins)}$**
NSR 1A	60	59 - 61	75

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

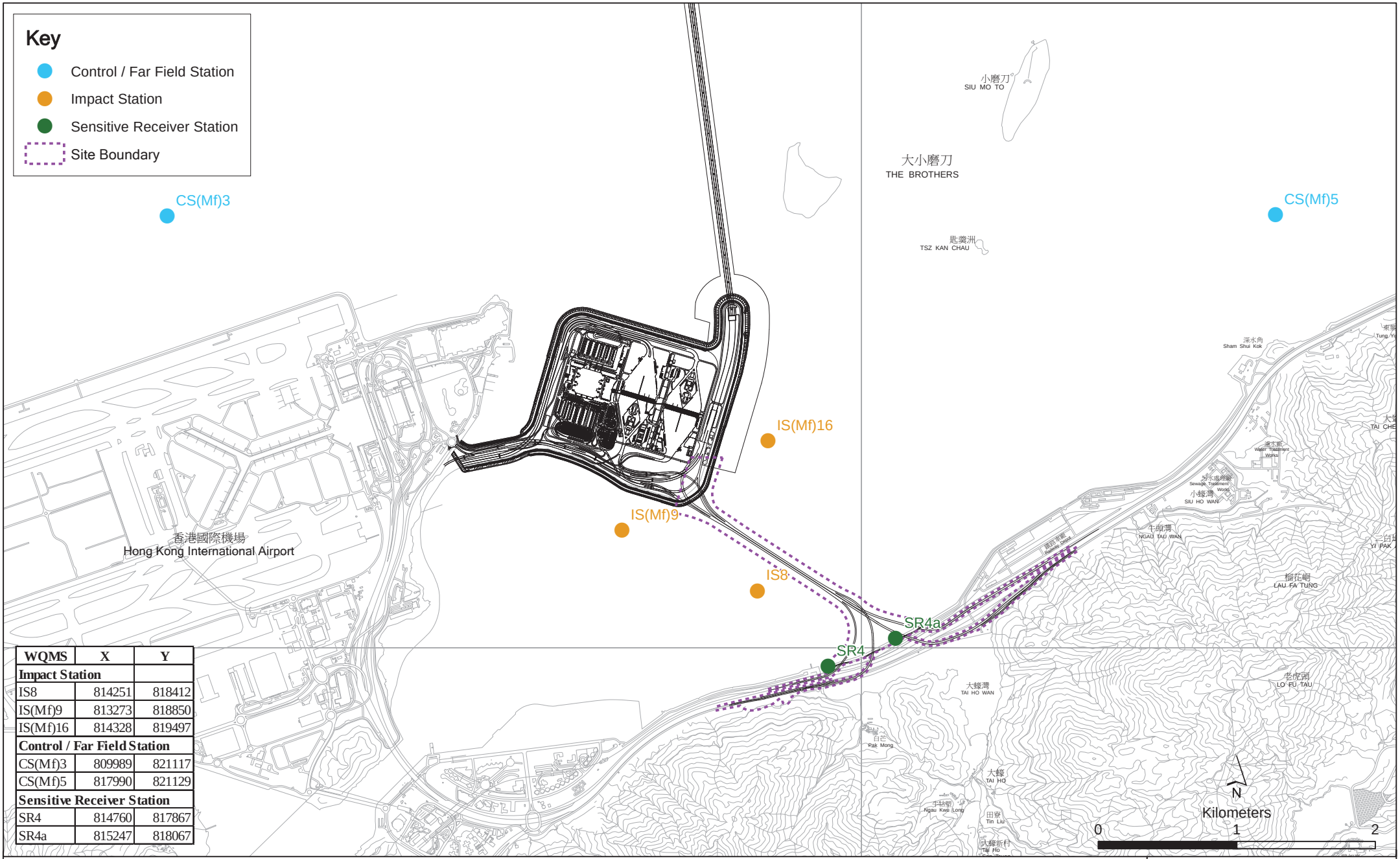
Major noise sources during the noise monitoring included noise from crane operation and excavation works, nearby traffic noise and aircraft noise.

2.3 *WATER QUALITY MONITORING*

2.3.1 *Monitoring Requirements and Equipment*

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

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



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

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

Environmental Resources Management

ERM

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	• Temperature(°C) • pH (pH unit) • Turbidity (NTU) • Water depth (m) • Salinity (ppt) • Dissolved Oxygen (DO) (mg/L and % of saturation) • Suspended Solid (SS) (mg/L)	Impact monitoring: 3 days per week, at mid-flood and mid-ebb tides during the construction period of the Contract	3 water depths: 1m below sea surface, mid-depth and 1m above sea bed. If the water depth is less than 3m, mid-depth sampling only. If water depth less than 6m, mid-depth may be omitted
IS(Mf)16	Impact Station (Close to HKBCF construction site)	814328	819497			
IS8	Impact Station (Close to HKBCF construction site)	814251	818412			
SR4	Sensitive receiver (Tai Ho Inlet)	814760	817867			
SR4a	Sensitive receiver	815247	818067			
CS(Mf)3	Control Station	809989	821117			
CS(Mf)5	Control Station	817990	821129			

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

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

Table 2.9 Water Quality Monitoring Equipment

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

2.3.2 *Monitoring Schedule for the Reporting Month*

The schedule for water quality monitoring in December 2016 is provided in *Appendix F*.

2.3.3 *Results and Observations*

In total of 14 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*.

Neither Action nor 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 Indo-Pacific humpback dolphin *Sousa chinensis* (i.e. Chinese White Dolphin) from the Contract. 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 summarizes 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.

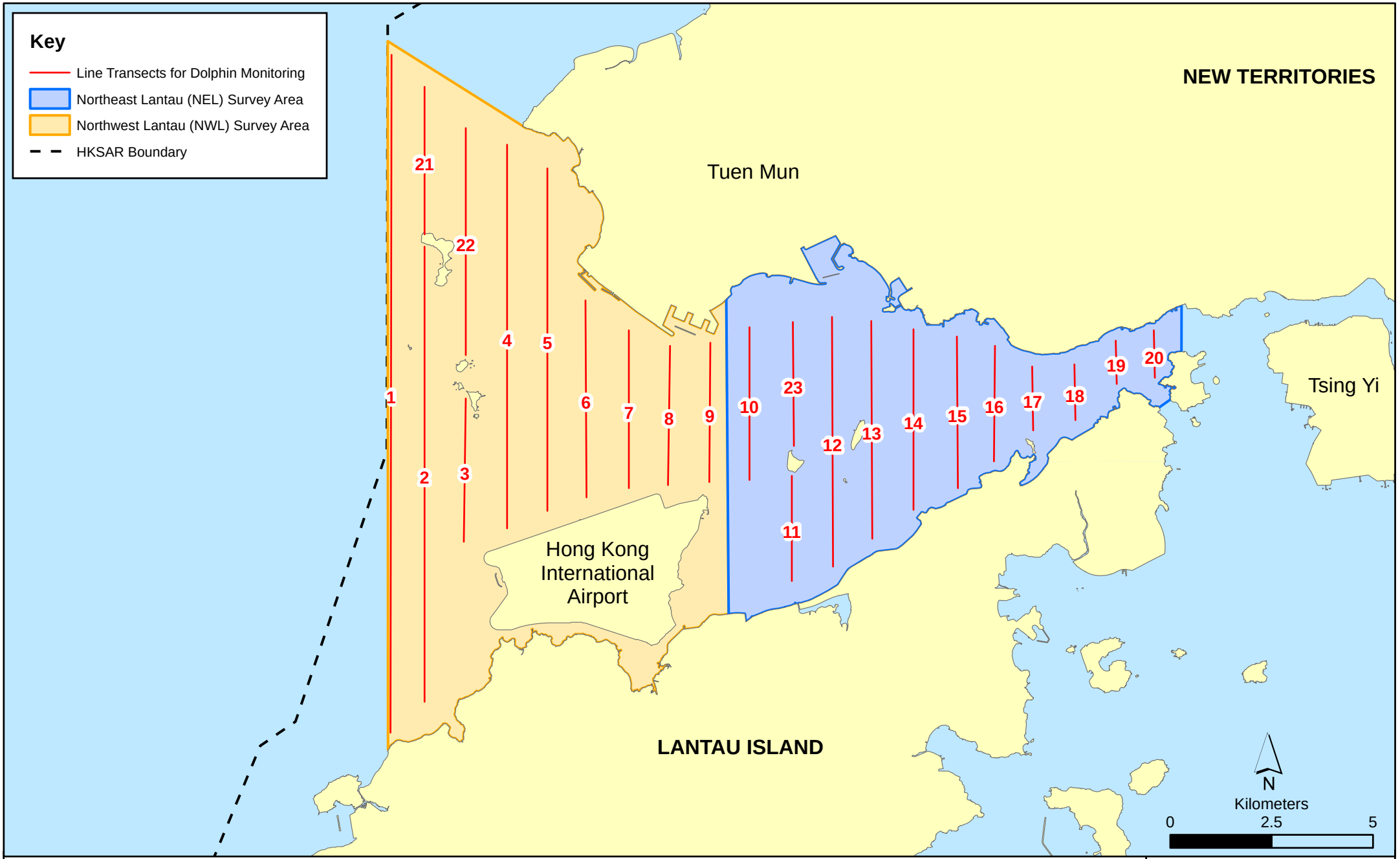


Figure 2.4

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

File: T:\GIS\CONTRACT\0212330\Mxd\0212330_Transect_of_Dolphin_Monitoring.mxd
Date: 10/12/2013

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Table 2.11 Impact Dolphin Monitoring Line Transect Co-ordinates

Line No.		Easting	Northing	Line No.		Easting	Northing
1	Start Point	804671	815456	13	Start Point	816506	819480
1	End Point	804671	831404	13	End Point	816506	824859
2	Start Point	805475	815913	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	820880	19	Start Point	822513	823268
7	End Point	810499	824613	19	End Point	822513	824321
8	Start Point	811508	821123	20	Start Point	823477	823402
8	End Point	811508	824254	20	End Point	823477	824613
9	Start Point	812516	821303	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	818853	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 1, 6, 16 and 19 December 2016 (*Appendix F*).

2.4.7 *Results and Observations*

A total of 295.50 km of survey effort was collected, with 96.3% of the total survey effort being conducted under favourable weather conditions (i.e. Beaufort Sea State 3 or below with good visibility) during the surveys in December 2016. Among the two areas, 116.10km and 179.40 km of survey effort were collected from NEL and NWL survey areas, respectively. The total survey effort conducted on primary and secondary lines were 212.93 km and 82.57 km, respectively. The survey efforts are summarized in *Appendix K*.

Six (6) groups of 24 Chinese White Dolphins were sighted during the two sets of monitoring surveys in December 2016. All six (6) dolphin sightings were made in NWL, while none was sighted in NEL. During the surveys in December 2016, five of the six sightings were made on primary lines during on-effort search. None of the dolphin groups was associated with operating fishing vessel and none of the dolphin groups were sighted in the proximity of the Project's alignment. The distribution of dolphin sighting during the reporting month is shown in *Figure 2.5*.

Encounter rates of Chinese White Dolphins are deduced from the survey effort and on-effort sighting data made under favourable conditions (Beaufort 3 or below) in December 2016 are shown in *Tables 2.12 & 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: Dec 1st / 6th	0.0	0.0
	Set 2: Dec 16th / 19th	0.0	0.0
NWL	Set 1: Dec 1st / 6th	1.6	1.6
	Set 2: Dec 16th / 19th	6.0	22.5

Note: Dolphin Encounter Rates are deduced from the two sets of surveys (two surveys in each set) in December 2016 in Northeast (NEL) and Northwest Lantau (NWL)

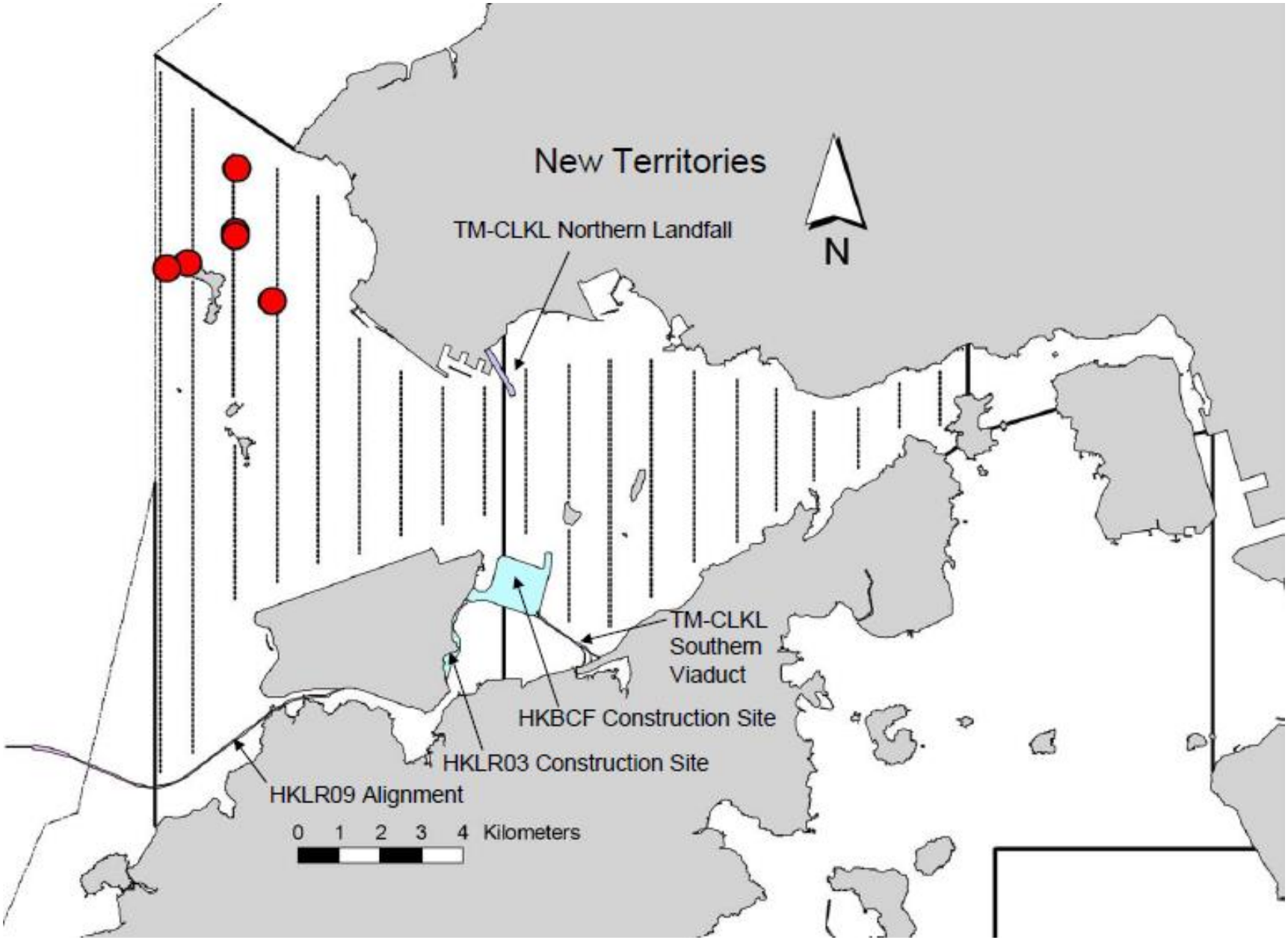

Figure 2.5

Date 7/10/2016

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 December 2016)

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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	3.8	2.9	12.3	9.4

Note: Overall dolphin encounter rates (sightings per 100 km of survey effort) from all four surveys are conducted in December 2016 on primary lines only as well as both primary lines and secondary lines in Northeast and Northwest Lantau

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, in which 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 daytime marine works activities. No sighting of Chinese White Dolphin was recorded in December 2016 during the exclusion zone monitoring.

Passive Acoustic Monitoring (PAM) had been decommissioned as no marine piling works was carried out outside the daylight hours since September 2015.

2.5 EM&A SITE INSPECTION

Site inspections were carried out on a weekly basis to monitor the implementation of proper environmental pollution control and mitigation measures under the Contract. In the reporting month, four (4) site inspections were carried out on 7, 14, 22 and 29 December 2016.

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
7 December 2016	Viaduct B (B17) • NRMM labels were not displayed on air compressor. • Sand bunds were not provided to avoid sediment runoff. • Chemical container was not placed in drip tray. Viaduct C (C17) • Stockpile was not fully covered by tarpaulin.	Viaduct B (B17) • The Contractor was reminded to display NRMM labels on air compressor. • The Contractor was reminded to provide sand bunds. • The Contractor was reminded to remove the chemical containers and placed them in drip tray. Viaduct C (C17) • The Contractor was reminded cover stockpile by tarpaulin.
14 December 2016	Seafront • Chemical container was not placed in drip tray. Viaduct E (E13AB) • NRMM labels were not displayed on generator. Viaduct E (E4) • Accumulated general refuse was observed.	Seafront • The Contractor was reminded to remove the chemical containers and placed them in drip tray. Viaduct E (E13AB) • The Contractor was reminded to display NRMM labels on generator. Viaduct E (E4) • The Contractor was reminded to clear accumulated general refuse.
22 December 2016	Viaduct D (D9) • Accumulated general refuse was observed. Viaduct D (D14) • Chemical containers were not placed in drip tray. Ramp D • Accumulated general refuse was observed.	Viaduct D (D9) • The Contractor was reminded to clear accumulated general refuse. Viaduct D (D14) • The Contractor was reminded to remove the chemical containers and placed them in drip tray. Ramp D • The Contractor was reminded to clear accumulated general refuse.
29 December 2016	Viaduct E (E8) • Chemical containers were not placed in drip tray. Viaduct B (near LG1) • Chemical containers were not placed in drip tray. • Water inside drip tray was observed. • NRMM labels were not properly displayed on generator.	Viaduct E (E8) • The Contractor was reminded to remove the chemical containers and placed them in drip tray. Viaduct B (near LG1) • The Contractor was reminded to remove the chemical containers and placed them in drip tray. • The Contractor was reminded to clear water inside drip tray. • The Contractor was reminded to properly display NRMM labels on generator.

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

2.6 *WASTE MANAGEMENT STATUS*

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

Wastes generated during this reporting period include mainly construction wastes (inert and non-inert), recyclable materials, chemical waste and marine sediment (Category L). 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)
December 2017	3,397	0	732	130,900	63	0	990	0

Notes:

(a) Inert construction wastes include hard rock and large broken concrete, and materials disposed as public fill.

(b) Non-inert construction wastes include general refuse disposed at landfill.

(c) Recyclable materials include metals, paper, cardboard, plastics, timber, felled trees and others.

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

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

2.7 *ENVIRONMENTAL LICENSES AND PERMITS*

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

Table 2.16 Summary of Environmental Licensing and Permit Status

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
Environmental Permit	EP-354/2009/D	13 March 2015	N/A	HyD	Tuen Mun- Chek Lap Kok Link
Environmental Permit	EP-353/2009/K	11 April 2016	N/A	HyD	Hong Kong Boundary Crossing Facilities
Construction Dust Notification	361571	5 Jul 2013	N/A	GCL	
Construction Dust Notification	362093	17 Jul 2013	N/A	GCL	For Area 23
Chemical Waste Registration	5213-961-G2380-13	10 Oct 2013	N/A	GCL	Chemical waste produced in Contract No. 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 No. 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 No. HY/2012/07 (WA5 adjacent to Cheung Tung Road, Yam O)
Chemical Waste Registration	5213-951-G2380-17	12 Jun 2014	N/A	GCL	Viaducts A, B, C, D & E
Construction Waste Disposal Account	7017735	10 Jul 2013	N/A	GCL	-
Construction Waste Disposal Account	7019470	3 Mar 2014	N/A	GCL	Vessel CHIT Account
Waste Water Discharge License	WT00019017-2014	13 May 2014	31 May 2019	GCL	Discharge for marine portion
Waste Water Discharge License	WT00019018-2014	13 May 2014	31 May 2019	GCL	Discharge for land portion
Construction Noise Permit for night works and works in general holidays	GW-RW0339-16	17 Jun 2016	19 Dec 2016	GCL	General works at WA5
Construction Noise Permit for night works and works in general holidays	GW-RW0708-16	20 Dec 2016	18 Jun 2017	GCL	General works at WA5
Construction Noise Permit for night works and works in general holidays	GW-RS1045-16	14 Oct 2016	13 Apr 2017	GCL	For Broad Permit
Construction Noise Permit for night works and works in general holidays	GW-RS1309-16	20 Dec 2016	19 Jun 2017	GCL	Broad Permit for Whole Site Areas
Construction Noise Permit for night works and works in general holidays	GW-RS1159-16	24 Nov 2016	28 Feb 2017	GCL	Broad Permit for Segment Launching at Land Portion
Construction Noise Permit for night works and works in general holidays	GW-RS0718-16	13 Jul 2016	13 Jan 2017	GCL	Pre-casted pile cap shell installation at E10-E13
Construction Noise Permit for night works and	GW-RS1044-16	14 Oct 2016	13 Apr 2017	GCL	Pre-casted pile cap shell installation at E8-E13

License/ Permit	License or Permit No.	Date of Issue	Date of Expiry	License/ Permit Holder	Remarks
works in general holidays					
Construction Noise Permit for night works and works in general holidays	GW-RS1158-16	24 Nov 2016	31 Dec 2016	GCL	Contingency plan for DN1000 works at Tung Chung Seafront Road
Marine Dumping Permit	EP/MD/17-141	24 Nov 2016	31 Dec 2016	GCL	For dumping Type I (Dedicated Site) and Type II sediment
Marine Dumping Permit	EP/MD/17-115	20 Oct 2016	31 Dec 2016	GCL	For dumping Type I sediment

2.8 IMPLEMENTATION STATUS OF ENVIRONMENTAL MITIGATION MEASURES

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

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

The landscape and visual (L&V) mitigation measures were also monitored on weekly basis in the reporting period. The monitoring status is summarized in *Appendix C*.

2.9 SUMMARY OF EXCEEDANCES OF THE ENVIRONMENTAL QUALITY PERFORMANCE LIMIT

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

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

2.10 SUMMARY OF COMPLAINTS, NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

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

There was one (1) complaint received from EPD on 13 December 2016 regarding hammering noise nuisance generated during midnights in the reporting period. Upon investigation, the complaint is considered not related to this Project. Detailed investigation report is presented in *Appendix N*.

There was no notification of summons or successful prosecution recorded in the reporting period.

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

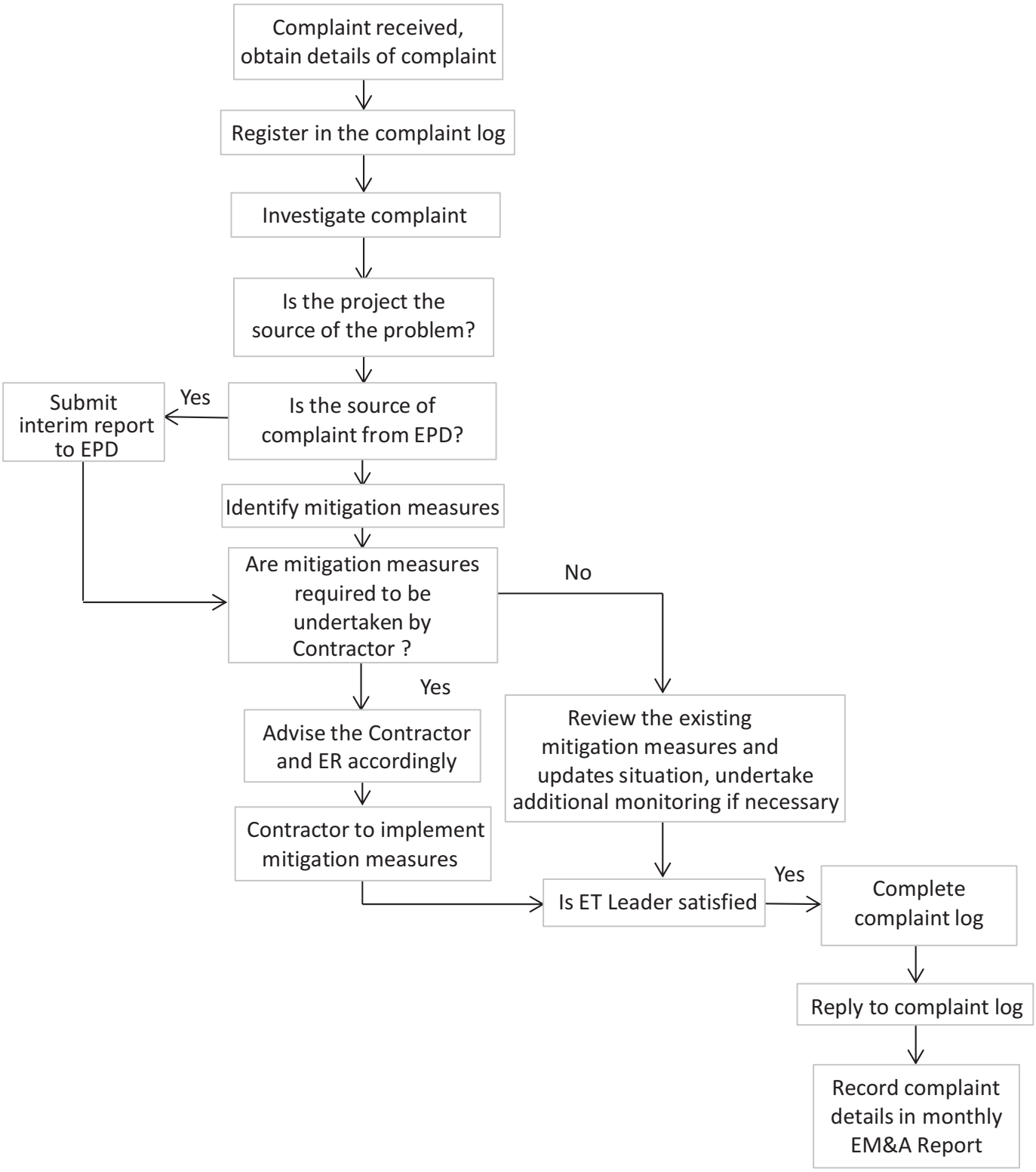

Figure 2.6 Environmental Complaint Handling Procedure

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3 FUTURE KEY ISSUES

3.1 CONSTRUCTION PROGRAMME FOR THE COMING MONTH

As informed by the Contractor, the major works for this Contract in January 2017 will be:

Marine Works

- Uninstallation of marine piling platform;
- Pier construction;
- Launching gantry operation; and
- Installation of deck segment and pier head segment.

Land-based Works

- Pier construction;
- Re-alignment of Cheung Tung Road;
- Road works along North Lantau Highway;
- Installation of pier head and deck segments; and
- Slope work of Viaducts A, B & C.

3.2 KEY ISSUES FOR THE COMING MONTH

Potential environmental impacts arising from the above upcoming construction activities in the next reporting month of January 2017 are mainly associated with dust, noise, marine water quality, marine ecology and waste management issues.

3.3 MONITORING SCHEDULE FOR THE COMING MONTH

The tentative schedules for environmental monitoring in January 2017 are provided in *Appendix F*.

4 CONCLUSIONS AND RECOMMENDATIONS

4.1 CONCLUSIONS

This Thirty-eighth Monthly EM&A Report presents the findings of the EM&A activities undertaken during the period from 1 to 31 December 2016 in accordance with the Updated EM&A Manual and the requirements of the Environmental Permits (*EP-354/2009/D* and *EP-353/2009/K*).

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

Six (6) groups of 24 Chinese White Dolphins were sighted during the two sets of monitoring surveys in December 2016. During this month of dolphin monitoring, no unacceptable impact from the construction activities of the TM-CLKL Southern Connection Viaduct Section on Chinese White Dolphins was noticeable from general observations.

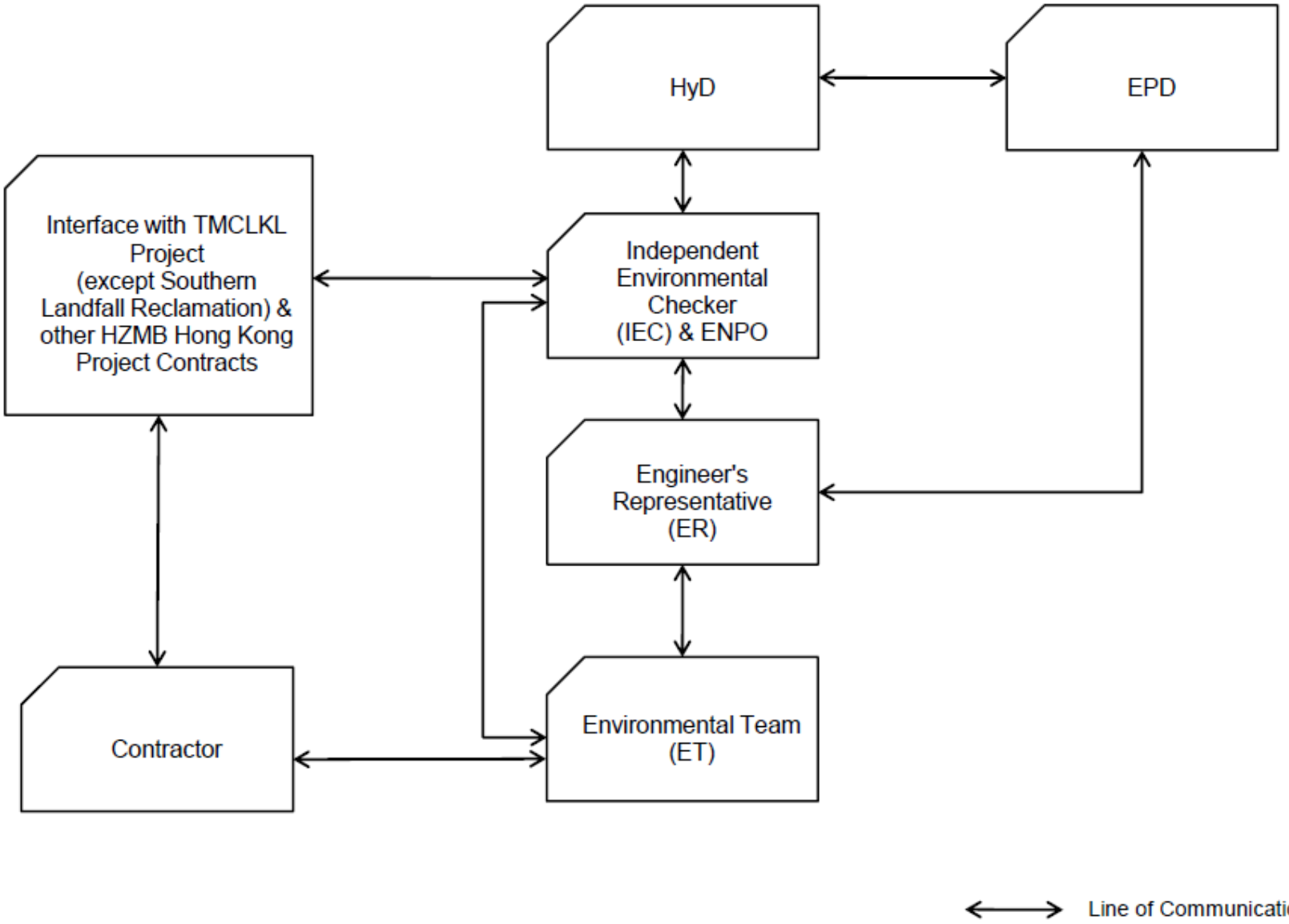
Environmental site inspection was carried out four (4) times in December 2016. Recommendations on remedial actions were given to the Contractor for the deficiencies identified during the site audits.

There was one (1) complaint received from EPD on 13 December 2016 regarding hammering noise nuisance generated during midnights in the reporting period. Upon investigation, the complaint is considered not related to this Project. There was no notification of summons or successful prosecution recorded in the reporting period.

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



Appendix A1

Contract No. HY/2012/07 Southern Connection Viaduct Section
Project Organization

DATE: 06/03/2013

Environmental Resources Management

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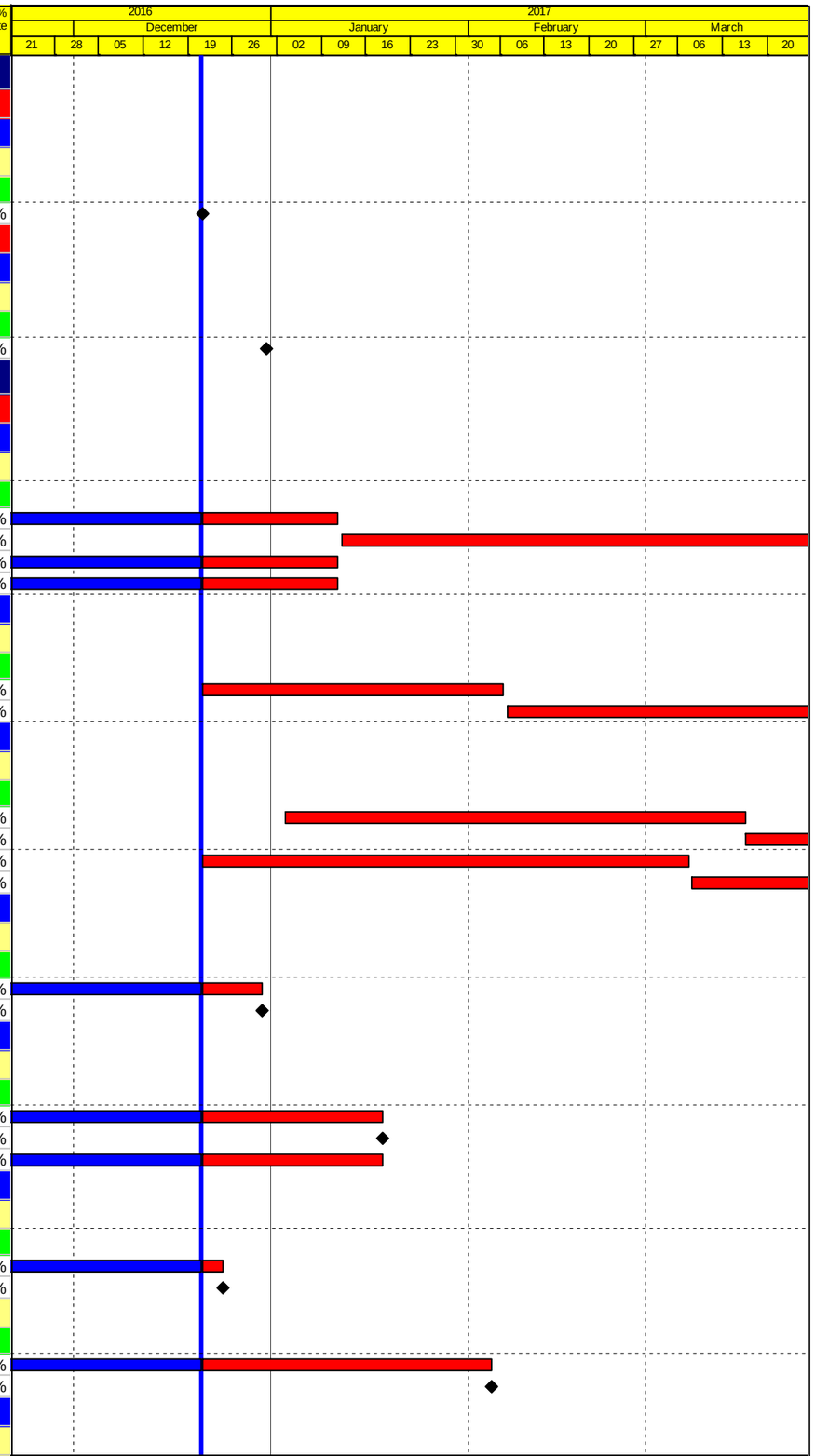
Appendix B

Three-Month Rolling Construction Programme

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
Contract Milestones									
Key Dates for Completion									
Stage of the Works									
Completion Date									
General									
KD03	KD3 - Stage 3: TCSS Along NLH Near Viaduct C, D (EoT 5-Apr-16)	0		0	21-Dec-16*		05-Apr-16	-259	0%
Portion Handover Dates									
Possession of the Works Area									
Access Dates									
General									
POS02-6B	Portion A - Area 6B (To be confirmed)	0	31-Dec-16*	0		15-Dec-15		-382	0%
Design									
Detailed Design									
General Submissions									
Reports & Manuals									
General									
ARDD0037-7	Preparation of Seismic Performance Report Viaduct F - AP12.03	160	21-Aug-15 A	16	11-Jan-17	16-Mar-16	07-Apr-16	-229	100%
ARDD0037-8	IC/SO Approval of Seismic Performance Report Viaduct F - AP12.03	75	12-Jan-17	75	13-Apr-17	08-Apr-16	08-Jul-16	-229	0%
ARDD0040-2	IC/SO Approval of Operation and Maintenance Manual - AP08.00	75	20-Oct-15 A	16	11-Jan-17	20-Jun-16	08-Jul-16	-154	0%
ARDD0042-2	IC/SO Approval of O&M Facility Provisions DDA - BP11.01	75	14-Jan-15 A	16	11-Jan-17	20-Jun-16	08-Jul-16	-154	50%
Slope Works Near Viaduct A									
Feature 9SE-B/FR8, B/R1, B/R2									
Slope Works Design									
ARDD0596	Preparation of remaining portion of Slope FR8 Combined AIP/DDA - CP11.	35	21-Dec-16	35	06-Feb-17	18-Dec-15	30-Jan-16	-299	0%
ARDD0596-1	IC/SO Approval of Slope Combined AIP/DDA - CP11.01	60	07-Feb-17	60	21-Apr-17	01-Feb-16	18-Apr-16	-299	0%
Slope Works Near Viaduct C									
Feature 10NW-C/C22, C/C26, C/C27, C/F13, C/F14, C/F15									
Slope Works Design									
ARDD0589-1	Preparation of Slope Combined AIP/DDA - CP13.01	60	03-Jan-17*	60	16-Mar-17	19-Jul-16	27-Sep-16	-138	0%
ARDD0589-2	IC/SO Approval of Combined AIP/DDA - CP13.01	28	16-Mar-17	28	13-Apr-17	28-Sep-16	25-Oct-16	-170	0%
ARDD0590	Newfill slopes PF1 & PF2 Preparation of Combined AIP/DDA - CP13.01	60	21-Dec-16	60	07-Mar-17	05-Jul-16	12-Sep-16	-142	0%
ARDD0590-1	New fill slopes PF1 & PF2 IC/SO Approval of combined AIP/DDA - CP13.0	28	08-Mar-17	28	10-Apr-17	13-Sep-16	18-Oct-16	-142	0%
Slope Works Near Viaduct D									
Feature 10NW-C/R4, C/F9, C/F10, C/F11, C/F17, C/F50									
Slope Works Design									
ARDD0603	IC/SO Approval of Slope Combined AIP/DDA -CP14.01	75	16-Dec-14 A	7	30-Dec-16	17-Feb-16	24-Feb-16	-253	75%
ARDD0603-1	IC/SO Approval of Slope Combined AIP/DDA -CP14.01	0		0	30-Dec-16		24-Feb-16	-253	0%
Watermain, Drainage & Utility Diversions									
General									
Design									
ARDD0629	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	75	22-Jul-14 A	22	18-Jan-17	01-Mar-16	29-Mar-16	-242	95%
ARDD0629-1	IC/SO Approval of Waterworks, Drainage & Utility DDA - BP20.01	0		0	18-Jan-17		29-Mar-16	-242	0%
ARDD0629-2	Gov't Approval of Submissions for Waterworks, Drainage & Utility Diversior	75	02-Jan-14 A	22	18-Jan-17	01-Mar-16	29-Mar-16	-242	95%
Viaduct Approach Ramp Retaining Walls									
Abutment & Approach Ramp B									
Design									
ARDD0664	Approach B - IC/SO Approval of Approach Ramp B DDA -DP21.01	75	14-Oct-14 A	4	24-Dec-16	09-Mar-16	12-Mar-16	-235	95%
ARDD0664-1	Approach B - IC/SO Approval of Approach Ramp B DDA -DP21.01	0		0	24-Dec-16		12-Mar-16	-235	0%
Abutment & Approach Ramp F									
Design									
ARDD0676	Approach F - IC/SO Approval of Approach Ramp F DDA -DP24.01	75	23-Dec-14 A	34	04-Feb-17	13-May-16	23-Jun-16	-184	70%
ARDD0676-1	Approach F - IC/SO Approval of Approach Ramp F DDA -DP24.01	0		0	04-Feb-17		23-Jun-16	-184	0%
Segment Target Geometry & Erection Engineering									
Viaduct A									



Actual Work
Planned Bar
Critical Bar
Milestone

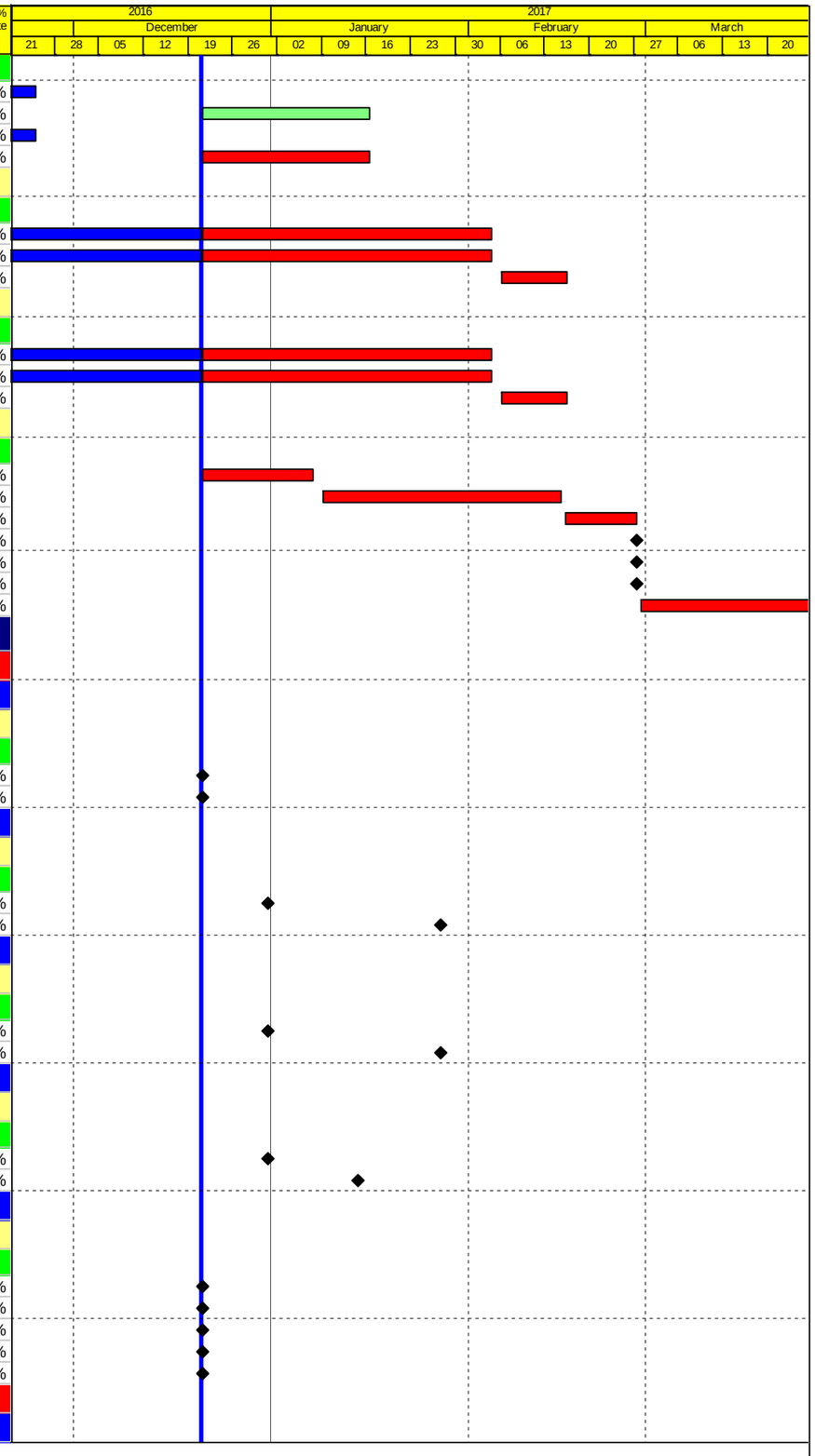
Project ID: TMCLK-DWPH-M43
Layout: J3518-DWP-3MRP Submission - M43
Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 1 of 13 Pages)
(Progress as of 21-Dec-16)

Date	Revision	Checked	Approved
31-Oct-16		PKN	GL
30-Nov-...		PKN	GL
03-Jan-17		PKN	GL

DWG. No.:
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
Design									
ARDD0717	Viaduct A - Erection Sequence Analysis	31	23-Jan-16 A	0	25-Nov-16 A				100%
ARDD0718	Viaduct A - Target Geometry Analysis	20	21-Dec-16	20	16-Jan-17	12-Mar-20	03-Apr-20	952	0%
ARDD0719	Viaduct A - Segment Geometry Schedules	10	25-Oct-16 A	0	25-Nov-16 A				100%
ARDD0719-5	Viaduct A - Issue Erection Manual	20	21-Dec-16	20	16-Jan-17	06-Feb-16	04-Mar-16	-258	0%
Viaduct E5 & E6									
Design									
ARDD0734	Viaduct E5 & E6 - Segment Geometry Schedules	10	05-May-14 A	34	04-Feb-17	08-Sep-15	19-Oct-15	-383	90%
TGP0570	Viaduct E5 & E6 - Issue of Optimised Casting Data and Segment Catalogu	40	30-Apr-15 A	34	04-Feb-17	08-Sep-15	19-Oct-15	-383	90%
TGP0590	Viaduct E5 & E6 - Issue Erection Manual	10	06-Feb-17	10	16-Feb-17	20-Oct-15	31-Oct-15	-383	0%
Viaduct E7 & E8									
Design									
ARDD0739	Viaduct E7 & E8 - Segment Geometry Schedules	10	05-May-14 A	34	04-Feb-17	08-Sep-15	19-Oct-15	-383	90%
TGP0760	Viaduct E7 & E8 - Issue of Optimised Casting Data and Segment Catalogu	40	31-Jul-15 A	34	04-Feb-17	08-Sep-15	19-Oct-15	-383	90%
TGP0790	Viaduct E7 & E8 - Issue Erection Manual	10	06-Feb-17	10	16-Feb-17	20-Oct-15	31-Oct-15	-383	0%
Viaduct F									
Design									
ARDD0752	Viaduct F - Erection Sequence Analysis	13	21-Dec-16*	13	07-Jan-17	09-Oct-15	24-Oct-15	-358	0%
ARDD0753	Viaduct F - Target Geometry Analysis	30	09-Jan-17	30	15-Feb-17	26-Oct-15	28-Nov-15	-358	0%
ARDD0754	Viaduct F - Segment Geometry Schedules	10	16-Feb-17	10	27-Feb-17	30-Nov-15	10-Dec-15	-358	0%
ARDD0754-1	Viaduct F - Issue of Pierhead Segments Bridge F1, F2, F3, F4 & F5	0		0	27-Feb-17		03-Apr-20	919	0%
ARDD0754-3	Viaduct F - Issue of Casting Data and Segment Catalogue Bridge F1, F3 (F	0		0	27-Feb-17		03-Apr-20	919	0%
ARDD0754-4	Viaduct F - Issue of Casting Data and Segment Catalogue Bridge F2, F4, F	0		0	27-Feb-17		10-Dec-15	-358	0%
ARDD0754-5	Viaduct F - Issue Erection Manual	30	28-Feb-17	30	03-Apr-17	11-Dec-15	18-Jan-16	-358	0%
Procurement									
Deck Segment Installation Equipment									
Traveling Hanging Beams									
Viaduct A to F									
Equipment Delivery									
PR67050	Steelworks for THB 3.0 - Batch 1	0		0	21-Dec-16*		03-Apr-20	972	0%
PR67060	Steelworks for THB 3.0 - Batch 2	0		0	21-Dec-16*		03-Apr-20	972	0%
K-Frames									
Viaduct A to F									
Equipment Delivery									
PR67120	Steelworks for K-Frame	0		0	31-Dec-16*		03-Apr-20	964	0%
PR67130	Hydraulic for K-Frame	0		0	27-Jan-17*		03-Apr-20	942	0%
Strand Jacks									
Viaduct A to F									
Equipment Delivery									
PR67140	Steelworks for 294T Strand Jack module	0		0	31-Dec-16*		03-Apr-20	964	0%
PR67150	Hydraulic for 294T Strand Jack	0		0	27-Jan-17*		03-Apr-20	942	0%
Crab									
Viaduct A to F									
Equipment Delivery									
PR67160	Steelworks for 294T Crab - Batch 1	0		0	31-Dec-16*		03-Apr-20	964	0%
PR67170	Steelworks for 294T Crab - Batch 2	0		0	14-Jan-17*		03-Apr-20	953	0%
Travelling Hanging Beams (Self-Launch)									
Viaduct A to F									
Equipment Delivery									
PR67070	Steelworks for Self-Launching System - Batch 1	0		0	21-Dec-16*		03-Apr-20	972	0%
PR67080	Steelworks for Self-Launching System - Batch 2	0		0	21-Dec-16*		03-Apr-20	972	0%
PR67090	Steelworks for Self-Launching System - Batch 3	0		0	21-Dec-16*		03-Apr-20	972	0%
PR67100	2 nos. Hydraulic Cylinder & Associated Accessories for Spare	0		0	21-Dec-16*		03-Apr-20	972	0%
PR67110	Power Pack for Hydraulic System for Self-Launching System	0		0	21-Dec-16*		03-Apr-20	972	0%
Precast Deck Segments									
Preliminaries									



Actual Work
Planned Bar
Critical Bar
Milestone

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Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 2 of 13 Pages)
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DWG. No.:

J3518/GCL/PGM/3MRP-M43

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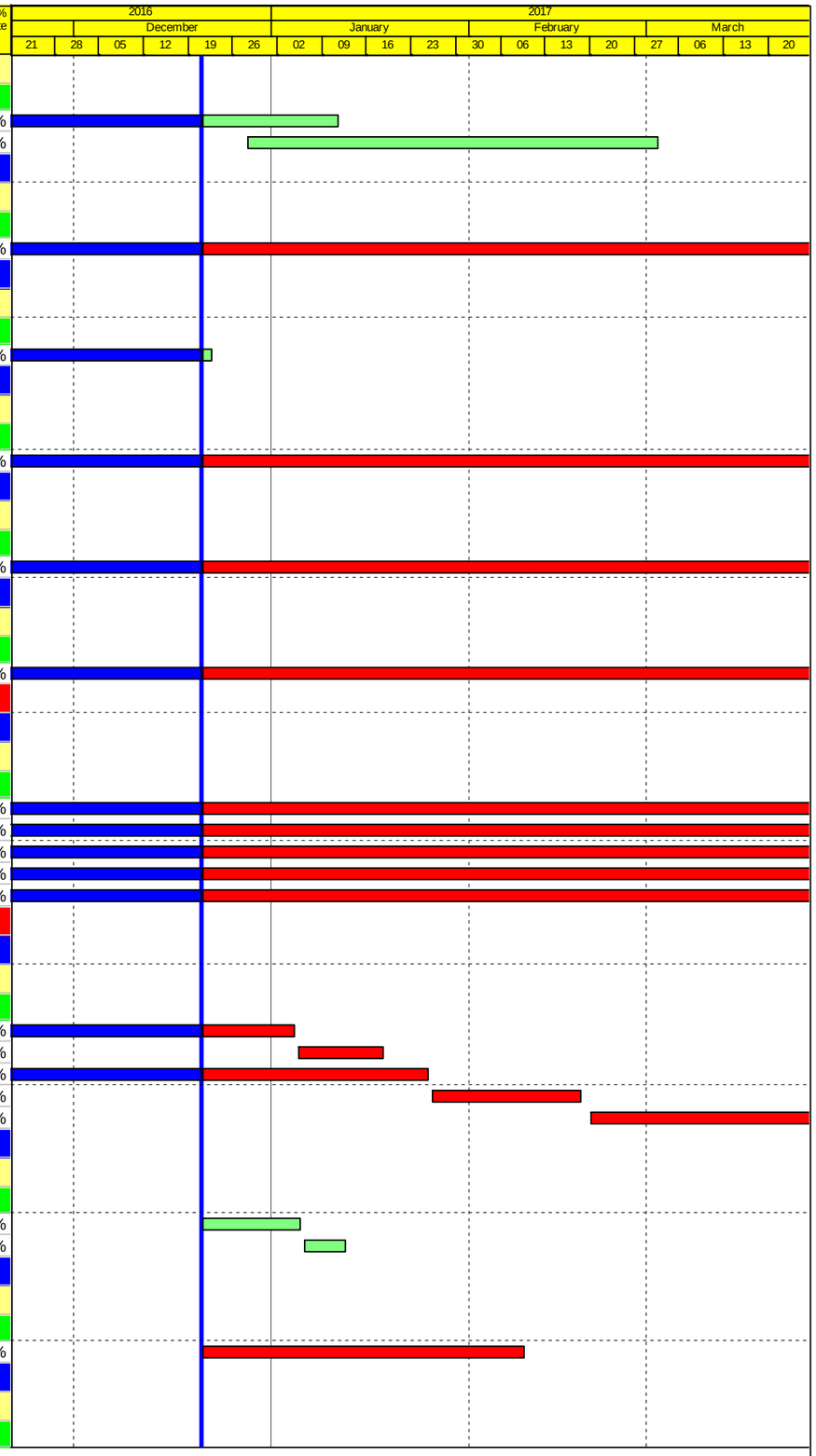
Viaduct F									
General									
MBBE0054	Precast Segment Mould Design (Viaduct F1 to F5)	42	01-Sep-16 A	16	11-Jan-17	30-Jan-20	17-Feb-20	916	0%
MBBE0056	Precast Segment Mould Fabrication & Erection (Viaduct F1 to F5)	52	28-Dec-16	52	02-Mar-17	04-Feb-20	03-Apr-20	916	0%
Viaduct A - Bridge A2-A1									
Segment Manufacture									
General									
MBAE0130-1	A: Progressive Segment Manufacture (179 Nr)	180	13-Jun-16 A	115	17-May-17	12-Feb-16	04-Jul-16	-257	44.7%
Viaduct E - Bridge E1									
Segment Manufacture									
General									
MBEE0130-5	E1: Progressive Segment Manufacture (188 Nr)	456	08-Apr-15 A	2	22-Dec-16	02-Apr-20	03-Apr-20	970	99.5%
Viaduct E - Bridge E2									
Segment Manufacture									
General									
MBEE0130-7	E2: Progressive Segment Manufacture (404 Nr)	376	06-May-15 A	126	31-May-17	21-Dec-15	28-May-16	-297	82.2%
Viaduct E - Bridge E5, E6, E7, E8									
Segment Manufacture									
General									
MBEE0130-9	E5-6-7-8: Progressive Segment Manufacture (544Nr)	360	06-May-15 A	206	02-Sep-17	15-Oct-15	27-Jun-16	-353	34.9%
Viaduct F - Bridge F1-F5									
Segment Manufacture									
General									
MBFE0130-1	F: Progressive Segment Manufacture (300 Nr)	252	27-Oct-16 A	214	12-Sep-17	15-Apr-16	30-Dec-16	-207	10%
Precast Parapets & Barriers									
Viaduct A to F									
Precast Parapet Manufacture									
General									
PP6011-01	Viaduct A - Precast Parapets/Barriers Production	90	01-Sep-16 A	178	01-Aug-17	02-Feb-16	08-Sep-16	-263	0%
PP6011-02	Viaduct B - Precast Parapets/Barriers Production	120	03-May-16 A	152	30-Jun-17	07-Mar-16	08-Sep-16	-237	0%
PP6011-03	Viaduct C - Precast Parapets/Barriers Production	120	01-Apr-16 A	128	02-Jun-17	03-Dec-15	12-May-16	-312	0%
PP6011-04	Viaduct D - Precast Parapets/Barriers Production	120	01-Mar-16 A	128	02-Jun-17	03-Dec-15	12-May-16	-312	0%
PP6011-05	Viaduct E - Precast Parapets/Barriers Production	180	02-Jul-16 A	256	03-Nov-17	08-Dec-15	20-Oct-16	-308	0%
Bearings									
Viaduct A									
Bearing Design & Manufacture									
General									
PPBRA5	SO review & comment on design submission - Viaduct A	36	21-Oct-16 A	10	04-Jan-17	08-Apr-16	19-Apr-16	-213	0%
PPBRA6	Bearing Design Amendment & re-issue - Viaduct A	12	05-Jan-17	12	18-Jan-17	20-Apr-16	04-May-16	-213	0%
PPBRA7	Manufacture of Bearing - Viaduct A	54	21-Oct-16 A	28	25-Jan-17	31-Mar-16	04-May-16	-219	0%
PPBRA8	Testing Bearing - Viaduct A	18	26-Jan-17	18	18-Feb-17	05-May-16	26-May-16	-219	0%
PPBRA9	Bearing Delivery - Viaduct A	48	20-Feb-17	48	20-Apr-17	27-May-16	23-Jul-16	-219	0%
Viaduct C									
Bearing Design & Manufacture									
General									
PPBRC6	Bearing Design Ammendment & re-issue - Viaduct C	11	21-Dec-16	11	05-Jan-17	16-Mar-20	27-Mar-20	955	0%
PPBRC99	Site preparation Bearings for Viaduct C	6	06-Jan-17	6	12-Jan-17	28-Mar-20	03-Apr-20	955	0%
Viaduct D									
Bearing Design & Manufacture									
General									
PPBRD99	Site preparation Bearings for Viaduct D	38	21-Dec-16	38	09-Feb-17	22-Feb-16	09-Apr-16	-249	0%
Viaduct E									
Bearing Design & Manufacture									
General									



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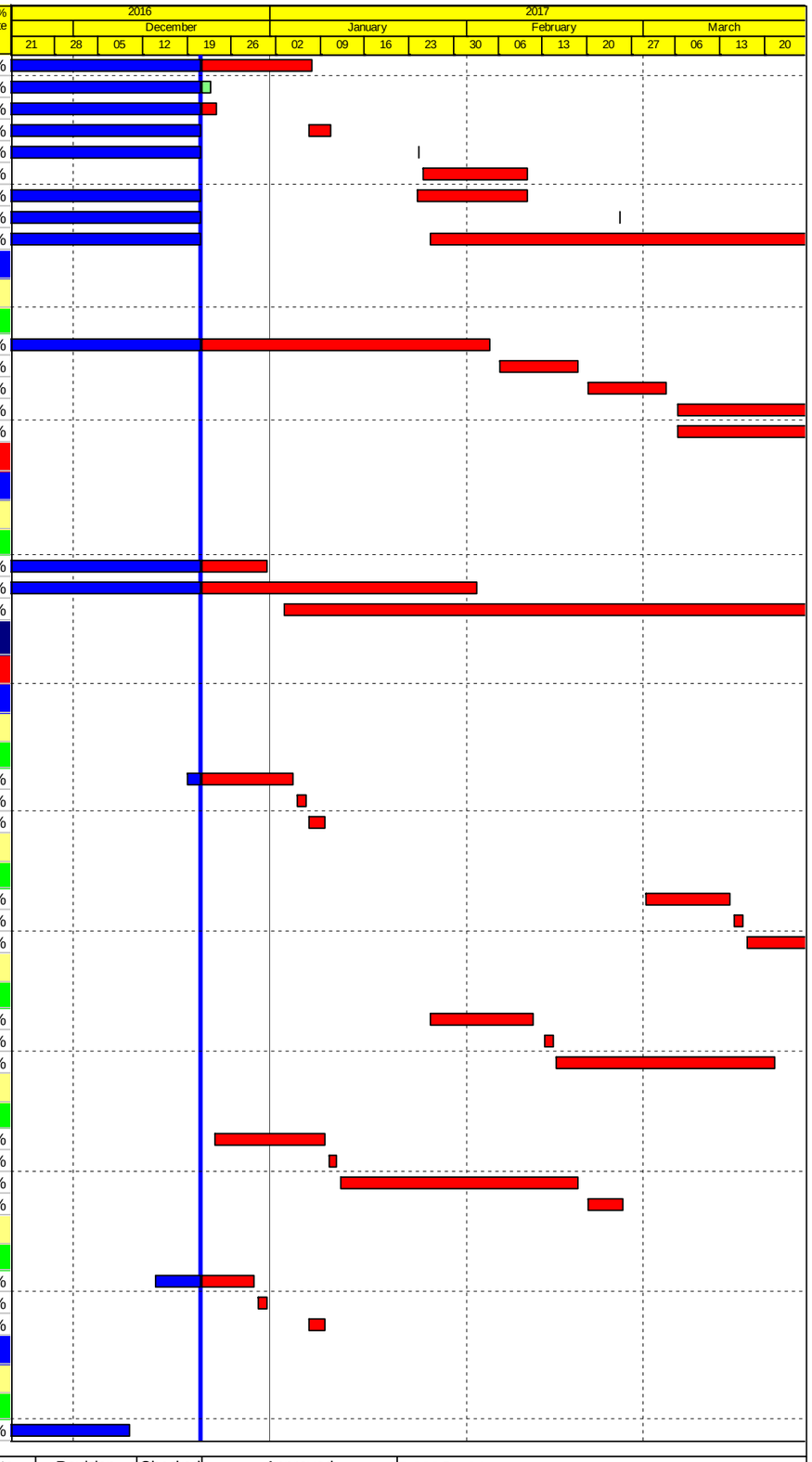
Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
PP7290	Site preparation Bearings for Viaduct E2	18	27-Apr-16 A	13	07-Jan-17	10-Mar-16	24-Mar-16	-234	0%
PP7360	Site preparation Bearings for Viaduct E1	18	10-Feb-15 A	2	22-Dec-16	02-Apr-20	03-Apr-20	970	0%
PPBRE3	Bearing design and submission - Viaduct E (E1, E2, E5, E6, E7 & E8)	12	28-Nov-13 A	3	23-Dec-16	08-Dec-15	10-Dec-15	-308	85%
PPBRE4	Design check by ICE - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	04-Apr-14 A	3	10-Jan-17	22-Dec-15	24-Dec-15	-308	85%
PPBRE5	SO review & comment on design submission - Viaduct E (E1, E2, E5, E6, E	36	26-Sep-14 A	0	24-Jan-17	11-Jan-16	11-Jan-16	-308	100%
PPBRE6	Bearing Design Amendment & re-issue - Viaduct E (E1, E2, E5, E6, E7 & E	12	25-Jan-17	12	10-Feb-17	12-Jan-16	25-Jan-16	-308	0%
PPBRE7	Manufacture of Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	54	02-Jun-14 A	13	10-Feb-17	11-Jan-16	25-Jan-16	-308	100%
PPBRE8	Testing Bearing - Viaduct E (E1, E2, E5, E6, E7 & E8)	24	03-Aug-15 A	0	25-Feb-17	11-Feb-16	11-Feb-16	-308	100%
PPBRE9	Bearing Delivery - Viaduct E (E1, E2, E5, E6, E7 & E8)	48	19-Nov-14 A	59	08-Apr-17	13-Jan-16	24-Mar-16	-308	100%
Viaduct F									
Bearing Design & Manufacture									
General									
PPBRF1	Preliminary Design of Bearings - Viaduct F	60	21-Oct-16 A	34	04-Feb-17	29-Jul-15	07-Sep-15	-417	0%
PPBRF3	Bearing design and submission - Viaduct F	12	06-Feb-17	12	18-Feb-17	08-Sep-15	21-Sep-15	-417	0%
PPBRF4	Design check by ICE - Viaduct F	12	20-Feb-17	12	04-Mar-17	22-Sep-15	07-Oct-15	-417	0%
PPBRF5	SO review & comment on design submission - Viaduct F	24	06-Mar-17	24	01-Apr-17	06-Nov-15	03-Dec-15	-393	0%
PPBRF7	Manufacture of Bearing - Viaduct F	48	06-Mar-17	48	06-May-17	08-Oct-15	03-Dec-15	-417	0%
Movement Joints									
Viaduct A to F									
MJ Design & Manufacture									
General									
PP6MJ01	Design & Submission of MJ	138	08-Feb-14 A	8	31-Dec-16	10-Mar-16	18-Mar-16	-234	30%
PP6MJ02-1	MJ Design Approval	96	26-May-14 A	32	02-Feb-17	01-Mar-16	11-Apr-16	-242	40%
PP6MJ02-2	Manufacture & delivery of MJ	150	03-Jan-17	150	08-Jul-17	10-Mar-16	09-Sep-16	-242	0%
Construction									
Foundation & Substructure Works									
Viaduct A - Bridge A2									
Pier A1 (A2e)									
Pier Head Segment									
A01-C5210	A1 - PHS - Temporary Platform	12	19-Dec-16 A	10	04-Jan-17	15-Feb-16	25-Feb-16	-255	17%
A01-C5310	A1 - Install PH Segment A1-A2 (1 nr)	2	05-Jan-17*	2	06-Jan-17	26-Feb-16	27-Feb-16	-255	0%
A01-C5320	A1 - Install PH Segment A1-E1 (1 nr)	2	07-Jan-17	2	09-Jan-17	29-Feb-16	01-Mar-16	-255	0%
Pier A3 (A2c)									
Pier Head Segment									
A03-C5210	A3 - PHS - Temporary Platform	12	01-Mar-17	12	14-Mar-17	08-Apr-16	21-Apr-16	-267	0%
A03-C5310	A3 - Install PH Segment (1 nr)	2	15-Mar-17*	2	16-Mar-17	22-Apr-16	23-Apr-16	-267	0%
A03-C5410	A3 - PHS Diaphragm - Rebar, Formwork, Concreting	30	17-Mar-17	30	25-Apr-17	25-Apr-16	31-May-16	-267	0%
Pier A4 (A2b)									
Pier Head Segment									
A04-C5210	A4 - PHS - Temporary Platform	12	26-Jan-17	12	11-Feb-17	01-Mar-16	15-Mar-16	-269	0%
A04-C5310	A4 - Install PH Segment (1nr)	2	13-Feb-17*	2	14-Feb-17	15-Mar-16	17-Mar-16	-269	0%
A04-C5410	A4 - PHS Diaphragm - Rebar, Formwork, Concreting	30	15-Feb-17	30	21-Mar-17	17-Mar-16	26-Apr-16	-269	0%
Pier A5 (A2a)									
Pier Head Segment									
A05-C5210	A5 - PHS - Temporary Platform	12	23-Dec-16	12	09-Jan-17	26-Jan-16	12-Feb-16	-270	0%
A05-C5310	A5 - Install PH Segment (1 nr)	2	10-Jan-17*	2	11-Jan-17	12-Feb-16	15-Feb-16	-270	0%
A05-C5410	A5 - PHS Diaphragm - Rebar, Formwork, Concreting	30	12-Jan-17	30	18-Feb-17	15-Feb-16	21-Mar-16	-270	0%
A05-C5420	A5 - PHS Diaphragm - Curing & Striking of Forms	6	20-Feb-17	6	25-Feb-17	21-Mar-16	01-Apr-16	-269	0%
Pier A6 (A1f)									
Pier Head Segment									
A06-C5210	A6 - PHS - Temporary Platform	12	14-Dec-16 A	6	29-Dec-16	19-Jan-16	25-Jan-16	-275	0%
A06-C5310	A6 - Install PH Segment A6-A5 (1 nr)	2	30-Dec-16*	2	31-Dec-16	26-Jan-16	27-Jan-16	-275	0%
A06-C5320	A6 - Install PH Segment A6-A7 (1 nr)	2	07-Jan-17*	2	09-Jan-17	28-Jan-16	29-Jan-16	-279	0%
Viaduct A - Bridge A1									
Pier A7 (A1e)									
Pier Head Segment									
A07-C5410	A7 - PHS Diaphragm - Rebar, Formwork, Concreting	24	12-Nov-16 A	0	10-Dec-16 A				100%



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Tuen Mun - Chek Lap Kok Link - Southern Connection
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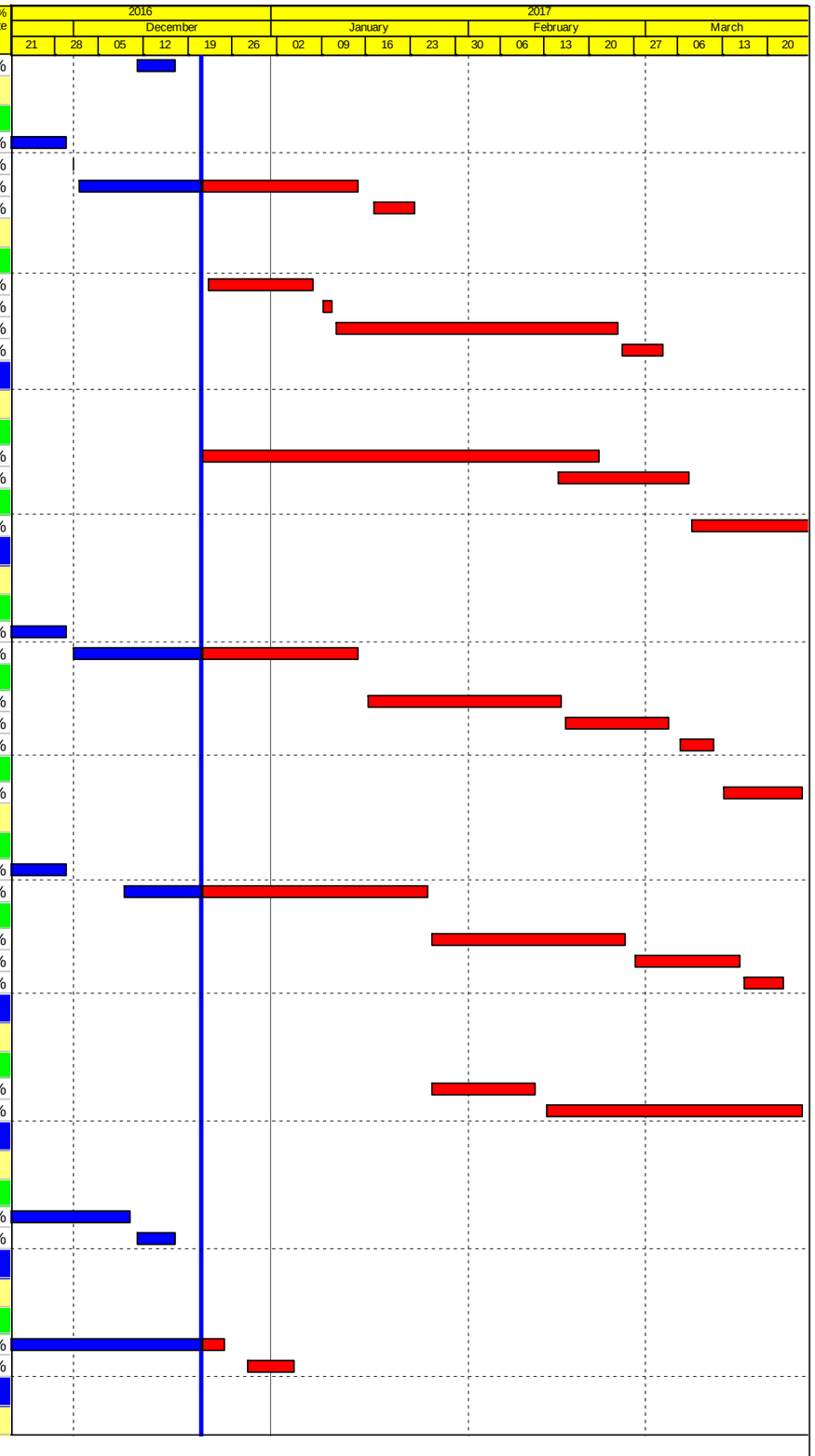
Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
A07-C5420	A7 - PHS Diaphragm - Curing & Striking of Forms	7	11-Dec-16 A	0	17-Dec-16 A				100%
Pier A8 (A1d)									
Pier Head Segment									
A08-C5210	A8 - PHS - Temporary Platform	12	14-Nov-16 A	0	30-Nov-16 A				100%
A08-C5310	A8 - Install PH Segment (1 nr)	2	01-Dec-16 A	0	01-Dec-16 A				100%
A08-C5410	A8 - PHS Diaphragm - Rebar, Formwork, Concreting	36	02-Dec-16 A	19	14-Jan-17	02-Jan-16	23-Jan-16	-289	50%
A08-C5420	A8 - PHS Diaphragm - Curing & Striking of Forms	6	17-Jan-17	6	23-Jan-17	26-Jan-16	01-Feb-16	-289	0%
Pier A9 (A1c)									
Pier Head Segment									
A09-C5210	A9 - PHS - Temporary Platform	12	22-Dec-16	12	07-Jan-17	26-Jan-16	11-Feb-16	-270	0%
A09-C5310	A9 - Install PH Segment (1 nr)	2	09-Jan-17*	2	10-Jan-17	12-Feb-16	13-Feb-16	-270	0%
A09-C5410	A9 - PHS Diaphragm - Rebar, Formwork, Concreting	36	11-Jan-17	36	24-Feb-17	15-Feb-16	30-Mar-16	-270	0%
A09-C5420	A9 - PHS Diaphragm - Curing & Striking of Forms	6	25-Feb-17	6	03-Mar-17	31-Mar-16	07-Apr-16	-270	0%
Ramp A									
Abutment & Approach Ramp A									
Ramp Structure									
ARA-C6140	Ramp A - Remaining RE & RC Walls	48	21-Dec-16*	48	21-Feb-17	21-Jan-16	19-Mar-16	-273	0%
ARA-C6150	Ramp A - Backfill to Walls	18	15-Feb-17	18	07-Mar-17	14-Mar-16	07-Apr-16	-273	0%
Ramp Finishes, E&M & Roadworks									
ARA-C7710	Ramp A - Parapet Panels	42	08-Mar-17	42	29-Apr-17	08-Apr-16	28-May-16	-273	0%
Viaduct B - Bridge B1									
Pier B17 (B1c)									
Foundation - Socketed H-Piles									
B17-C2030	B17 - TTA & Utility Protection Work	26	18-Nov-16 A	0	30-Nov-16 A				100%
B17-C2110	B17 - Install SH Pile (10 nr) (incl. proof drilling)	36	01-Dec-16 A	19	14-Jan-17	24-Nov-15	15-Dec-15	-320	40%
Pile Cap									
B17-C3110	B17 - Pile Cap Excavation / ELS & Break Pile	24	16-Jan-17	24	15-Feb-17	16-Dec-15	15-Jan-16	-320	0%
B17-C3210	B17 - Pile Cap Blinding, Rebar, Formwork, Concrete	15	16-Feb-17	15	04-Mar-17	16-Jan-16	02-Feb-16	-320	0%
B17-C3310	B17 - Pile Cap Curing, Strike Formwork, CJ Prep, Backfill	6	06-Mar-17	6	11-Mar-17	03-Feb-16	12-Feb-16	-320	0%
Pier									
B17-C4110	B17 - Pier Scaffold, Rebar, Formwork, Concrete (1st Lift)	12	13-Mar-17	12	25-Mar-17	13-Feb-16	26-Feb-16	-320	0%
Pier B18 (B1b)									
Foundation - Socketed H-Piles									
B18-C2030	B18 - TTA & Utility Protection Work	26	18-Nov-16 A	0	30-Nov-16 A				100%
B18-C2110	B18 - Install SH Pile (6 nr) (incl. proof drilling)	27	09-Dec-16 A	28	25-Jan-17	23-Jan-16	27-Feb-16	-271	50%
Pile Cap									
B18-C3110	B18 - Pile Cap Excavation / ELS & Break Pile	24	26-Jan-17	24	25-Feb-17	14-Apr-16	12-May-16	-236	0%
B18-C3210	B18 - Pile Cap Blinding, Rebar, Formwork, Concrete	15	27-Feb-17	15	15-Mar-17	13-May-16	31-May-16	-236	0%
B18-C3310	B18 - Pile Cap Curing, Strike Formwork, CJ Prep, Backfill	6	16-Mar-17	6	22-Mar-17	01-Jun-16	07-Jun-16	-236	0%
Ramp B									
Abutment & Approach Ramp B									
Ramp Structure									
ARB-C6110	Ramp B - Erect Fence / Enabling Works	12	26-Jan-17	12	11-Feb-17	29-Feb-16	12-Mar-16	-271	0%
ARB-C6120	Ramp B - RE Wall - Excavation & Bottom Layer to Grnd Level	36	13-Feb-17	36	25-Mar-17	14-Mar-16	28-Apr-16	-271	0%
Viaduct C - Bridge C3									
Pier C10 (C3b)									
Pier Head Segment									
C10-C5410	C10 - PHS Diaphragm - Rebar, Formwork, Concreting	30	09-Nov-16 A	0	10-Dec-16 A				100%
C10-C5420	C10 - PHS Diaphragm - Curing & Striking of Forms	6	11-Dec-16 A	0	17-Dec-16 A				100%
Viaduct C - Bridge C2									
Pier C16 (C2b)									
Pier Head Segment									
C16-C5410	C16 - PHS Diaphragm - Rebar, Formwork, Concreting	36	15-Nov-16 A	4	24-Dec-16	24-Dec-15	30-Dec-15	-294	80%
C16-C5420	C16 - PHS Diaphragm - Curing & Striking of Forms	6	28-Dec-16	6	04-Jan-17	31-Dec-15	07-Jan-16	-294	0%
Ramp C									
Abutment & Approach Ramp C									



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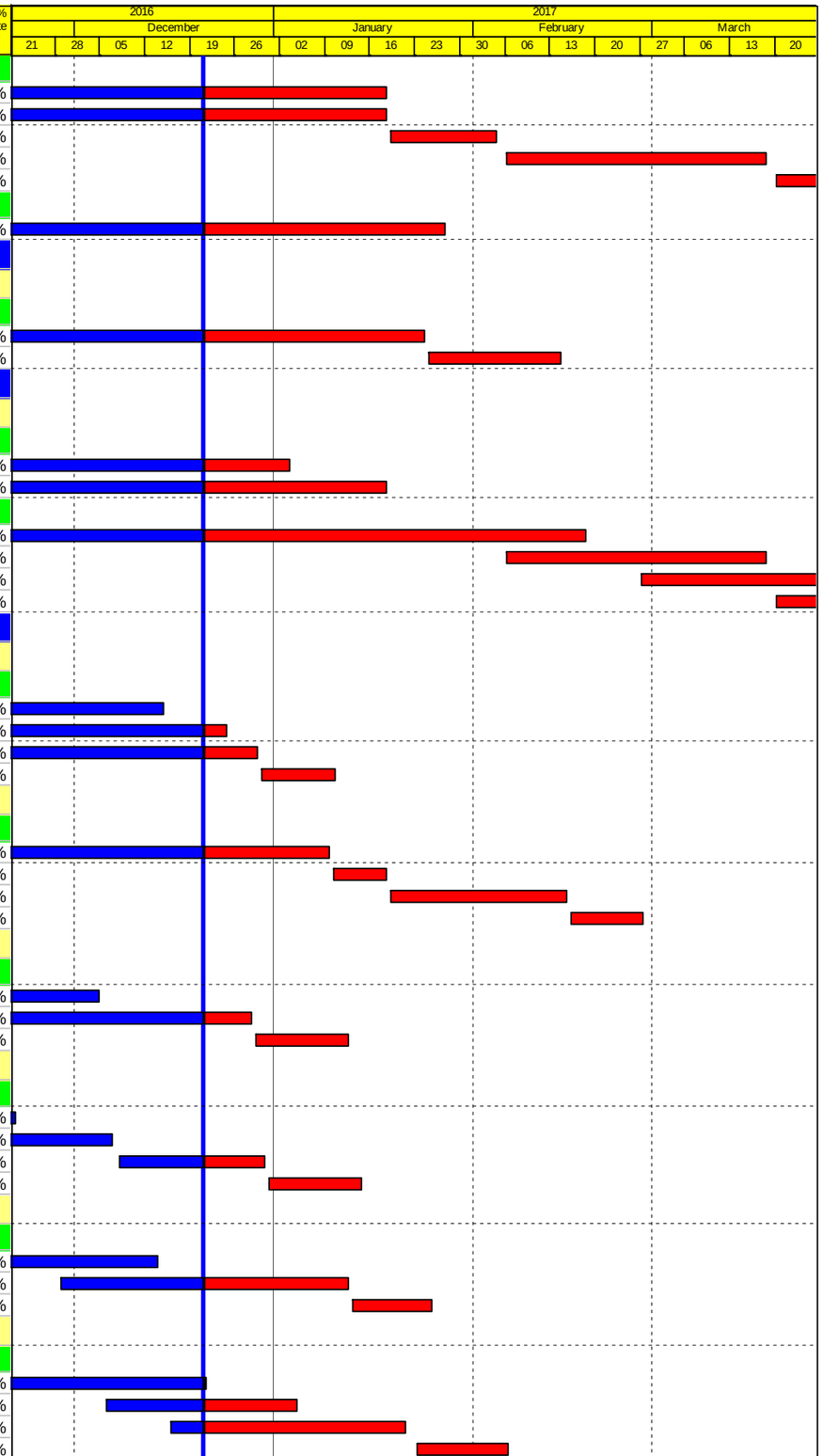
DWG. No.:

J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
Ramp Structure									
ARC-C6140	Ramp C - RC Wall - Backfill	12	16-May-16 A	22	18-Jan-17	15-Jan-16	12-Feb-16	-278	90%
ARC-C6150	Ramp C - Utility - Termination of 800 Tee	72	21-Sep-16 A	22	18-Jan-17	15-Jan-16	12-Feb-16	-278	0%
ARC-C6160	Ramp C - Utility - Remove 800 Tee & Backfill	12	19-Jan-17	12	04-Feb-17	13-Feb-16	26-Feb-16	-278	0%
ARC-C6170	Ramp C - RE Wall - Remaining Bays at 800 Tee	36	06-Feb-17	36	18-Mar-17	27-Feb-16	13-Apr-16	-278	0%
ARC-C6180	Ramp C - RC Wall - Remaining Bays at 800 Tee	36	20-Mar-17	36	06-May-17	14-Apr-16	27-May-16	-278	0%
Ramp Finishes, E&M & Roadworks									
ARC-C7710	Ramp C - Parapet Panels (Initial)	24	26-Sep-16 A	30	27-Jan-17	21-Apr-16	27-May-16	-202	10%
Viaduct D - Bridge D2									
Pier D13 (D2d)									
Pier Head Segment									
D13-C5410	D13 - PHS Diaphragm - Rebar, Formwork, Concreting	42	12-Sep-16 A	27	24-Jan-17	18-Jan-16	20-Feb-16	-276	60%
D13-C5420	D13 - PHS Diaphragm - Curing, Striking of Forms, Remove Scaffold	15	25-Jan-17	15	14-Feb-17	22-Feb-16	09-Mar-16	-276	0%
Ramp D									
Abutment & Approach Ramp D									
Ramp Structure									
ARD-C6140	Ramp D - Box Structure Bay 1 & Bay 8	55	07-Mar-16 A	9	03-Jan-17	16-Mar-16	29-Mar-16	-229	80%
ARD-C6150	Ramp D - Backfill Embankment	90	02-Nov-15 A	22	18-Jan-17	16-Mar-16	14-Apr-16	-229	70%
Ramp Finishes, E&M & Roadworks									
ARD-C7710	Ramp D - Parapet Panels	42	15-Oct-16 A	46	18-Feb-17	16-Mar-16	13-May-16	-229	50%
ARD-C7720	Ramp D - Ducting, Gantry & TCSS Provisions (KD4)	36	06-Feb-17	36	18-Mar-17	29-Apr-16	13-Jun-16	-229	0%
ARD-C7810	Ramp D - Drainage, Fire Main & E&M Services	54	27-Feb-17	54	06-May-17	23-May-16	26-Jul-16	-229	0%
ARD-C7820	Ramp D - Railings, Light Poles, Signs & Street Furniture	30	20-Mar-17	30	27-Apr-17	09-Aug-16	12-Sep-16	-182	0%
Viaduct E - Bridge E2									
Pier E4A (E2b2)									
Pier Head Segment									
E04A-C5130	E4A - Diaphragm of PHS - Formwork, Rebar, Concreting	77	04-Jun-16 A	0	15-Dec-16 A				100%
E04A-C5140	E4A - Remove Rail Beams, Megashore Towers. Crane	17	13-Oct-16 A	4	24-Dec-16	09-Apr-16	13-Apr-16	-212	70%
E04A-C5145	E4A - Install Infill Segments (4 nr) - THB	26	14-Nov-16 A	6	29-Dec-16	07-Apr-16	13-Apr-16	-214	50%
E04A-C5150	E4A - IFS Stitch & Remove Equipment	9	30-Dec-16	9	10-Jan-17	14-Apr-16	23-Apr-16	-214	0%
Pier E4B (E2b1)									
Pier Head Segment									
E04B-C5130	E4B - Diaphragm of PHS - Formwork, Rebar, Concreting	125	14-Sep-16 A	14	09-Jan-17	25-Jun-16	12-Jul-16	-149	80%
E04B-C5140	E4B - Remove Rail Beams, Megashore Towers	8	10-Jan-17	8	18-Jan-17	13-Jul-16	21-Jul-16	-149	0%
E04B-C5145	E4B - Install Infill Segments (4 nr) - THB	21	19-Jan-17	21	15-Feb-17	22-Jul-16	15-Aug-16	-149	0%
E04B-C5150	E4B - IFS Stitch & Remove Equipment	10	16-Feb-17	10	27-Feb-17	16-Aug-16	26-Aug-16	-149	0%
Pier E5A (E2c2)									
Pier Head Segment									
E05A-C5140	E5A - Remove Rail Beams, Crane	14	01-Nov-16 A	0	05-Dec-16 A				100%
E05A-C5145	E5A - Install Infill Segments (4 nr) - THB	23	12-Nov-16 A	5	28-Dec-16	14-Dec-15	18-Dec-15	-303	50%
E05A-C5150	E5A - IFS Stitch & Remove Equipment	12	29-Dec-16	12	12-Jan-17	19-Dec-15	05-Jan-16	-303	0%
Pier E5B (E2c1)									
Pier Head Segment									
E05B-C5130	E5B - Diaphragm of PHS - Formwork, Rebar, Concreting	73	08-Sep-16 A	0	22-Nov-16 A				100%
E05B-C5140	E5B - Remove Rail Beams	8	17-Nov-16 A	0	07-Dec-16 A				100%
E05B-C5145	E5B - Install Infill Segments (4 nr) - THB	15	08-Dec-16 A	7	30-Dec-16	18-Jan-16	25-Jan-16	-276	50%
E05B-C5150	E5B - IFS Stitch & Remove Equipment	12	31-Dec-16	12	14-Jan-17	26-Jan-16	11-Feb-16	-276	0%
Pier E6A (E2d2)									
Pier Head Segment									
E06A-C5140	E6A - Remove Rail Beams, Crane	11	17-Nov-16 A	0	14-Dec-16 A				100%
E06A-C5145	E6A - Install Infill Segments (4 nr) - THB	16	29-Nov-16 A	17	12-Jan-17	25-Jan-16	16-Feb-16	-270	50%
E06A-C5150	E6A - IFS Stitch & Remove Equipment	11	13-Jan-17	11	25-Jan-17	17-Feb-16	29-Feb-16	-270	0%
Pier E6B (E2d1)									
Pier Head Segment									
E06B-C5130	E6B - Diaphragm of PHS - Formwork, Rebar, Concreting	76	26-Sep-16 A	1	21-Dec-16	20-Feb-16	20-Feb-16	-250	90%
E06B-C5140	E6B - Remove Rail Beams	9	06-Dec-16 A	10	04-Jan-17	20-Feb-16	02-Mar-16	-250	50%
E06B-C5145	E6B - Install Infill Segments (4 nr) - THB	17	16-Dec-16 A	25	21-Jan-17	20-Feb-16	19-Mar-16	-250	25%
E06B-C5150	E6B - IFS Stitch & Remove Equipment	10	23-Jan-17	10	06-Feb-17	21-Mar-16	05-Apr-16	-250	0%



Actual Work
Planned Bar
Critical Bar
Milestone

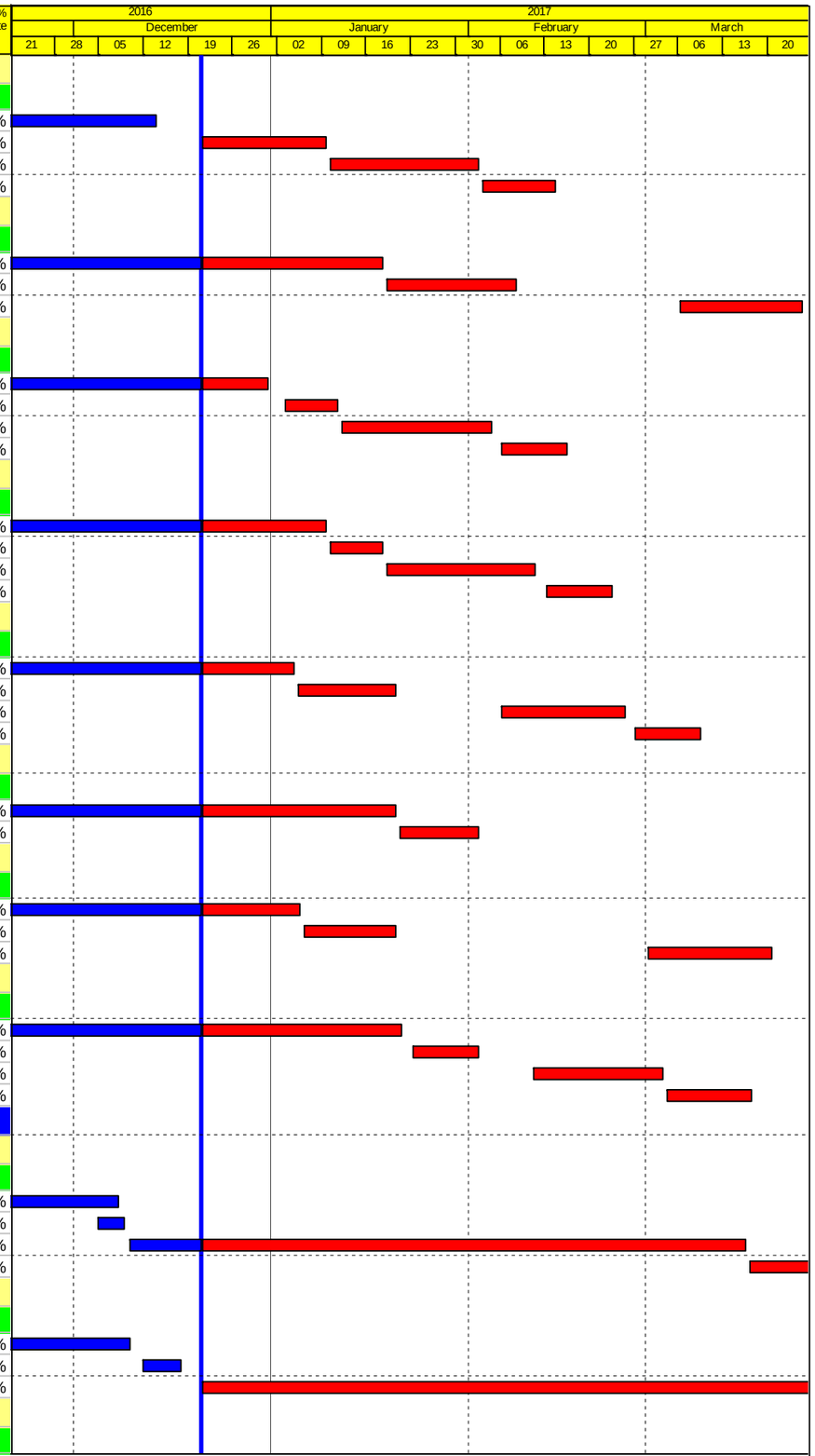
Project ID: TMCLK-DWPH-M43
Layout: J3518-DWP-3MRP Submission - M43
Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 6 of 13 Pages)
(Progress as of 21-Dec-16)

Date	Revision	Checked	Approved
31-Oct-16		PKN	GL
30-Nov-...		PKN	GL
03-Jan-17		PKN	GL

DWG. No.:
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
Pier E7A (E2e2)									
Pier Head Segment									
E07A-C5130	E7A - Diaphragm of PHS - Formwork, Rebar, Concreting	71	08-Oct-16 A	0	14-Dec-16 A				100%
E07A-C5140	E7A - Remove Rail Beams, Crane	14	21-Dec-16	14	09-Jan-17	28-Jan-16	16-Feb-16	-267	0%
E07A-C5145	E7A - Install Infill Segments (4 nr) - THB	18	10-Jan-17	18	02-Feb-17	17-Feb-16	08-Mar-16	-267	0%
E07A-C5150	E7A - IFS Stitch & Remove Equipment	10	03-Feb-17	10	14-Feb-17	09-Mar-16	19-Mar-16	-267	0%
Pier E7B (E2e1)									
Pier Head Segment									
E07B-C5130	E7B - Diaphragm of PHS - Formwork, Rebar, Concreting	76	14-Oct-16 A	22	18-Jan-17	07-Nov-15	02-Dec-15	-334	40%
E07B-C5140	E7B - Remove Rail Beams	15	19-Jan-17	15	08-Feb-17	03-Dec-15	19-Dec-15	-334	0%
E07B-C5145	E7B - Install Infill Segments (4 nr) - THB	18	06-Mar-17*	18	25-Mar-17	21-Dec-15	13-Jan-16	-355	0%
Pier E8A (E2f2)									
Pier Head Segment									
E08A-C5130	E8A - Diaphragm of PHS - Formwork, Rebar, Concreting	82	28-Sep-16 A	8	31-Dec-16	27-Oct-15	04-Nov-15	-344	80%
E08A-C5140	E8A - Remove Rail Beams, Crane	8	03-Jan-17	8	11-Jan-17	05-Nov-15	13-Nov-15	-344	0%
E08A-C5145	E8A - Install Infill Segments (4 nr) - THB	18	12-Jan-17	18	04-Feb-17	14-Nov-15	04-Dec-15	-344	0%
E08A-C5150	E8A - IFS Stitch & Remove Equipment	10	06-Feb-17	10	16-Feb-17	05-Dec-15	16-Dec-15	-344	0%
Pier E8B (E2f1)									
Pier Head Segment									
E08B-C5130	E8B - Diaphragm of PHS - Formwork, Rebar, Concreting	61	26-Oct-16 A	14	09-Jan-17	19-Mar-16	08-Apr-16	-226	60%
E08B-C5140	E8B - Remove Rail Beams	8	10-Jan-17	8	18-Jan-17	09-Apr-16	18-Apr-16	-226	0%
E08B-C5145	E8B - Install Infill Segments (4 nr) - THB	18	19-Jan-17	18	11-Feb-17	19-Apr-16	10-May-16	-226	0%
E08B-C5150	E8B - IFS Stitch & Remove Equipment	10	13-Feb-17	10	23-Feb-17	11-May-16	23-May-16	-226	0%
Pier E9A (E2g2)									
Pier Head Segment									
E09A-C5130	E9A - Diaphragm of PHS - Formwork, Rebar, Concreting	86	23-Sep-16 A	10	04-Jan-17	21-Dec-15	04-Jan-16	-297	60%
E09A-C5140	E9A - Remove Rail Beams, Crane	14	05-Jan-17	14	20-Jan-17	05-Jan-16	20-Jan-16	-297	0%
E09A-C5145	E9A - Install Infill Segments (4 nr) - THB	18	06-Feb-17*	18	25-Feb-17	21-Jan-16	13-Feb-16	-307	0%
E09A-C5150	E9A - IFS Stitch & Remove Equipment	10	27-Feb-17	10	09-Mar-17	15-Feb-16	25-Feb-16	-307	0%
Pier E9B (E2g1)									
Pier Head Segment									
E09B-C5130	E9B - Diaphragm of PHS - Formwork, Rebar, Concreting	33	17-Oct-16 A	24	20-Jan-17	13-Feb-16	11-Mar-16	-256	50%
E09B-C5140	E9B - Remove Rail Beams	8	21-Jan-17	8	02-Feb-17	12-Mar-16	21-Mar-16	-256	0%
Pier E10A (E2h2)									
Pier Head Segment									
E10A-C5130	E10A - Diaphragm of PHS - Formwork, Rebar, Concreting	56	15-Oct-16 A	11	05-Jan-17	26-Apr-16	09-May-16	-198	50%
E10A-C5140	E10A - Remove Rail Beams, Crane	13	06-Jan-17	13	20-Jan-17	10-May-16	25-May-16	-198	0%
E10A-C5145	E10A - Install Infill Segments (4 nr) - THB	17	01-Mar-17*	17	20-Mar-17	26-May-16	15-Jun-16	-228	0%
Pier E10B (E2h1)									
Pier Head Segment									
E10B-C5130	E10B - Diaphragm of PHS - Formwork, Rebar, Concreting	51	19-Nov-16 A	25	21-Jan-17	15-Apr-16	16-May-16	-207	15%
E10B-C5140	E10B - Remove Rail Beams	7	23-Jan-17	7	02-Feb-17	17-May-16	24-May-16	-207	0%
E10B-C5145	E10B - Install Infill Segments (4 nr) - THB	18	11-Feb-17*	18	03-Mar-17	25-May-16	15-Jun-16	-214	0%
E10B-C5150	E10B - IFS Stitch & Remove Equipment	12	04-Mar-17	12	17-Mar-17	16-Jun-16	29-Jun-16	-214	0%
Viaduct E - Bridge E5, E6, E7, E8									
Pier E11A (E7E8a)									
Pier Head Segment									
E11A-C5110	E11A - Temp. Work, Grillages, Spreader Beams, Rail Beams	21	28-Oct-16 A	0	08-Dec-16 A				100%
E11A-C5120	E11A - Install PH Segment (4 nr)	9	05-Dec-16 A	0	09-Dec-16 A				100%
E11A-C5130	E11A - Diaphragm of PHS - Formwork, Rebar, Concreting	80	10-Dec-16 A	68	16-Mar-17	24-Oct-15	14-Jan-16	-346	5%
E11A-C5140	E11A - Remove Rail Beams, Spreader Beams, Crane	14	17-Mar-17	14	01-Apr-17	15-Jan-16	30-Jan-16	-346	0%
Pier E11B (E5e6a)									
Pier Head Segment									
E11B-C5110	E11B - Temp. Work, Spreader Beams, Rail Beams	21	21-Nov-16 A	0	10-Dec-16 A				100%
E11B-C5120	E11B - Install PH Segment (4 nr)	7	12-Dec-16 A	0	18-Dec-16 A				100%
E11B-C5130	E11B - Diaphragm of PHS - Formwork, Rebar, Concreting	81	21-Dec-16	81	31-Mar-17	15-May-15	20-Aug-15	-478	0%
Pier E12A (E8b)									
Pile Cap Dolphin									



Actual Work
Planned Bar
Critical Bar
Milestone

Project ID: TMCLK-DWPH-M43
Layout: J3518-DWP-3MRP Submission - M43
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Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 7 of 13 Pages)
(Progress as of 21-Dec-16)

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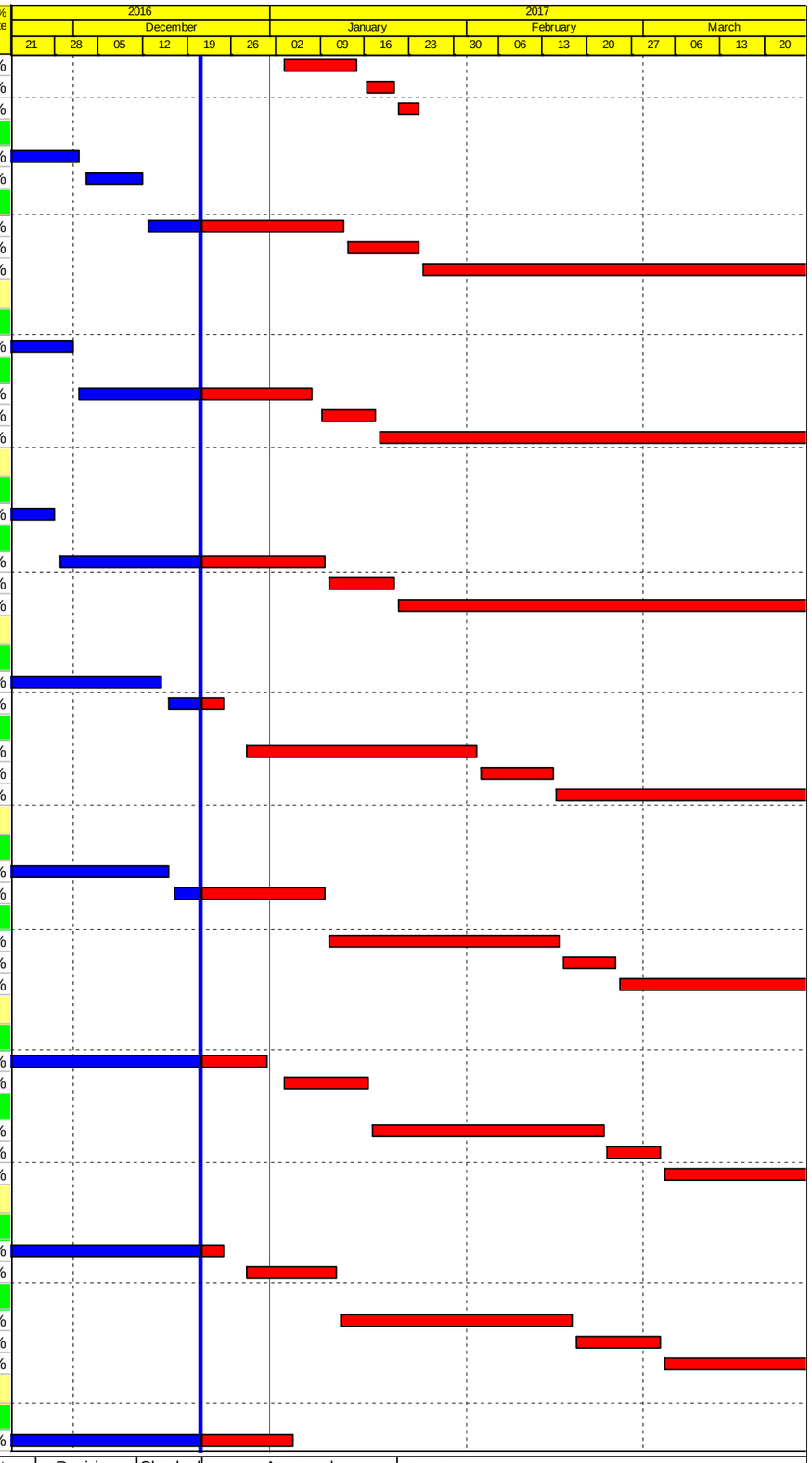
03-Jan-17		PKN	GL

DWG. No.:
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
E12A-C3130	E12A- Dolphin - Marine Pile Cap - Fixings, Dewatering & Trim Pile	11	03-Jan-17*	11	14-Jan-17	07-Nov-16	18-Nov-16	-46	0%
E12A-C3150	E12A - Dolphin - Marine Pile Cap - Rebar, Concreting	5	16-Jan-17	5	20-Jan-17	19-Nov-16	24-Nov-16	-46	0%
E12A-C3160	E12A - Dolphin - Marine Pile Cap - CJ preparation & Curing	3	21-Jan-17	3	24-Jan-17	25-Nov-16	28-Nov-16	-46	0%
Pier									
E12A-C4040	E12A Pier - TW, Rebar, Formwork, Concreting - Upper Arm (Solid)	47	10-Oct-16 A	0	02-Dec-16 A				100%
E12A-C4050	E12A Pier - Curing, CJ, Remove Formwork & Falsework	12	03-Dec-16 A	0	12-Dec-16 A				100%
Pier Head Segment / Infill Segment									
E12A-C5110	E12A - Temp. Work, Grillages, Megashore Towers, Rail Beams	28	13-Dec-16 A	17	12-Jan-17	01-Jun-15	19-Jun-15	-465	0%
E12A-C5120	E12A - Install PH Segment (4 nr)	10	13-Jan-17	10	24-Jan-17	22-Jun-15	03-Jul-15	-465	0%
E12A-C5130	E12A - Diaphragm of PHS - Formwork, Rebar, Concreting	78	25-Jan-17	78	05-May-17	04-Jul-15	06-Oct-15	-465	0%
Pier E12B (E7b)									
Pier									
E12B-C4060	E12B Pier - Curing, CJ, Remove Formwork & Falsework	12	17-Nov-16 A	0	01-Dec-16 A				100%
Pier Head Segment / Infill Segment									
E12B-C5110	E12B - Temp. Work, Grillages, Megashore Towers, Rail Beams	29	02-Dec-16 A	13	07-Jan-17	28-Nov-15	12-Dec-15	-316	50%
E12B-C5120	E12B - Install PH Segment (4 nr)	8	09-Jan-17	8	17-Jan-17	14-Dec-15	22-Dec-15	-316	0%
E12B-C5130	E12B - Diaphragm of PHS - Formwork, Rebar, Concreting	81	18-Jan-17	81	29-Apr-17	23-Dec-15	06-Apr-16	-316	0%
Pier E12C (E6b)									
Pier									
E12C-C4050	E12C Pier - Curing, CJ, Remove Formwork & Falsework	12	21-Nov-16 A	0	28-Nov-16 A				100%
Pier Head Segment / Infill Segment									
E12C-C5110	E12C - Temp. Work, Grillages, Megashore Towers, Rail Beams	28	29-Nov-16 A	14	09-Jan-17	21-Nov-15	07-Dec-15	-322	50%
E12C-C5120	E12C - Install PH Segment (4 nr)	10	10-Jan-17*	10	20-Jan-17	08-Dec-15	18-Dec-15	-322	0%
E12C-C5130	E12C - Diaphragm of PHS - Formwork, Rebar, Concreting	79	21-Jan-17	79	02-May-17	19-Dec-15	30-Mar-16	-322	0%
Pier E12D (E5b)									
Pier									
E12D-C4040	E12D Pier - TW, Rebar, Formwork, Concreting - Upper Arm (Solid)	36	31-Oct-16 A	0	15-Dec-16 A				100%
E12D-C4050	E12D Pier - Curing, CJ, Remove Formwork & Falsework	12	16-Dec-16 A	4	24-Dec-16	11-May-15	14-May-15	-482	70%
Pier Head Segment / Infill Segment									
E12D-C5110	E12D - Temp. Work, Grillages, Megashore Towers, Rail Beams	28	28-Dec-16	28	02-Feb-17	15-May-15	17-Jun-15	-482	0%
E12D-C5120	E12D - Install PH Segment (4 nr)	10	03-Feb-17	10	14-Feb-17	18-Jun-15	30-Jun-15	-482	0%
E12D-C5130	E12D - Diaphragm of PHS - Formwork, Rebar, Concreting	77	15-Feb-17	77	22-May-17	02-Jul-15	02-Oct-15	-482	0%
Pier E13A (E8c)									
Pier									
E13A-C4040	E13A Pier - TW, Rebar, Formwork, Concreting - Upper Arm (Soild)	44	17-Oct-16 A	0	16-Dec-16 A				100%
E13A-C4050	E13A Pier - Curing, CJ, Remove Formwork & Falsework	12	17-Dec-16 A	14	09-Jan-17	25-Apr-15	12-May-15	-494	15%
Pier Head Segment / Infill Segment									
E13A-C5110	E13A - Temp. Work, Grillages, Megashore Towers, Rail Beams	29	10-Jan-17	29	15-Feb-17	13-May-15	16-Jun-15	-494	0%
E13A-C5120	E13A - Install PH Segment (4 nr)	8	16-Feb-17	8	24-Feb-17	17-Jun-15	26-Jun-15	-494	0%
E13A-C5130	E13A - Diaphragm of PHS - Formwork, Rebar, Concreting	77	25-Feb-17	77	02-Jun-17	27-Jun-15	26-Sep-15	-494	0%
Pier E13B (E7c)									
Pier									
E13B-C4030	E13B Pier - TW, Rebar, Formwork, Concreting - Upper Arm (Solid)	52	31-Oct-16 A	8	31-Dec-16	27-Apr-15	06-May-15	-493	75%
E13B-C4040	E13B Pier - Curing, CJ, Remove Formwork & Falsework	12	03-Jan-17	12	16-Jan-17	07-May-15	20-May-15	-493	0%
Pier Head Segment / Infill Segment									
E13B-C5110	E13B - Temp. Work, Grillages, Megashore Towers, Rail Beams	29	17-Jan-17	29	22-Feb-17	21-May-15	25-Jun-15	-493	0%
E13B-C5120	E13B - Install PH Segment (4 nr)	8	23-Feb-17	8	03-Mar-17	26-Jun-15	06-Jul-15	-493	0%
E13B-C5130	E13B - Diaphragm of PHS - Formwork, Rebar, Concreting	77	04-Mar-17	77	09-Jun-17	07-Jul-15	07-Oct-15	-493	0%
Pier E13C (E6c)									
Pier									
E13C-C4030	E13C Pier - TW, Rebar, Formwork, Concreting - Upper Arm (Soild)	36	15-Nov-16 A	4	24-Dec-16	15-Aug-15	19-Aug-15	-402	75%
E13C-C4040	E13C Pier - Curing, CJ, Remove Formwork & Falsework	12	28-Dec-16	12	11-Jan-17	20-Aug-15	02-Sep-15	-402	0%
Pier Head Segment / Infill Segment									
E13C-C5110	E13C - Temp. Work, Grillages, Megashore Towers, Rail Beams	29	12-Jan-17	29	17-Feb-17	04-Sep-15	09-Oct-15	-402	0%
E13C-C5120	E13C - Install PH Segment (4 nr)	12	18-Feb-17	12	03-Mar-17	10-Oct-15	24-Oct-15	-402	0%
E13C-C5130	E13C - Diaphragm of PHS - Formwork, Rebar, Concreting	76	04-Mar-17	76	08-Jun-17	26-Oct-15	25-Jan-16	-402	0%
Pier E13D (E5c)									
Pier									
E13D-C4030	E13D Pier - TW, Rebar, Formwork, Concreting - Upper Arm (Solid)	36	21-Nov-16 A	10	04-Jan-17	21-Jul-15	31-Jul-15	-424	60%



Actual Work
Planned Bar
Critical Bar
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Project ID: TMCLK-DWPH-M43
Layout: J3518-DWP-3MRP Submission - M43
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Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 8 of 13 Pages)
(Progress as of 21-Dec-16)

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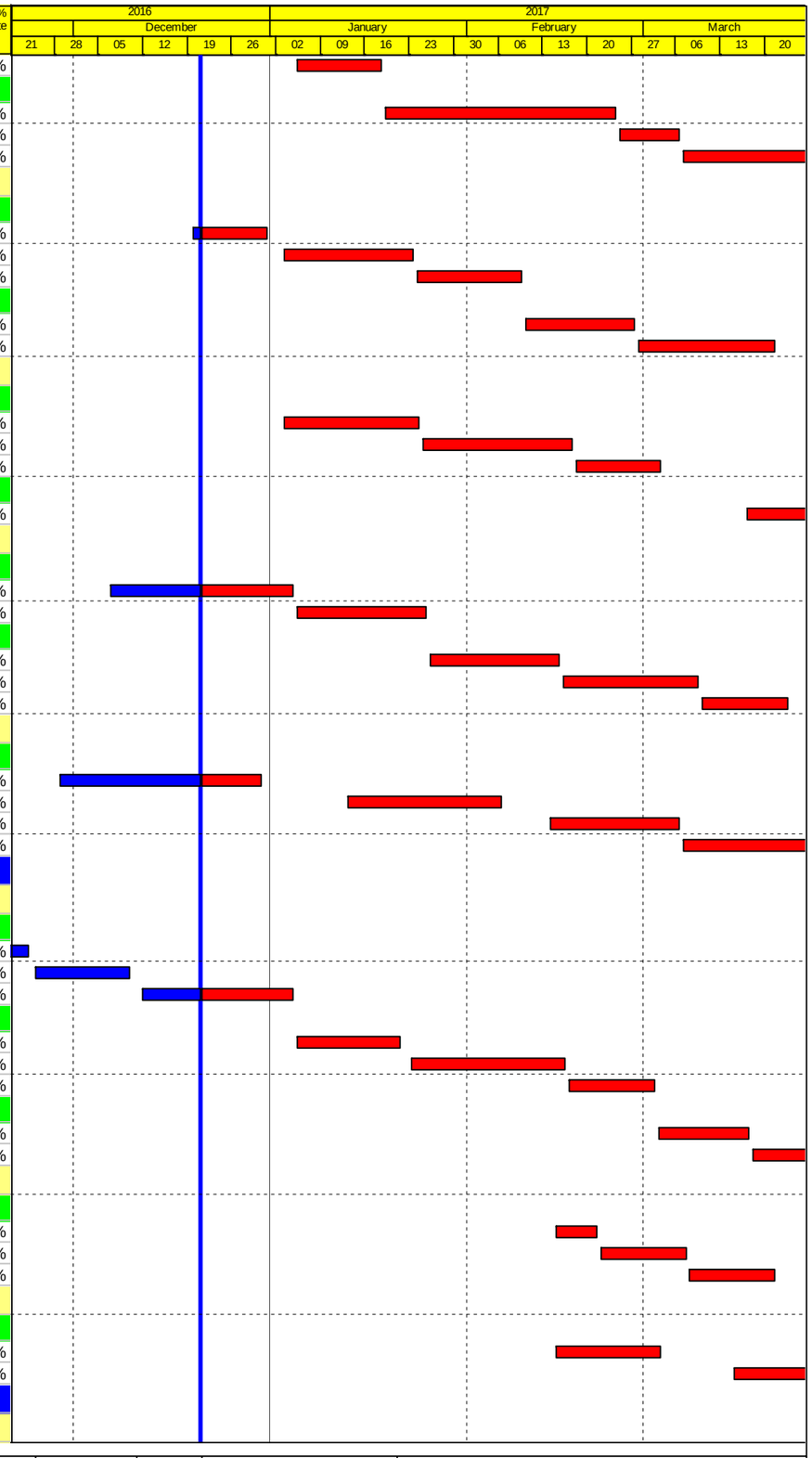
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
E13D-C4040	E13D Pier - Curing, CJ, Remove Formwork & Falsework	12	05-Jan-17	12	18-Jan-17	01-Aug-15	14-Aug-15	-424	0%
Pier Head Segment / Infill Segment									
E13D-C5110	E13D - Temp. Work, Grillages, Megashore Towers, Rail Beams	29	19-Jan-17	29	24-Feb-17	15-Aug-15	18-Sep-15	-424	0%
E13D-C5120	E13D - Install PH Segment (4 nr)	8	25-Feb-17	8	06-Mar-17	19-Sep-15	29-Sep-15	-424	0%
E13D-C5130	E13D - Diaphragm of PHS - Formwork, Rebar, Concreting	77	07-Mar-17	77	12-Jun-17	30-Sep-15	02-Jan-16	-424	0%
Pier E14A (E8d)									
Foundation - Bored Piles									
E14A-C2140	E14A EB Pile - Excavate, Rebar, Concrete (2nd) P3 - Resume	9	20-Dec-16 A	8	31-Dec-16	25-Jun-15	04-Jul-15	-445	10%
E14A-C2210	E14A EB PIle - Curing & Sonic Test	18	03-Jan-17	18	23-Jan-17	06-Jul-15	25-Jul-15	-445	0%
E14A-C2220	E14A EB PIle - Full Depth Core & Test	12	24-Jan-17	12	09-Feb-17	27-Jul-15	08-Aug-15	-445	0%
Pile Cap									
E14A-C3110	E14A Pile Cap - Excavate, Break Pile Head	15	10-Feb-17*	15	27-Feb-17	10-Aug-15	26-Aug-15	-445	0%
E14A-C3210	E14A Pile Cap - Blinding, Formwork, Rebar, Concrete	19	28-Feb-17	19	21-Mar-17	27-Aug-15	18-Sep-15	-445	0%
Pier E14B (E7d)									
Foundation - Bored Piles									
E14B-C2140	E14B EB Pile - Excavate, Rebar, Concrete (3rd) P1	19	03-Jan-17*	19	24-Jan-17	04-Jun-15	26-Jun-15	-470	0%
E14B-C2210	E14B EB PIle - Curing & Sonic Test	18	25-Jan-17	18	17-Feb-17	27-Jun-15	18-Jul-15	-470	0%
E14B-C2220	E14B EB PIle - Full Depth Core & Test	12	18-Feb-17	12	03-Mar-17	20-Jul-15	01-Aug-15	-470	0%
Pile Cap									
E14B-C3110	E14B Pile Cap - Excavate, Break Pile Head	15	17-Mar-17*	15	03-Apr-17	03-Aug-15	19-Aug-15	-481	0%
Pier E14C (E6d)									
Foundation - Bored Piles									
E14C-C2140	E14C EB Pile - Excavate, Rebar, Concrete (3rd) P2	18	07-Dec-16 A	10	04-Jan-17	21-Sep-15	03-Oct-15	-372	40%
E14C-C2210	E14C EB PIle - Curing & Sonic Test	18	05-Jan-17	18	25-Jan-17	05-Oct-15	26-Oct-15	-372	0%
Pile Cap									
E14C-C3110	E14C Pile Cap - Excavate, Break Pile Head	15	26-Jan-17	15	15-Feb-17	27-Oct-15	12-Nov-15	-372	0%
E14C-C3210	E14C Pile Cap - Blinding, Formwork, Rebar, Concrete	19	16-Feb-17	19	09-Mar-17	13-Nov-15	04-Dec-15	-372	0%
E14C-C3310	E14C Pile Cap - Curing, Remove Formwork, Backfill	12	10-Mar-17	12	23-Mar-17	05-Dec-15	18-Dec-15	-372	0%
Pier E14D (E5d)									
Foundation - Bored Piles									
E14D-C2130	E14D EB Pile - Excavate, Rebar, Concrete (2nd) P4	18	29-Nov-16 A	7	30-Dec-16	24-Mar-15	31-Mar-15	-518	0%
E14D-C2140	E14D EB Pile - Excavate, Rebar, Concrete (3rd) P3	18	13-Jan-17*	18	06-Feb-17	01-Apr-15	25-Apr-15	-528	0%
E14D-C2150	E14D EB Pile - Excavate, Rebar, Concrete (4th) P1	18	14-Feb-17*	18	06-Mar-17	27-Apr-15	18-May-15	-534	0%
E14D-C2210	E14D EB PIle - Curing & Sonic Test	18	07-Mar-17	18	27-Mar-17	19-May-15	09-Jun-15	-534	0%
Viaduct F - Bridge F1									
Pier F1 (F1b)									
Foundation - Bored Piles									
F01-C2130	F1 EB Pile - Excavate, Rebar, Concrete (2nd) P2	21	07-Nov-16 A	0	24-Nov-16 A				100%
F01-C2140	F1 EB Pile - Excavate, Rebar, Concrete (3rd) P1	21	25-Nov-16 A	0	10-Dec-16 A				100%
F01-C2210	F1 EB PIle - Curing & Sonic Test	18	12-Dec-16 A	10	04-Jan-17	24-Jul-15	04-Aug-15	-421	0%
Pile Cap									
F01-C3110	F1 Pile Cap - Excavate, Break Pile Head	15	05-Jan-17	15	21-Jan-17	05-Aug-15	21-Aug-15	-421	0%
F01-C3210	F1 Pile Cap - Blinding, Formwork, Rebar, Concrete	19	23-Jan-17	19	16-Feb-17	22-Aug-15	14-Sep-15	-421	0%
F01-C3310	F1 Pile Cap - Curing, Remove Formwork, Backfill	12	17-Feb-17	12	02-Mar-17	15-Sep-15	29-Sep-15	-421	0%
Pier									
F01-C4110	F1 Pier - Scaffold, Rebar, Formwork, Concrete (1st Lift)	13	03-Mar-17	13	17-Mar-17	30-Sep-15	15-Oct-15	-421	0%
F01-C4210	F1 Pier - Scaffold, Rebar, Formwork, Concrete (2nd Lift)	18	18-Mar-17	18	08-Apr-17	16-Oct-15	06-Nov-15	-421	0%
Pier F2 (F1c)									
Foundation - Bored Piles									
F02-C2110	F2 Fr Pile - Set-up Plant & Install Sleeve	6	15-Feb-17*	6	21-Feb-17	01-Jun-15	06-Jun-15	-507	0%
F02-C2120	F2 Fr Pile - Excavate, Rebar, Concrete (1st) P1	12	22-Feb-17	12	07-Mar-17	08-Jun-15	22-Jun-15	-507	0%
F02-C2130	F2 Fr Pile - Excavate, Rebar, Concrete (2nd) P2	12	08-Mar-17	12	21-Mar-17	23-Jun-15	07-Jul-15	-507	0%
Pier F3 (F1d)									
Foundation - Bored Piles									
F03-C2130	F3 Fr Pile - Excavate, Rebar, Concrete (1st) P1 - Replacement	15	15-Feb-17*	15	03-Mar-17	26-Jun-15	14-Jul-15	-486	0%
F03-C2180	F3 Fr Pile - Excavate, Rebar, Concrete (2nd) P2	15	15-Mar-17*	15	31-Mar-17	15-Jul-15	31-Jul-15	-495	0%
Viaduct F - Bridge F2									
Pier F4 (F2b)									



Actual Work
Planned Bar
Critical Bar
Milestone

Project ID: TMCLK-DWPH-M43
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Tuen Mun - Chek Lap Kok Link - Southern Connection
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03-Jan-17		PKN	GL

DWG. No.:

J3518/GCL/PGM/3MRP-M43

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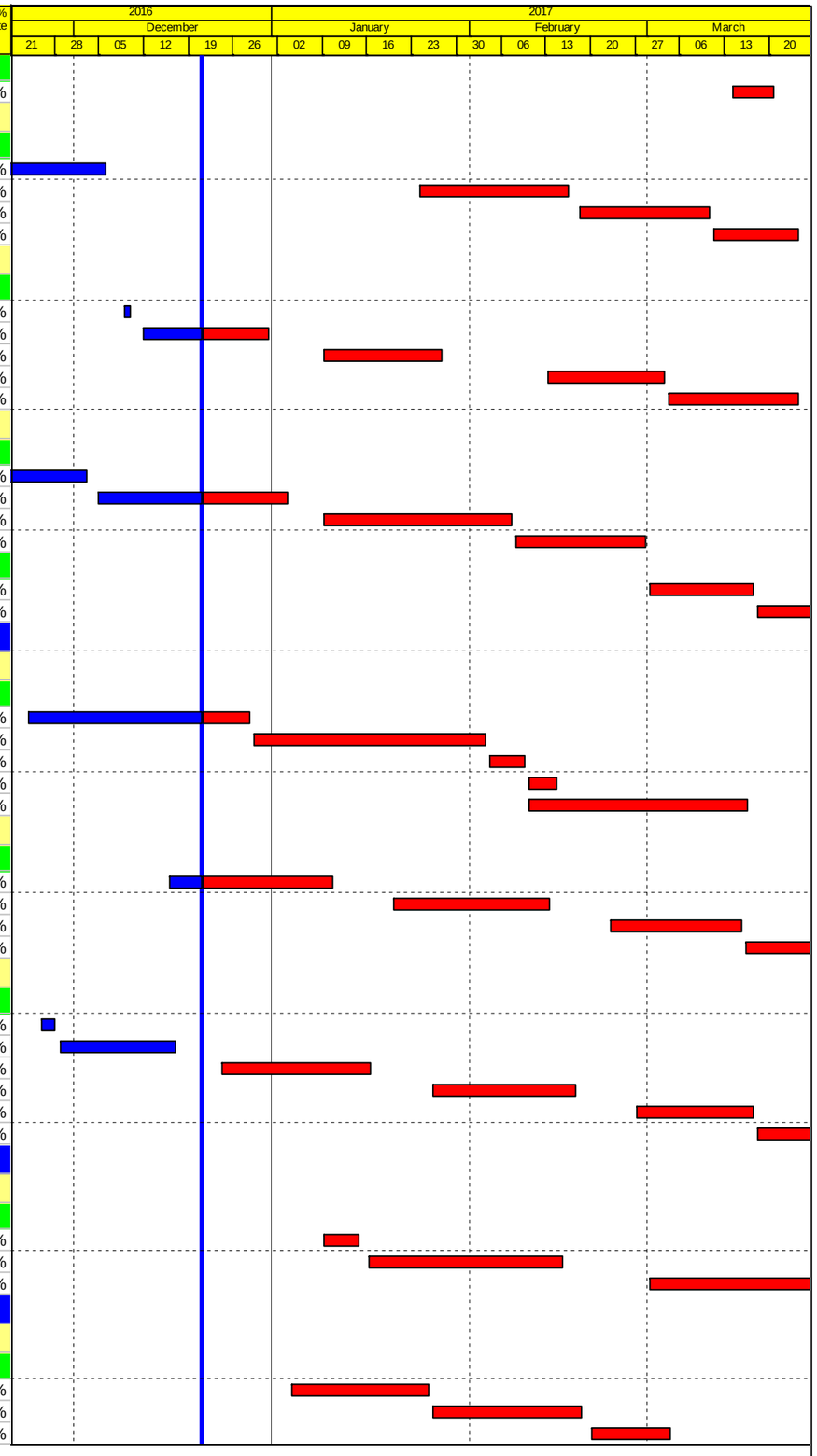
Foundation - Bored Piles									
F04-C2110	F4 Fr Pile - Set-up Plant & Install Sleeve	6	14-Mar-17*	6	20-Mar-17	04-Sep-15	10-Sep-15	-451	0%
Pier F5 (F2c)									
Foundation - Bored Piles									
F05-C2130	F5 EB Pile - Excavate, Rebar, Concrete (2nd) P1	16	16-Nov-16 A	0	06-Dec-16 A				100%
F05-C2140	F5 EB Pile - Excavate, Rebar, Concrete (3rd) P2	18	24-Jan-17*	18	16-Feb-17	02-Oct-15	23-Oct-15	-390	0%
F05-C2210	F5 EB PIle - Curing & Sonic Test	18	18-Feb-17*	18	10-Mar-17	24-Oct-15	13-Nov-15	-391	0%
F05-C2220	F5 EB PIle - Full Depth Core & Test	12	11-Mar-17	12	24-Mar-17	14-Nov-15	27-Nov-15	-391	0%
Pier F6 (F2d)									
Foundation - Bored Piles									
F06-C2110	F6 EB Pile - Set-up Plant & Install Sleeve	7	09-Dec-16 A	0	10-Dec-16 A				100%
F06-C2120	F6 EB Pile - Excavate, Rebar, Concrete (1st) P2	13	12-Dec-16 A	8	31-Dec-16	01-Jun-15	09-Jun-15	-465	40%
F06-C2130	F6 EB Pile - Excavate, Rebar, Concrete (2nd) P1	17	09-Jan-17*	17	27-Jan-17	20-Nov-15	09-Dec-15	-336	0%
F06-C2140	F6 EB Pile - Excavate, Rebar, Concrete (3rd) P3	17	13-Feb-17*	17	03-Mar-17	10-Dec-15	31-Dec-15	-346	0%
F06-C2210	F6 EB PIle - Curing & Sonic Test	18	04-Mar-17	18	24-Mar-17	02-Jan-16	22-Jan-16	-346	0%
Pier F7 (F2e)									
Foundation - Bored Piles									
F07-C2120	F7 EB Pile - Excavate, Rebar, Concrete (1st) P1	12	16-Nov-16 A	0	03-Dec-16 A				100%
F07-C2130	F7 EB Pile - Excavate, Rebar, Concrete (2nd) P3	18	05-Dec-16 A	9	03-Jan-17	14-Nov-15	24-Nov-15	-328	60%
F07-C2140	F7 EB Pile - Excavate, Rebar, Concrete (3rd) P2	23	09-Jan-17*	23	07-Feb-17	06-Apr-16	03-May-16	-228	0%
F07-C2210	F7 EB PIle - Curing & Sonic Test	18	08-Feb-17	18	28-Feb-17	04-May-16	25-May-16	-228	0%
Pile Cap									
F07-C3110	F7 Pile Cap - Excavate, Break Pile Head	15	01-Mar-17	15	17-Mar-17	26-May-16	13-Jun-16	-228	0%
F07-C3210	F7 Pile Cap - Blinding, Formwork, Rebar, Concrete	19	18-Mar-17	19	10-Apr-17	14-Jun-16	06-Jul-16	-228	0%
Viaduct F - Bridge F3									
Pier F9 (F3d)									
Foundation - Bored Piles									
F09-C3130	F9 Fr Pile - Enabling Works for Load Test (Prelim. Pile)	20	24-Nov-16 A	5	28-Dec-16	10-Apr-15	15-Apr-15	-507	0%
F09-C3135	F9 Fr Pile - Install Kentledges for Load Test (Prelim. Pile)	28	29-Dec-16	28	03-Feb-17	16-Apr-15	19-May-15	-507	0%
F09-C3140	F9 Fr Pile - Cary Out Load Test (Prelim. Pile)	5	04-Feb-17	5	09-Feb-17	20-May-15	26-May-15	-507	0%
F09-C3145	F9 Fr Pile - Load Test Report Submission & Approval (Prelim. Pile)	4	10-Feb-17	4	14-Feb-17	27-May-15	30-May-15	-507	0%
F09-C3150	F9 Fr Pile - Remove Kentledges / Footing & Clear Area	30	10-Feb-17	30	16-Mar-17	08-Jun-15	14-Jul-15	-497	0%
Pier F10 (F3c)									
Foundation - Bored Piles									
F10-C2130	F10 EB Pile - Excavate, Rebar, Concrete (2nd) P3	14	16-Dec-16 A	15	10-Jan-17	16-Nov-15	02-Dec-15	-327	0%
F10-C2140	F10 EB Pile - Excavate, Rebar, Concrete (3rd) P2	18	20-Jan-17*	18	13-Feb-17	03-Dec-15	23-Dec-15	-335	0%
F10-C2150	F10 EB Pile - Excavate, Rebar, Concrete (3rd) P4	18	23-Feb-17*	18	15-Mar-17	24-Dec-15	16-Jan-16	-343	0%
F10-C2210	F10 EB PIle - Curing & Sonic Test	18	16-Mar-17	18	06-Apr-17	18-Jan-16	06-Feb-16	-343	0%
Pier F11 (F3b)									
Foundation - Bored Piles									
F11-C2110	F11 EB Pile - Set-up Plant & Install Sleeve	13	26-Nov-16 A	0	28-Nov-16 A				100%
F11-C2120	F11 EB Pile - Excavate, Rebar, Concrete (1st) P2	15	29-Nov-16 A	0	17-Dec-16 A				100%
F11-C2130	F11 EB Pile - Excavate, Rebar, Concrete (2nd) P1	17	24-Dec-16*	17	16-Jan-17	05-Feb-16	27-Feb-16	-263	0%
F11-C2140	F11 EB Pile - Excavate, Rebar, Concrete (3rd) P3	17	26-Jan-17*	17	17-Feb-17	29-Feb-16	18-Mar-16	-271	0%
F11-C2150	F11 EB Pile - Excavate, Rebar, Concrete (4th) P4	17	27-Feb-17*	17	17-Mar-17	19-Mar-16	12-Apr-16	-278	0%
F11-C2210	F11 EB PIle - Curing & Sonic Test	18	18-Mar-17	18	08-Apr-17	13-Apr-16	04-May-16	-278	0%
Viaduct F - Bridge F4									
Pier F16 (F5a/F4a)									
Foundation - Bored Piles									
F16-C2110	F16 EB Pile - Set-up Plant & Install Sleeve	6	09-Jan-17*	6	14-Jan-17	09-Sep-15	15-Sep-15	-395	0%
F16-C2120	F16 EB Pile - Excavate, Rebar, Concrete (1st) P3	24	16-Jan-17	24	15-Feb-17	16-Sep-15	15-Oct-15	-395	0%
F16-C2130	F16 EB Pile - Excavate, Rebar, Concrete (2nd) P1	24	01-Mar-17*	24	28-Mar-17	16-Oct-15	13-Nov-15	-406	0%
Viaduct F - Bridge F5									
Pier F13 (F5d)									
Foundation - Bored Piles									
F13-C2140	F13 EB Pile - Excavate, Rebar, Concrete (3rd) P1	19	04-Jan-17*	19	25-Jan-17	02-Oct-15	24-Oct-15	-373	0%
F13-C2210	F13 EB PIle - Curing & Sonic Test	18	26-Jan-17	18	18-Feb-17	26-Oct-15	14-Nov-15	-373	0%
F13-C2220	F13 EB PIle - Full Depth Core & Test	12	20-Feb-17	12	04-Mar-17	16-Nov-15	28-Nov-15	-373	0%



Actual Work
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Critical Bar
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Tuen Mun - Chek Lap Kok Link - Southern Connection
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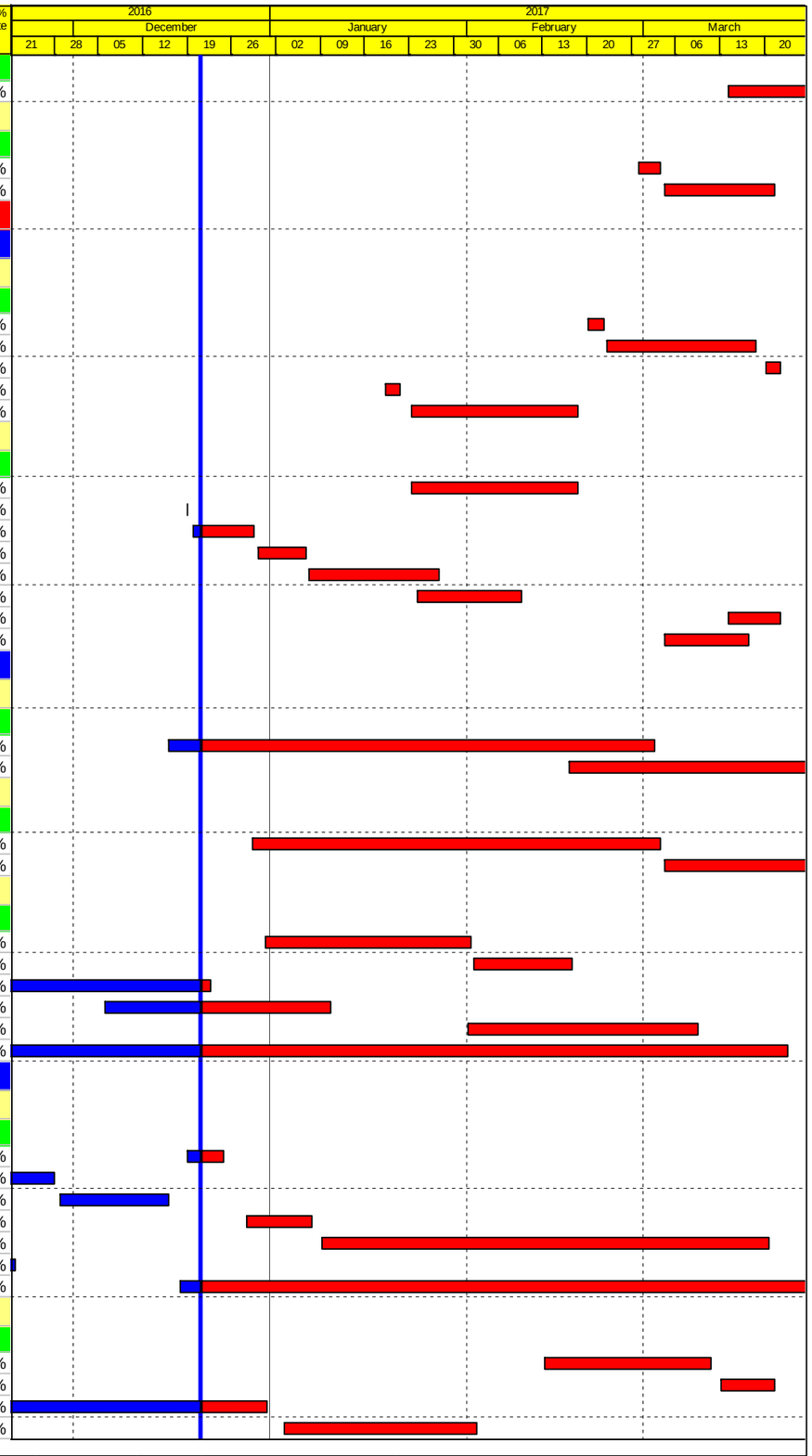
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
Pile Cap									
F13-C3110	F13 Pile Cap - ELS/Excavate, Break Pile Head	22	14-Mar-17*	22	08-Apr-17	30-Nov-15	24-Dec-15	-380	0%
Pier F14 (F5c)									
Foundation - Bored Piles									
F14-C2110	F14 Fr Pile - Set-up Plant & Install Sleeve	4	28-Feb-17*	4	03-Mar-17	20-Aug-15	24-Aug-15	-451	0%
F14-C2120	F14 Fr Pile - Excavate, Rebar, Concrete (1st) P1	15	04-Mar-17	15	21-Mar-17	25-Aug-15	11-Sep-15	-451	0%
Superstructure & Associated Works									
Viaduct A									
Bridge A2									
Deck Span Segment									
A01-C6210	A1 - Install THB	3	20-Feb-17	3	22-Feb-17	02-Mar-16	04-Mar-16	-287	0%
A01-C6310	A1 - End Span to A2 (6 nr) - THB	21	23-Feb-17	21	18-Mar-17	05-Mar-16	01-Apr-16	-287	0%
A05-C6210	A5 - Install THB	3	20-Mar-17	3	22-Mar-17	02-Apr-16	06-Apr-16	-287	0%
A06-C6210	A6 - Install THB	3	19-Jan-17	3	21-Jan-17	30-Jan-16	02-Feb-16	-287	0%
A06-C6310	A6 - End Span to A5 (6 nr) - THB	21	23-Jan-17	21	18-Feb-17	03-Feb-16	01-Mar-16	-287	0%
Bridge A1									
Deck Span Segment									
A06-C6320	A6 - End Span to A7 (8 nr) - THB	21	23-Jan-17	21	18-Feb-17	03-Feb-16	01-Mar-16	-287	0%
A07-C6210	A7 - Install THB	3	19-Dec-16 A	0	19-Dec-16 A				100%
A07-C6310	A7 - Cantilever Span (Initial 3 nr) - THB	9	20-Dec-16 A	6	29-Dec-16	28-Nov-15	04-Dec-15	-316	30%
A07-C6320	A7 - Install KF	6	30-Dec-16	6	06-Jan-17	05-Dec-15	11-Dec-15	-316	0%
A07-C6330	A7 - Cantilever Span (Remaining 13 nr) - KF	18	07-Jan-17	18	27-Jan-17	12-Dec-15	05-Jan-16	-316	0%
A08-C6310	A8 - Cantilever Span (Initial 3 nr) - Crane	12	24-Jan-17	12	09-Feb-17	02-Feb-16	18-Feb-16	-289	0%
A08-C6410	A8 - Install KF (MTR)	8	14-Mar-17	8	22-Mar-17	19-Feb-16	27-Feb-16	-316	0%
A09-C6310	A9 - Cantilever Span (Initial 3 nr) - Crane	12	04-Mar-17	12	17-Mar-17	08-Apr-16	21-Apr-16	-270	0%
Viaduct B									
Bridge B3									
Deck Fnishes, E&M and Roadworks									
VB3-C7710	Viaduct B3 - Parapet Panels	48	16-Dec-16 A	56	02-Mar-17	06-Jun-16	11-Aug-16	-165	1%
VB3-C7720	Viaduct B3 - Gantry & TCSS Provisions (KD5)	36	17-Feb-17	36	30-Mar-17	29-Jul-16	08-Sep-16	-165	0%
Bridge B2									
Deck Span Segment									
B11-C6310	B11 - Cantilever Span (Remaining 16 nr) - THB/Crane	52	29-Dec-16*	52	03-Mar-17	10-Mar-16	16-May-16	-239	0%
B12-C6410	B12 - Falsework for End Span to B11	24	04-Mar-17	24	31-Mar-17	11-Jun-16	09-Jul-16	-218	0%
Bridge B1									
Deck Span Segment									
B12-C6210	B12 - Falsework for End Span to B13	24	31-Dec-16*	24	01-Feb-17	25-Apr-16	24-May-16	-206	0%
B12-C6310	B12 - End Span to B13 (7 nr) - Crane	14	02-Feb-17	14	17-Feb-17	25-May-16	10-Jun-16	-206	0%
B14-C6310	B14 - Cantilever Span (24 nr) - Crane	48	12-Nov-16 A	2	22-Dec-16	03-Mar-16	04-Mar-16	-240	95%
B15-C6310	B15 - Cantilever Span (Initial 8 nr) - Crane	20	06-Dec-16 A	15	10-Jan-17	02-Mar-16	18-Mar-16	-241	20%
B15-C6320	B15 - Cantilever Span (Remaining 18 nr) - Crane	32	01-Feb-17*	32	09-Mar-17	19-Mar-16	29-Apr-16	-256	0%
B16-C6310	B16 - Cantilever Span (24 nr) - Crane	28	13-Oct-16 A	74	23-Mar-17	13-Feb-16	16-May-16	-256	88%
Viaduct C									
Bridge C3									
Deck Span Segment									
C06-C6310	C6 - End Span to C7 (7 nr) - LG2	6	19-Dec-16 A	4	24-Dec-16	23-Sep-15	26-Sep-15	-370	0%
C07-C6410	C7 - Launch LG2 from C5 to C7 (MTR)	6	19-Nov-16 A	0	28-Nov-16 A				100%
C07-C6510	C7 - Cantilever Span (24 nr) (MTR) - LG2	20	29-Nov-16 A	0	16-Dec-16 A				100%
C08-C6210	C8 - Launch LG2 from C6 to C8 (MTR/NLH)	9	28-Dec-16	9	07-Jan-17	29-Sep-15	09-Oct-15	-370	0%
C08-C6310	C8 - Cantilever Span (24 nr) (MTR/NLH) - LG2	58	09-Jan-17	58	20-Mar-17	10-Oct-15	17-Dec-15	-370	0%
C09-C6310	C9 - Cantilever Span (Initial 12 nr) (NLH) - Crane	24	01-Nov-16 A	0	22-Nov-16 A				100%
C10-C6310	C10 - Cantilever Span (22 nr) - Crane	28	18-Dec-16 A	133	08-Jun-17	22-Sep-15	04-Mar-16	-371	9%
Bridge C2									
Deck Span Segment									
C11-C6210	C11 - Falsework for End Span to C12	24	13-Feb-17	24	11-Mar-17	18-Jan-16	17-Feb-16	-316	0%
C11-C6310	C11 - End Span to C12 (4 nr) - Crane	8	13-Mar-17	8	21-Mar-17	18-Feb-16	26-Feb-16	-316	0%
C15-C6310	C15 - Cantilever Span (16 nr) - Crane & THB	36	16-Nov-16 A	8	31-Dec-16	28-Nov-15	07-Dec-15	-316	60%
C16-C6410	C16 - Falsework for End Span to C15	24	03-Jan-17	24	02-Feb-17	08-Dec-15	07-Jan-16	-316	0%



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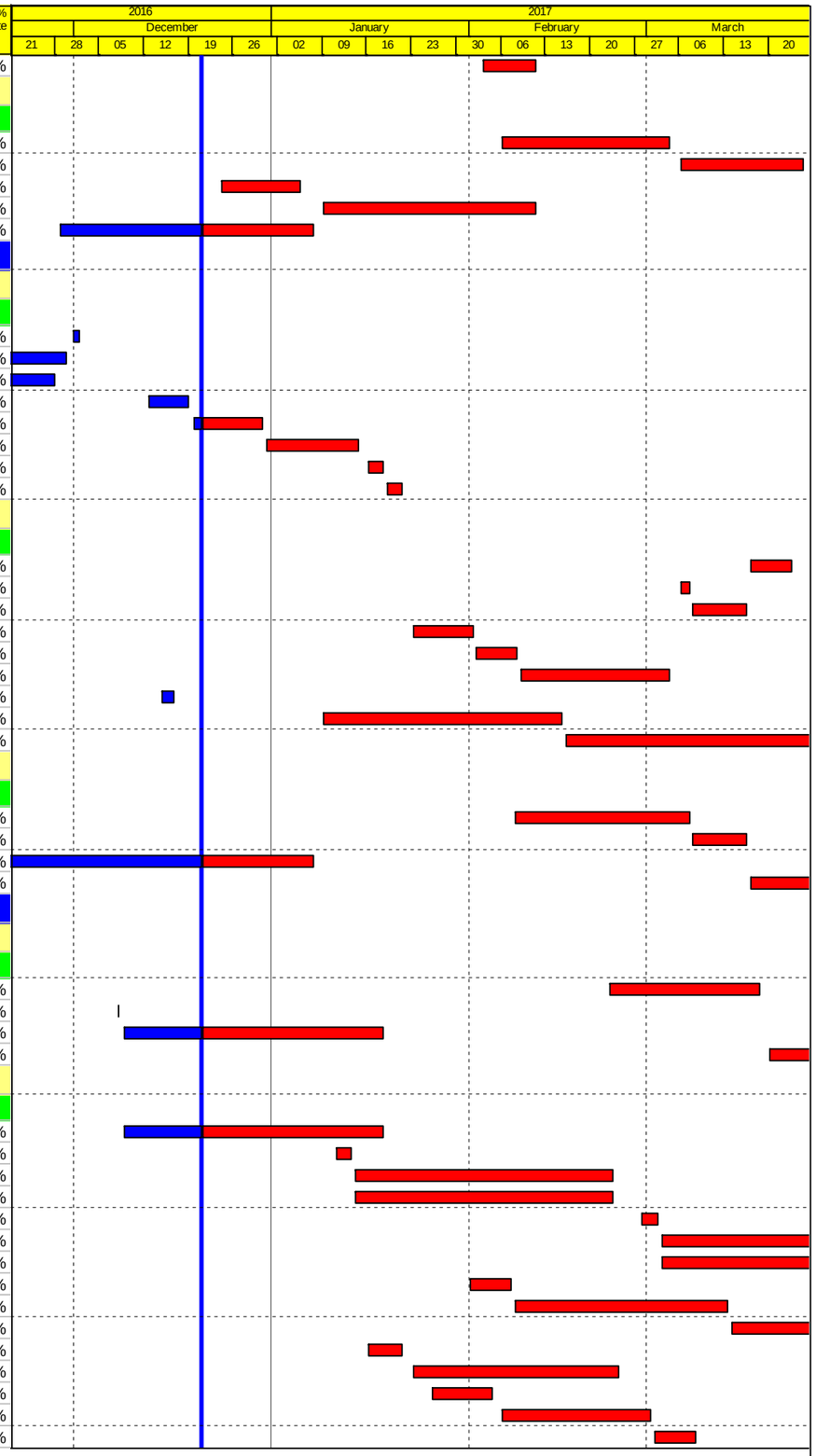
31-Oct-16		PKN	GL
30-Nov-...		PKN	GL
03-Jan-17		PKN	GL

DWG. No.:
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
C16-C6510	C16 - End Span to C15 (4 nr) - Crane	8	03-Feb-17	8	11-Feb-17	08-Jan-16	16-Jan-16	-316	0%
Bridge C1									
Deck Span Segment									
C16-C6210	C16 - Falsework for End Span to C17	24	06-Feb-17	24	04-Mar-17	20-Feb-16	18-Mar-16	-284	0%
C16-C6310	C16 - End Span to C17 (9 nr) - Crane	18	06-Mar-17	18	25-Mar-17	19-Mar-16	13-Apr-16	-284	0%
C17-C6310	C17 - Cantilever Span (Initial 2 nr) - Crane	8	24-Dec-16*	8	05-Jan-17	14-Jan-16	22-Jan-16	-282	0%
C17-C6320	C17 - Cantilever Span (Remaining 22 nr) - Crane	27	09-Jan-17	27	11-Feb-17	23-Jan-16	26-Feb-16	-284	0%
C18-C6320	C18 - Cantilever Span (Remaining 24 nr) - Crane	29	29-Nov-16 A	13	07-Jan-17	08-Jan-16	22-Jan-16	-284	80%
Viaduct D									
Bridge D3									
Deck Span Segment									
D01-C6510	D1 - End Span to D2 (6 nr) - LG1	8	01-Dec-16 A	0	02-Dec-16 A				100%
D02-C6310	D2 - Cantilever Span (20 nr) - LG1	12	15-Nov-16 A	0	30-Nov-16 A				100%
D03-C6210	D3 - Cantilever Span (Initial 2 nr) - THB	20	09-Nov-16 A	0	28-Nov-16 A				100%
D03-C6510	D3 - Launch LG1 from D1 to D3	7	13-Dec-16 A	0	19-Dec-16 A				100%
D03-C6610	D3 - Cantilever Span (Remaining 18 nr) - LG1	9	20-Dec-16 A	7	30-Dec-16	27-Aug-15	04-Sep-15	-392	5%
D04-C6210	D4 - Launch LG1 from D3 to D4, D5	12	31-Dec-16	12	14-Jan-17	05-Sep-15	18-Sep-15	-392	0%
D04-C6310	D4 - Cantilever Span (Remaining 6 nr) - LG1	3	16-Jan-17	3	18-Jan-17	19-Sep-15	22-Sep-15	-392	0%
D05-C6510	D5 - Cantilever Span (Remaining 4 nr) - LG1	3	19-Jan-17	3	21-Jan-17	23-Sep-15	25-Sep-15	-392	0%
Bridge D2									
Deck Span Segment									
D06-C6210	D6 - Launch LG1 from D7 to D6	6	17-Mar-17	6	23-Mar-17	19-Nov-15	25-Nov-15	-392	0%
D07-C6410	D7 - Launch LG1 from D8 to D7	2	06-Mar-17	2	07-Mar-17	07-Nov-15	09-Nov-15	-392	0%
D07-C6510	D7 - Cantilever Span (Remaining 4 nr) - LG1	8	08-Mar-17	8	16-Mar-17	10-Nov-15	18-Nov-15	-392	0%
D08-C6210	D8 - Launch LG1 from D5 to D7 (MTR)	6	23-Jan-17	6	01-Feb-17	26-Sep-15	05-Oct-15	-392	0%
D08-C6215	D8 - Launch LG1 from D7 to D8 (MTR)	6	02-Feb-17	6	08-Feb-17	06-Oct-15	12-Oct-15	-392	0%
D08-C6310	D8 - Cantilever Span (26 nr) (MTR) - LG1	21	09-Feb-17	21	04-Mar-17	13-Oct-15	06-Nov-15	-392	0%
D10-C6210	D10 - Cantilever Span (Initial 2 nr) - Crane	8	15-Dec-16 A	0	16-Dec-16 A				100%
D11-C6310	D11 - Cantilever Span (Remaining 12 nr) - THB	30	09-Jan-17	30	15-Feb-17	15-Dec-15	21-Jan-16	-315	0%
D12-C6310	D12 - Cantilever Span (Remaining 18 nr) - Crane & THB	36	16-Feb-17	36	29-Mar-17	22-Jan-16	07-Mar-16	-315	0%
Bridge D1									
Deck Span Segment									
D13-C6210	D13 - Falsework for End Span to D14	24	08-Feb-17	24	07-Mar-17	03-Mar-16	02-Apr-16	-276	0%
D13-C6310	D13 - End Span to D14 (4 nr) - Crane	8	08-Mar-17	8	16-Mar-17	05-Apr-16	13-Apr-16	-276	0%
D14-C6310	D14 - Cantilever Span (Remaining 10 nr) - THB	45	09-Nov-16 A	13	07-Jan-17	30-Nov-15	14-Dec-15	-315	80%
VD1-C6510	Viaduct D1 - Final Stitch & Stressing to Span	24	17-Mar-17	24	18-Apr-17	14-Apr-16	12-May-16	-276	0%
Viaduct E									
Bridge E1									
Deck Span Segment									
A01-C6320	A1 - End Span to E1D (7 nr) - THB	21	23-Feb-17	21	18-Mar-17	05-Mar-16	01-Apr-16	-287	0%
E03D-C6210	E3D - Install THB	3	08-Dec-16 A	0	08-Dec-16 A				100%
E03D-C6410	E3D - End Span to E2D (6 nr) - THB	33	09-Dec-16 A	22	18-Jan-17	05-Jan-16	29-Jan-16	-287	5%
VE1-C6510	Viaduct E1 - Final Stitch & Stressing to Span	24	20-Mar-17	24	20-Apr-17	14-Apr-16	12-May-16	-278	0%
Bridge E2									
Deck Span Segment									
E03D-C6420	E3D - End Span to E4B (7 nr) - THB	33	09-Dec-16 A	22	18-Jan-17	05-Jan-16	29-Jan-16	-287	15%
E04A-C6210	E4A - Install THB	3	11-Jan-17	3	13-Jan-17	25-Apr-16	27-Apr-16	-214	0%
E04A-C6310	E4A - Bifurcation Span to E3A (12 nr) with 1st Stitch - THB	32	14-Jan-17	32	23-Feb-17	28-Apr-16	06-Jun-16	-214	0%
E04A-C6410	E4A - Bifurcation Span to E5A (6 nr) with 1st Stitch - THB	32	14-Jan-17	32	23-Feb-17	27-Aug-16	05-Oct-16	-114	0%
E04B-C6210	E4B - Install THB	3	28-Feb-17	3	02-Mar-17	27-Aug-16	30-Aug-16	-149	0%
E04B-C6310	E4B - Bifurcation Span to E3B (12 nr) with 1st Stitch - THB	32	03-Mar-17	32	10-Apr-17	31-Aug-16	08-Oct-16	-149	0%
E04B-C6410	E4B - Bifurcation Span to E5B (6 nr) with 1st Stitch - THB	32	03-Mar-17	32	10-Apr-17	31-Aug-16	08-Oct-16	-149	0%
E05A-C6410	E5A - Install KF	6	01-Feb-17	6	07-Feb-17	06-Jan-16	12-Jan-16	-316	0%
E05A-C6510	E5A - Cantilever Span (14 nr) with 1st Stitch - KF	29	08-Feb-17	29	13-Mar-17	13-Jan-16	18-Feb-16	-316	0%
E05A-C6610	E5A - Stitch between E4A and E5A	12	14-Mar-17	12	27-Mar-17	06-Oct-16	20-Oct-16	-129	0%
E05B-C6410	E5B - Install ALF	6	16-Jan-17	6	21-Jan-17	12-Feb-16	18-Feb-16	-276	0%
E05B-C6510	E5B - Cantilever Span (14 nr) with 1st Stitch - ALF	26	23-Jan-17	26	24-Feb-17	19-Feb-16	19-Mar-16	-276	0%
E06A-C6210	E6A - Install WLF	6	26-Jan-17	6	04-Feb-17	01-Mar-16	07-Mar-16	-270	0%
E06A-C6310	E6A - Cantilever Span (9 nr) with 1st Stitch- WLF	21	06-Feb-17	21	01-Mar-17	08-Mar-16	05-Apr-16	-270	0%
E06B-C6210	E6B - Install WLF	6	02-Mar-17	6	08-Mar-17	06-Apr-16	12-Apr-16	-270	0%



Actual Work
Planned Bar
Critical Bar
Milestone

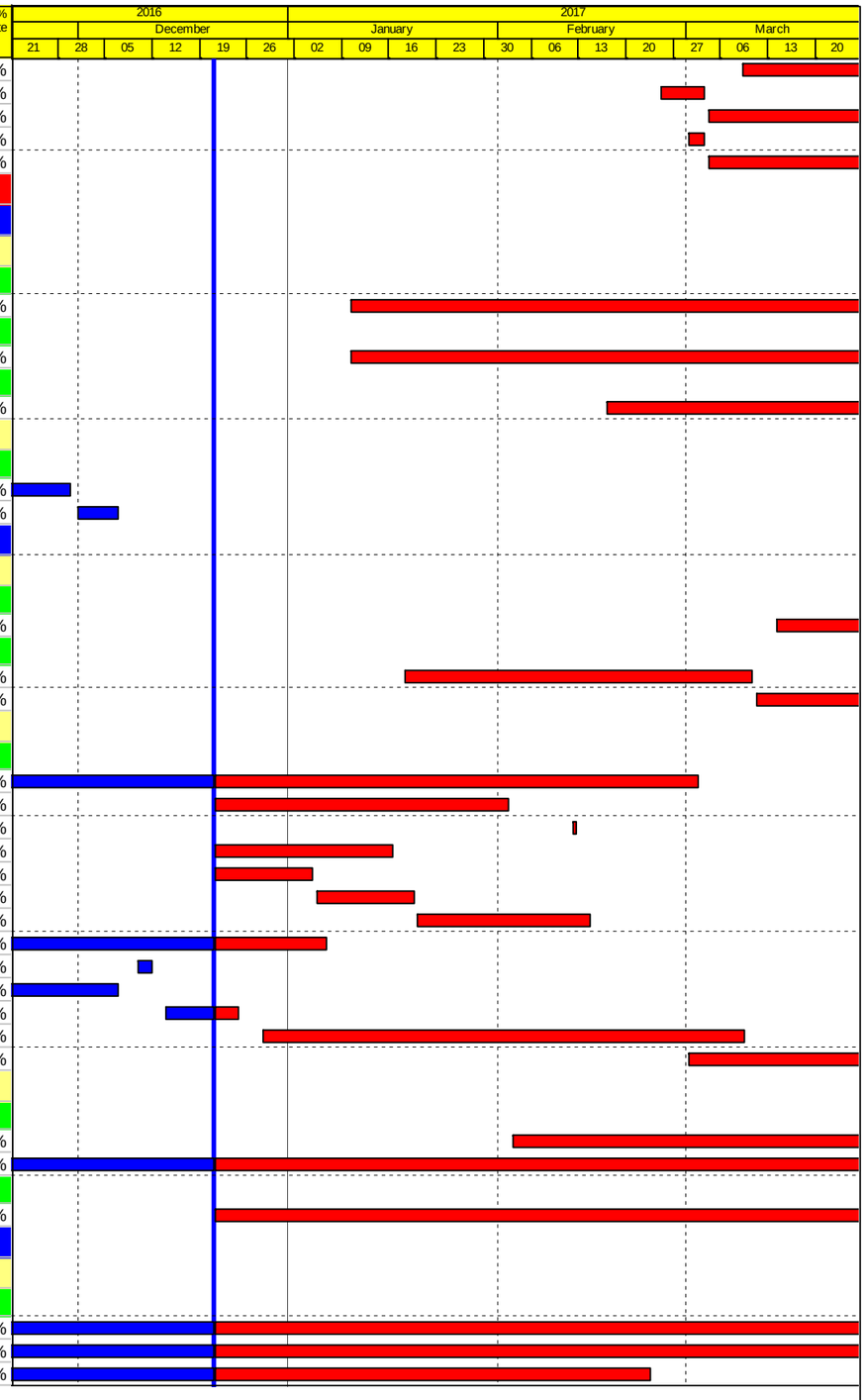
Project ID: TMCLK-DWPH-M43
Layout: J3518-DWP-3MRP Submission - M43
Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 12 of 13 Pages)
(Progress as of 21-Dec-16)

Date	Revision	Checked	Approved
31-Oct-16		PKN	GL
30-Nov-...		PKN	GL
03-Jan-17		PKN	GL

DWG. No.:
J3518/GCL/PGM/3MRP-M43

Activity ID	Activity Name	Orig. Durn.	Act. Start / FC Early Start	Rem. Durn.	Act. Finish / FC Early Finish	Late Start	Late Finish	Total Float	Physical % Complete
E06B-C6310	E6B - Cantilever Span (9 nr) with 1st Stitch - WLF	21	09-Mar-17	21	01-Apr-17	13-Apr-16	07-May-16	-270	0%
E07A-C6210	E7A - Install ALF	6	25-Feb-17	6	03-Mar-17	21-Mar-16	30-Mar-16	-276	0%
E07A-C6310	E7A - Cantilever Span (18 nr) with 1st Stitch - ALF	31	04-Mar-17	31	10-Apr-17	31-Mar-16	07-May-16	-276	0%
E08A-C6200	E8A - Install THB	3	01-Mar-17*	3	03-Mar-17	17-Dec-15	19-Dec-15	-354	0%
E08A-C6310	E8A - Cantilever Span (13 nr) - THB	28	04-Mar-17	28	06-Apr-17	21-Dec-15	25-Jan-16	-354	0%
At-Grade Works & Miscellaneous Works									
At-Grade Works Along North Lantau Highway									
Slope Works Near Viaduct D									
Slope 10NW-C/F10									
M201160	10NW-C/F10 - Slope works (incl. L-Shape Ret. Walls)	110	10-Jan-17*	110	27-May-17	06-May-16	14-Sep-16	-204	0%
Slope 10NW-C/F11									
M201180	10NW-C/F11 - Slope works (incl. Concrete Toe Walls)	90	10-Jan-17*	90	04-May-17	21-Jun-16	06-Oct-16	-167	0%
Slope 10NW-C/R4									
M201170	10NW-C/R4 - Slope works	80	17-Feb-17	80	27-May-17	13-Jun-16	14-Sep-16	-204	0%
Road Works Along NLH Eastbound									
General									
RW20078-1	NLH E/B (Gantries 324 - 328) - Prepare & Implement TTA to Erect Beams	23	01-Nov-16 A	0	30-Nov-16 A				100%
RW20078-2	NLH E/B (Gantries 324 - 328) - Erect Gantry Beams & Sign Faces	8	01-Dec-16 A	0	07-Dec-16 A				100%
At-Grade Works Along Cheung Tung Road									
Slope Works Near Viaduct C									
Slope 10NW-C/F14									
SWVC5000	10NW-C/F14 - Slope works	42	14-Mar-17*	42	08-May-17	06-Aug-16	24-Sep-16	-179	0%
Slope 10NW-C/F15									
SWVC6000	10NW-C/F15 - Slope works	42	18-Jan-17*	42	10-Mar-17	13-Aug-16	03-Oct-16	-129	0%
SWVC6005	10NW-C/F15 - Install Geo. Instru. & Baseline Monitoring	30	11-Mar-17	30	19-Apr-17	04-Oct-16	08-Nov-16	-129	0%
Re-alignment of CTR Along Viaduct B									
General									
RP00064	Ch620-750: telecom, 11KV & 132KV ducting	20	20-Aug-15 A	56	02-Mar-17	26-Feb-16	06-May-16	-245	80%
RP00071	Ch620-750: towngas(DN250+DN400) connection	32	21-Dec-16*	32	02-Feb-17	29-Mar-16	06-May-16	-221	0%
RP00072	Ch620-700 DN1000 connection	1	12-Feb-17*	1	12-Feb-17	05-May-16	06-May-16	-282	0%
RP00075	Ch100-300: duct laying for 11KV	20	21-Dec-16*	20	16-Jan-17	13-Apr-16	06-May-16	-209	0%
RP00076	Ch100-300: lay telecom cable	10	21-Dec-16*	10	04-Jan-17	14-Mar-16	24-Mar-16	-231	0%
RP00077	Ch100-300: street lighting & draw pit	13	05-Jan-17	13	19-Jan-17	29-Mar-16	13-Apr-16	-231	0%
RP00078	Ch100-300: relocation of vent pipe	19	20-Jan-17	19	14-Feb-17	14-Apr-16	06-May-16	-231	0%
RP00079	Ch100-300: watermain(DN450+DN1000)	142	29-Apr-15 A	12	06-Jan-17	22-Apr-16	06-May-16	-201	80%
RP00080	Ch100-300: towngas(DN250)	6	10-Dec-16 A	0	12-Dec-16 A				100%
RP00081	Ch100-300: towngas(DN400)	6	17-Nov-16 A	0	07-Dec-16 A				100%
RP00081-1	Ch100-300 Temp roadwork for CTR diversion	15	14-Dec-16 A	4	24-Dec-16	19-Feb-16	23-Feb-16	-251	80%
RP00081-3	Ch100-300 watermain DN1000 remaining pipework and connection	58	28-Dec-16	58	09-Mar-17	24-Feb-16	06-May-16	-251	0%
RP00083	Ch100-300: drainage and roadwork for new CTR	150	01-Mar-17	150	31-Aug-17	27-Apr-16	26-Oct-16	-251	0%
Re-alignment of CTR Along Viaduct C									
West Portion									
RW61012	Realign CTR (West of Abut C) - tie out drainage	100	03-Feb-17*	100	07-Jun-17	21-Oct-16	21-Feb-17	-84	0%
RW61020	Realign CTR (West of Abut. C) - Utilily diversion	90	24-Mar-15 A	124	27-May-17	10-Sep-16	11-Feb-17	-84	50%
East Portion									
RW60005	Realign CTR (East of Abut. C) - Drainage for tie-in	143	21-Dec-16*	143	20-Jun-17	15-Sep-15	09-Mar-16	-377	0%
Watermain from Tung Chung to Southern Landfall									
Watermain Works									
General									
WM00120	Lay DN450 Fresh Water Main at Re-aligned CTR (approx. 500m)	48	22-Apr-15 A	124	27-May-17	27-May-16	24-Oct-16	-173	40%
WM00170	Lay DN450 Watermain Tung Chung to Re-aligned CTR (3rd 500m)	50	01-Jun-16 A	84	04-Apr-17	15-Jul-16	24-Oct-16	-133	50%
WM00180	Lay DN450 Watermain from Tung Chung to Re-aligned CTR (last 400m)	76	21-Oct-16 A	50	23-Feb-17	24-Aug-16	24-Oct-16	-99	80%



Actual Work
Planned Bar
Critical Bar
Milestone

Project ID: TMCLK-DWPH-M43
Layout: J3518-DWP-3MRP Submission - M43
Filter: TASK filters: 3-Month Lookahead, No CC Milestones, No Level of Effort.

Tuen Mun - Chek Lap Kok Link - Southern Connection
3-Month Rolling Programme (Page 13 of 13 Pages)
(Progress as of 21-Dec-16)

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DWG. No.:

J3518/GCL/PGM/3MRP-M43

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-Chep Lap Kok Link – Investigation. Updated EM&A Manual for Tuen Mun-Chek Lap Kok Link)

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									
General Marine Works									
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		✓
Temporary Staging work									
	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						
Land Works									
6.10	-	Wastewater from temporary site facilities should be controlled to prevent direct discharge to surface or marine waters.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Sewage effluent and discharges from on- site kitchen facilities shall be directed to Government sewer in accordance with the requirements of the WPCO or collected for disposal offsite. The use of soakaways shall be avoided.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Storm drainage shall be directed to storm drains via adequately designed sand/silt removal facilities such as sand traps, silt traps and sediment basins. Channels, earth bunds or sand bag barriers should be provided on site to properly direct stormwater to such silt removal facilities. Catchpits and perimeter channels should be constructed in advance of site formation works and earthworks.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Silt removal facilities, channels and manholes shall be maintained and any deposited silt and grit shall be removed regularly, including specifically at the onset of and after each rainstorm.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Temporary access roads should be surfaced with crushed stone or gravel.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Rainwater pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓
6.10	-	Measures should be taken to prevent the washout of construction materials, soil, silt or debris into any drainage system.	All areas/ throughout construction period	Contractor	TM-EIAO		Y		✓

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

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

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
			construction during bored piling						
8.14	6.3,6.5	Avoidance of peak CWD calving season in May and June for driving of metal caissons during bored piling works	Southern marine viaduct/ May and June during bored piling	Contractor	TMEIA		Y		n/a
8.14	6.3,6.5	Specification and implementation of 250m dolphin exclusion zone.	All marine bored piling and temporary staging works areas/Detailed Design/during all marine bored piling and temporary staging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.5	Specification and deployment of an artificial reef of an area of 3,600 m^2 in an area where fishing activities are prohibited.	Area of prohibited fishing activities/Detailed Design/towards end of construction period	TM-CLKL/ HKBCF Design Consultant/ TM-CLKL/ HKBCF Contractor	TMEIA	Y		Y	n/a To be enforced by AFCD.
8.14	6.3, 6.5	Specification and implementation of marine vessel control specifications	All areas/Detailed Design/during construction works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.14	6.3, 6.5	Design and implementation of acoustic decoupling methods for marine bored piling and the whole lifespan of temporary staging works.	All areas/ Detailed Design/during marine bored piling and temporary staging works	Design Consultant/ Contractor	TMEIA	Y	Y		✓
8.15	6.3, 6.4	Pre-construction phase survey and coral translocation	Tai Ho Wan (donar site) and Yam Tsui Wan (receptor site) /Detailed Design/Prior to construction	Design Consultant/ Contractor	TMEIA	Y	Y		n/a
8.15	6.5	Audit coral translocation success	Yam Tsui Wan (receptor site)/Post translocation	Contractor	TMEIA		Y		**Completed in October 2014**
7.13	6.5	Undertaken gabion wall works in Stream NL1 in the dry season	North Lantau slope works/dry	Contractor	TMEIA		Y		n/a

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		✓ Tree transplanted as Contract Specification
10.9	7.6	Hillside and roadside screen planting to proposed roads, associated structures and slope works (CM3).	All areas/detailed design/ during construction/post construction	Design Consultant/	TMEIA	Y	Y		✓
10.9	7.6	Hydroseeding or sheeting of soil stockpiles with visually unobtrusive material (in earth tone) (CM4)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		<>
10.9	7.6	Screening of construction works by hoardings around works area in visually unobtrusive colours, to screen works (CM5)	All areas/detailed design/ during construction/post construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Control night-time lighting and glare by hooding all lights (CM6)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Ensure no run-off into water body adjacent to the Project Area (CM7)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓
10.9	7.6	Avoidance of excessive height and bulk of buildings and structures (CM8)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		✓

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
10.9	7.6	Recycle/Reuse all felled trees and vegetation, e.g. mulching (CM9)	All areas/detailed design/ during construction	Design Consultant/ Contractor	TMEIA	Y	Y		n/a No felled trees or vegetation suitable for recycle
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	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be implemented by

EIA Reference	EM&A Manual Reference	Environmental Protection Measures	Location/ Timing	Implementation Agent	Relevant Standard or Requirement	Implementation Stages			Status
						D	C	O	
		(OM4)							HyD/LCSD
10.9	7.6	Aesthetically pleasing design (visually unobtrusive and non-reflective) as regard to the form, material and finishes	All areas/detailed design/ during construction / during operation	Design Consultant/ Contractor	TMEIA	Y	Y	Y	n/a. To be 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	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	
		where possible. Earth retaining structures and bored pile walls should be proposed to minimise the extent of cutting.	construction period						
12.6	8.1	Rock armour from the existing seawall should be reused on the new sloping seawall as far as possible	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	The site and surroundings shall be kept tidy and litter free.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	No waste shall be burnt on site.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Provisions to be made in contract documents to allow and promote the use of recycled aggregates where appropriate.	Detailed Design	Design Consultant	TMEIA	Y			n/a
12.6	8.1	The Contractor shall be prohibited from disposing of C&D materials at any sensitive locations. The Contractor should propose the final disposal sites in the EMP and WMP for approval before implementation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Stockpiled material shall be covered by tarpaulin and /or watered as appropriate to prevent windblown dust/ surface run off.	All areas / throughout construction period	Contractor	TMEIA		Y		<>
12.6	8.1	Excavated material in trucks shall be covered by tarpaulins to reduce the potential for spillage and dust generation.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Wheel washing facilities shall be used by all trucks leaving the site to prevent transfer of mud onto public roads.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
12.6	8.1	Standard formwork or pre-fabrication should be used as far as practicable so as to minimise the C&D materials arising. The use of more durable formwork/plastic facing for construction works should be considered. The use of wooden hoardings should be avoided and metal hoarding should be used to facilitate recycling. Purchasing of construction	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	
		materials should avoid over-ordering and wastage.							
12.6	8.1	The Contractor should recycle as many C&D 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.	All areas / throughout construction period	Contractor	TMEIA		Y		✓
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: - 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;	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	
		- Adequate ventilation; - Sufficiently covered to prevent rainfall entering (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 hard standing;	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	Site Offices/	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	
		paper if such volume is sufficiently large to warrant collection. Participation in a local collection scheme by the Contractor should be advocated. Waste separation facilities for paper, aluminium cans, plastic bottles, etc should be provided on-site.	throughout construction period						
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 μg/m³	ASR9A/ASR8A = 178 ASR9C/ASR8/ASR9 = 178	260
1 Hour TSP Level in μg /m³	ASR9A/ASR8A = 394 ASR9C/ASR8/ ASR9 = 393	500

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

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

Table D3 *Action and Limit Levels for Water Quality*

Parameter	Action Level#	Limit Level#
DO in mg/L [(a)]	Surface and Middle **5.0 mg/L** Bottom **4.7 mg/L**	Surface and Middle **4.2 mg/L** Bottom **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	:	ASR8(A)
Calibrated by	:	P.F.Yeung
Date	:	28/11/2016

Sampler

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

Calibration Orfice and Standard Calibration Relationship

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

Standard Condition

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

Calibration Condition

Pa (hpa)	:	1017
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.4	3.418	1.657	56	56.68
2	13 holes	9.3	3.087	1.499	50	50.61
3	10 holes	6.6	2.600	1.268	43	43.53
4	7 holes	4.5	2.147	1.053	36	36.44
5	5 holes	2.5	1.600	0.793	26	26.32

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

Sampler Calibration Relationship (Linear Regression)

Slope(m):34.464 Intercept(b): -0.502 Correlation Coefficient(r): 0.9990

Checked by: Magnum Fan Date: 02/12/2016

High-Volume TSP Sampler
5-Point Calibration Record

Location	:	ASR9
Calibrated by	:	P.F.Yeung
Date	:	28/11/2016

Sampler

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

Calibration Orfice and Standard Calibration Relationship

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

Standard Condition

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

Calibration Condition

Pa (hpa)	:	1017
Ta(K)	:	292

Resistance Plate		dH [green liquid] (inch water)	Z	X=Qstd (cubic meter/min)	IC (chart)	Y (corrected)
1	18 holes	11.6	3.447	1.671	56	56.68
2	13 holes	9.5	3.120	1.515	50	50.61
3	10 holes	7.0	2.678	1.305	44	44.54
4	7 holes	4.8	2.218	1.086	35	35.48
5	5 holes	2.7	1.663	0.823	26	26.32

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

Sampler Calibration Relationship (Linear Regression)

Slope(m):35.730 Intercept(b):-3.020 Correlation Coefficient(r): 0.9989

Checked by: Magnum Fan Date: 02/12/2016

TISCH Environmental

TISCH ENVIRONMENTAL, INC.
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VILLAGE OF CLEVES, OH
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ORIFICE TRANSFER STANDARD CERTIFICATION WORKSHEET TE-5025A

Date - Mar 14, 2016 Rootsmeter S/N 0438320 Ta (K) - 295
Operator Tisch Orifice I.D. - 2454 Pa (mm) - 745.49

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	1.4020	3.2	2.00
2	NA	NA	1.00	1.0060	6.4	4.00
3	NA	NA	1.00	0.9010	7.9	5.00
4	NA	NA	1.00	0.8590	8.8	5.50
5	NA	NA	1.00	0.7090	12.8	8.00

DATA TABULATION

Vstd	(x axis) Qstd	(y axis)
0.9866	0.7037	1.4078
0.9824	0.9765	1.9909
0.9803	1.0880	2.2259
0.9792	1.1399	2.3345
0.9738	1.3735	2.8155

Qstd slope (m) = 2.10326
intercept (b) = -0.06696
coefficient (r) = 0.99989

y axis = SQRT[H2O(Pa/760)(298/Ta)]

Va	(x axis) Qa	(y axis)
0.9957	0.7102	0.8896
0.9914	0.9855	1.2581
0.9893	1.0980	1.4066
0.9882	1.1504	1.4753
0.9828	1.3862	1.7792

Qa slope (m) = 1.31703
intercept (b) = -0.04232
coefficient (r) = 0.99989

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. : C163248
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC16-1307) Date of Receipt / 收件日期 : 10 June 2016

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. Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun, New Territories, 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 : 15 June 2016

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed 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
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong, Technical Officer

Certified By 核證 : K C Lee, Project Engineer

Date of Issue 簽發日期 : 17 June 2016

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
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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. : C163248
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 3 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C153519
CL281	Multifunction Acoustic Calibrator	PA160023
TST150A	Measuring Amplifier	C161175

4. Test procedure : MA100N.

5. 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	0.985	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.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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Tel/電話: 2927 2606 Fax/傳真: 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

輝創工程有限公司
Sun Creation Engineering Limited
Calibration and Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C163758
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC16-1465) Date of Receipt / 收件日期 : 29 June 2016

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. Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun, New Territories, 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 : 11 July 2016

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed 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
- Agilent Technologies / Keysight Technologies
- Rohde & Schwarz Laboratory, Germany
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong
Technical Officer

Certified By 核證 : K C Lee
Project Engineer

Date of Issue 簽發日期 : 12 July 2016

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 – 校正及檢測實驗所
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. : C163758
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 :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C160077
CL281	Multifunction Acoustic Calibrator	PA160023

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	93.4	± 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	93.4 (Ref.)
				104.00		103.4
				114.00		113.4

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	93.4	Ref.
			Slow			93.4	± 0.3

Certificate of Calibration
校正證書

Certificate No. : C163758
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	67.1	-26.2 ± 1.5
					125 Hz	77.1	-16.1 ± 1.5
					250 Hz	84.7	-8.6 ± 1.4
					500 Hz	90.1	-3.2 ± 1.4
					1 kHz	93.4	Ref.
					2 kHz	94.7	+1.2 ± 1.6
					4 kHz	94.5	+1.0 ± 1.6
					8 kHz	92.4	-1.1 (+2.1 ; -3.1)
					12.5 kHz	89.5	-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	92.5	-0.8 ± 1.5
					125 Hz	93.2	-0.2 ± 1.5
					250 Hz	93.4	0.0 ± 1.4
					500 Hz	93.4	0.0 ± 1.4
					1 kHz	93.4	Ref.
					2 kHz	93.3	-0.2 ± 1.6
					4 kHz	92.7	-0.8 ± 1.6
					8 kHz	90.5	-3.0 (+2.1 ; -3.1)
					12.5 kHz	87.6	-6.2 (+3.0 ; -6.0)

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.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/012 Manufacturer : HACH

Model No. : 2100Q Serial No. : 12060 C 018447

Date of Calibration : 26/09/2016 Due Date : 25/12/2016

Ref. No. of Turbidity Standard used (4000NTU)	005/6.1/001/9

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	20.0	0.00
100	97.8	-2.20
800	775	-3.13

(*) 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 : _____

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Performance Check of Turbidity Meter

Equipment Ref. No. : ET/0505/012 Manufacturer : HACH

Model No. : 2100Q Serial No. : 12060 C 018447

Date of Calibration : 24/12/2016 Due Date : 23/03/2017

Ref. No. of Turbidity Standard used (4000NTU)	005/6.1/001/9

Theoretical Value of Turbidity Standard (NTU)	Measured Value (NTU)	Difference % *
20	20.2	1.0
100	98.5	-1.5
800	780	-2.5

(*) 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 : _____

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Internal Calibration & Performance Check of pH Meter

Equipment Ref. No.	:	ET/EW007/007	Manufacturer	:	HANNA
Model No.	:	HI 8314	Serial No.	:	08500489
Date of Calibration	:	07/11/2016	Calibration Due Date	:	06/12/2016

Liquid Junction Error

003/5.2/002/05 (20℃)

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/002/06 (25℃)

Temperature of Solution : 25.0 / 20.0 $\Delta pH_{½}$ = 0.080 / 0.080

pH value of diluted buffer : 6.96 / 6.98 pH (S) = 6.865 / 6.881

ΔpH = pH(S) - pH of diluted buffer = 0.095 / 0.099 (Observed Deviation)

Liquid Junction Error (ΔpH_j) = ΔpH - $\Delta pH_{½}$ = 0.015 / 0.019

Shift on Stirring

pH of buffer solution (with stirring), pH_s = 6.89 / 6.90

Shift on stirring, ΔpH_s= pH_s - pH(S) - ΔpH_j = 0.010 / 0.000

Noise

Noise, ΔpH_n = difference between max and min reading : 0.01 / 0.01

Verification of ATC

Ref. No. of reference thermometer used:	ET/0521/019	
Temperature record from the reference thermometer (T_R):	25.0 / 20.0	°C
Temperature record from the ATC (T_{ATC}):	24.8 / 19.8	°C
Temperature Difference, $\lvert T_R - T_{ATC} \rvert$	0.2 / 0.2	°C
Correction	+0.2 / +0.2	°C

Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	ΔpHj	≤0.05
Shift on Stirring	ΔpHs	≤0.02
Noise	ΔpHn	≤0.02
Verifcation of ATC	Temperature Difference	≤0.5°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: 王 Checked by : [signature]

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

'Form E/CE/L/15/Issue 2 (1/1) [04/15]

Internal Calibration & Performance Check of pH Meter

Equipment Ref. No.	:	ET/EW007/007	Manufacturer	:	HANNA
Model No.	:	HI 8314	Serial No.	:	08500489
Date of Calibration	:	07/12/2016	Calibration Due Date	:	06/01/2017

Liquid Junction Error

003/5.2/002/07 (20℃)

Primary Standard Solution Used : Phosphate Ref No. of Primary Solution: 003/5.2/002/08 (25℃)

Temperature of Solution : 25.0 / 20.0 $\Delta pH_{½}$ = 0.080 / 0.080

pH value of diluted buffer : 6.97 / 6.98 pH (S) = 6.865 / 6.881

ΔpH = pH(S) - pH of diluted buffer = 0.105 / 0.099 (Observed Deviation)

Liquid Junction Error (ΔpH_j) = $\Delta pH - \Delta pH_{½}$ = 0.025 / 0.019

Shift on Stirring

pH of buffer solution (with stirring), pH_s = 6.90 / 6.90

Shift on stirring, $\Delta pH_s = pH_s - pH(S) - \Delta pH_j$ = 0.010 / 0.000

Noise

Noise, ΔpH_n = difference between max and min reading : 0.01 / 0.01

Verification of ATC

Ref. No. of reference thermometer used: ET/0521/018 / ET/0521/019

Temperature record from the reference thermometer (T_R):	25.0 / 20.0	°C
Temperature record from the ATC (T_{ATC}):	24.8 / 19.8	°C
Temperature Difference, $\lvert T_R - T_{ATC} \rvert$	0.2 / 0.2	°C
Correction	+0.2 / +0.2	°C

Acceptance Criteria

Performance Characteristic		Acceptable Range
Liquid Junction Error	ΔpHj	≤0.05
Shift on Stirring	ΔpHs	≤0.02
Noise	ΔpHn	≤0.02
Verifcation of ATC	Temperature Difference	≤0.5°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.	:	ET/EW/008/005	Manufacturer	:	YSI
Model No.	:	Pro 2030	Serial No.	:	12A 100353
Date of Calibration	:	22/10/2016	Calibration Due Date	:	21/01/2017

Temperature Verification

Ref. No. of Reference Thermometer : ET/0521/017

Ref. No. of Water Bath : ---

	Temperature (°C)			
Reference Thermometer reading	Measured	20.0	Corrected	20.1
DO Meter reading	Measured	19.9	Difference	0.2

Standardization of sodium thiosulphate ($Na_2S_2O_3$) solution

Reagent No. of $Na_2S_2O_3$ titrant	CPE/012/4.5/001/14	Reagent No. of 0.025N $K_2Cr_2O_7$	CPE/012/4.4/002/14

	Trial 1	Trial 2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	10.35
Final Vol. of $Na_2S_2O_3$ (ml)	10.35	20.75
Vol. of $Na_2S_2O_3$ used (ml)	10.35	10.40
Normality of $Na_2S_2O_3$ solution (N)	0.02415	0.02404
Average Normality (**N**) of $Na_2S_2O_3$ solution (N)	0.02410	
Acceptance criteria, Deviation	Less than ± 0.001N	

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

Lineality Checking

Determination of dissolved oxygen content by Winkler Titration *

Purging Time (min)	2		5		10	
Trial	1	2	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	11.70	23.40	0.00	6.50	10.50
Final Vol. of $Na_2S_2O_3$ (ml)	11.70	23.40	30.00	6.50	10.50	14.60
Vol. (**V**) of $Na_2S_2O_3$ used (ml)	11.70	11.70	6.60	6.50	4.00	4.10
Dissolved Oxygen (**DO**), mg/L	7.57	7.57	4.27	4.21	2.59	2.65
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	7.44	7.51	7.48	7.57	7.57	7.57	1.20
5	4.19	4.19	4.19	4.27	4.21	4.24	1.19
10	2.52	2.54	2.53	2.59	2.65	2.62	3.50
Linear regression coefficient				0.9999			

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

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/012/4.7/003/29	Reagent No. of NaCl (30ppt)	CPE/012/4.8/003/29

Determination of dissolved oxygen content by Winkler Titration **

Salinity (ppt)	10		30	
Trial	1	2	1	2
Initial Vol. of $Na_2S_2O_3$ (ml)	0.00	10.90	21.90	31.30
Final Vol. of $Na_2S_2O_3$ (ml)	10.90	21.90	31.30	40.80
Vol. (**V**) of $Na_2S_2O_3$ used (ml)	10.90	11.00	9.40	9.50
Dissolved Oxygen (**DO**), mg/L	7.05	7.12	6.08	6.15
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	7.11	7.15	7.13	7.05	7.12	7.09	0.56
30	6.08	6.04	6.06	6.08	6.15	6.12	0.99

Acceptance Criteria

(1) Differenc 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 : _____

東業德勤測試顧問有限公司
ETS-TESTCONSULT LIMITED

Performance Check of Salinity Meter

Equipment Ref. No. :	ET/EW/008/005	Manufacturer :	YSI
Model No. :	Pro 2030	Serial No. :	12A 100353
Date of Calibration :	22/10/2016	Due Date :	21/01/2017

Ref. No. of Salinity Standard used (30ppt)	S/001/5

Salinity Standard (ppt)	Measured Salinity (ppt)	Difference * (%)
30.0	30.6	2.00

(*) 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 : _____

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. : C165934
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC16-2438) Date of Receipt / 收件日期 : 26 October 2016

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. Room 113, 1/F, My Loft, 9 Hoi Wing Road, Tuen Mun, New Territories, 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 : 27 October 2016

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 : T L Shek
Assistant Engineer

Certified By / 核證 : H C Chan
Engineer

Date of Issue / 簽發日期 : 28 October 2016

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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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. : C165934
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours before the commencement of the test.

2. The results presented are the mean of 10 measurements at each calibration point.

3. Test equipment :

Equipment ID	Description	Certificate No.
CL386	Multi-function Measuring Instrument	S12109

4. Test procedure : MA130N.

5. Results :

Air Velocity

Applied Value (m/s)	UUT Reading (m/s)	Measured Correction		
		Value (m/s)	Measurement Uncertainty	
			Expanded Uncertainty (m/s)	Coverage Factor
2.0	1.8	+0.2	0.2	2.0
4.0	3.8	+0.2	0.2	2.0
6.0	5.8	+0.2	0.3	2.0
8.1	8.0	+0.1	0.3	2.0
10.0	10.0	0.0	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 :
Only the original copy or the laboratory's certified true copy is valid.

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

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ENVIROTECH SERVICES CO.

Calibration Report of Wind Meter

Date of Calibration : 1 November 2016

Brand of Test Meter: Global Water

Model: Speed Sensor: WE550 (S/N:E1337005099)

Direction Senor: WE570 (S/N:153500564)

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)
1.18	1.3
0.99	1.1
0.67	0.7

Wind Direction Test

Global Wate (o)	Marine Compass (o)
270.46	270
0.07	0
90.25	90
181.13	180

Calibrated by: Fai

Yeung Ping Fai
(Technical Officer)

Checked by : Fat

Ho Kam Fat
(Senior Technical Officer)

Appendix F

EM&A Monitoring Schedules

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Noise Monitoring Schedule (1 to 31 December 2016)

Alternative Noise Monitoring at Pak Mong Village Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Dec	2-Dec	3-Dec
				Noise Impact Monitoring		
4-Dec	5-Dec	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec
			Noise Impact Monitoring			
11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec
		Noise Impact Monitoring				
18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec
	Noise Impact Monitoring			Noise Impact Monitoring		
25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec
			Noise Impact Monitoring			

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Air Quality Monitoring Schedule (1 to 31 December 2016)

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Dec	2-Dec	3-Dec
				1-hr TSP Monitoring 24-hr TSP Monitoring		
4-Dec	5-Dec	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec
			1-hr TSP Monitoring 24-hr TSP Monitoring			
11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec
		1-hr TSP Monitoring 24-hr TSP Monitoring				
18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec
	1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring		
25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec
			1-hr TSP Monitoring 24-hr TSP Monitoring			

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Noise Monitoring Schedule (1 to 31 January 2017)

Alternative Noise Monitoring at Pak Mong Village Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan
		Noise Impact Monitoring				
8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan
	Noise Impact Monitoring			Noise Impact Monitoring		
15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan
			Noise Impact Monitoring			
22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan
		Noise Impact Monitoring			Noise Impact Monitoring	
29-Jan	30-Jan	31-Jan				

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 to 31 January 2017)

Alternative Air Quality Monitoring at WA4 and MTRC Depot Entrance

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan
		1-hr TSP Monitoring 24-hr TSP Monitoring				
8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan
	1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring		
15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan
			1-hr TSP Monitoring 24-hr TSP Monitoring			
22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan
		1-hr TSP Monitoring 24-hr TSP Monitoring			1-hr TSP Monitoring 24-hr TSP Monitoring	
29-Jan	30-Jan	31-Jan				

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 Marine Water Quality Monitoring (WQM) Schedule (December 2016)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
27-Nov	28-Nov	29-Nov	30-Nov	01-Dec	02-Dec	03-Dec
				WQM Mid-Flood 8:46 (07:01 - 10:31) Mid-Ebb 14:11 (12:26 - 15:56)		**WQM** Mid-Flood 10:02 (08:17 - 11:47) Mid-Ebb 15:25 (13:40 - 17:10)
04-Dec	05-Dec	06-Dec	07-Dec	08-Dec	09-Dec	10-Dec
		WQM Mid-Flood 12:41 (10:56 - 14:26) Mid-Ebb 18:12 (16:35 - 19:50)		**WQM** Mid-Flood 14:30 (12:45 - 16:15) Mid-Ebb 20:53 (19:08 - 22:38)		**WQM** Mid-Ebb 9:18 (07:33 - 11:03) Mid-Flood 15:50 (14:05 - 17:35)
11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec
		WQM Mid-Ebb 12:18 (10:33 - 14:03) Mid-Flood 17:49 (16:04 - 19:34)		**WQM** Mid-Flood 8:35 (06:50 - 10:20) Mid-Ebb 14:00 (12:15 - 15:45)		**WQM** Mid-Flood 10:13 (08:28 - 11:58) Mid-Ebb 15:32 (13:47 - 17:17)
18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec
		WQM Mid-Flood 12:45 (11:00 - 14:30) Mid-Ebb 18:24 (16:39 - 20:09)		**WQM** Mid-Ebb 6:58 (05:13 - 08:43) Mid-Flood 14:28 (12:43 - 16:13)		**WQM** Mid-Ebb 9:44 (07:59 - 11:29) Mid-Flood 15:47 (14:02 - 17:32)
25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec
		WQM Mid-Ebb 12:06 (10:21 - 13:51) Mid-Flood 17:20 (15:35 - 19:05)		**WQM** Mid-Flood 8:02 (06:17 - 09:47) Mid-Ebb 13:18 (11:33 - 15:03)		**WQM** Mid-Flood 9:09 (07:24 - 10:54) Mid-Ebb 14:29 (12:44 - 16:14)

HY/2012/07 - Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Marine Water Quality Monitoring (WQM) Schedule (January 2017)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
01-Jan	02-Jan	03-Jan	04-Jan	05-Jan	06-Jan	07-Jan
		WQM Mid-Flood 11:02 (09:17 - 12:47) Mid-Ebb 16:39 (14:54 - 18:24)		**WQM** Mid-Flood 12:35 (10:50 - 14:20) Mid-Ebb 18:49 (17:04 - 20:34)		**WQM** Mid-Ebb 7:23 (05:38 - 09:08) Mid-Flood 14:16 (12:31 - 16:01)
08-Jan	09-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan
		WQM Mid-Ebb 11:18 (09:33 - 13:03) Mid-Flood 16:43 (14:58 - 18:28)		**WQM** Mid-Ebb 13:02 (11:17 - 14:47) Mid-Flood 18:16 (16:31 - 20:01)		**WQM** Mid-Flood 9:07 (07:22 - 10:52) Mid-Ebb 14:29 (12:44 - 16:14)
15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan
		WQM Mid-Flood 11:02 (09:17 - 12:47) Mid-Ebb 16:34 (14:49 - 18:19)		**WQM** Mid-Flood 12:16 (10:31 - 14:01) Mid-Ebb 18:23 (16:38 - 20:08)		**WQM** Mid-Ebb 6:47 (05:02 - 08:32) Mid-Flood 13:47 (12:02 - 15:32)
22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan
		WQM Mid-Ebb 11:04 (09:19 - 12:49) Mid-Flood 16:07 (14:22 - 17:52)		**WQM** Mid-Ebb 12:24 (10:39 - 14:09) Mid-Flood 17:30 (15:45 - 19:15)		**WQM** Mid-Flood 8:13 (06:28 - 09:58) Mid-Ebb 13:35 (11:50 - 15:20)
29-Jan	30-Jan	31-Jan	01-Feb	02-Feb	03-Feb	04-Feb
		WQM Mid-Flood 9:41 (07:56 - 11:26) Mid-Ebb 15:25 (13:40 - 17:10)		**WQM** Mid-Flood 10:50 (09:05 - 12:35) Mid-Ebb 16:56 (15:11 - 18:41)		**WQM** Mid-Flood 12:22 (10:37 - 14:07) Mid-Ebb 19:11 (17:26 - 20:56)

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

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Dolphin Monitoring Survey Schedule (1 to 31 December 2016)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
				1-Dec	2-Dec	3-Dec
				Impact Dolphin Monitoring		
4-Dec	5-Dec	6-Dec	7-Dec	8-Dec	9-Dec	10-Dec
		Impact Dolphin Monitoring				
11-Dec	12-Dec	13-Dec	14-Dec	15-Dec	16-Dec	17-Dec
					Impact Dolphin Monitoring	
18-Dec	19-Dec	20-Dec	21-Dec	22-Dec	23-Dec	24-Dec
	Impact Dolphin Monitoring					
25-Dec	26-Dec	27-Dec	28-Dec	29-Dec	30-Dec	31-Dec

HY/2012/07 Tuen Mun - Chek Lap Kok Link - Southern Connection Viaduct Section
Impact Dolphin Monitoring Survey Schedule (1 to 31 January 2017)

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1-Jan	2-Jan	3-Jan	4-Jan	5-Jan	6-Jan	7-Jan
8-Jan	9-Jan	10-Jan	11-Jan	12-Jan	13-Jan	14-Jan
		Impact Dolphin Monitoring		Impact Dolphin Monitoring		
15-Jan	16-Jan	17-Jan	18-Jan	19-Jan	20-Jan	21-Jan
				Impact Dolphin Monitoring		
22-Jan	23-Jan	24-Jan	25-Jan	26-Jan	27-Jan	28-Jan
	Impact Dolphin Monitoring					
29-Jan	30-Jan	31-Jan				

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	2016-12-01	ASR8A	8:34	1-hr TSP	93	394	500
TMCLKL	HY/2012/07	2016-12-01	ASR8A	9:36	1-hr TSP	104		
TMCLKL	HY/2012/07	2016-12-01	ASR8A	10:38	1-hr TSP	87		
TMCLKL	HY/2012/07	2016-12-07	ASR8A	13:20	1-hr TSP	115		
TMCLKL	HY/2012/07	2016-12-07	ASR8A	14:22	1-hr TSP	82		
TMCLKL	HY/2012/07	2016-12-07	ASR8A	15:24	1-hr TSP	115		
TMCLKL	HY/2012/07	2016-12-13	ASR8A	8:12	1-hr TSP	88		
TMCLKL	HY/2012/07	2016-12-13	ASR8A	9:14	1-hr TSP	79		
TMCLKL	HY/2012/07	2016-12-13	ASR8A	10:16	1-hr TSP	84		
TMCLKL	HY/2012/07	2016-12-19	ASR8A	8:33	1-hr TSP	73		
TMCLKL	HY/2012/07	2016-12-19	ASR8A	9:35	1-hr TSP	60		
TMCLKL	HY/2012/07	2016-12-19	ASR8A	10:37	1-hr TSP	47		
TMCLKL	HY/2012/07	2016-12-22	ASR8A	8:00	1hr TSP	125		
TMCLKL	HY/2012/07	2016-12-22	ASR8A	9:02	1-hr TSP	66		
TMCLKL	HY/2012/07	2016-12-22	ASR8A	10:04	1-hr TSP	65		
TMCLKL	HY/2012/07	2016-12-28	ASR8A	9:20	1-hr TSP	99		
TMCLKL	HY/2012/07	2016-12-28	ASR8A	10:22	1-hr TSP	88		
TMCLKL	HY/2012/07	2016-12-28	ASR8A	11:24	1-hr TSP	95		
					Average	87		
					Min.	47		
					Max.	125		

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

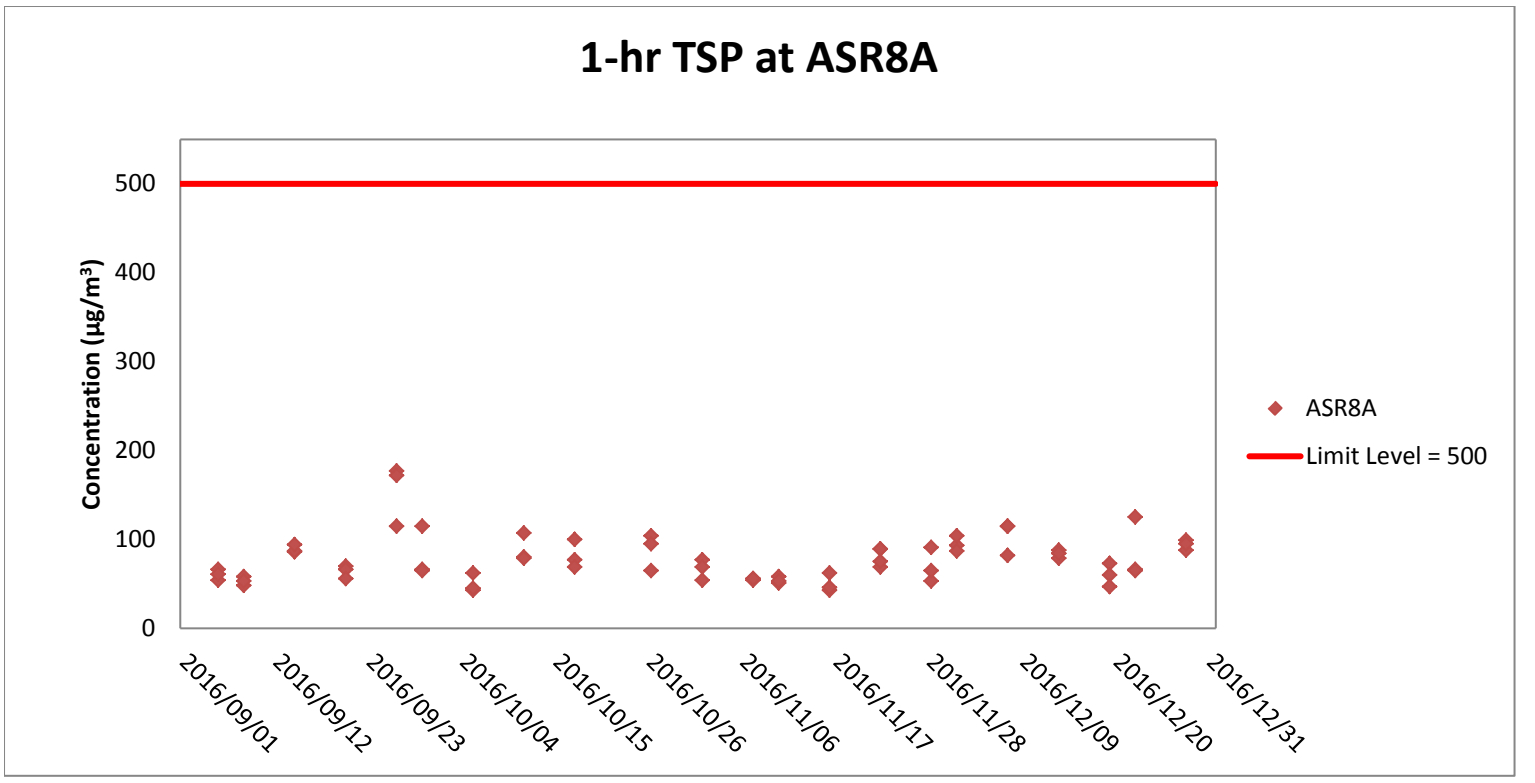
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)
TMCLKL	HY/2012/07	2016-12-01	ASR9	8:44	1-hr TSP	135	393	500
TMCLKL	HY/2012/07	2016-12-01	ASR9	9:46	1-hr TSP	148		
TMCLKL	HY/2012/07	2016-12-01	ASR9	10:48	1-hr TSP	106		
TMCLKL	HY/2012/07	2016-12-07	ASR9	13:30	1-hr TSP	159		
TMCLKL	HY/2012/07	2016-12-07	ASR9	14:32	1-hr TSP	175		
TMCLKL	HY/2012/07	2016-12-07	ASR9	15:34	1-hr TSP	180		
TMCLKL	HY/2012/07	2016-12-13	ASR9	8:23	1-hr TSP	131		
TMCLKL	HY/2012/07	2016-12-13	ASR9	9:25	1-hr TSP	77		
TMCLKL	HY/2012/07	2016-12-13	ASR9	10:27	1-hr TSP	128		
TMCLKL	HY/2012/07	2016-12-19	ASR9	8:43	1-hr TSP	147		
TMCLKL	HY/2012/07	2016-12-19	ASR9	9:45	1-hr TSP	84		
TMCLKL	HY/2012/07	2016-12-19	ASR9	10:47	1-hr TSP	147		
TMCLKL	HY/2012/07	2016-12-22	ASR9	8:10	1-hr TSP	62		
TMCLKL	HY/2012/07	2016-12-22	ASR9	9:12	1-hr TSP	114		
TMCLKL	HY/2012/07	2016-12-22	ASR9	10:14	1-hr TSP	98		
TMCLKL	HY/2012/07	2016-12-28	ASR9	9:30	1-hr TSP	119		
TMCLKL	HY/2012/07	2016-12-28	ASR9	10:32	1-hr TSP	126		
TMCLKL	HY/2012/07	2016-12-28	ASR9	11:34	1-hr TSP	118		
					Average	125		
					Min.	62		
					Max.	180		

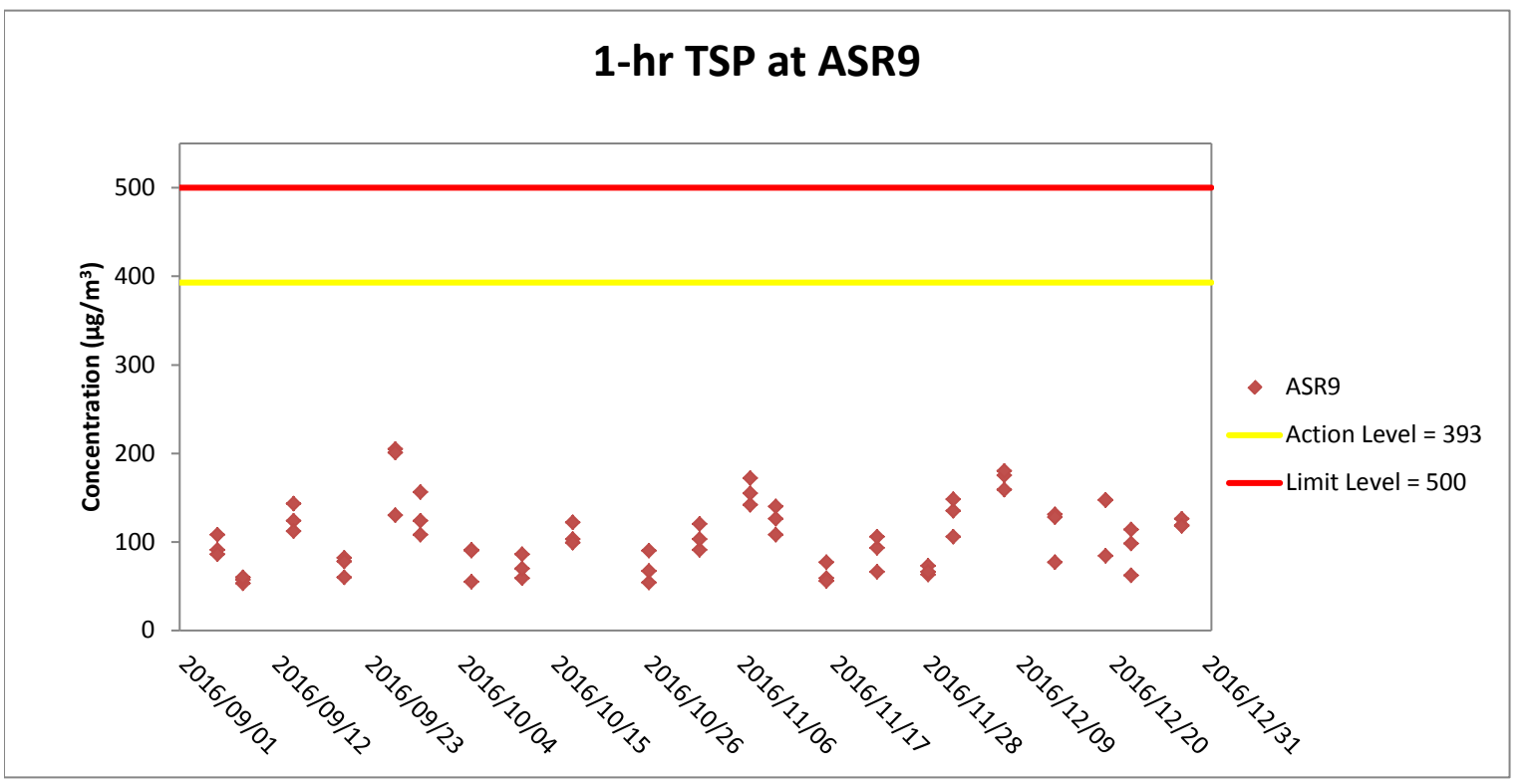
24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR8A

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	2016-12-01	ASR8A	11:40	24-hr TSP	69	178	260
TMCLKL	HY/2012/07	2016-12-07	ASR8A	16:26	24-hr TSP	76		
TMCLKL	HY/2012/07	2016-12-13	ASR8A	11:18	24-hr TSP	68		
TMCLKL	HY/2012/07	2016-12-19	ASR8A	11:39	24-hr TSP	46		
TMCLKL	HY/2012/07	2016-12-22	ASR8A	11:06	24-hr TSP	54		
TMCLKL	HY/2012/07	2016-12-28	ASR8A	12:26	24-hr TSP	78		
					Average	65		
					Min.	46		
					Max.	78		

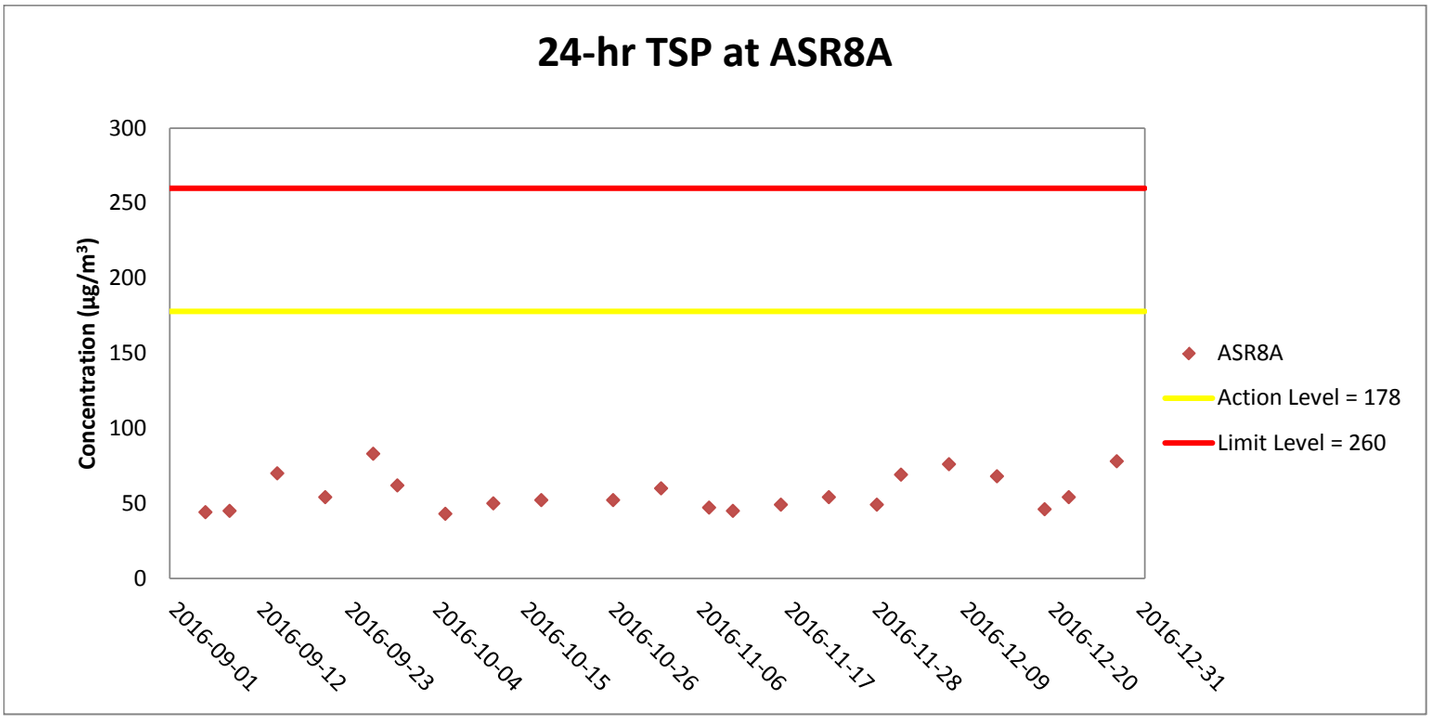
24-hour TSP Monitoring Results at Air Quality Monitoring Station ASR9

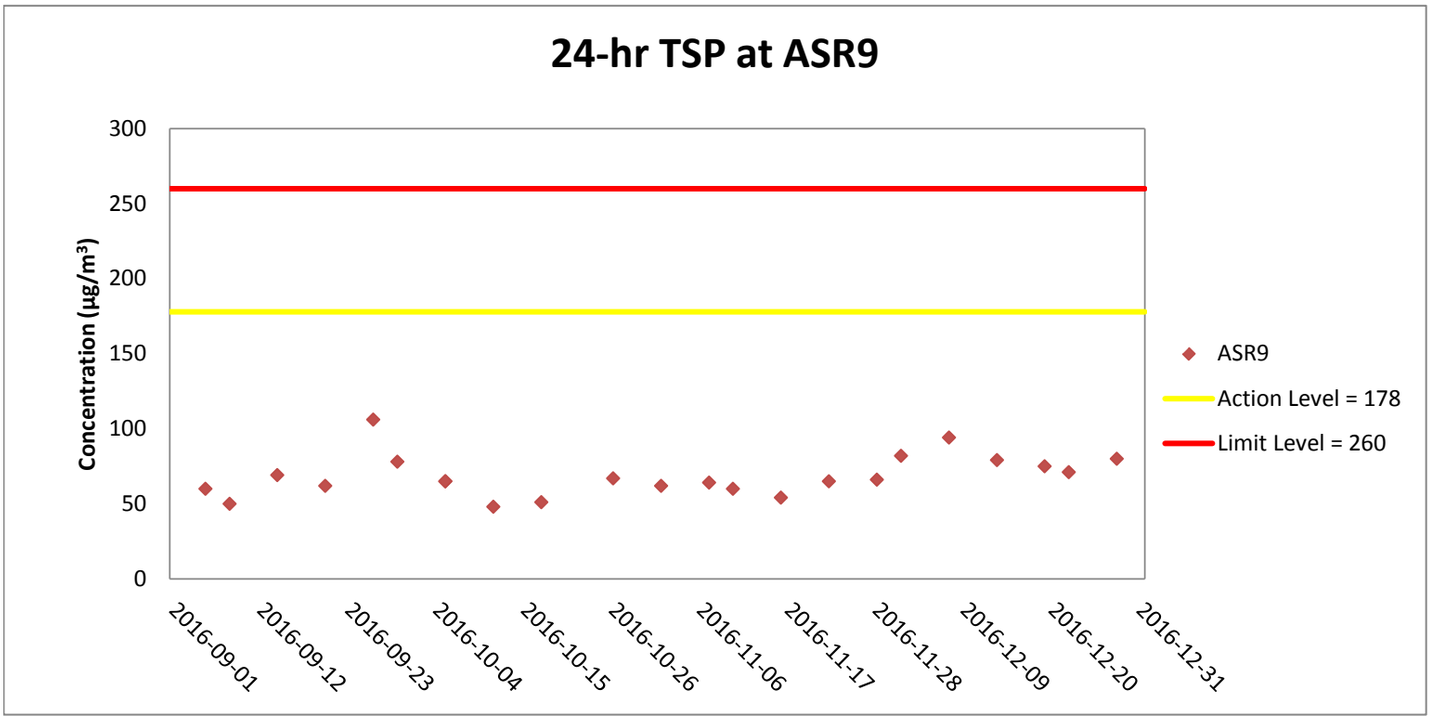
Project	Works	Date(yyyy-mm-dd)	Station	Time (hh:mm, 24hour)	Parameter	Results (ug/m3)	Action Level (ug/m3)	Limit Level (ug/m3)
TMCLKL	HY/2012/07	2016-12-01	ASR9	11:50	24-hr TSP	82	178	260
TMCLKL	HY/2012/07	2016-12-07	ASR9	16:36	24-hr TSP	94		
TMCLKL	HY/2012/07	2016-12-13	ASR9	11:29	24-hr TSP	79		
TMCLKL	HY/2012/07	2016-12-19	ASR9	11:49	24-hr TSP	75		
TMCLKL	HY/2012/07	2016-12-22	ASR9	11:16	24-hr TSP	71		
TMCLKL	HY/2012/07	2016-12-28	ASR9	12:36	24-hr TSP	80		
					Average	80		
					Min.	71		
					Max.	94		





Weather condition within the reporting period varied between sunny to rainy.
Major construction works undertaken within the reporting period include Pier construction; Re-alignment of Cheung Tung Road; Road works along North Lantau Highway;; Installation of pier head and deck segments; and Slope work of Viaducts A, B & C.
Marine works within the reporting period include Construction and installation of pile caps; Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.





Weather condition within the reporting period varied between sunny to rainy.
Major construction works undertaken within the reporting period include Pier construction; Re-alignment of Cheung Tung Road; Road works along North Lantau Highway;; Installation of pier head and deck segments; and Slope work of Viaducts A, B & C.
Marine works within the reporting period include Construction and installation of pile caps; Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Appendix H

Meteorological Data for the Reporting Month

Date	Time (HH)	Wind speed (m/s)	Wind direction (deg)
2016-12-01	0	0.0	-
2016-12-01	1	0.0	-
2016-12-01	2	0.0	-
2016-12-01	3	0.0	-
2016-12-01	4	0.2	128
2016-12-01	5	0.0	-
2016-12-01	6	0.0	-
2016-12-01	7	0.2	187
2016-12-01	8	0.1	234
2016-12-01	9	0.2	214
2016-12-01	10	0.0	-
2016-12-01	11	0.0	-
2016-12-01	12	0.1	223
2016-12-01	13	0.1	168
2016-12-01	14	0.0	-
2016-12-01	15	0.1	103
2016-12-01	16	0.1	265
2016-12-01	17	0.0	-
2016-12-01	18	0.1	202
2016-12-01	19	0.2	194
2016-12-01	20	0.1	194
2016-12-01	21	0.1	182
2016-12-01	22	0.2	178
2016-12-01	23	0.0	-
2016-12-02	0	0.0	-
2016-12-02	1	0.1	108
2016-12-02	2	0.0	-
2016-12-02	3	0.0	-
2016-12-02	4	0.0	-
2016-12-02	5	0.2	167
2016-12-02	6	0.1	196
2016-12-02	7	0.0	-
2016-12-02	8	0.0	-
2016-12-02	9	0.0	-
2016-12-02	10	0.0	-
2016-12-02	11	0.0	-
2016-12-02	12	0.0	-
2016-12-02	13	0.0	-
2016-12-02	14	0.0	-
2016-12-02	15	0.0	-
2016-12-02	16	0.0	-
2016-12-02	17	0.4	191
2016-12-02	18	0.3	166
2016-12-02	19	0.1	120
2016-12-02	20	0.0	-
2016-12-02	21	0.0	-
2016-12-02	22	0.1	168
2016-12-02	23	0.0	-
2016-12-07	0	0.0	-
2016-12-07	1	0.0	-
2016-12-07	2	0.0	-
2016-12-07	3	0.0	-
2016-12-07	4	0.0	-
2016-12-07	5	0.1	87
2016-12-07	6	0.0	-
2016-12-07	7	0.2	62
2016-12-07	8	0.1	117
2016-12-07	9	0.0	-
2016-12-07	10	0.0	-
2016-12-07	11	0.1	177
2016-12-07	12	0.0	-
2016-12-07	13	0.0	-
2016-12-07	14	0.0	-
2016-12-07	15	0.0	-
2016-12-07	16	0.0	-
2016-12-07	17	0.3	190
2016-12-07	18	0.0	-
2016-12-07	19	0.0	-
2016-12-07	20	0.2	192
2016-12-07	21	0.4	190
2016-12-07	22	0.2	188

Date	Time (HH)	Wind speed (m/s)	Wind direction (deg)
2016-12-07	23	0.4	192
2016-12-08	0	0.1	183
2016-12-08	1	0.2	193
2016-12-08	2	0.1	181
2016-12-08	3	0.0	-
2016-12-08	4	0.0	-
2016-12-08	5	0.1	166
2016-12-08	6	0.0	-
2016-12-08	7	0.0	-
2016-12-08	8	0.0	-
2016-12-08	9	0.0	-
2016-12-08	10	0.0	-
2016-12-08	11	0.0	-
2016-12-08	12	0.0	-
2016-12-08	13	0.0	-
2016-12-08	14	0.1	266
2016-12-08	15	0.0	-
2016-12-08	16	0.3	190
2016-12-08	17	0.4	182
2016-12-08	18	0.5	190
2016-12-08	19	0.4	194
2016-12-08	20	0.3	195
2016-12-08	21	0.3	183
2016-12-08	22	0.2	192
2016-12-08	23	0.3	187
2016-12-13	0	1.2	174
2016-12-13	1	0.5	119

Date	Time (HH)	Wind speed (m/s)	Wind direction (deg)
2016-12-13	2	0.1	120
2016-12-13	3	0.1	133
2016-12-13	4	0.1	132
2016-12-13	5	3.0	165
2016-12-13	6	3.6	164
2016-12-13	7	0.1	111
2016-12-13	8	0.1	72
2016-12-13	9	0.1	156
2016-12-13	10	0.2	298
2016-12-13	11	0.0	-
2016-12-13	12	0.0	-
2016-12-13	13	0.0	-
2016-12-13	14	0.0	-
2016-12-13	15	0.1	172
2016-12-13	16	0.1	198
2016-12-13	17	0.1	192
2016-12-13	18	0.0	-
2016-12-13	19	0.0	-
2016-12-13	20	0.0	-
2016-12-13	21	0.0	-
2016-12-13	22	0.0	-
2016-12-13	23	0.0	-
2016-12-14	0	0.0	-
2016-12-14	1	0.2	297
2016-12-14	2	0.3	292
2016-12-14	3	0.1	314
2016-12-14	4	0.1	189
2016-12-14	5	0.1	182
2016-12-14	6	0.2	67
2016-12-14	7	0.3	44
2016-12-14	8	0.2	79
2016-12-14	9	0.4	202
2016-12-14	10	0.0	-
2016-12-14	11	0.0	-
2016-12-14	12	0.0	-
2016-12-14	13	0.0	-
2016-12-14	14	0.0	-
2016-12-14	15	0.0	-
2016-12-14	16	0.1	89
2016-12-14	17	0.0	-
2016-12-14	18	0.0	-
2016-12-14	19	0.1	202
2016-12-14	20	0.3	216
2016-12-14	21	0.2	221
2016-12-14	22	0.4	308
2016-12-14	23	0.3	290
2016-12-19	0	1.6	156
2016-12-19	1	1.2	166
2016-12-19	2	1.7	182
2016-12-19	3	2.9	167
2016-12-19	4	2.0	211
2016-12-19	5	3.8	163
2016-12-19	6	0.1	125
2016-12-19	7	0.2	188
2016-12-19	8	0.4	195
2016-12-19	9	0.7	174
2016-12-19	10	1.1	183
2016-12-19	11	1.0	140
2016-12-19	12	0.6	125
2016-12-19	13	1.8	168
2016-12-19	14	1.4	156
2016-12-19	15	2.1	171
2016-12-19	16	1.9	174
2016-12-19	17	0.1	194
2016-12-19	18	0.9	183
2016-12-19	19	0.9	172
2016-12-19	20	0.5	190
2016-12-19	21	1.5	182
2016-12-19	22	0.2	91
2016-12-19	23	0.1	86
2016-12-20	0	0.1	107

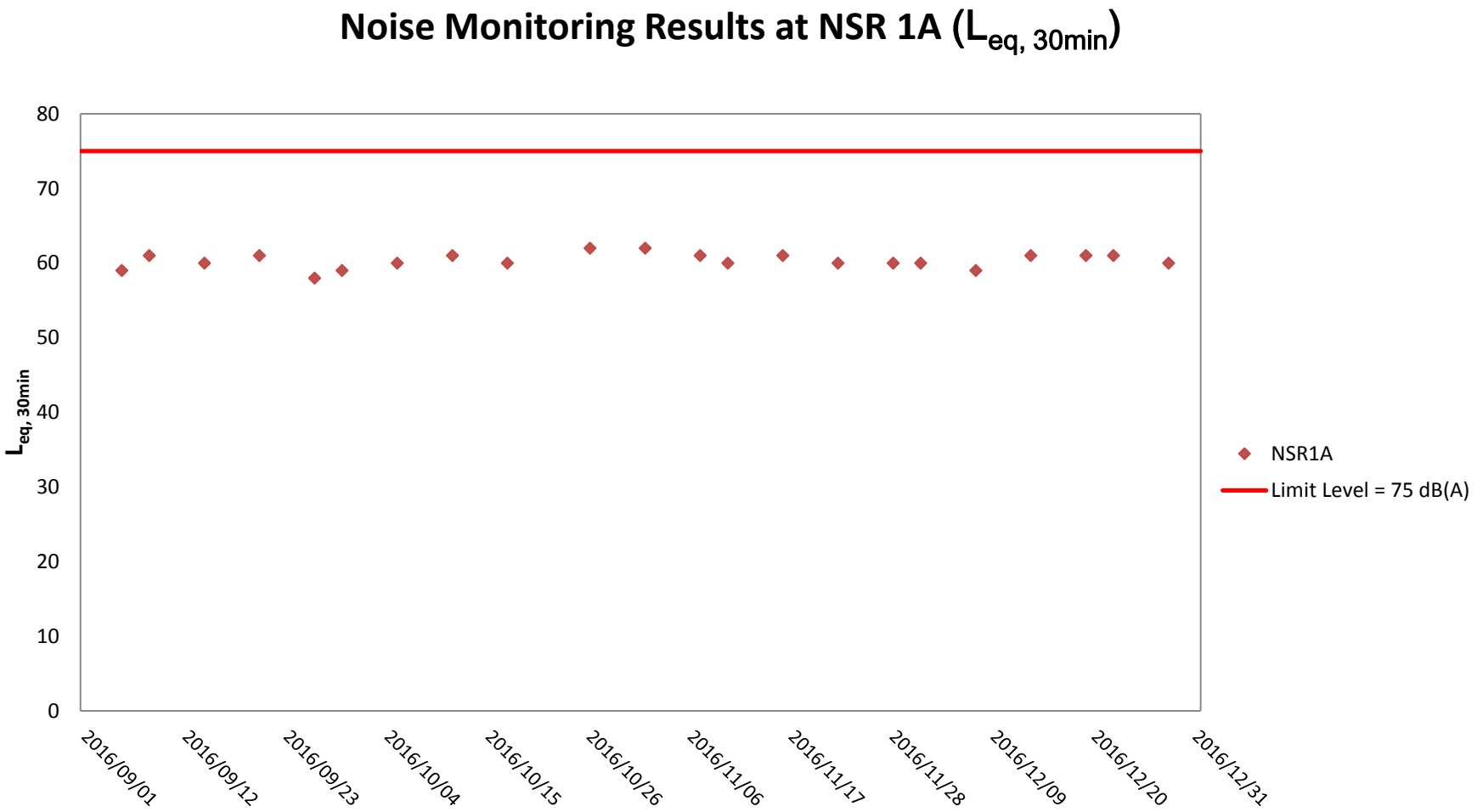
Date	Time (HH)	Wind speed (m/s)	Wind direction (deg)
2016-12-20	1	0.0	-
2016-12-20	2	0.2	133
2016-12-20	3	0.2	142
2016-12-20	4	0.2	199
2016-12-20	5	0.6	215
2016-12-20	6	1.0	202
2016-12-20	7	1.0	171
2016-12-20	8	1.3	188
2016-12-20	9	0.8	185
2016-12-20	10	0.5	199
2016-12-20	11	1.0	181
2016-12-20	12	1.5	155
2016-12-20	13	0.8	115
2016-12-20	14	1.2	122
2016-12-20	15	1.0	82
2016-12-20	16	0.3	139
2016-12-20	17	0.2	139
2016-12-20	18	0.0	-
2016-12-20	19	0.8	160
2016-12-20	20	0.6	153
2016-12-20	21	0.7	149
2016-12-20	22	0.1	124
2016-12-20	23	0.0	-
2016-12-22	0	0.0	-
2016-12-22	1	0.1	162
2016-12-22	2	0.0	-
2016-12-22	3	0.1	70
2016-12-22	4	0.0	-
2016-12-22	5	0.1	129
2016-12-22	6	0.0	-
2016-12-22	7	0.0	-
2016-12-22	8	0.0	-
2016-12-22	9	0.0	-
2016-12-22	10	0.0	-
2016-12-22	11	0.1	189
2016-12-22	12	0.1	143
2016-12-22	13	0.1	166
2016-12-22	14	0.0	-
2016-12-22	15	0.0	-
2016-12-22	16	0.0	-
2016-12-22	17	0.0	-
2016-12-22	18	0.0	-
2016-12-22	19	0.0	-
2016-12-22	20	0.0	-
2016-12-22	21	0.0	-
2016-12-22	22	0.0	-
2016-12-22	23	0.1	55
2016-12-23	0	0.0	-
2016-12-23	1	0.0	-
2016-12-23	2	0.0	-
2016-12-23	3	0.0	-
2016-12-23	4	0.0	-
2016-12-23	5	0.0	-
2016-12-23	6	0.0	-
2016-12-23	7	0.0	-
2016-12-23	8	0.1	51
2016-12-23	9	0.1	74
2016-12-23	10	0.0	-
2016-12-23	11	0.0	-
2016-12-23	12	0.0	-
2016-12-23	13	0.1	277
2016-12-23	14	0.0	-
2016-12-23	15	0.1	154
2016-12-23	16	0.1	220
2016-12-23	17	0.0	-
2016-12-23	18	0.2	119
2016-12-23	19	0.0	-
2016-12-23	20	0.0	-
2016-12-23	21	0.2	127
2016-12-23	22	0.7	178
2016-12-23	23	0.8	189

Date	Time (HH)	Wind speed (m/s)	Wind direction (deg)
2016-12-28	0	0.4	290
2016-12-28	1	0.1	320
2016-12-28	2	0.3	288
2016-12-28	3	0.1	266
2016-12-28	4	0.2	310
2016-12-28	5	0.0	-
2016-12-28	6	0.1	295
2016-12-28	7	0.1	254
2016-12-28	8	0.2	271
2016-12-28	9	0.1	272
2016-12-28	10	0.1	246
2016-12-28	11	0.0	-
2016-12-28	12	0.0	-
2016-12-28	13	0.1	198
2016-12-28	14	0.1	249
2016-12-28	15	0.1	318
2016-12-28	16	0.0	-
2016-12-28	17	0.0	-
2016-12-28	18	0.1	197
2016-12-28	19	0.1	219
2016-12-28	20	0.1	298
2016-12-28	21	0.0	-
2016-12-28	22	0.0	-
2016-12-28	23	0.0	-
2016-12-29	0	0.1	238
2016-12-29	1	0.2	266
2016-12-29	2	0.0	-
2016-12-29	3	0.1	277
2016-12-29	4	0.1	318
2016-12-29	5	0.2	282
2016-12-29	6	0.4	308
2016-12-29	7	0.3	286
2016-12-29	8	0.1	248
2016-12-29	9	0.1	287
2016-12-29	10	0.4	319
2016-12-29	11	0.1	248
2016-12-29	12	0.2	248
2016-12-29	13	0.0	-
2016-12-29	14	0.0	-
2016-12-29	15	0.1	181
2016-12-29	16	0.0	-
2016-12-29	17	0.0	-
2016-12-29	18	0.1	67
2016-12-29	19	0.0	-
2016-12-29	20	0.1	95
2016-12-29	21	0.0	-
2016-12-29	22	0.0	-
2016-12-29	23	0.1	76

Appendix I

Impact Noise Monitoring Results and Graphical Presentation

Project	Works	Date (yyyy-mm-dd)	Station	Weather Condition	Time (hh:mm, 24hour)	Noise Level for 30-min, dB(A)			Limit Level dB(A)	Wind Speed (m/s)	Noise Meter Model/ID	Calibrator Model/ID
						Leq	L10	L90				
TMCLKL	HY/2012/07	2016-12-01	NSR1A	Sunny	9:57	60	60	54	75	0.8	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2016-12-07	NSR1A	Sunny	14:42	59	61	53	75	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2016-12-13	NSR1A	Sunny	9:35	61	63	57	75	0.2	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2016-12-19	NSR1A	Sunny	9:56	61	63	56	75	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2016-12-22	NSR1A	Sunny	9:22	61	63	56	75	0.3	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
TMCLKL	HY/2012/07	2016-12-28	NSR1A	Cloudy	10:43	60	62	55	75	0.2	RION NL31 (S/N 00603867)	RION NC73 (S/N 10997142)
					Min.	59						
					Max.	61						
					Average	60						



Weather condition within the reporting period varied between sunny to rainy.
Major construction works undertaken within the reporting period include Pier construction; Re-alignment of Cheung Tung Road; Road works along North Lantau Highway; Installation of pier head and deck segments; and Slope work of Viaducts A, B & C.
Marine works within the reporting period include Construction and installation of pile caps; Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Appendix J

Impact Water Quality Monitoring Results and Graphical Presentation

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)5	08:15	Surface	1	1	22.9	7.77	28.4	7.86	8.13	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)5	08:15	Surface	1	2	22.8	7.8	28.5	7.82	8.04	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)5	08:15	Middle	2	1	23.1	7.85	28.6	7.73	8.81	12.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)5	08:15	Middle	2	2	23.2	7.84	28.5	7.76	8.85	12.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)5	08:15	Bottom	3	1	23.2	7.78	28.7	7.66	8.57	12
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)5	08:15	Bottom	3	2	23.3	7.82	28.8	7.7	8.5	11.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4a	08:35	Surface	1	1	22.9	7.94	28.3	8.2	8.02	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4a	08:35	Surface	1	2	23	7.9	28.4	8.18	8	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4a	08:35	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4a	08:35	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4a	08:35	Bottom	3	1	23.1	7.88	28.4	8.03	8.09	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4a	08:35	Bottom	3	2	23.1	7.86	28.5	7.98	8.05	11.3
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4	08:55	Surface	1	1	23.1	7.77	28.2	7.72	7.68	10.6
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4	08:55	Surface	1	2	23.1	7.75	28.3	7.69	7.74	10.7
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4	08:55	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4	08:55	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4	08:55	Bottom	3	1	23.2	7.8	28.4	7.35	7.81	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	SR4	08:55	Bottom	3	2	23.1	7.84	28.3	7.32	7.76	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS8	09:15	Surface	1	1	23.1	7.8	28.4	7.85	7.6	10.5
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS8	09:15	Surface	1	2	23.2	7.84	28.3	7.81	7.63	10.5
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS8	09:15	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS8	09:15	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS8	09:15	Bottom	3	1	23.2	7.87	28.4	7.77	7.75	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS8	09:15	Bottom	3	2	23.3	7.83	28.5	7.74	7.78	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)16	09:35	Surface	1	1	23	7.75	28.2	7.74	7.92	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)16	09:35	Surface	1	2	23.1	7.79	28.3	7.79	7.85	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)16	09:35	Middle	2	1	23.2	7.8	28.4	7.87	8.08	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)16	09:35	Middle	2	2	23.1	7.85	28.5	7.9	8.15	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)16	09:35	Bottom	3	1	23.3	7.86	28.6	7.65	8.2	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)16	09:35	Bottom	3	2	23.4	7.85	28.5	7.62	8.14	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)9	09:55	Surface	1	1	23.1	7.8	28.5	7.86	8.17	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)9	09:55	Surface	1	2	23.2	7.77	28.6	7.82	8.08	10.7

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)9	09:55	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)9	09:55	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)9	09:55	Bottom	3	1	23.3	7.74	28.7	7.62	8.02	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	IS(Mf)9	09:55	Bottom	3	2	23.2	7.85	28.8	7.59	7.95	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)3	10:17	Surface	1	1	22.9	7.86	28.4	7.94	8.23	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)3	10:17	Surface	1	2	23	7.89	28.3	7.92	8.14	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)3	10:17	Middle	2	1	23.2	7.78	28.5	8.08	7.97	10.7
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)3	10:17	Middle	2	2	23.3	7.82	28.6	8.06	8.01	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)3	10:17	Bottom	3	1	23.5	7.77	28.6	7.83	8.29	11.5
TMCLKL	HY/2012/07	2016-12-01	Mid-Flood	CS(Mf)3	10:17	Bottom	3	2	23.4	7.73	28.7	7.81	8.35	11.5
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)5	14:38	Surface	1	1	23.2	7.81	28.6	7.93	8.24	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)5	14:38	Surface	1	2	23.3	7.83	28.7	7.95	8.25	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)5	14:38	Middle	2	1	23.3	7.85	28.7	7.73	8.45	11.5
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)5	14:38	Middle	2	2	23.4	7.86	28.7	7.72	8.47	11.5
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)5	14:38	Bottom	3	1	23.4	7.86	28.8	7.82	8.85	12.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)5	14:38	Bottom	3	2	23.5	7.84	28.9	7.84	8.87	12.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4a	14:17	Surface	1	1	23.5	7.95	28.7	8.21	8.15	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4a	14:17	Surface	1	2	23.4	7.96	28.6	8.22	8.16	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4a	14:17	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4a	14:17	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4a	14:17	Bottom	3	1	23.6	8.01	28.8	7.99	8.23	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4a	14:17	Bottom	3	2	23.6	8.02	28.8	8.01	8.25	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4	13:45	Surface	1	1	23.9	7.83	29	7.83	8.12	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4	13:45	Surface	1	2	23.7	7.86	29.1	7.84	8.13	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4	13:45	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4	13:45	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4	13:45	Bottom	3	1	23.6	7.92	29.3	7.65	8.14	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	SR4	13:45	Bottom	3	2	23.7	7.95	29.2	7.63	8.17	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS8	13:26	Surface	1	1	23.7	7.76	28.6	7.71	7.77	10.3
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS8	13:26	Surface	1	2	23.6	7.73	28.7	7.7	7.8	10.4
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS8	13:26	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS8	13:26	Middle	2	2						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS8	13:26	Bottom	3	1	23.6	7.72	28.9	7.92	7.92	10.7
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS8	13:26	Bottom	3	2	23.6	7.69	29.1	7.9	7.95	10.7
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)16	13:06	Surface	1	1	23.6	7.72	28.4	7.81	8.23	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)16	13:06	Surface	1	2	23.7	7.75	28.3	7.8	8.24	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)16	13:06	Middle	2	1	23.6	7.77	28.3	7.92	8.3	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)16	13:06	Middle	2	2	23.6	7.79	28.4	7.94	8.32	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)16	13:06	Bottom	3	1	23.7	7.81	28.5	7.62	8.34	11.3
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)16	13:06	Bottom	3	2	23.8	7.82	28.6	7.65	8.35	11.2
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)9	12:46	Surface	1	1	23.5	7.88	28.9	7.91	8.29	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)9	12:46	Surface	1	2	23.6	7.84	28.8	7.87	8.26	11
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)9	12:46	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)9	12:46	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)9	12:46	Bottom	3	1	23.6	7.81	29.2	8.02	8.16	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	IS(Mf)9	12:46	Bottom	3	2	23.5	7.83	29.1	8.04	8.14	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)3	12:26	Surface	1	1	23.4	7.93	29.1	8.02	8.37	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)3	12:26	Surface	1	2	23.6	7.96	29.2	8.05	8.38	11.1
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)3	12:26	Middle	2	1	23.6	7.82	29.3	8.15	8.16	10.9
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)3	12:26	Middle	2	2	23.3	7.84	29.4	8.17	8.14	10.8
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)3	12:26	Bottom	3	1	23.3	7.9	29.4	7.89	8.4	11.3
TMCLKL	HY/2012/07	2016-12-01	Mid-Ebb	CS(Mf)3	12:26	Bottom	3	2	23.4	7.91	29.6	7.84	8.44	11.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)5	09:17	Surface	1	1	23.2	7.76	27.9	7.46	7.46	10.3
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)5	09:17	Surface	1	2	23.2	7.8	28	7.41	7.39	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)5	09:17	Middle	2	1	23.2	7.71	28	7.29	7.78	10.7
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)5	09:17	Middle	2	2	23.3	7.75	28.1	7.33	7.69	10.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)5	09:17	Bottom	3	1	23.3	7.84	28.3	7.2	7.5	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)5	09:17	Bottom	3	2	23.3	7.87	28.3	7.17	7.59	10.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4a	09:43	Surface	1	1	23.2	7.84	28	7.39	7.38	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4a	09:43	Surface	1	2	23.3	7.79	28	7.35	7.3	10.1
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4a	09:43	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4a	09:43	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4a	09:43	Bottom	3	1	23.3	7.73	28	7.43	7.52	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4a	09:43	Bottom	3	2	23.3	7.77	28.1	7.47	7.48	10.5

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4	10:00	Surface	1	1	23.2	7.87	27.9	7.33	7.29	10.1
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4	10:00	Surface	1	2	23.2	7.82	27.9	7.27	7.33	10.1
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4	10:00	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4	10:00	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4	10:00	Bottom	3	1	23.2	7.87	28	7.18	7.4	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	SR4	10:00	Bottom	3	2	23.2	7.83	28.1	7.14	7.49	10.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS8	10:17	Surface	1	1	23.3	7.85	27.9	7.54	7.34	10.1
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS8	10:17	Surface	1	2	23.2	7.89	28	7.59	7.41	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS8	10:17	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS8	10:17	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS8	10:17	Bottom	3	1	23.3	7.9	28.2	7.89	7.2	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS8	10:17	Bottom	3	2	23.3	7.86	28.1	7.84	7.26	10.3
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)16	10:36	Surface	1	1	23.3	8.07	27.7	7.66	7.67	10.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)16	10:36	Surface	1	2	23.4	8.04	27.8	7.64	7.58	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)16	10:36	Middle	2	1	23.3	7.87	28	7.75	7.37	9.9
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)16	10:36	Middle	2	2	23.3	7.9	28.1	7.79	7.3	9.9
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)16	10:36	Bottom	3	1	23.4	7.79	28.2	8.07	7.66	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)16	10:36	Bottom	3	2	23.4	7.81	28.3	8.11	7.71	10.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)9	10:57	Surface	1	1	23.3	7.88	28.1	7.58	7.89	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)9	10:57	Surface	1	2	23.3	7.84	28.1	7.55	7.94	10.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)9	10:57	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)9	10:57	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)9	10:57	Bottom	3	1	23.5	8.07	28.3	7.6	7.7	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	IS(Mf)9	10:57	Bottom	3	2	23.5	8.04	28.3	7.63	7.66	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)3	11:17	Surface	1	1	23.2	8.07	28	7.59	7.84	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)3	11:17	Surface	1	2	23.3	8.04	28	7.61	7.76	10.3
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)3	11:17	Middle	2	1	23.3	7.89	28.1	7.68	7.73	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)3	11:17	Middle	2	2	23.3	7.92	28.1	7.72	7.69	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)3	11:17	Bottom	3	1	23.4	8.07	28.2	7.94	7.58	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Flood	CS(Mf)3	11:17	Bottom	3	2	23.4	8.12	28.3	7.97	7.62	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)5	15:32	Surface	1	1	23.5	7.74	28.1	7.42	6.95	9.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)5	15:32	Surface	1	2	23.4	7.76	28.1	7.44	6.97	9.5

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)5	15:32	Middle	2	1	23.4	7.83	28.2	7.58	7.14	9.7
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)5	15:32	Middle	2	2	23.4	7.81	28.3	7.56	7.15	9.7
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)5	15:32	Bottom	3	1	23.5	8.15	28.4	7.77	7.28	10
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)5	15:32	Bottom	3	2	23.6	8.17	28.3	7.79	7.3	10.1
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4a	15:15	Surface	1	1	23.4	8.17	27.9	7.29	7.23	9.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4a	15:15	Surface	1	2	23.4	8.19	28	7.31	7.26	9.7
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4a	15:15	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4a	15:15	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4a	15:15	Bottom	3	1	23.3	7.65	28.1	7.44	7.61	10.3
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4a	15:15	Bottom	3	2	23.2	7.68	28.2	7.46	7.63	10.3
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4	15:04	Surface	1	1	23.5	8.13	28.1	7.68	6.91	9.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4	15:04	Surface	1	2	23.4	8.15	28.2	7.7	6.93	9.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4	15:04	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4	15:04	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4	15:04	Bottom	3	1	23.6	7.92	28.3	7.88	7.18	9.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	SR4	15:04	Bottom	3	2	23.6	7.94	28.4	7.9	7.2	9.6
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS8	14:43	Surface	1	1	23.4	7.74	28	7.74	7.13	9.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS8	14:43	Surface	1	2	23.3	7.76	28.1	7.72	7.15	9.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS8	14:43	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS8	14:43	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS8	14:43	Bottom	3	1	23.5	8.12	28.2	8.04	7.3	9.9
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS8	14:43	Bottom	3	2	23.5	8.14	28.3	8.06	7.33	9.9
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)16	14:22	Surface	1	1	23.6	8.13	27.9	7.84	7.06	9.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)16	14:22	Surface	1	2	23.5	8.11	28	7.86	7.08	9.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)16	14:22	Middle	2	1	23.4	7.94	28.1	7.94	7.13	9.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)16	14:22	Middle	2	2	23.5	7.96	28.2	7.96	7.15	9.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)16	14:22	Bottom	3	1	23.5	7.88	28.3	8.23	7.29	9.9
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)16	14:22	Bottom	3	2	23.6	7.86	28.4	8.25	7.31	9.8
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)9	14:02	Surface	1	1	23.5	7.947	28.1	7.64	7.74	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)9	14:02	Surface	1	2	23.4	7.96	28.2	7.66	7.76	10.5
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)9	14:02	Middle	2	1	-	-	-	-	-	-
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)9	14:02	Middle	2	2						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)9	14:02	Bottom	3	1	23.6	8.14	28.3	7.74	7.92	10.8
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	IS(Mf)9	14:02	Bottom	3	2	23.6	8.17	28.4	7.76	7.95	10.9
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)3	13:40	Surface	1	1	23.4	8.14	28	7.74	7.42	10
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)3	13:40	Surface	1	2	23.4	8.16	28.1	7.76	7.39	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)3	13:40	Middle	2	1	23.3	7.92	28.2	7.83	7.55	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)3	13:40	Middle	2	2	23.2	7.94	28.3	7.81	7.57	10.2
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)3	13:40	Bottom	3	1	23.4	8.12	28.4	8.02	7.64	10.4
TMCLKL	HY/2012/07	2016-12-03	Mid-Ebb	CS(Mf)3	13:40	Bottom	3	2	23.5	8.14	28.5	8.04	7.66	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)5	11:56	Surface	1	1	23.2	7.82	28	7.52	7.37	10.2
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)5	11:56	Surface	1	2	23.3	7.86	28.1	7.47	7.3	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)5	11:56	Middle	2	1	23.4	7.77	28.2	7.35	7.69	10.6
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)5	11:56	Middle	2	2	23.3	7.81	28.3	7.39	7.6	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)5	11:56	Bottom	3	1	23.4	7.9	28.4	7.26	7.41	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)5	11:56	Bottom	3	2	23.5	7.93	28.3	7.23	7.5	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4a	12:18	Surface	1	1	23.4	7.9	28	7.45	7.29	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4a	12:18	Surface	1	2	23.3	7.85	28.1	7.41	7.21	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4a	12:18	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4a	12:18	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4a	12:18	Bottom	3	1	23.4	7.79	28.1	7.49	7.43	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4a	12:18	Bottom	3	2	23.5	7.83	28.2	7.53	7.39	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4	12:40	Surface	1	1	23.3	7.93	27.9	7.24	7.2	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4	12:40	Surface	1	2	23.2	7.88	28	7.18	7.24	10
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4	12:40	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4	12:40	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4	12:40	Bottom	3	1	23.3	7.93	28.1	7.09	7.31	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	SR4	12:40	Bottom	3	2	23.4	7.89	28.2	7.05	7.4	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS8	13:02	Surface	1	1	23.3	7.91	28	7.6	7.25	10
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS8	13:02	Surface	1	2	23.4	7.95	28.1	7.65	7.32	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS8	13:02	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS8	13:02	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS8	13:02	Bottom	3	1	23.2	7.96	28.3	7.95	7.11	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS8	13:02	Bottom	3	2	23.3	7.92	28.2	7.9	7.17	10.2

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)16	13:24	Surface	1	1	23.5	8.13	27.8	7.72	7.58	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)16	13:24	Surface	1	2	23.4	8.1	27.9	7.7	7.49	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)16	13:24	Middle	2	1	23.5	7.93	28.1	7.81	7.28	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)16	13:24	Middle	2	2	23.6	7.96	28.2	7.85	7.21	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)16	13:24	Bottom	3	1	23.6	7.85	28.4	8.13	7.57	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)16	13:24	Bottom	3	2	23.5	7.87	28.3	8.17	7.62	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)9	13:46	Surface	1	1	23.3	7.94	28.2	7.64	7.8	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)9	13:46	Surface	1	2	23.4	7.9	28.1	7.61	7.85	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)9	13:46	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)9	13:46	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)9	13:46	Bottom	3	1	23.5	8.13	28.3	7.66	7.61	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	IS(Mf)9	13:46	Bottom	3	2	23.6	8.1	28.4	7.69	7.57	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)3	14:10	Surface	1	1	23.3	8.13	28.1	7.65	7.75	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)3	14:10	Surface	1	2	23.4	8.1	28	7.67	7.67	10.2
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)3	14:10	Middle	2	1	23.5	7.95	28.1	7.74	7.64	10.2
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)3	14:10	Middle	2	2	23.4	7.98	28.2	7.78	7.6	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)3	14:10	Bottom	3	1	23.5	8.14	28.3	8	7.49	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Flood	CS(Mf)3	14:10	Bottom	3	2	23.4	8.18	28.4	8.03	7.53	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)5	17:53	Surface	1	1	23.5	7.85	28.5	7.47	7.22	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)5	17:53	Surface	1	2	23.4	7.82	28.6	7.49	7.26	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)5	17:53	Middle	2	1	23.2	7.83	28.5	7.46	7.38	10
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)5	17:53	Middle	2	2	23.2	7.84	28.5	7.48	7.43	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)5	17:53	Bottom	3	1	23.2	7.82	28.5	7.37	7.52	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)5	17:53	Bottom	3	2	23	7.83	28.5	7.39	7.55	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4a	17:40	Surface	1	1	23.1	7.82	28.6	7.44	7.37	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4a	17:40	Surface	1	2	23.2	7.83	28.5	7.48	7.32	9.7
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4a	17:40	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4a	17:40	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4a	17:40	Bottom	3	1	23	7.83	28.5	7.42	7.67	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4a	17:40	Bottom	3	2	23.1	7.83	28.5	7.38	7.62	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4	17:29	Surface	1	1	23.7	7.92	28.4	7.3	7.28	9.7
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4	17:29	Surface	1	2	23.6	7.94	28.3	7.27	7.25	9.6
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4	17:29	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4	17:29	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4	17:29	Bottom	3	1	23.5	7.91	28.3	7.14	7.44	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	SR4	17:29	Bottom	3	2	23.2	7.92	28.3	7.17	7.43	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS8	17:18	Surface	1	1	23.4	7.91	28.3	7.56	7.36	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS8	17:18	Surface	1	2	23.5	7.94	28.4	7.59	7.39	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS8	17:18	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS8	17:18	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS8	17:18	Bottom	3	1	23.3	7.92	28.4	7.42	7.5	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS8	17:18	Bottom	3	2	23.3	7.92	28.4	7.39	7.55	10.2
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)16	17:04	Surface	1	1	23.5	7.93	28.4	7.68	7.36	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)16	17:04	Surface	1	2	23.4	7.94	28.3	7.62	7.42	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)16	17:04	Middle	2	1	23.5	7.92	28.4	7.63	7.39	9.8
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)16	17:04	Middle	2	2	23.3	7.93	28.4	7.6	7.43	9.9
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)16	17:04	Bottom	3	1	23.2	7.92	28.4	7.56	7.52	10.2
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)16	17:04	Bottom	3	2	23.2	7.93	28.3	7.53	7.56	10.1
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)9	16:53	Surface	1	1	23.5	7.87	28.6	7.67	7.76	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)9	16:53	Surface	1	2	23.6	7.92	28.7	7.69	7.79	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)9	16:53	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)9	16:53	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)9	16:53	Bottom	3	1	23.2	7.94	28.5	7.56	7.68	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	IS(Mf)9	16:53	Bottom	3	2	23.5	7.97	28.2	7.5	7.72	10.6
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)3	16:35	Surface	1	1	23.6	7.86	28.3	7.62	7.79	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)3	16:35	Surface	1	2	23.5	7.89	28.4	7.63	7.81	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)3	16:35	Middle	2	1	23.3	7.93	28.3	7.56	7.74	10.4
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)3	16:35	Middle	2	2	23.3	7.97	28.2	7.59	7.76	10.5
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)3	16:35	Bottom	3	1	23.2	7.91	28.4	7.48	7.56	10.3
TMCLKL	HY/2012/07	2016-12-06	Mid-Ebb	CS(Mf)3	16:35	Bottom	3	2	23.2	7.94	28.4	7.52	7.59	10.4
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)5	13:45	Surface	1	1	24.3	7.88	28.2	7.58	7.28	10
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)5	13:45	Surface	1	2	24.2	7.92	28.3	7.53	7.36	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)5	13:45	Middle	2	1	24.4	7.83	28.5	7.41	7.75	10.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)5	13:45	Middle	2	2	24.5	7.87	28.4	7.45	7.66	10.6
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)5	13:45	Bottom	3	1	24.5	7.96	28.7	7.32	7.47	10.5
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)5	13:45	Bottom	3	2	24.6	7.99	28.8	7.29	7.56	10.6

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4a	14:07	Surface	1	1	24.4	7.96	28.4	7.51	7.2	9.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4a	14:07	Surface	1	2	24.5	7.91	28.5	7.47	7.12	9.8
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4a	14:07	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4a	14:07	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4a	14:07	Bottom	3	1	24.5	7.85	28.6	7.55	7.34	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4a	14:07	Bottom	3	2	24.6	7.89	28.5	7.59	7.3	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4	14:29	Surface	1	1	24.5	7.99	28.5	7.3	7.11	9.8
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4	14:29	Surface	1	2	24.6	7.94	28.6	7.24	7.15	9.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4	14:29	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4	14:29	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4	14:29	Bottom	3	1	24.7	7.99	28.8	7.15	7.22	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	SR4	14:29	Bottom	3	2	24.6	7.95	28.7	7.11	7.31	10.4
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS8	14:51	Surface	1	1	24.6	7.97	28.6	7.66	7.16	9.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS8	14:51	Surface	1	2	24.7	8.01	28.7	7.71	7.23	10
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS8	14:51	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS8	14:51	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS8	14:51	Bottom	3	1	24.7	8.02	28.7	8.01	7.02	10
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS8	14:51	Bottom	3	2	24.8	7.98	28.8	7.96	7.08	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)16	15:13	Surface	1	1	24.5	8.19	28.4	7.78	7.49	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)16	15:13	Surface	1	2	24.4	8.16	28.5	7.76	7.4	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)16	15:13	Middle	2	1	24.6	7.99	28.6	7.87	7.19	9.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)16	15:13	Middle	2	2	24.7	8.02	28.5	7.91	7.12	9.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)16	15:13	Bottom	3	1	24.8	7.91	28.6	8.19	7.48	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)16	15:13	Bottom	3	2	24.9	7.93	28.7	8.23	7.53	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)9	15:35	Surface	1	1	24.5	8	28.5	7.7	7.71	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)9	15:35	Surface	1	2	24.5	7.96	28.6	7.67	7.76	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)9	15:35	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)9	15:35	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)9	15:35	Bottom	3	1	24.6	8.19	28.8	7.72	7.52	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	IS(Mf)9	15:35	Bottom	3	2	24.7	8.16	28.7	7.75	7.48	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)3	15:59	Surface	1	1	24.5	8.19	28.4	7.61	7.66	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)3	15:59	Surface	1	2	24.6	8.16	28.5	7.73	7.58	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)3	15:59	Middle	2	1	24.6	8.01	28.6	7.8	7.55	10.1

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)3	15:59	Middle	2	2	24.7	8.04	28.7	7.84	7.51	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)3	15:59	Bottom	3	1	24.8	8.2	28.8	8.06	7.4	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Flood	CS(Mf)3	15:59	Bottom	3	2	24.7	8.24	28.9	8.09	7.44	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)5	20:43	Surface	1	1	24.2	7.89	28.1	7.43	7.36	10
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)5	20:43	Surface	1	2	24.1	7.84	28	7.4	7.41	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)5	20:43	Middle	2	1	24.3	7.92	28.2	7.39	7.52	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)5	20:43	Middle	2	2	24.2	7.91	28.2	7.36	7.58	10.3
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)5	20:43	Bottom	3	1	24.4	7.83	28.4	7.3	7.67	10.6
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)5	20:43	Bottom	3	2	24.4	7.8	28.5	7.34	7.62	10.5
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4a	20:24	Surface	1	1	24.3	7.92	28.2	7.23	7.48	9.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4a	20:24	Surface	1	2	24.2	7.94	28.1	7.26	7.41	9.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4a	20:24	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4a	20:24	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4a	20:24	Bottom	3	1	24.3	7.87	28.2	7.38	7.52	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4a	20:24	Bottom	3	2	24.3	7.85	28.3	7.36	7.59	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4	20:10	Surface	1	1	24.3	7.86	28.3	7.35	7.39	9.8
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4	20:10	Surface	1	2	24.4	7.81	28.3	7.31	7.46	9.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4	20:10	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4	20:10	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4	20:10	Bottom	3	1	24.3	7.88	28.4	7.24	7.58	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	SR4	20:10	Bottom	3	2	24.2	7.85	28.3	7.21	7.54	10
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS8	19:58	Surface	1	1	24.3	7.92	28.3	7.48	7.25	9.6
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS8	19:58	Surface	1	2	24.2	7.96	28.2	7.51	7.31	9.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS8	19:58	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS8	19:58	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS8	19:58	Bottom	3	1	24.5	7.99	28.4	7.71	7.47	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS8	19:58	Bottom	3	2	24.4	7.97	28.5	7.67	7.4	10
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)16	19:40	Surface	1	1	24.2	7.96	28.3	7.59	7.28	9.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)16	19:40	Surface	1	2	24.1	7.98	28.4	7.56	7.37	9.8
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)16	19:40	Middle	2	1	24.4	8.07	28.6	7.63	7.56	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)16	19:40	Middle	2	2	24.3	8.01	28.5	7.66	7.62	10.1
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)16	19:40	Bottom	3	1	24.5	7.96	28.7	7.84	7.48	10.2
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)16	19:40	Bottom	3	2	24.4	7.92	28.7	7.8	7.42	9.9

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)9	19:28	Surface	1	1	24.3	7.91	28.4	7.46	7.89	10.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)9	19:28	Surface	1	2	24.2	7.93	28.3	7.5	7.82	10.6
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)9	19:28	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)9	19:28	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)9	19:28	Bottom	3	1	24.3	7.87	28.5	7.32	7.74	10.5
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	IS(Mf)9	19:28	Bottom	3	2	24.4	7.84	28.6	7.35	7.67	10.5
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)3	19:08	Surface	1	1	24.3	7.97	28.2	7.34	7.79	10.5
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)3	19:08	Surface	1	2	24.2	7.92	28.3	7.38	7.74	10.4
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)3	19:08	Middle	2	1	24.4	7.84	28.4	7.42	8.03	10.8
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)3	19:08	Middle	2	2	24.5	7.91	28.3	7.44	8.07	10.9
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)3	19:08	Bottom	3	1	24.5	7.82	28.7	7.61	7.86	10.7
TMCLKL	HY/2012/07	2016-12-08	Mid-Ebb	CS(Mf)3	19:08	Bottom	3	2	24.4	7.84	28.6	7.64	7.91	10.8
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)5	14:20	Surface	1	1	24.7	7.66	28.4	7.24	7.62	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)5	14:20	Surface	1	2	24.8	7.69	28.4	7.21	7.55	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)5	14:20	Middle	2	1	24.7	7.7	28.5	7.16	7.94	11
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)5	14:20	Middle	2	2	24.7	7.76	28.5	7.13	7.89	10.9
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)5	14:20	Bottom	3	1	24.6	7.77	28.7	7.05	7.72	10.8
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)5	14:20	Bottom	3	2	24.5	7.69	28.7	7.05	7.67	10.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4a	14:30	Surface	1	1	24.7	7.8	28.4	7.3	7.49	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4a	14:30	Surface	1	2	24.7	7.76	28.5	7.26	7.56	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4a	14:30	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4a	14:30	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4a	14:30	Bottom	3	1	24.6	7.65	28.5	7.18	7.67	10.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4a	14:30	Bottom	3	2	24.6	7.69	28.5	7.15	7.75	10.9
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4	14:44	Surface	1	1	24.7	7.83	28.4	7.18	7.34	10.1
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4	14:44	Surface	1	2	24.7	7.79	28.4	7.14	7.42	10.2
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4	14:44	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4	14:44	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4	14:44	Bottom	3	1	24.6	7.86	28.5	7.03	7.6	10.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	SR4	14:44	Bottom	3	2	24.6	7.81	28.5	7	7.53	10.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS8	14:59	Surface	1	1	24.7	7.79	28.4	7.36	7.58	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS8	14:59	Surface	1	2	24.8	7.73	28.5	7.32	7.5	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS8	14:59	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS8	14:59	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS8	14:59	Bottom	3	1	24.7	7.78	28.5	7.5	7.68	10.9
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS8	14:59	Bottom	3	2	24.7	7.82	28.6	7.57	7.74	11
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)16	15:14	Surface	1	1	24.8	7.94	28.3	7.4	7.67	10.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)16	15:14	Surface	1	2	24.8	7.99	28.3	7.36	7.6	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)16	15:14	Middle	2	1	24.7	7.89	28.4	7.43	7.73	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)16	15:14	Middle	2	2	24.7	7.86	28.4	7.46	7.68	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)16	15:14	Bottom	3	1	24.7	7.74	28.7	7.63	7.8	10.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)16	15:14	Bottom	3	2	24.7	7.76	28.7	7.6	7.73	10.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)9	15:31	Surface	1	1	24.7	7.83	28.4	7.37	7.49	10
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)9	15:31	Surface	1	2	24.6	7.88	28.5	7.42	7.56	10.1
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)9	15:31	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)9	15:31	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)9	15:31	Bottom	3	1	24.7	7.88	28.6	7.28	7.8	10.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	IS(Mf)9	15:31	Bottom	3	2	24.7	7.93	28.6	7.25	7.74	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)3	15:48	Surface	1	1	24.8	7.89	28.4	7.25	7.38	9.8
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)3	15:48	Surface	1	2	24.8	7.93	28.4	7.28	7.44	9.9
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)3	15:48	Middle	2	1	24.7	7.8	28.5	7.4	7.53	10.1
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)3	15:48	Middle	2	2	24.7	7.84	28.6	7.36	7.61	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)3	15:48	Bottom	3	1	24.7	7.99	28.8	7.61	7.3	10.1
TMCLKL	HY/2012/07	2016-12-10	Mid-Flood	CS(Mf)3	15:48	Bottom	3	2	24.6	8.02	28.8	7.66	7.26	10
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)5	10:47	Surface	1	1	24.4	7.79	28.3	7.49	7.34	10
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)5	10:47	Surface	1	2	24.5	7.83	28.2	7.44	7.42	10.1
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)5	10:47	Middle	2	1	24.6	7.74	28.3	7.32	7.81	10.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)5	10:47	Middle	2	2	24.5	7.78	28.4	7.36	7.72	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)5	10:47	Bottom	3	1	24.6	7.87	28.5	7.23	7.53	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)5	10:47	Bottom	3	2	24.6	7.9	28.6	7.2	7.62	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4a	10:23	Surface	1	1	24.4	7.87	28.3	7.42	7.26	9.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4a	10:23	Surface	1	2	24.3	7.82	28.4	7.38	7.18	9.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4a	10:23	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4a	10:23	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4a	10:23	Bottom	3	1	24.5	7.76	28.4	7.46	7.4	10
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4a	10:23	Bottom	3	2	24.4	7.8	28.5	7.5	7.36	9.9

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4	10:01	Surface	1	1	24.4	7.9	28.2	7.21	7.17	9.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4	10:01	Surface	1	2	24.5	7.85	28.3	7.15	7.21	9.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4	10:01	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4	10:01	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4	10:01	Bottom	3	1	24.5	7.92	28.4	7.06	7.28	9.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	SR4	10:01	Bottom	3	2	24.6	7.88	28.5	7.02	7.37	9.8
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS8	09:39	Surface	1	1	24.3	7.88	28.1	7.57	7.22	9.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS8	09:39	Surface	1	2	24.4	7.92	28.2	7.62	7.29	9.7
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS8	09:39	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS8	09:39	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS8	09:39	Bottom	3	1	24.4	7.93	28.3	7.92	7.08	9.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS8	09:39	Bottom	3	2	24.5	7.89	28.2	7.87	7.14	9.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)16	09:17	Surface	1	1	24.3	8.1	28.1	7.69	7.55	10
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)16	09:17	Surface	1	2	24.2	8.07	28	7.67	7.46	9.9
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)16	09:17	Middle	2	1	24.3	7.9	28.2	7.78	7.25	9.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)16	09:17	Middle	2	2	24.4	7.93	28.3	7.82	7.18	9.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)16	09:17	Bottom	3	1	24.4	7.82	28.4	8.1	7.54	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)16	09:17	Bottom	3	2	24.5	7.84	28.3	8.14	7.59	10.2
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)9	08:55	Surface	1	1	24.2	7.91	28.3	7.61	7.77	10.5
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)9	08:55	Surface	1	2	24.1	7.87	28.4	7.58	7.82	10.6
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)9	08:55	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)9	08:55	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)9	08:55	Bottom	3	1	24.2	8.1	28.5	7.63	7.58	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	IS(Mf)9	08:55	Bottom	3	2	24.3	8.07	28.4	7.66	7.54	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)3	08:33	Surface	1	1	24	8.1	28.2	7.52	7.72	10.4
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)3	08:33	Surface	1	2	24.1	8.07	28.3	7.64	7.64	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)3	08:33	Middle	2	1	24.2	7.92	28.4	7.71	7.61	10.3
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)3	08:33	Middle	2	2	24.3	7.95	28.3	7.75	7.57	10.2
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)3	08:33	Bottom	3	1	24.3	8.11	28.4	7.97	7.46	10.1
TMCLKL	HY/2012/07	2016-12-10	Mid-Ebb	CS(Mf)3	08:33	Bottom	3	2	24.4	8.15	28.5	8	7.5	10.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)5	16:04	Surface	1	1	22.4	7.81	28.2	7.51	6.88	9.5
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)5	16:04	Surface	1	2	22.3	7.84	28.1	7.56	6.84	9.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)5	16:04	Middle	2	1	22.4	7.83	28.2	7.64	6.81	9.4

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)5	16:04	Middle	2	2	22.5	7.87	28.2	7.67	6.77	9.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)5	16:04	Bottom	3	1	22.5	7.75	28.3	7.82	6.89	9.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)5	16:04	Bottom	3	2	22.6	7.79	28.3	7.78	6.92	9.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4a	16:27	Surface	1	1	22.3	7.78	28.3	7.18	6.25	8.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4a	16:27	Surface	1	2	22.4	7.75	28.3	7.21	6.27	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4a	16:27	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4a	16:27	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4a	16:27	Bottom	3	1	22.7	7.8	28.4	7.27	6.36	8.8
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4a	16:27	Bottom	3	2	22.6	7.83	28.5	7.32	6.34	8.9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4	16:48	Surface	1	1	22.5	7.88	28.1	7.16	6.07	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4	16:48	Surface	1	2	22.6	7.92	28.2	7.19	6.08	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4	16:48	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4	16:48	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4	16:48	Bottom	3	1	22.8	7.96	28.3	7.14	6.15	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	SR4	16:48	Bottom	3	2	22.7	7.93	28.3	7.08	6.17	8.8
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS8	17:09	Surface	1	1	22.5	7.91	28.2	7.57	6.23	8.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS8	17:09	Surface	1	2	22.5	7.87	28.3	7.59	6.25	8.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS8	17:09	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS8	17:09	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS8	17:09	Bottom	3	1	22.6	7.93	28.4	7.63	6.07	8.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS8	17:09	Bottom	3	2	22.7	7.95	28.3	7.66	6.1	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)16	17:25	Surface	1	1	22.5	8.01	28.2	7.63	6.55	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)16	17:25	Surface	1	2	22.6	7.98	28.3	7.7	6.52	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)16	17:25	Middle	2	1	22.6	8.07	28	7.66	6.47	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)16	17:25	Middle	2	2	22.7	8.12	28.1	7.72	6.53	8.9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)16	17:25	Bottom	3	1	22.7	7.93	28.4	7.84	6.72	9.2
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)16	17:25	Bottom	3	2	22.9	7.95	28.5	7.82	6.74	9.2
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)9	17:40	Surface	1	1	22.4	7.87	28.1	7.52	6.74	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)9	17:40	Surface	1	2	22.4	7.9	28.2	7.55	6.76	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)9	17:40	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)9	17:40	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)9	17:40	Bottom	3	1	22.7	7.98	28.4	7.46	6.58	8.9
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	IS(Mf)9	17:40	Bottom	3	2	22.6	8.03	28.3	7.43	6.61	9

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)3	17:53	Surface	1	1	22.4	8.01	28.1	7.31	6.27	8.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)3	17:53	Surface	1	2	22.5	7.95	28.1	7.35	6.3	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)3	17:53	Middle	2	1	22.6	7.84	28.3	7.44	6.36	8.5
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)3	17:53	Middle	2	2	22.6	7.86	28.4	7.46	6.39	8.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)3	17:53	Bottom	3	1	22.8	7.63	28.2	7.38	6.52	9.1
TMCLKL	HY/2012/07	2016-12-13	Mid-Flood	CS(Mf)3	17:53	Bottom	3	2	22.7	7.67	28.3	7.4	6.56	9.1
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)5	13:47	Surface	1	1	22.3	7.85	28.1	7.34	6.4	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)5	13:47	Surface	1	2	22.4	7.89	28.2	7.29	6.48	8.8
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)5	13:47	Middle	2	1	22.5	7.8	28.3	7.17	6.87	9.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)5	13:47	Middle	2	2	22.6	7.84	28.4	7.21	6.78	9.2
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)5	13:47	Bottom	3	1	22.7	7.93	28.6	7.06	6.59	9.1
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)5	13:47	Bottom	3	2	22.6	7.96	28.5	7.05	6.68	9.2
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4a	13:23	Surface	1	1	22.4	7.93	28.2	7.27	6.32	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4a	13:23	Surface	1	2	22.5	7.88	28.3	7.23	6.24	8.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4a	13:23	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4a	13:23	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4a	13:23	Bottom	3	1	22.6	7.82	28.4	7.31	6.46	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4a	13:23	Bottom	3	2	22.5	7.86	28.3	7.35	6.42	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4	13:01	Surface	1	1	22.7	7.96	28	7.06	6.23	8.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4	13:01	Surface	1	2	22.6	7.91	28.1	7	6.27	8.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4	13:01	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4	13:01	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4	13:01	Bottom	3	1	22.8	7.98	28.2	6.81	6.34	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	SR4	13:01	Bottom	3	2	22.9	7.94	28.3	6.9	6.43	8.6
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS8	12:39	Surface	1	1	22.4	7.94	28.1	7.42	6.28	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS8	12:39	Surface	1	2	22.5	7.98	28.2	7.47	6.35	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS8	12:39	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS8	12:39	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS8	12:39	Bottom	3	1	22.7	7.99	28.3	7.77	6.14	8.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS8	12:39	Bottom	3	2	22.8	7.95	28.4	7.72	6.2	8.4
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)16	12:17	Surface	1	1	22.6	8.16	28	7.54	6.61	8.8
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)16	12:17	Surface	1	2	22.5	8.13	27.9	7.52	6.52	8.7
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)16	12:17	Middle	2	1	22.7	7.96	28.2	7.63	6.31	8.4

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)16	12:17	Middle	2	2	22.8	7.99	28.3	7.67	6.24	8.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)16	12:17	Bottom	3	1	23.1	7.88	28.5	7.95	6.6	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)16	12:17	Bottom	3	2	23	7.9	28.4	7.99	6.65	8.9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)9	11:55	Surface	1	1	22.4	7.97	28	7.46	6.83	9.2
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)9	11:55	Surface	1	2	22.5	7.93	28.1	7.43	6.88	9.3
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)9	11:55	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)9	11:55	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)9	11:55	Bottom	3	1	22.6	8.16	28.3	7.48	6.64	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	IS(Mf)9	11:55	Bottom	3	2	22.5	8.13	28.4	7.39	6.6	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)3	11:33	Surface	1	1	22.3	8.16	27.8	7.37	6.78	9.2
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)3	11:33	Surface	1	2	22.4	8.13	27.9	7.42	6.7	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)3	11:33	Middle	2	1	22.5	7.98	28.2	7.56	6.61	8.9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)3	11:33	Middle	2	2	22.6	8.01	28.3	7.6	6.64	9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)3	11:33	Bottom	3	1	22.9	8.17	28.5	7.82	6.52	8.9
TMCLKL	HY/2012/07	2016-12-13	Mid-Ebb	CS(Mf)3	11:33	Bottom	3	2	22.8	8.21	28.6	7.85	6.56	9
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)5	08:05	Surface	1	1	22	7.84	27.3	7.21	7.27	10
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)5	08:05	Surface	1	2	22	7.85	27.3	7.25	7.33	10.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)5	08:05	Middle	2	1	21.8	7.86	27.5	7.08	7.84	10.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)5	08:05	Middle	2	2	21.8	7.86	27.5	7.05	7.79	10.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)5	08:05	Bottom	3	1	21.7	7.86	27.7	7.14	7.98	11.2
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)5	08:05	Bottom	3	2	21.6	7.87	27.7	7.18	7.95	11.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4a	08:25	Surface	1	1	22	7.88	27.1	7.08	7.49	10.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4a	08:25	Surface	1	2	22	7.88	27.2	7.05	7.44	10.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4a	08:25	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4a	08:25	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4a	08:25	Bottom	3	1	21.9	7.89	27.4	6.99	7.75	10.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4a	08:25	Bottom	3	2	21.9	7.88	27.4	6.95	7.7	10.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4	08:40	Surface	1	1	22.1	7.9	27.1	7.1	6.92	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4	08:40	Surface	1	2	22.1	7.91	27.1	7.14	6.96	9.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4	08:40	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4	08:40	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4	08:40	Bottom	3	1	22	7.91	27.4	7.08	7.58	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	SR4	08:40	Bottom	3	2	22	7.93	27.4	7.14	7.5	10.7

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS8	08:58	Surface	1	1	22.1	7.92	27.2	7.22	7.37	10.2
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS8	08:58	Surface	1	2	22.1	7.92	27.2	7.18	7.34	10.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS8	08:58	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS8	08:58	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS8	08:58	Bottom	3	1	21.9	7.93	27.5	7.07	7.49	10.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS8	08:58	Bottom	3	2	21.9	7.94	27.5	7.04	7.52	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)16	09:20	Surface	1	1	22	7.93	27.4	7.45	6.98	9.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)16	09:20	Surface	1	2	22	7.93	27.3	7.48	6.95	9.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)16	09:20	Middle	2	1	21.8	7.95	27.8	7.42	7.74	10.4
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)16	09:20	Middle	2	2	21.9	7.95	27.8	7.45	7.7	10.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)16	09:20	Bottom	3	1	21.8	7.95	27.9	7.48	8.02	11
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)16	09:20	Bottom	3	2	21.8	7.95	27.9	7.45	8.06	11
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)9	09:45	Surface	1	1	22.1	7.97	27.4	7.29	6.77	9
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)9	09:45	Surface	1	2	22.1	7.96	27.4	7.33	6.7	8.9
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)9	09:45	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)9	09:45	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)9	09:45	Bottom	3	1	21.8	7.98	27.7	7.34	7.44	10.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	IS(Mf)9	09:45	Bottom	3	2	21.8	7.97	27.8	7.38	7.4	10.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)3	10:05	Surface	1	1	22.1	7.98	27.5	7.57	7.11	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)3	10:05	Surface	1	2	22.2	7.98	27.5	7.59	7.15	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)3	10:05	Middle	2	1	22	7.99	27.8	7.44	7.49	10
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)3	10:05	Middle	2	2	22	7.99	27.8	7.4	7.46	10.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)3	10:05	Bottom	3	1	21.9	8.01	27.9	7.39	7.81	10.9
TMCLKL	HY/2012/07	2016-12-15	Mid-Flood	CS(Mf)3	10:05	Bottom	3	2	21.9	8.02	28	7.42	7.76	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)5	14:30	Surface	1	1	22.3	7.9	27.5	7.07	7.41	10.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)5	14:30	Surface	1	2	22.3	7.89	27.5	7.04	7.38	10
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)5	14:30	Middle	2	1	22.1	7.88	27.6	7.19	7.77	10.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)5	14:30	Middle	2	2	22.2	7.86	27.6	7.21	7.8	10.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)5	14:30	Bottom	3	1	22.1	7.93	27.8	7.28	8.02	11.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)5	14:30	Bottom	3	2	22.1	7.95	27.7	7.25	8.06	11.1
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4a	14:10	Surface	1	1	22.3	7.86	27.4	7.22	7.74	10.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4a	14:10	Surface	1	2	22.3	7.83	27.4	7.25	7.71	10.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4a	14:10	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4a	14:10	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4a	14:10	Bottom	3	1	22.3	7.9	27.5	7.34	7.93	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4a	14:10	Bottom	3	2	22.2	7.88	27.5	7.3	7.96	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4	13:45	Surface	1	1	22.3	7.86	27.3	6.92	7.14	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4	13:45	Surface	1	2	22.4	7.84	27.3	6.97	7.17	10.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4	13:45	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4	13:45	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4	13:45	Bottom	3	1	22.2	7.91	27.5	7.15	7.49	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	SR4	13:45	Bottom	3	2	22.3	7.93	27.5	7.11	7.44	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS8	13:24	Surface	1	1	22.3	7.9	27.4	7.08	7.46	9.9
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS8	13:24	Surface	1	2	22.3	7.87	27.4	7.05	7.49	10
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS8	13:24	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS8	13:24	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS8	13:24	Bottom	3	1	22.4	7.93	27.6	7.17	7.61	10.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS8	13:24	Bottom	3	2	22.3	7.96	27.5	7.14	7.64	10.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)16	13:00	Surface	1	1	22.3	7.69	27.6	7.56	7.11	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)16	13:00	Surface	1	2	22.4	7.71	27.6	7.52	7.14	9.5
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)16	13:00	Middle	2	1	22.1	7.76	27.9	7.73	7.43	9.9
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)16	13:00	Middle	2	2	22.2	7.79	27.9	7.77	7.47	9.9
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)16	13:00	Bottom	3	1	22.1	7.74	28	7.82	7.79	10.6
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)16	13:00	Bottom	3	2	22.1	7.71	28.1	7.85	7.74	10.4
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)9	12:39	Surface	1	1	22.3	7.93	27.6	7.04	6.86	9.3
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)9	12:39	Surface	1	2	22.3	7.91	27.6	7.07	6.82	9.2
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)9	12:39	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)9	12:39	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)9	12:39	Bottom	3	1	22.3	7.88	27.7	7.23	7.15	9.7
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	IS(Mf)9	12:39	Bottom	3	2	22.2	7.87	27.8	7.26	7.18	9.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)3	12:15	Surface	1	1	22.3	7.86	27.7	7.23	7.28	9.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)3	12:15	Surface	1	2	22.3	7.84	27.7	7.19	7.23	9.8
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)3	12:15	Middle	2	1	22.3	7.91	27.9	7.34	7.4	10
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)3	12:15	Middle	2	2	22.2	7.93	27.9	7.39	7.43	10
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)3	12:15	Bottom	3	1	22.2	7.81	27.9	7.5	7.53	10.2
TMCLKL	HY/2012/07	2016-12-15	Mid-Ebb	CS(Mf)3	12:15	Bottom	3	2	22.3	7.79	28	7.54	7.5	10.3

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)5	09:53	Surface	1	1	21.4	7.69	27.7	6.86	9.24	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)5	09:53	Surface	1	2	21.5	7.64	27.8	6.83	9.33	12.9
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)5	09:53	Middle	2	1	21.5	7.73	27.8	6.74	9.56	13.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)5	09:53	Middle	2	2	21.6	7.68	27.8	6.69	9.64	13.3
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)5	09:53	Bottom	3	1	21.8	7.6	27.9	6.89	8.94	12.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)5	09:53	Bottom	3	2	21.8	7.63	28	6.91	9.03	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4a	10:18	Surface	1	1	21.4	7.63	27.8	6.79	9.13	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4a	10:18	Surface	1	2	21.4	7.66	27.8	6.81	9.06	12.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4a	10:18	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4a	10:18	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4a	10:18	Bottom	3	1	21.4	7.67	27.8	6.85	9.34	13
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4a	10:18	Bottom	3	2	21.4	7.64	27.8	6.87	9.4	13.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4	10:33	Surface	1	1	21.4	7.6	27.8	6.73	9.16	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4	10:33	Surface	1	2	21.4	7.63	27.9	6.76	9.1	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4	10:33	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4	10:33	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4	10:33	Bottom	3	1	21.4	7.66	27.9	6.65	9.07	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	SR4	10:33	Bottom	3	2	21.5	7.62	27.9	6.68	9.01	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS8	10:47	Surface	1	1	21.4	7.64	27.8	6.81	9.04	12.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS8	10:47	Surface	1	2	21.5	7.67	27.8	6.78	8.97	12.4
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS8	10:47	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS8	10:47	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS8	10:47	Bottom	3	1	21.5	7.68	27.7	6.7	9.16	13
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS8	10:47	Bottom	3	2	21.5	7.65	27.8	6.66	9.1	12.9
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)16	11:03	Surface	1	1	21.5	7.74	27.8	6.73	9.24	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)16	11:03	Surface	1	2	21.5	7.7	27.9	6.7	9.31	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)16	11:03	Middle	2	1	21.5	7.66	27.9	6.64	9.05	12.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)16	11:03	Middle	2	2	21.5	7.68	27.9	6.61	9	12.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)16	11:03	Bottom	3	1	21.6	7.74	28.1	6.79	8.76	12
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)16	11:03	Bottom	3	2	21.7	7.77	28	6.82	8.84	12.1
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)9	11:25	Surface	1	1	21.5	7.68	27.9	6.87	9.18	12.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)9	11:25	Surface	1	2	21.6	7.64	27.8	6.84	9.09	12.1
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)9	11:25	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)9	11:25	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)9	11:25	Bottom	3	1	21.5	7.6	27.9	6.96	9.34	12.7
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	IS(Mf)9	11:25	Bottom	3	2	21.5	7.64	27.9	6.93	9.25	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)3	11:42	Surface	1	1	21.6	7.69	27.9	6.78	9.15	12.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)3	11:42	Surface	1	2	21.6	7.73	27.9	6.75	9.24	12.3
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)3	11:42	Middle	2	1	21.6	7.64	27.9	6.69	9.4	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)3	11:42	Middle	2	2	21.5	7.68	27.9	6.64	9.32	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)3	11:42	Bottom	3	1	21.7	7.7	28.1	6.77	8.93	12.4
TMCLKL	HY/2012/07	2016-12-17	Mid-Flood	CS(Mf)3	11:42	Bottom	3	2	21.7	7.73	28.1	6.8	9.02	12.4
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)5	15:30	Surface	1	1	21.5	7.85	27.8	6.6	9.4	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)5	15:30	Surface	1	2	21.4	7.83	27.9	6.63	9.43	12.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)5	15:30	Middle	2	1	21.6	8.14	28	6.73	10.2	13.9
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)5	15:30	Middle	2	2	21.6	8.16	28.1	6.76	10.4	14.1
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)5	15:30	Bottom	3	1	21.7	7.95	28.2	6.88	11	15.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)5	15:30	Bottom	3	2	21.8	7.97	28.2	6.9	11.2	15.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4a	15:10	Surface	1	1	21.4	8.24	27.9	6.77	9.33	12.4
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4a	15:10	Surface	1	2	21.5	8.22	28	6.75	9.35	12.4
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4a	15:10	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4a	15:10	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4a	15:10	Bottom	3	1	21.6	7.96	28.1	6.99	9.72	13.1
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4a	15:10	Bottom	3	2	21.6	7.98	28.2	7.01	9.7	13.1
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4	14:53	Surface	1	1	21.5	8.24	27.9	6.41	9.38	12.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4	14:53	Surface	1	2	21.5	8.22	27.8	6.38	9.41	12.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4	14:53	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4	14:53	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4	14:53	Bottom	3	1	21.6	7.96	28	6.57	9.68	12.9
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	SR4	14:53	Bottom	3	2	21.7	7.99	28.1	6.59	9.71	12.9
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS8	14:41	Surface	1	1	21.4	7.86	27.9	6.65	9.13	12.1
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS8	14:41	Surface	1	2	21.5	7.89	28	6.68	9.16	12.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS8	14:41	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS8	14:41	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS8	14:41	Bottom	3	1	21.6	8.14	28.1	6.94	9.38	12.7
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS8	14:41	Bottom	3	2	21.6	8.16	28.2	6.97	9.41	12.7

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)16	14:22	Surface	1	1	21.4	8.14	28	6.85	9.34	12.4
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)16	14:22	Surface	1	2	21.5	8.16	27.9	6.88	9.37	12.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)16	14:22	Middle	2	1	21.6	7.93	28.1	7.03	9.45	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)16	14:22	Middle	2	2	21.7	7.96	28.1	7.06	9.48	12.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)16	14:22	Bottom	3	1	21.8	7.88	28.2	7.14	9.68	13.2
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)16	14:22	Bottom	3	2	21.7	7.9	28.3	7.16	9.71	13
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)9	14:04	Surface	1	1	21.5	7.86	28	6.52	10.4	14
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)9	14:04	Surface	1	2	21.5	7.88	27.9	6.5	10.1	13.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)9	14:04	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)9	14:04	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)9	14:04	Bottom	3	1	21.6	8.14	28.1	6.67	10.7	14.6
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	IS(Mf)9	14:04	Bottom	3	2	21.7	8.16	28.2	6.7	10.7	14.7
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)3	13:47	Surface	1	1	21.4	8.13	27.9	6.48	10	13.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)3	13:47	Surface	1	2	21.5	8.15	28	6.51	10.2	13.8
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)3	13:47	Middle	2	1	21.6	7.92	28.1	6.67	10.9	14.7
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)3	13:47	Middle	2	2	21.6	7.94	28.1	6.69	11.1	15
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)3	13:47	Bottom	3	1	21.7	7.86	28.2	6.77	11.4	15.5
TMCLKL	HY/2012/07	2016-12-17	Mid-Ebb	CS(Mf)3	13:47	Bottom	3	2	21.6	7.88	28.3	6.79	11.6	15.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)5	12:23	Surface	1	1	21.7	7.76	27.7	7.43	9.06	12.5
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)5	12:23	Surface	1	2	21.7	7.73	27.6	7.39	9.03	12.5
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)5	12:23	Middle	2	1	21.6	7.7	27.7	7.48	9.34	12.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)5	12:23	Middle	2	2	21.6	7.74	27.8	7.51	9.26	12.8
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)5	12:23	Bottom	3	1	21.4	7.71	27.9	7.73	8.74	12.2
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)5	12:23	Bottom	3	2	21.4	7.68	27.9	7.68	8.81	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4a	12:48	Surface	1	1	21.7	7.74	27.6	7.35	8.79	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4a	12:48	Surface	1	2	21.7	7.71	27.7	7.32	8.85	12.2
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4a	12:48	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4a	12:48	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4a	12:48	Bottom	3	1	21.7	7.68	27.7	7.26	9.04	12.6
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4a	12:48	Bottom	3	2	21.6	7.72	27.7	7.22	9.11	12.8
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4	13:05	Surface	1	1	21.7	7.64	27.6	7.48	8.94	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4	13:05	Surface	1	2	21.7	7.61	27.7	7.51	9.01	12.4
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4	13:05	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4	13:05	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4	13:05	Bottom	3	1	21.7	7.59	27.7	7.39	9.3	13.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	SR4	13:05	Bottom	3	2	21.6	7.63	27.7	7.34	9.39	13.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS8	13:18	Surface	1	1	21.6	7.67	27.7	7.56	8.74	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS8	13:18	Surface	1	2	21.7	7.64	27.8	7.53	8.81	12.2
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS8	13:18	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS8	13:18	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS8	13:18	Bottom	3	1	21.6	7.68	27.8	7.47	9.12	13
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS8	13:18	Bottom	3	2	21.6	7.63	27.9	7.43	9.2	13.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)16	13:33	Surface	1	1	21.7	7.73	27.8	7.67	8.94	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)16	13:33	Surface	1	2	21.7	7.68	27.7	7.64	9	12.4
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)16	13:33	Middle	2	1	21.7	7.59	27.8	7.53	9.31	12.6
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)16	13:33	Middle	2	2	21.6	7.63	27.9	7.5	9.26	12.6
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)16	13:33	Bottom	3	1	21.5	7.62	28.1	7.76	8.69	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)16	13:33	Bottom	3	2	21.4	7.67	28.1	7.78	8.75	12
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)9	13:55	Surface	1	1	21.7	7.73	27.8	7.61	8.87	11.8
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)9	13:55	Surface	1	2	21.7	7.69	27.8	7.58	8.94	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)9	13:55	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)9	13:55	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)9	13:55	Bottom	3	1	21.7	7.64	27.8	7.46	9.16	12.5
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	IS(Mf)9	13:55	Bottom	3	2	21.6	7.67	27.8	7.43	9.23	12.6
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)3	14:14	Surface	1	1	21.7	7.66	27.8	7.73	8.97	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)3	14:14	Surface	1	2	21.8	7.7	27.8	7.7	9.05	12
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)3	14:14	Middle	2	1	21.7	7.68	27.8	7.62	9.18	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)3	14:14	Middle	2	2	21.6	7.63	27.9	7.59	9.24	12.5
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)3	14:14	Bottom	3	1	21.5	7.61	28.1	7.66	8.67	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Flood	CS(Mf)3	14:14	Bottom	3	2	21.4	7.65	28.1	7.68	8.74	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)5	18:06	Surface	1	1	21.9	7.72	28.1	7.44	9.02	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)5	18:06	Surface	1	2	22	7.74	28.1	7.48	9.08	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)5	18:06	Middle	2	1	21.8	7.73	28.2	7.47	9.22	12.5
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)5	18:06	Middle	2	2	21.9	7.74	28.1	7.44	9.26	12.6
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)5	18:06	Bottom	3	1	21.8	7.74	28.2	7.48	8.93	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)5	18:06	Bottom	3	2	21.8	7.74	28.1	7.52	8.96	12.4

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4a	17:52	Surface	1	1	21.7	7.72	28.2	7.38	8.83	11.7
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4a	17:52	Surface	1	2	21.8	7.72	28.2	7.34	8.86	11.8
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4a	17:52	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4a	17:52	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4a	17:52	Bottom	3	1	21.8	7.73	28.1	7.23	8.98	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4a	17:52	Bottom	3	2	21.8	7.73	28.1	7.25	8.94	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4	17:39	Surface	1	1	21.9	7.8	28	7.6	8.92	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4	17:39	Surface	1	2	21.8	7.83	28.1	7.64	7.95	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4	17:39	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4	17:39	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4	17:39	Bottom	3	1	21.9	7.8	28.1	7.51	9.22	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	SR4	17:39	Bottom	3	2	21.9	7.76	28.1	7.5	9.26	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS8	17:26	Surface	1	1	21.8	7.76	28.1	7.66	8.76	11.7
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS8	17:26	Surface	1	2	21.8	7.72	28.2	7.63	8.72	11.6
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS8	17:26	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS8	17:26	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS8	17:26	Bottom	3	1	21.8	7.71	28.1	7.38	8.97	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS8	17:26	Bottom	3	2	21.8	7.67	28.1	7.42	9.02	12.2
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)16	17:10	Surface	1	1	21.8	7.72	28.2	7.62	8.98	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)16	17:10	Surface	1	2	21.8	7.75	28.1	7.65	8.92	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)16	17:10	Middle	2	1	21.9	7.68	28.1	7.59	9.26	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)16	17:10	Middle	2	2	21.8	7.71	28.1	7.61	9.3	12.4
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)16	17:10	Bottom	3	1	21.8	7.72	28.1	7.7	8.71	11.8
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)16	17:10	Bottom	3	2	21.8	7.75	28.2	7.66	8.74	11.7
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)9	16:57	Surface	1	1	22	7.74	28.2	7.65	8.9	12
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)9	16:57	Surface	1	2	22.1	7.78	28.1	7.64	8.93	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)9	16:57	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)9	16:57	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)9	16:57	Bottom	3	1	22	7.7	28.2	7.43	9.12	12.4
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	IS(Mf)9	16:57	Bottom	3	2	21.9	7.66	28.2	7.46	9.1	12.5
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)3	16:39	Surface	1	1	22.1	7.64	28.1	7.76	8.89	12
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)3	16:39	Surface	1	2	22	7.68	28.2	7.74	8.94	12.1
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)3	16:39	Middle	2	1	22	7.69	28.2	7.66	9.08	12.3

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)3	16:39	Middle	2	2	21.9	7.72	28.1	7.62	9.11	12.3
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)3	16:39	Bottom	3	1	21.8	7.6	28.2	7.6	8.74	11.9
TMCLKL	HY/2012/07	2016-12-20	Mid-Ebb	CS(Mf)3	16:39	Bottom	3	2	21.8	7.62	28.2	7.62	8.79	12
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)5	12:43	Surface	1	1	21.3	7.65	28.2	7.99	7.62	10.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)5	12:43	Surface	1	2	21.4	7.69	28.2	8.04	7.59	10.3
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)5	12:43	Middle	2	1	21.4	7.98	28.2	8.12	7.68	10.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)5	12:43	Middle	2	2	21.4	7.94	28.3	8.16	7.71	10.5
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)5	12:43	Bottom	3	1	21.4	7.83	28.4	8.23	7.51	10.5
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)5	12:43	Bottom	3	2	21.5	7.87	28.5	8.27	7.54	10.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4a	13:09	Surface	1	1	21.3	7.72	28.2	7.96	6.43	8.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4a	13:09	Surface	1	2	21.3	7.76	28.3	8	6.47	8.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4a	13:09	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4a	13:09	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4a	13:09	Bottom	3	1	21.4	7.58	28.4	8.18	6.75	9.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4a	13:09	Bottom	3	2	21.4	7.62	28.3	8.15	6.77	9.5
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4	13:31	Surface	1	1	21.3	7.76	28.2	7.81	6.44	8.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4	13:31	Surface	1	2	21.3	7.79	28.1	7.84	6.47	8.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4	13:31	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4	13:31	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4	13:31	Bottom	3	1	21.4	7.58	28.2	7.73	6.63	9.3
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	SR4	13:31	Bottom	3	2	21.4	7.55	28.3	7.75	6.67	9.5
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS8	13:51	Surface	1	1	21.3	7.81	28.1	7.74	6.58	9.1
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS8	13:51	Surface	1	2	21.3	7.84	28.1	7.76	6.61	9.1
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS8	13:51	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS8	13:51	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS8	13:51	Bottom	3	1	21.3	7.96	28.3	7.93	6.84	9.7
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS8	13:51	Bottom	3	2	21.4	7.92	28.2	7.96	6.86	9.7
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)16	14:22	Surface	1	1	21.3	7.59	28	7.65	6.68	9.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)16	14:22	Surface	1	2	21.2	7.64	28.1	7.67	6.64	9.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)16	14:22	Middle	2	1	21.3	7.88	28.2	7.78	6.93	9.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)16	14:22	Middle	2	2	21.4	7.85	28.2	7.74	6.97	9.5
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)16	14:22	Bottom	3	1	21.4	7.72	28.3	7.91	6.87	9.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)16	14:22	Bottom	3	2	21.5	7.77	28.3	7.95	6.9	9.5

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)9	14:42	Surface	1	1	21.3	7.88	28	7.52	6.43	8.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)9	14:42	Surface	1	2	21.2	7.9	28.1	7.55	6.47	8.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)9	14:42	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)9	14:42	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)9	14:42	Bottom	3	1	21.3	7.64	28.2	7.68	6.81	9.3
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	IS(Mf)9	14:42	Bottom	3	2	21.3	7.69	28.3	7.72	6.84	9.3
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)3	15:03	Surface	1	1	21.2	7.65	28.1	7.71	6.66	8.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)3	15:03	Surface	1	2	21.3	7.67	28.1	7.74	6.68	8.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)3	15:03	Middle	2	1	21.3	7.83	28.1	7.56	6.9	9.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)3	15:03	Middle	2	2	21.3	7.85	28.2	7.58	6.93	9.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)3	15:03	Bottom	3	1	21.3	7.97	28.3	7.92	6.74	9.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Flood	CS(Mf)3	15:03	Bottom	3	2	21.4	8.01	28.4	7.95	6.76	9.3
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)5	08:35	Surface	1	1	21.3	7.82	28.2	7.93	7.5	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)5	08:35	Surface	1	2	21.3	7.85	28.1	7.89	7.53	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)5	08:35	Middle	2	1	21.4	7.91	28.2	8.09	7.68	10.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)5	08:35	Middle	2	2	21.3	7.89	28.2	8.14	7.64	10.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)5	08:35	Bottom	3	1	21.4	7.94	28.3	8.17	7.84	10.8
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)5	08:35	Bottom	3	2	21.4	7.97	28.4	8.23	7.81	10.8
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4a	08:26	Surface	1	1	21.3	7.84	28.2	8.04	7.69	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4a	08:26	Surface	1	2	21.3	7.87	28.2	8.08	7.64	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4a	08:26	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4a	08:26	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4a	08:26	Bottom	3	1	21.4	7.92	28.2	8.2	7.84	10.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4a	08:26	Bottom	3	2	21.3	7.89	28.3	8.17	7.89	10.7
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4	08:12	Surface	1	1	21.3	7.92	28.1	7.75	7.28	9.7
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4	08:12	Surface	1	2	21.3	7.94	28.2	7.71	7.24	9.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4	08:12	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4	08:12	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4	08:12	Bottom	3	1	21.3	7.88	28.2	7.91	7.39	9.8
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	SR4	08:12	Bottom	3	2	21.4	7.85	28.3	7.94	7.43	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS8	08:01	Surface	1	1	21.3	7.89	28.1	7.89	7.47	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS8	08:01	Surface	1	2	21.3	7.91	28	7.86	7.42	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS8	08:01	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS8	08:01	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS8	08:01	Bottom	3	1	21.4	7.86	28.2	8.07	7.59	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS8	08:01	Bottom	3	2	21.3	7.89	28.1	8.04	7.62	10.3
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)16	07:49	Surface	1	1	21.3	7.96	28.1	8.02	7.23	9.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)16	07:49	Surface	1	2	21.2	7.93	28.1	8.05	7.2	9.6
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)16	07:49	Middle	2	1	21.3	7.9	28.1	8.13	7.09	9.4
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)16	07:49	Middle	2	2	21.3	7.88	28.2	8.17	7.12	9.5
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)16	07:49	Bottom	3	1	21.3	7.87	28.2	8.28	7.34	10
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)16	07:49	Bottom	3	2	21.4	7.9	28.2	8.25	7.37	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)9	07:38	Surface	1	1	21.2	7.9	28.1	7.95	7.35	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)9	07:38	Surface	1	2	21.1	7.91	28.1	7.91	7.39	10
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)9	07:38	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)9	07:38	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)9	07:38	Bottom	3	1	21.2	7.93	28.2	8.01	7.43	10.1
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	IS(Mf)9	07:38	Bottom	3	2	21.2	7.9	28.1	8.04	7.41	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)3	07:25	Surface	1	1	21.2	7.82	28	7.86	7.31	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)3	07:25	Surface	1	2	21.2	7.8	28.1	7.9	7.37	9.9
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)3	07:25	Middle	2	1	21.3	7.86	28.1	8.02	7.44	10
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)3	07:25	Middle	2	2	21.2	7.84	28.2	8.07	7.41	10
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)3	07:25	Bottom	3	1	21.3	7.83	28.2	8.16	7.53	10.2
TMCLKL	HY/2012/07	2016-12-22	Mid-Ebb	CS(Mf)3	07:25	Bottom	3	2	21.4	7.84	28.2	8.13	7.56	10.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)5	14:02	Surface	1	1	21.1	7.71	28.3	8.05	7.53	10.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)5	14:02	Surface	1	2	21	7.75	28.2	8.1	7.5	10.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)5	14:02	Middle	2	1	21.3	8.04	28.4	8.18	7.59	10.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)5	14:02	Middle	2	2	21.2	8	28.5	8.22	7.62	10.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)5	14:02	Bottom	3	1	21.3	7.89	28.6	8.29	7.42	10.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)5	14:02	Bottom	3	2	21.4	7.93	28.5	8.33	7.45	10.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4a	14:20	Surface	1	1	21.3	7.78	28.4	8.02	6.34	8.7
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4a	14:20	Surface	1	2	21.4	7.82	28.3	8.06	6.38	8.8
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4a	14:20	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4a	14:20	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4a	14:20	Bottom	3	1	21.5	7.64	28.4	8.24	6.66	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4a	14:20	Bottom	3	2	21.4	7.68	28.5	8.21	6.68	9.4

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4	14:38	Surface	1	1	21.2	7.82	28	7.87	6.5	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4	14:38	Surface	1	2	21.3	7.85	28.1	7.9	6.53	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4	14:38	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4	14:38	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4	14:38	Bottom	3	1	21.3	7.64	28.1	7.79	6.69	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	SR4	14:38	Bottom	3	2	21.2	7.61	28.2	7.81	6.73	9.6
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS8	14:56	Surface	1	1	21.4	7.87	28.1	7.8	6.49	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS8	14:56	Surface	1	2	21.3	7.9	28.2	7.82	6.52	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS8	14:56	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS8	14:56	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS8	14:56	Bottom	3	1	21.4	8.02	28.2	7.99	6.75	9.6
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS8	14:56	Bottom	3	2	21.5	7.98	28.3	8.02	6.77	9.6
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)16	15:14	Surface	1	1	21.5	7.65	28.3	7.71	6.74	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)16	15:14	Surface	1	2	21.4	7.7	28.4	7.73	6.7	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)16	15:14	Middle	2	1	21.6	7.94	28.5	7.84	6.84	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)16	15:14	Middle	2	2	21.7	7.91	28.4	7.8	6.88	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)16	15:14	Bottom	3	1	21.8	7.78	28.5	7.97	6.78	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)16	15:14	Bottom	3	2	21.7	7.83	28.6	8.01	6.81	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)9	15:32	Surface	1	1	21.2	7.94	28.2	7.58	6.34	8.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)9	15:32	Surface	1	2	21.3	7.96	28.3	7.61	6.38	8.5
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)9	15:32	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)9	15:32	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)9	15:32	Bottom	3	1	21.3	7.7	28.4	7.74	6.72	9.1
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	IS(Mf)9	15:32	Bottom	3	2	21.4	7.75	28.3	7.78	6.75	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)3	15:52	Surface	1	1	21.3	7.71	28.3	7.77	6.57	8.7
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)3	15:52	Surface	1	2	21.4	7.73	28.4	7.8	6.59	8.8
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)3	15:52	Middle	2	1	21.4	7.89	28.4	7.62	6.81	9.1
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)3	15:52	Middle	2	2	21.5	7.91	28.5	7.64	6.84	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)3	15:52	Bottom	3	1	21.5	8.03	28.6	7.98	6.65	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Flood	CS(Mf)3	15:52	Bottom	3	2	21.4	8.07	28.5	8.01	6.67	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)5	10:56	Surface	1	1	20.8	7.66	28	7.96	7.86	10.7
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)5	10:56	Surface	1	2	20.8	7.68	28.1	7.99	7.76	10.6
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)5	10:56	Middle	2	1	20.8	7.64	28.2	8.07	7.8	10.6

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)5	10:56	Middle	2	2	20.9	7.66	28.1	8.1	7.89	10.7
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)5	10:56	Bottom	3	1	21	7.73	28.4	8.21	7.56	10.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)5	10:56	Bottom	3	2	21.1	7.69	28.4	8.18	7.48	10.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4a	10:34	Surface	1	1	20.8	7.69	28.2	7.88	7.04	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4a	10:34	Surface	1	2	20.9	7.71	28.1	7.91	6.92	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4a	10:34	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4a	10:34	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4a	10:34	Bottom	3	1	20.9	7.64	28.2	8	7.33	9.9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4a	10:34	Bottom	3	2	20.9	7.66	28.2	7.97	7.24	9.8
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4	10:18	Surface	1	1	20.9	7.73	28.1	7.77	6.73	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4	10:18	Surface	1	2	20.9	7.68	28	7.81	6.81	9.1
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4	10:18	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4	10:18	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4	10:18	Bottom	3	1	20.9	7.75	28.1	7.58	6.97	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	SR4	10:18	Bottom	3	2	20.9	7.69	28.1	7.6	7.03	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS8	10:03	Surface	1	1	20.9	7.73	28	7.68	6.75	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS8	10:03	Surface	1	2	21	7.7	28	7.73	6.69	8.9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS8	10:03	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS8	10:03	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS8	10:03	Bottom	3	1	21.1	7.89	28.1	7.87	6.94	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS8	10:03	Bottom	3	2	21.1	7.93	28	7.9	6.99	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)16	09:42	Surface	1	1	21	7.57	28.1	7.48	6.94	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)16	09:42	Surface	1	2	21	7.63	28	7.52	6.88	9.2
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)16	09:42	Middle	2	1	21.1	7.84	28.2	7.66	7.03	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)16	09:42	Middle	2	2	21.1	7.8	28.2	7.6	7	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)16	09:42	Bottom	3	1	21.3	7.7	28.3	7.81	6.85	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)16	09:42	Bottom	3	2	21.4	7.73	28.4	7.78	6.77	9.1
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)9	09:23	Surface	1	1	20.8	7.78	27.9	7.4	6.59	8.9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)9	09:23	Surface	1	2	20.9	7.81	28	7.44	6.64	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)9	09:23	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)9	09:23	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)9	09:23	Bottom	3	1	20.9	7.66	28.2	7.52	6.93	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	IS(Mf)9	09:23	Bottom	3	2	21	7.7	28.2	7.56	6.85	9.4

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)3	09:00	Surface	1	1	20.8	7.63	28.1	7.59	6.76	9.1
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)3	09:00	Surface	1	2	20.9	7.67	28.1	7.61	6.69	9
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)3	09:00	Middle	2	1	21.1	7.73	28.2	7.48	6.9	9.3
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)3	09:00	Middle	2	2	21.2	7.75	28.3	7.52	6.97	9.4
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)3	09:00	Bottom	3	1	21.3	7.84	28.4	7.73	6.49	8.8
TMCLKL	HY/2012/07	2016-12-24	Mid-Ebb	CS(Mf)3	09:00	Bottom	3	2	21.4	7.91	28.5	7.77	6.56	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)5	15:35	Surface	1	1	21.2	7.92	28	8.26	7.04	9.6
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)5	15:35	Surface	1	2	21.1	7.94	28.1	8.29	7.07	9.6
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)5	15:35	Middle	2	1	21.3	8.05	28.2	8.34	7.13	9.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)5	15:35	Middle	2	2	21.3	8.07	28.2	8.37	7.16	9.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)5	15:35	Bottom	3	1	21.4	8.14	28.3	8.44	7.33	10.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)5	15:35	Bottom	3	2	21.3	8.17	28.4	8.47	7.35	10.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4a	15:57	Surface	1	1	21.2	8.05	28.1	8.14	6.4	8.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4a	15:57	Surface	1	2	21.2	8.07	28.1	8.12	6.43	8.9
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4a	15:57	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4a	15:57	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4a	15:57	Bottom	3	1	21.3	8.14	28.3	8.29	6.59	9.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4a	15:57	Bottom	3	2	21.4	8.12	28.2	8.31	6.61	9.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4	16:19	Surface	1	1	21.2	8.03	28.1	8.15	7.15	9.9
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4	16:19	Surface	1	2	21.2	8.06	28	8.18	7.17	9.9
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4	16:19	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4	16:19	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4	16:19	Bottom	3	1	21.4	8.14	28.2	8.36	7.34	10.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	SR4	16:19	Bottom	3	2	21.3	8.17	28.3	8.39	7.37	10.5
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS8	16:41	Surface	1	1	21.1	7.92	27.9	8.07	7.24	10
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS8	16:41	Surface	1	2	21.2	7.94	28	8.09	7.26	10
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS8	16:41	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS8	16:41	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS8	16:41	Bottom	3	1	21.3	8.1	28.1	8.2	7.4	10.5
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS8	16:41	Bottom	3	2	21.3	8.13	28.2	8.22	7.43	10.6
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)16	17:04	Surface	1	1	21.2	7.83	28.1	7.99	7.04	9.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)16	17:04	Surface	1	2	21.1	7.8	28.1	8.01	7.07	9.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)16	17:04	Middle	2	1	21.3	8.14	28.2	8.09	7.14	9.6

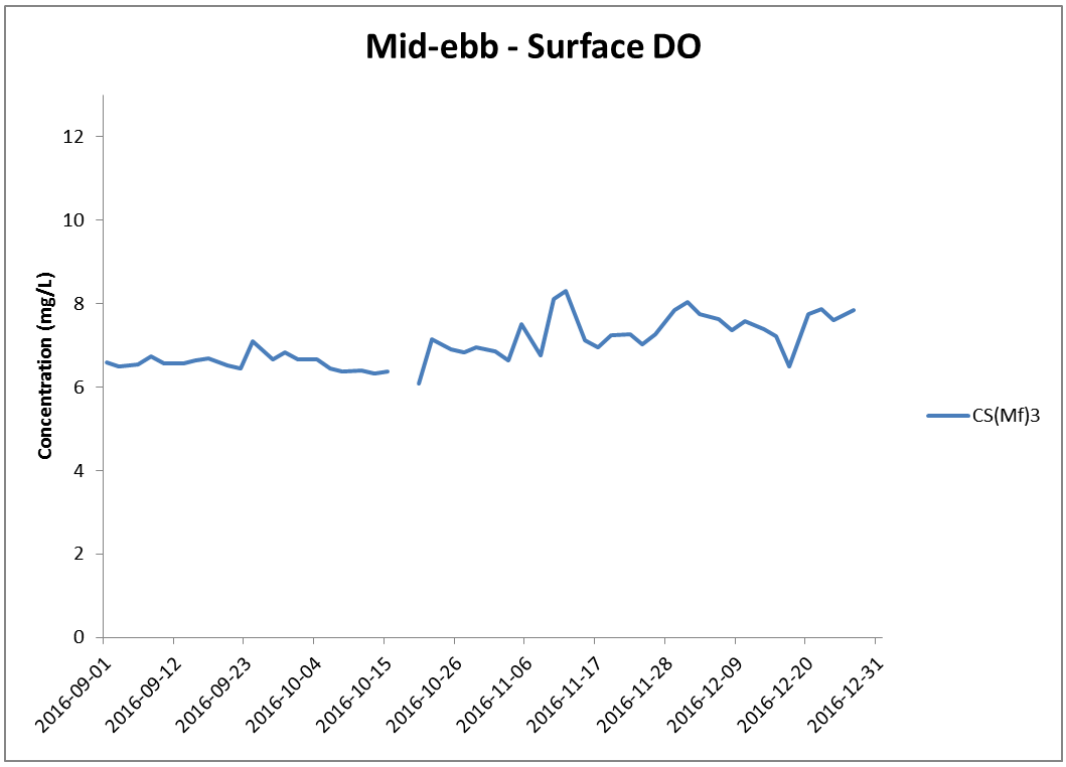
Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)16	17:04	Middle	2	2	21.3	8.16	28.3	8.11	7.17	9.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)16	17:04	Bottom	3	1	21.4	7.99	28.4	8.32	7.34	10.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)16	17:04	Bottom	3	2	21.3	7.97	28.4	8.3	7.38	10.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)9	17:26	Surface	1	1	21.1	7.93	28.1	7.95	7.3	9.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)9	17:26	Surface	1	2	21.2	7.96	28.1	7.97	7.33	9.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)9	17:26	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)9	17:26	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)9	17:26	Bottom	3	1	21.3	8.14	28.2	8.14	7.44	10.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	IS(Mf)9	17:26	Bottom	3	2	21.4	8.17	28.3	8.16	7.47	10.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)3	17:45	Surface	1	1	21.2	8.14	27.9	8.24	6.97	9.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)3	17:45	Surface	1	2	21.2	8.12	28	8.27	6.99	9.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)3	17:45	Middle	2	1	21.3	7.92	28.1	8.39	7.15	9.6
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)3	17:45	Middle	2	2	21.4	7.94	28.2	8.41	7.17	9.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)3	17:45	Bottom	3	1	21.5	8.04	28.3	8.55	7.34	10.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Flood	CS(Mf)3	17:45	Bottom	3	2	21.5	8.07	28.3	8.53	7.36	10.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)5	13:35	Surface	1	1	21.2	7.77	28.1	8.11	7.44	10.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)5	13:35	Surface	1	2	21.3	7.81	28.2	8.16	7.41	10.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)5	13:35	Middle	2	1	21.4	8.1	28.2	8.24	7.5	10.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)5	13:35	Middle	2	2	21.3	8.06	28.3	8.28	7.53	10.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)5	13:35	Bottom	3	1	21.5	7.95	28.3	8.35	7.33	10.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)5	13:35	Bottom	3	2	21.6	7.99	28.4	8.39	7.36	10.2
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4a	13:11	Surface	1	1	21.3	7.84	27.9	8.08	6.25	8.3
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4a	13:11	Surface	1	2	21.4	7.88	28	8.12	6.29	8.4
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4a	13:11	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4a	13:11	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4a	13:11	Bottom	3	1	21.5	7.7	28.1	8.3	6.57	8.9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4a	13:11	Bottom	3	2	21.4	7.74	28	8.27	6.59	8.9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4	12:49	Surface	1	1	21.4	7.88	28	7.93	6.41	8.5
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4	12:49	Surface	1	2	21.4	7.91	27.9	7.96	6.44	8.6
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4	12:49	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4	12:49	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4	12:49	Bottom	3	1	21.4	7.7	28.1	7.85	6.6	8.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	SR4	12:49	Bottom	3	2	21.5	7.67	28.2	7.87	6.64	8.8

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS8	12:27	Surface	1	1	21.4	7.93	28.1	7.86	6.4	8.5
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS8	12:27	Surface	1	2	21.5	7.96	28.2	7.88	6.43	8.6
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS8	12:27	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS8	12:27	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS8	12:27	Bottom	3	1	21.5	8.08	28.3	8.05	6.66	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS8	12:27	Bottom	3	2	21.6	8.04	28.2	8.08	6.68	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)16	12:05	Surface	1	1	21.5	7.71	28.1	7.77	6.65	8.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)16	12:05	Surface	1	2	21.4	7.76	28	7.79	6.61	8.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)16	12:05	Middle	2	1	21.6	8	28.2	7.9	6.75	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)16	12:05	Middle	2	2	21.7	7.97	28.3	7.86	6.79	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)16	12:05	Bottom	3	1	21.9	7.84	28.4	8.03	6.69	9.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)16	12:05	Bottom	3	2	21.9	7.89	28.5	8.07	6.72	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)9	11:43	Surface	1	1	21.5	8	28	7.64	6.25	8.4
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)9	11:43	Surface	1	2	21.6	8.02	28.1	7.67	6.29	8.5
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)9	11:43	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)9	11:43	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)9	11:43	Bottom	3	1	21.7	7.76	28.3	7.8	6.63	9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	IS(Mf)9	11:43	Bottom	3	2	21.6	7.81	28.2	7.84	6.66	9.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)3	11:21	Surface	1	1	21.4	7.77	28.1	7.83	6.48	8.7
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)3	11:21	Surface	1	2	21.5	7.79	28.2	7.86	6.5	8.8
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)3	11:21	Middle	2	1	21.6	7.95	28.3	7.68	6.72	9.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)3	11:21	Middle	2	2	21.5	7.97	28.4	7.7	6.75	9.1
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)3	11:21	Bottom	3	1	21.6	8.09	28.5	8.04	6.56	8.9
TMCLKL	HY/2012/07	2016-12-27	Mid-Ebb	CS(Mf)3	11:21	Bottom	3	2	21.7	8.13	28.6	8.07	6.58	9
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)5	07:40	Surface	1	1	20.7	7.58	28.1	8.01	7.79	10.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)5	07:40	Surface	1	2	20.7	7.61	28	8.03	7.83	10.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)5	07:40	Middle	2	1	20.8	7.73	28.2	8.11	7.84	10.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)5	07:40	Middle	2	2	20.7	7.71	28.2	8.09	7.91	10.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)5	07:40	Bottom	3	1	20.8	7.65	28.2	8.19	7.67	10.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)5	07:40	Bottom	3	2	20.9	7.69	28.3	8.22	7.61	10.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4a	08:03	Surface	1	1	20.8	7.72	28.1	8.07	6.99	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4a	08:03	Surface	1	2	20.7	7.76	28.1	8.05	6.91	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4a	08:03	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4a	08:03	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4a	08:03	Bottom	3	1	20.8	7.68	28.1	8.13	7.23	10
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4a	08:03	Bottom	3	2	20.8	7.74	28.2	8.09	7.29	10.2
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4	08:17	Surface	1	1	20.8	7.78	28.1	8.1	6.91	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4	08:17	Surface	1	2	20.9	7.82	28.1	7.97	6.99	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4	08:17	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4	08:17	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4	08:17	Bottom	3	1	20.9	7.79	28.1	7.71	7.11	10
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	SR4	08:17	Bottom	3	2	20.9	7.71	28.2	7.8	7.16	10.2
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS8	08:31	Surface	1	1	20.9	7.78	28.1	7.89	6.81	9.4
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS8	08:31	Surface	1	2	20.8	7.74	28	7.85	6.77	9.3
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS8	08:31	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS8	08:31	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS8	08:31	Bottom	3	1	20.9	7.94	28	8.02	7.13	10.1
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS8	08:31	Bottom	3	2	20.9	7.99	28	8.06	7.1	10.1
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)16	08:45	Surface	1	1	20.9	7.68	28.1	7.67	7.13	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)16	08:45	Surface	1	2	21	7.61	28.1	7.7	7.09	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)16	08:45	Middle	2	1	20.9	7.78	28.1	7.82	7.18	9.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)16	08:45	Middle	2	2	20.9	7.82	28.2	7.77	7.11	9.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)16	08:45	Bottom	3	1	21.1	7.71	28.3	7.88	7.09	9.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)16	08:45	Bottom	3	2	21	7.69	28.2	7.91	7.03	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)9	09:03	Surface	1	1	20.9	7.77	28	7.61	6.72	8.9
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)9	09:03	Surface	1	2	20.9	7.83	28.1	7.57	6.67	8.9
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)9	09:03	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)9	09:03	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)9	09:03	Bottom	3	1	20.9	7.59	28.1	7.77	7.01	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	IS(Mf)9	09:03	Bottom	3	2	21	7.66	28.1	7.8	6.93	9.4
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)3	09:24	Surface	1	1	20.9	7.61	28.1	7.78	6.88	9.2
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)3	09:24	Surface	1	2	21	7.66	28.2	7.81	6.85	9.1
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)3	09:24	Middle	2	1	21	7.76	28.1	7.65	6.99	9.4
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)3	09:24	Middle	2	2	21.1	7.81	28.1	7.67	7.03	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)3	09:24	Bottom	3	1	21.2	7.93	28.2	7.9	6.66	9.3
TMCLKL	HY/2012/07	2016-12-29	Mid-Flood	CS(Mf)3	09:24	Bottom	3	2	21.1	7.97	28.1	7.92	6.72	9.3

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)5	13:34	Surface	1	1	20.9	7.69	28	7.95	7.41	10.1
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)5	13:34	Surface	1	2	20.8	7.72	27.9	7.96	7.47	10.2
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)5	13:34	Middle	2	1	21	7.88	28.2	8.17	7.23	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)5	13:34	Middle	2	2	21.1	7.86	28.1	8.15	7.18	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)5	13:34	Bottom	3	1	21.1	7.74	28.4	8.03	7.59	10.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)5	13:34	Bottom	3	2	21.2	7.76	28.3	8.07	7.63	10.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4a	13:11	Surface	1	1	20.8	7.87	27.9	8.11	7.03	9.3
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4a	13:11	Surface	1	2	20.7	7.85	27.8	8.13	7.11	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4a	13:11	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4a	13:11	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4a	13:11	Bottom	3	1	20.9	7.72	28	7.91	7.36	9.9
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4a	13:11	Bottom	3	2	20.8	7.76	28	7.87	7.24	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4	12:54	Surface	1	1	20.7	7.82	28	7.87	7.12	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4	12:54	Surface	1	2	20.8	7.84	27.9	7.89	7.18	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4	12:54	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4	12:54	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4	12:54	Bottom	3	1	20.8	7.72	28.1	7.71	7.23	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	SR4	12:54	Bottom	3	2	20.8	7.73	28	7.69	7.29	9.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS8	11:37	Surface	1	1	20.8	7.76	28	7.79	7.05	9.4
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS8	11:37	Surface	1	2	20.8	7.72	28.1	7.81	7.09	9.4
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS8	11:37	Middle	2	1						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS8	11:37	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS8	11:37	Bottom	3	1	20.9	7.83	28.2	8.12	7.34	9.9
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS8	11:37	Bottom	3	2	20.8	7.87	28.1	8.09	7.25	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)16	12:18	Surface	1	1	20.9	7.74	28.1	7.64	7.24	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)16	12:18	Surface	1	2	20.8	7.77	28	7.61	7.19	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)16	12:18	Middle	2	1	21	7.71	28.3	7.81	7.15	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)16	12:18	Middle	2	2	20.9	7.72	28.2	7.83	7.11	9.5
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)16	12:18	Bottom	3	1	21	7.85	28.3	7.96	7.38	10
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)16	12:18	Bottom	3	2	21.1	7.81	28.4	7.93	7.31	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)9	11:59	Surface	1	1	20.8	7.79	27.9	7.74	6.89	9.3
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)9	11:59	Surface	1	2	20.7	7.81	28	7.71	6.81	9.2
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)9	11:59	Middle	2	1						

Project	Works	Date (yyyy-mm-dd)	Tide	Stat	Start Time	Level	Lev_Cod	Replicate	Temp_v	pH_v	Sal_v	DO_v	Turb_v	SS_v
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)9	11:59	Middle	2	2						
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)9	11:59	Bottom	3	1	20.9	7.71	28.1	7.67	7.07	9.6
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	IS(Mf)9	11:59	Bottom	3	2	20.9	7.67	28.2	7.64	7.12	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)3	11:33	Surface	1	1	20.8	7.71	28.1	7.84	7.38	10
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)3	11:33	Surface	1	2	20.7	7.74	28	7.81	7.44	10
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)3	11:33	Middle	2	1	20.6	7.83	28.2	7.69	7.27	9.8
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)3	11:33	Middle	2	2	20.7	7.85	28.1	7.67	7.21	9.7
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)3	11:33	Bottom	3	1	20.8	7.76	28.4	7.74	7.68	10.4
TMCLKL	HY/2012/07	2016-12-29	Mid-Ebb	CS(Mf)3	11:33	Bottom	3	2	20.9	7.79	28.3	7.76	7.61	10.4



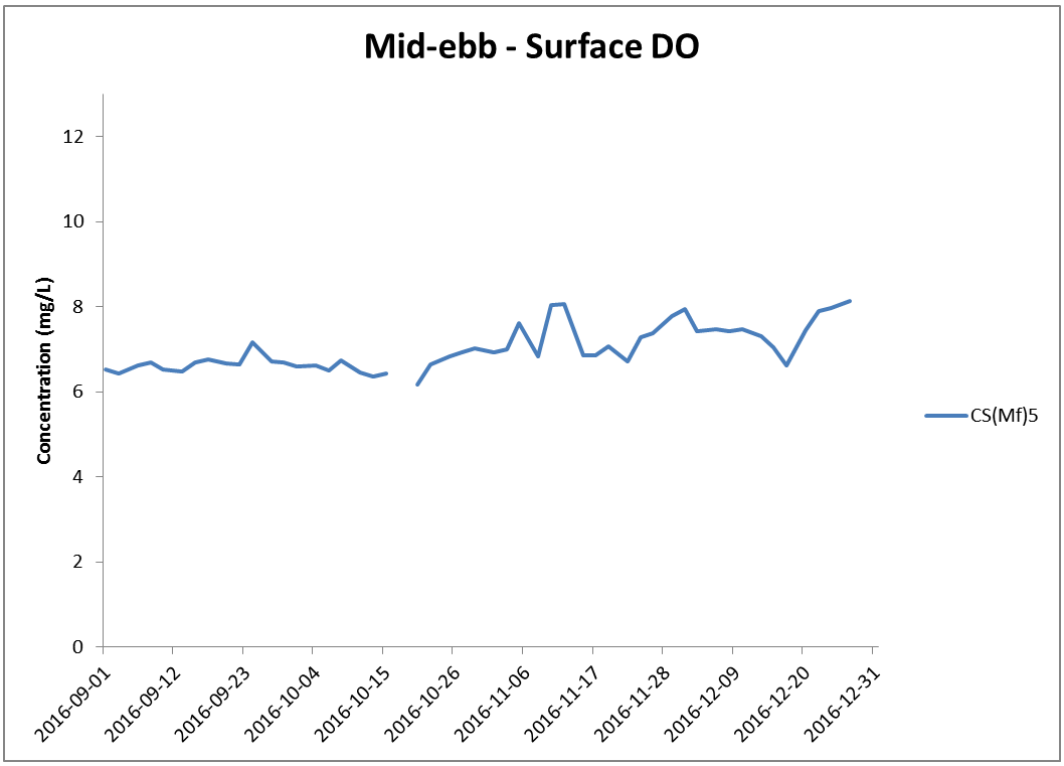
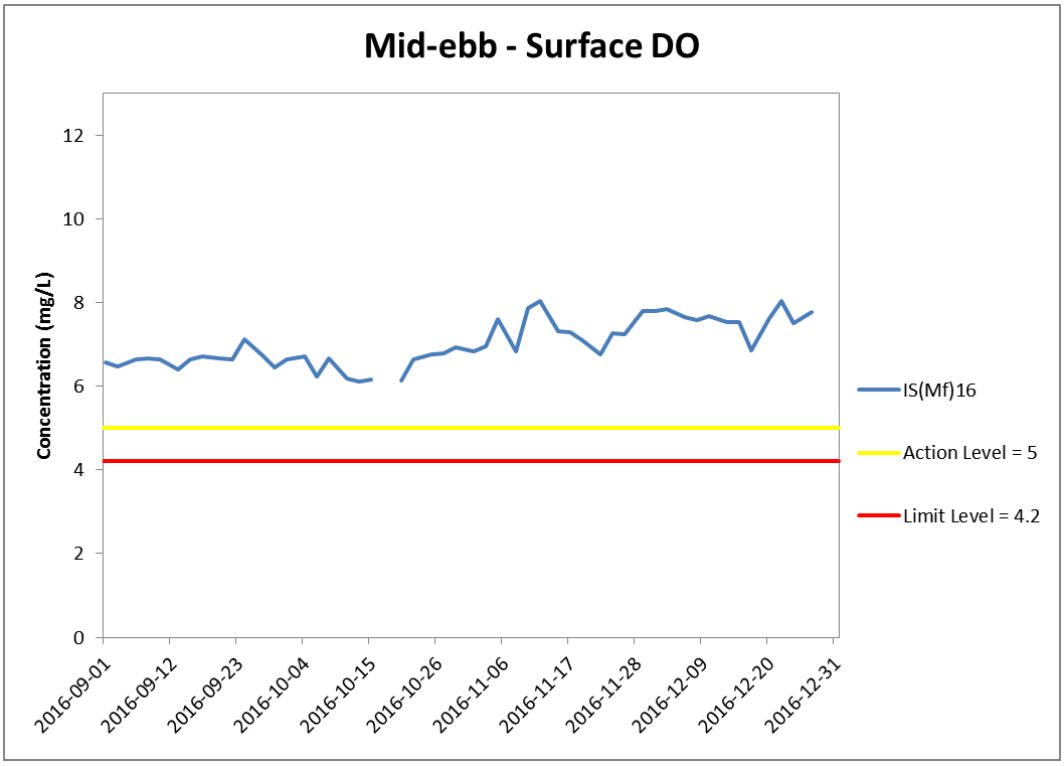


Figure J1 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



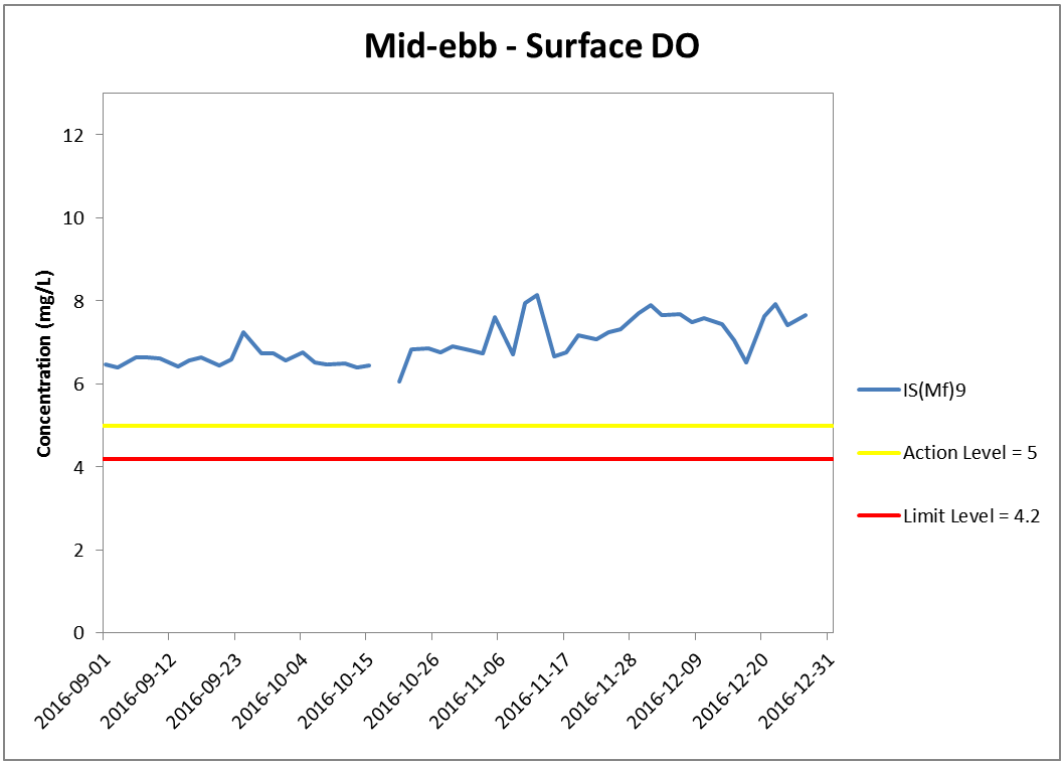
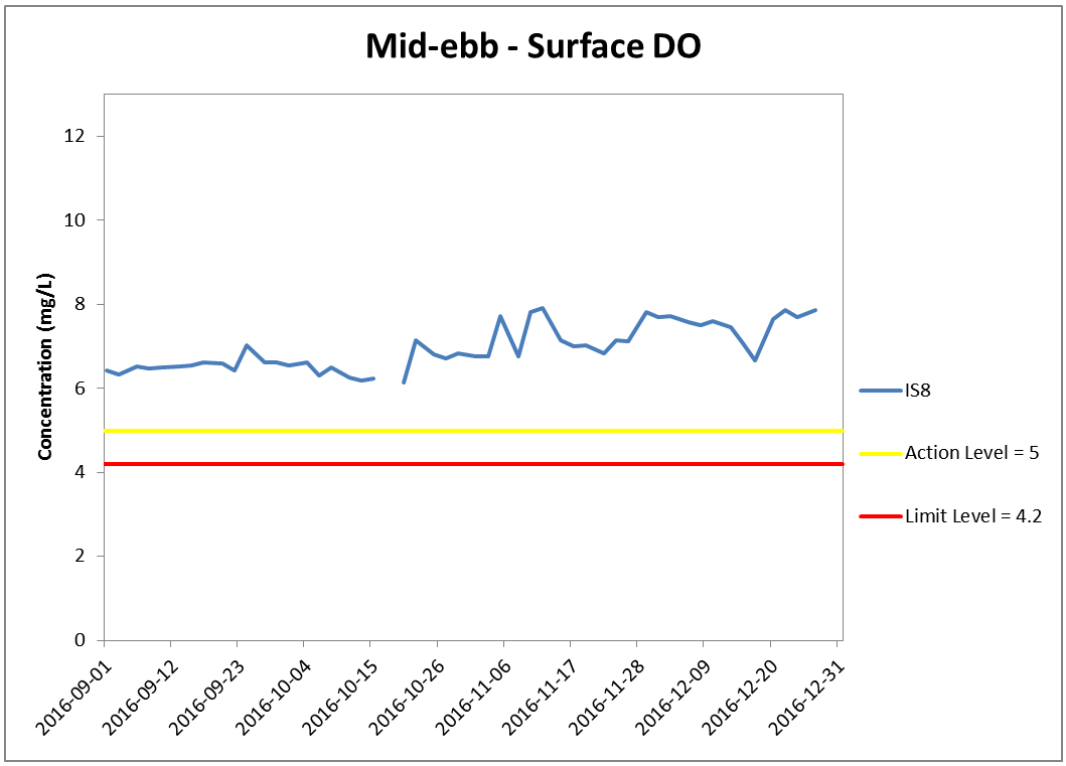


Figure J2 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



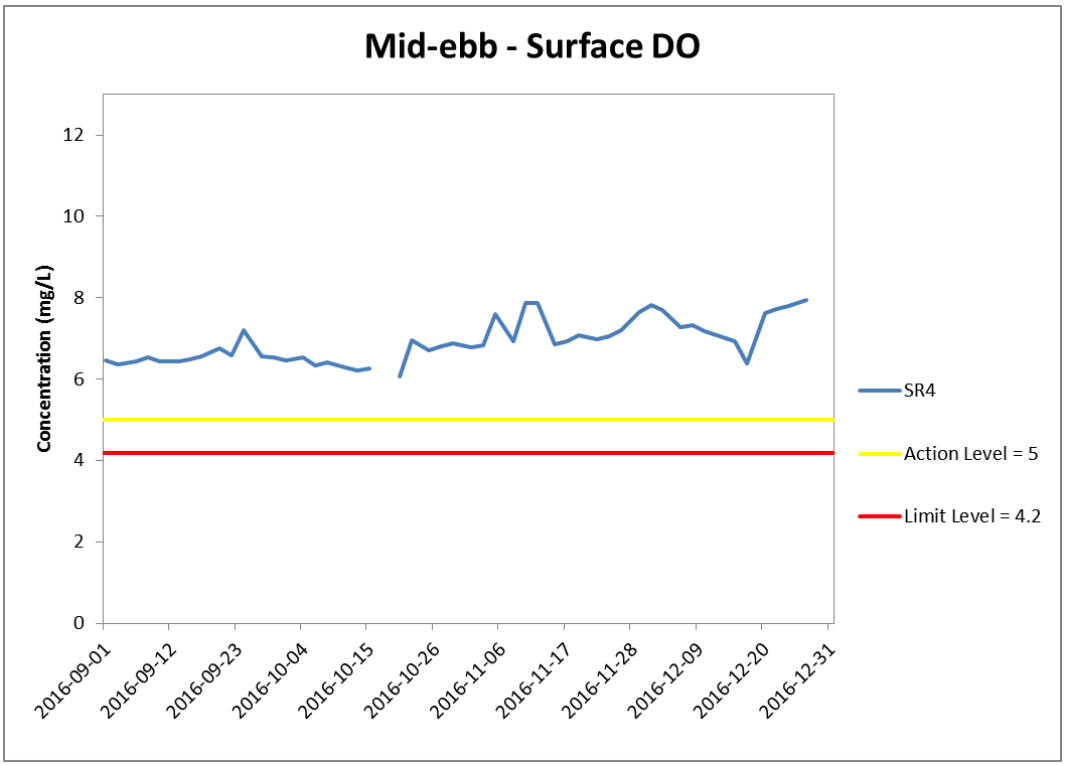


Figure J3 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

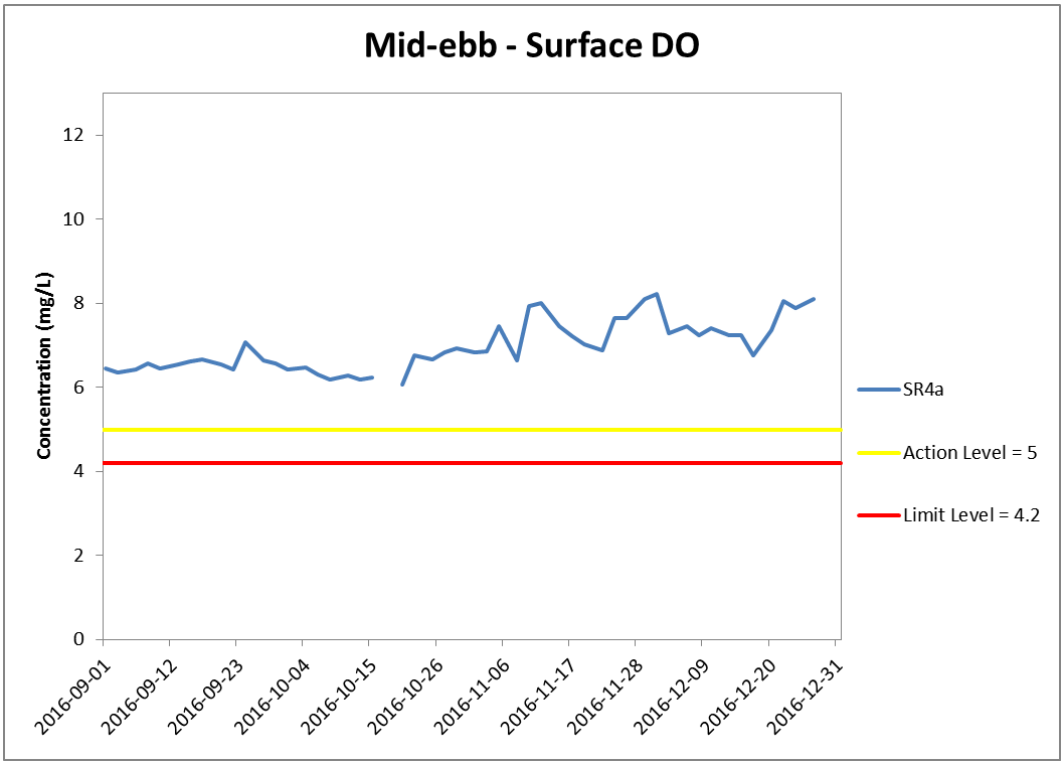
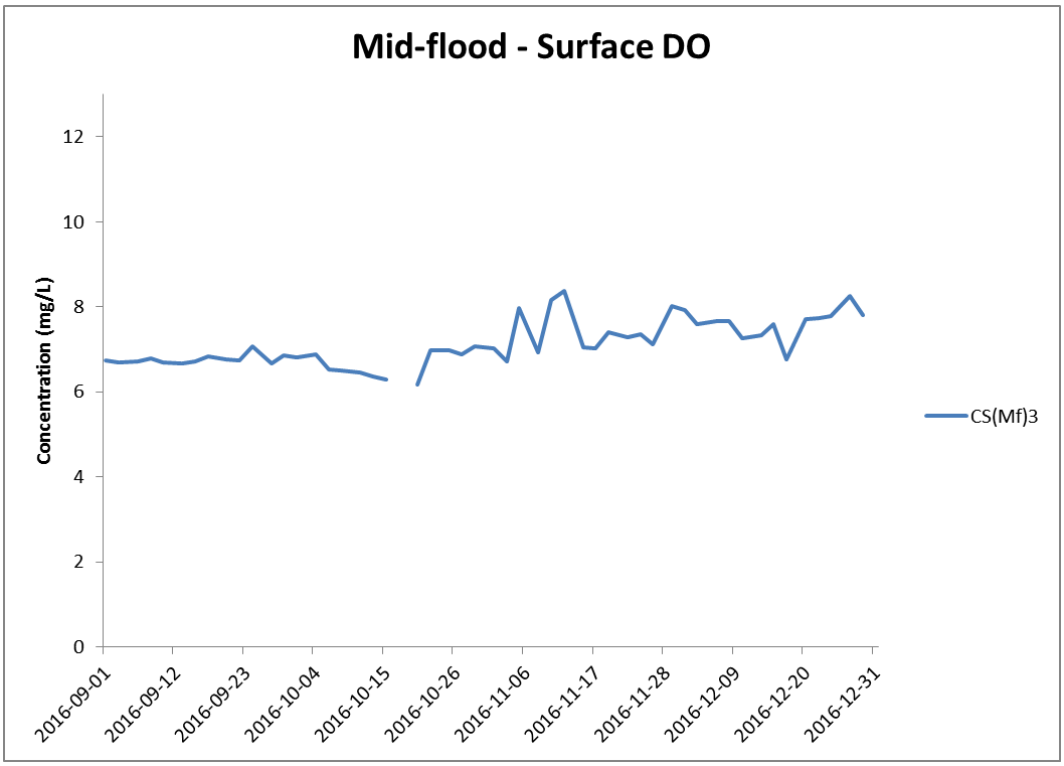


Figure J4 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-ebb tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



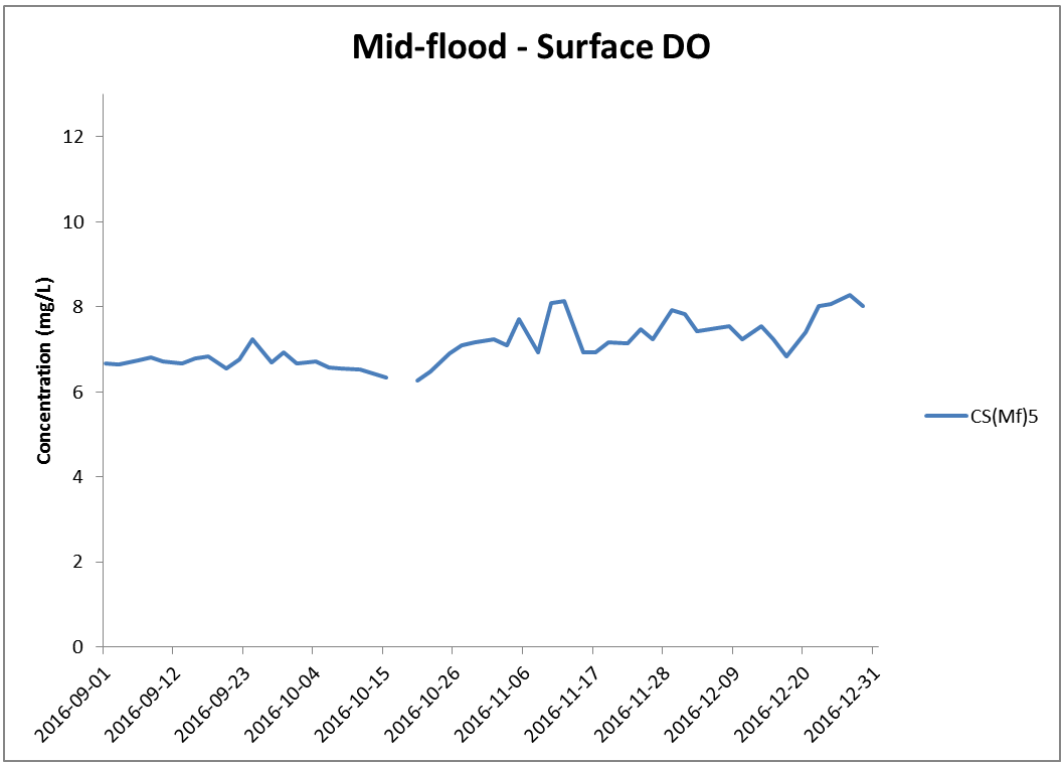
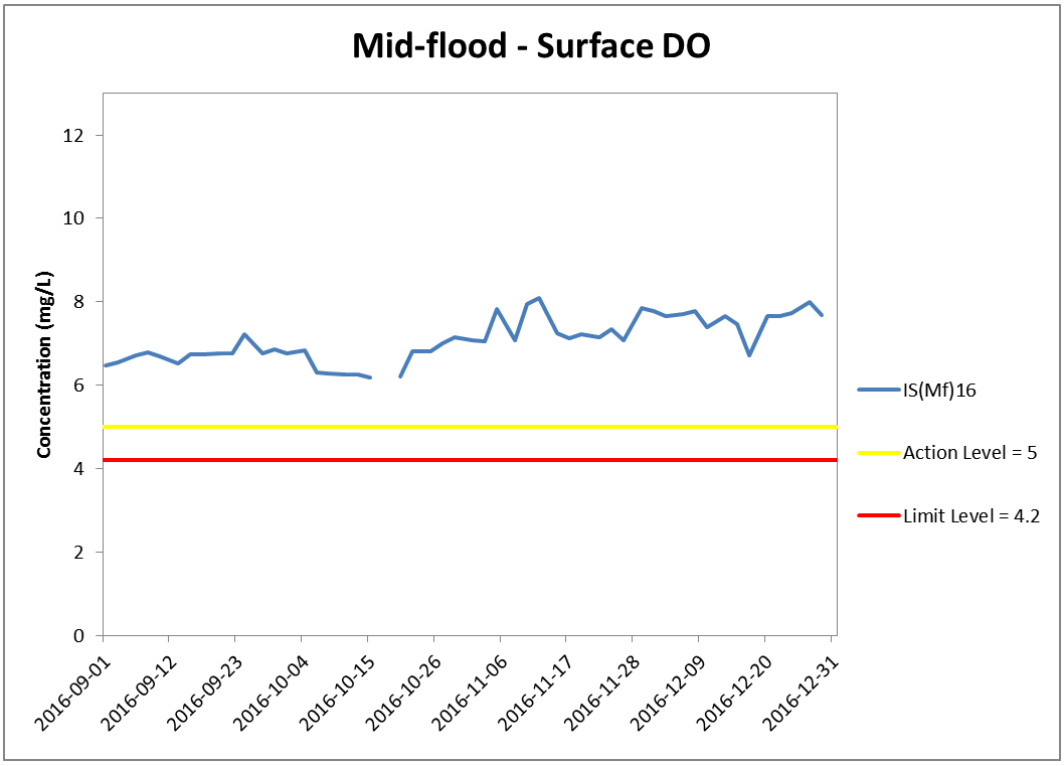


Figure J5 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



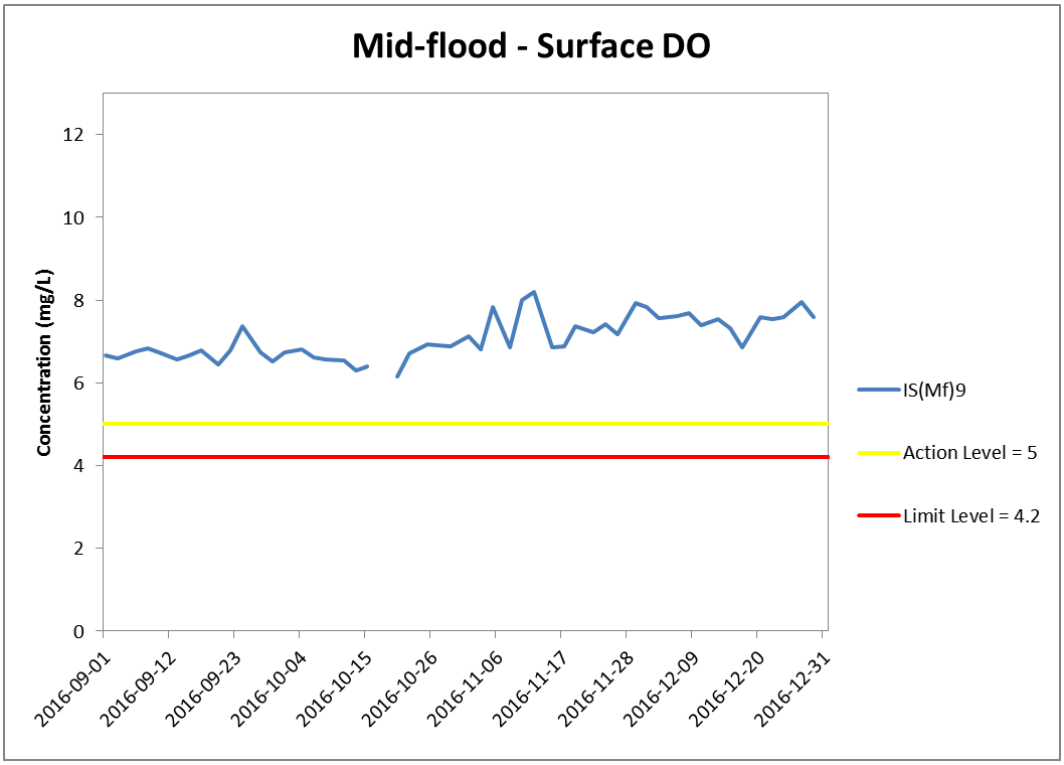
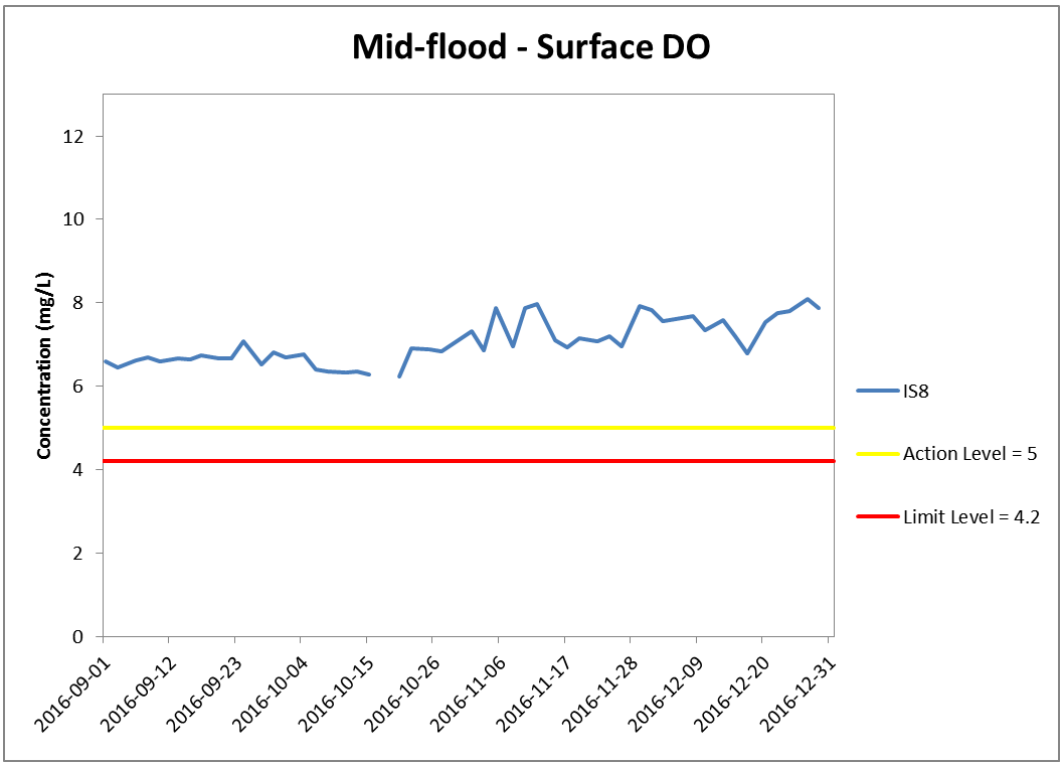


Figure J6 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.)
Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



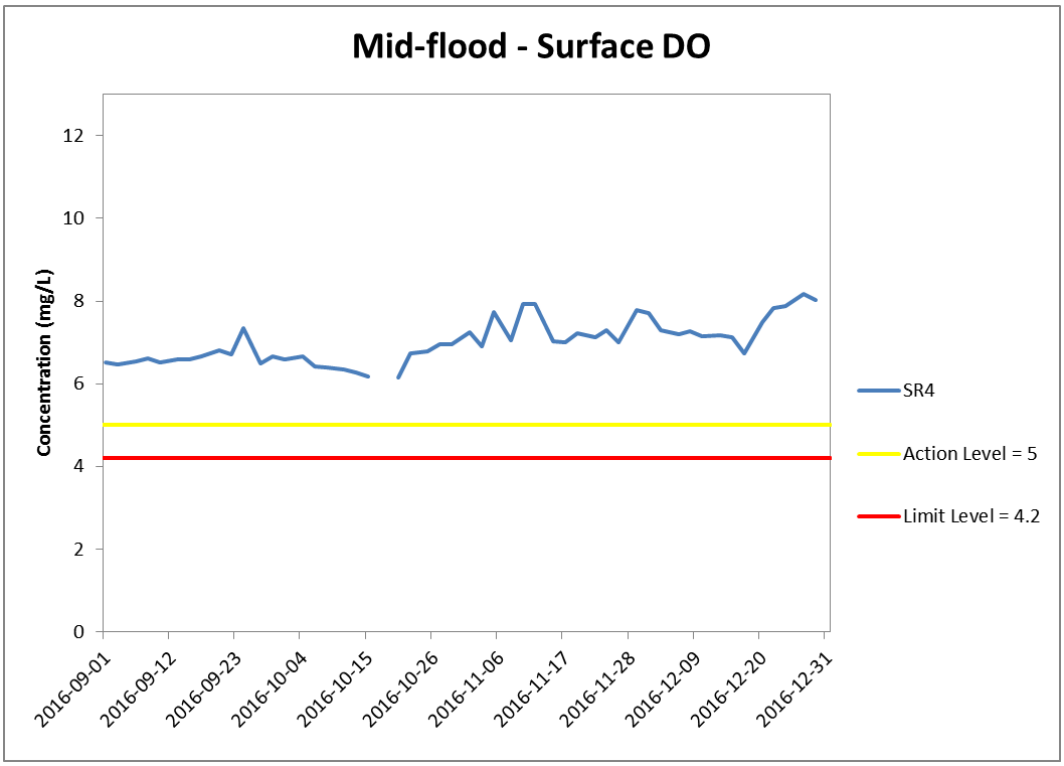


Figure J7 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

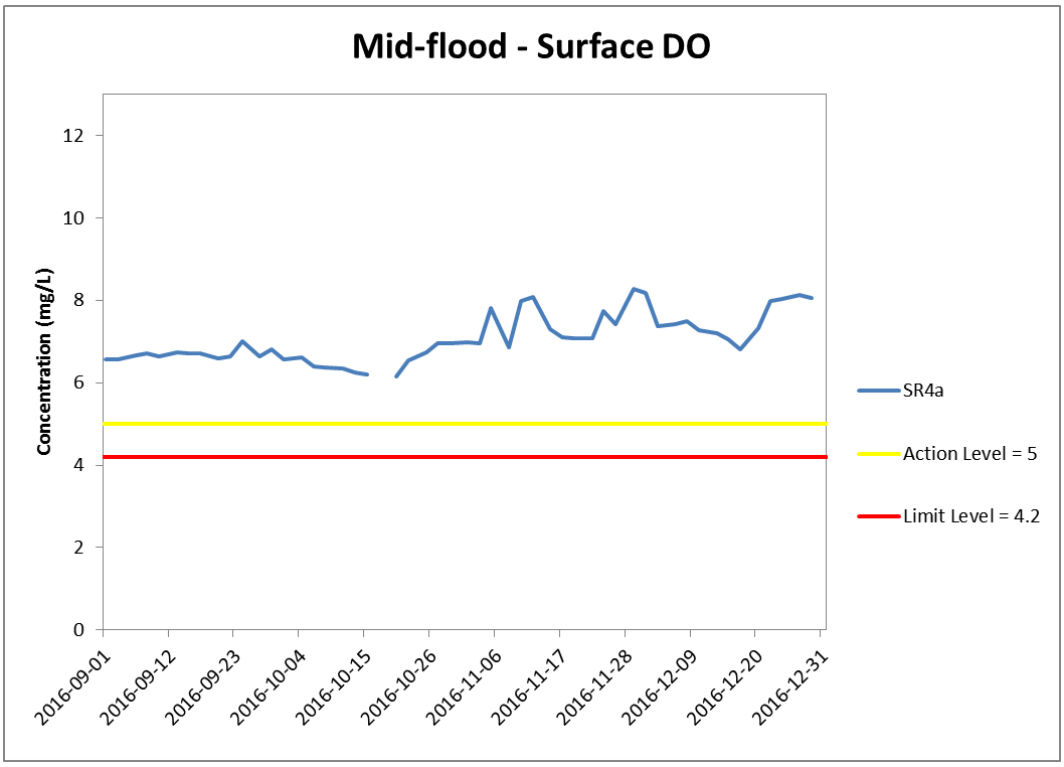
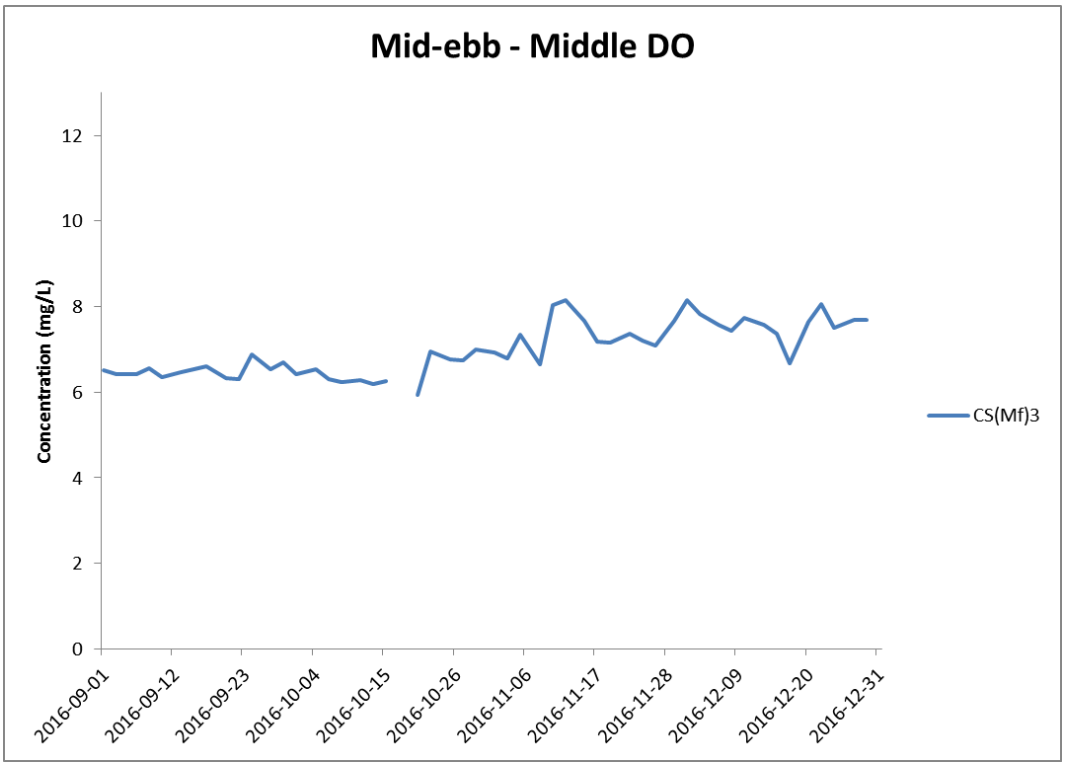


Figure J8 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in surface waters during mid-flood tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



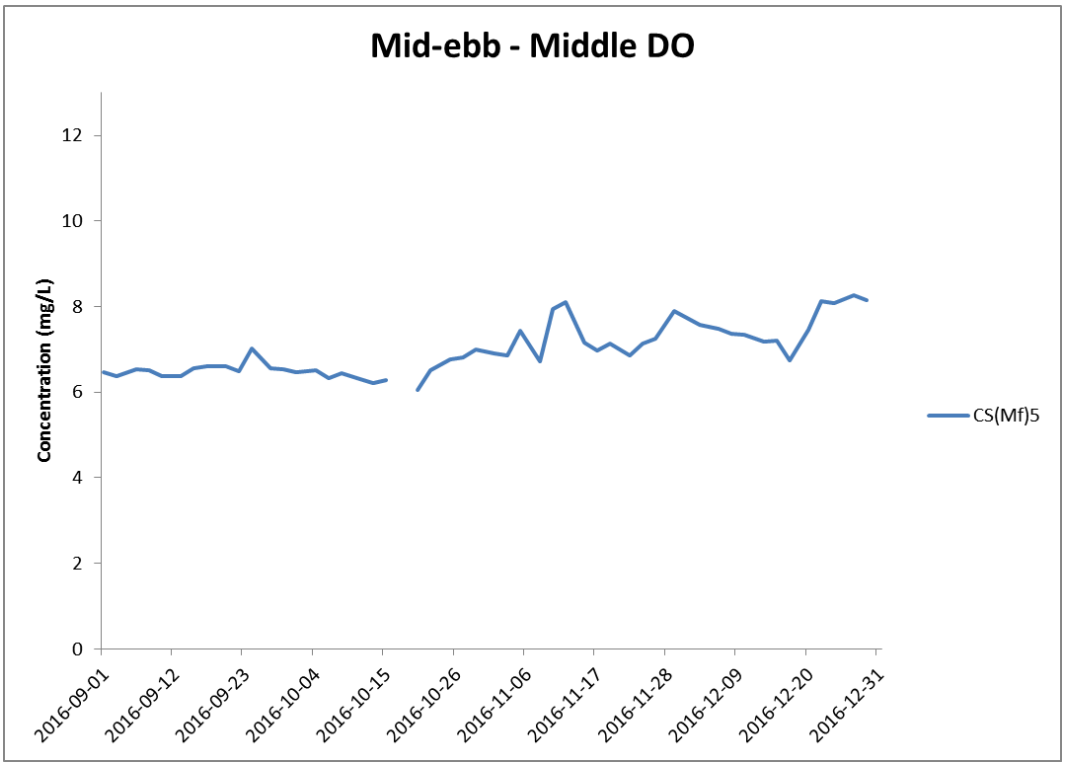


Figure J9 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

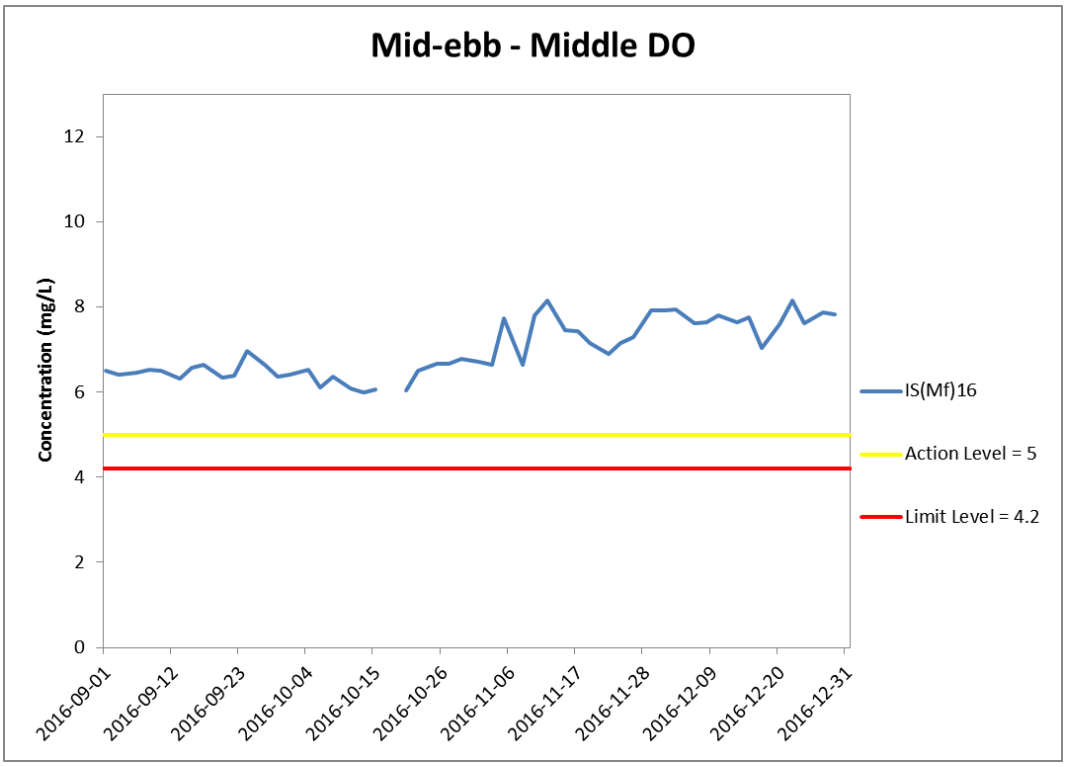
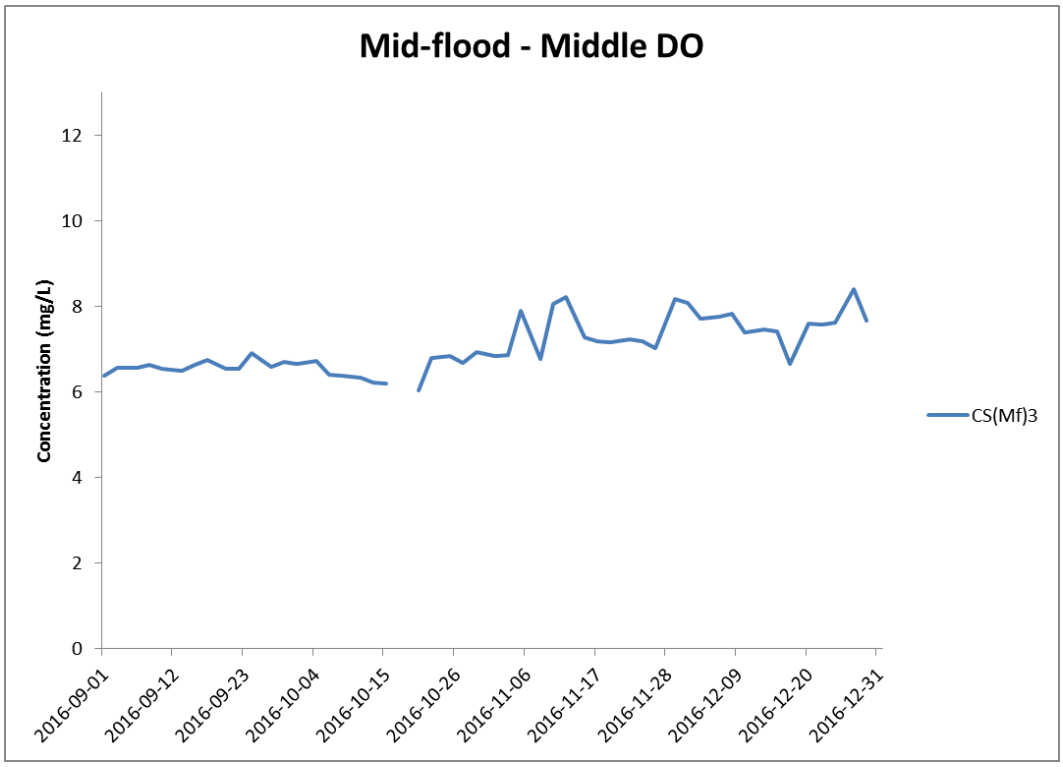


Figure J10 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-ebb tide between 1 September and 31 December 2016 at IS(Mf)16.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



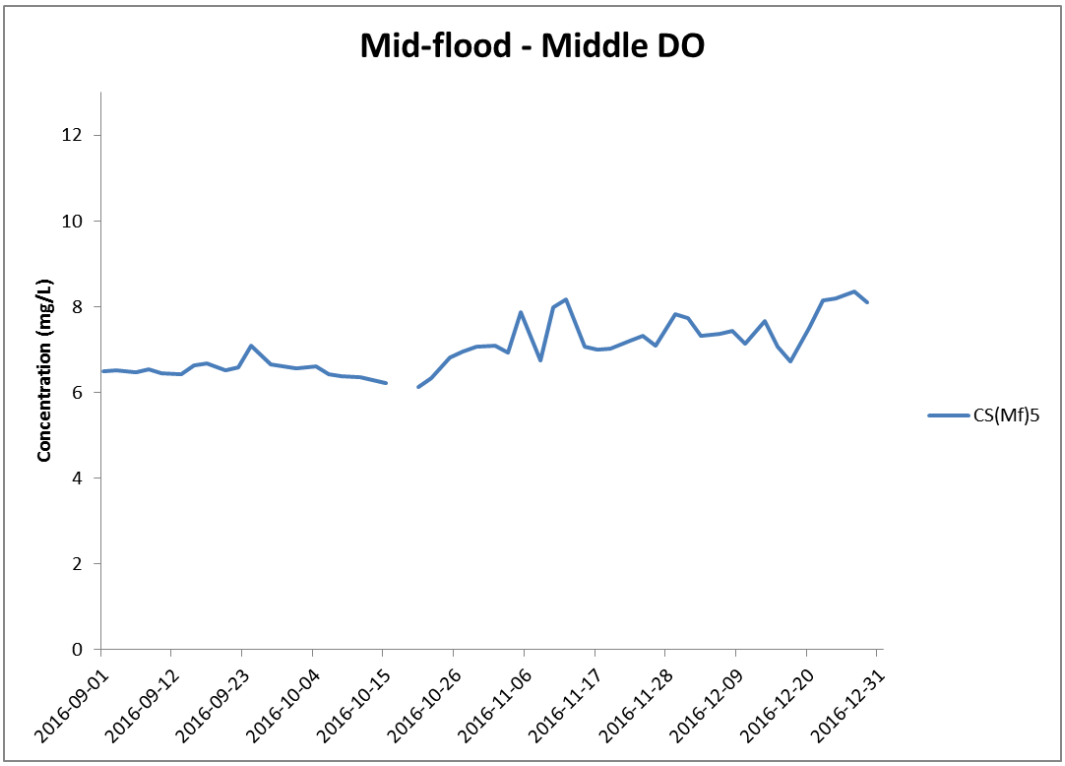


Figure J11 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

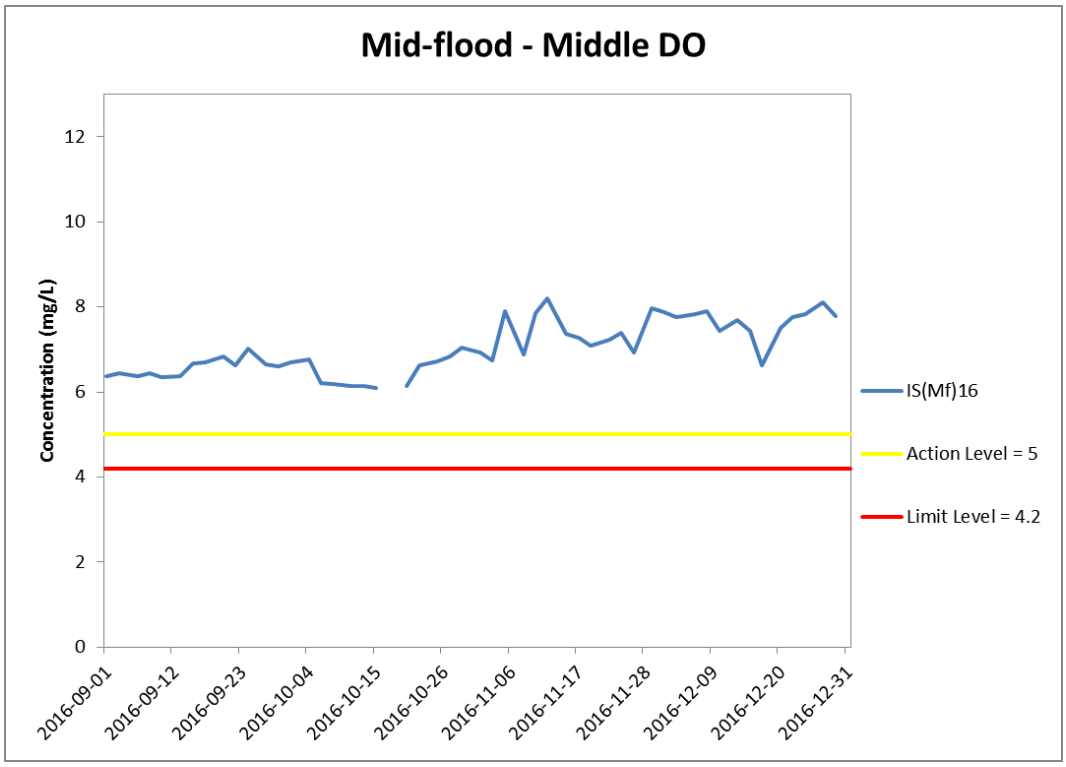
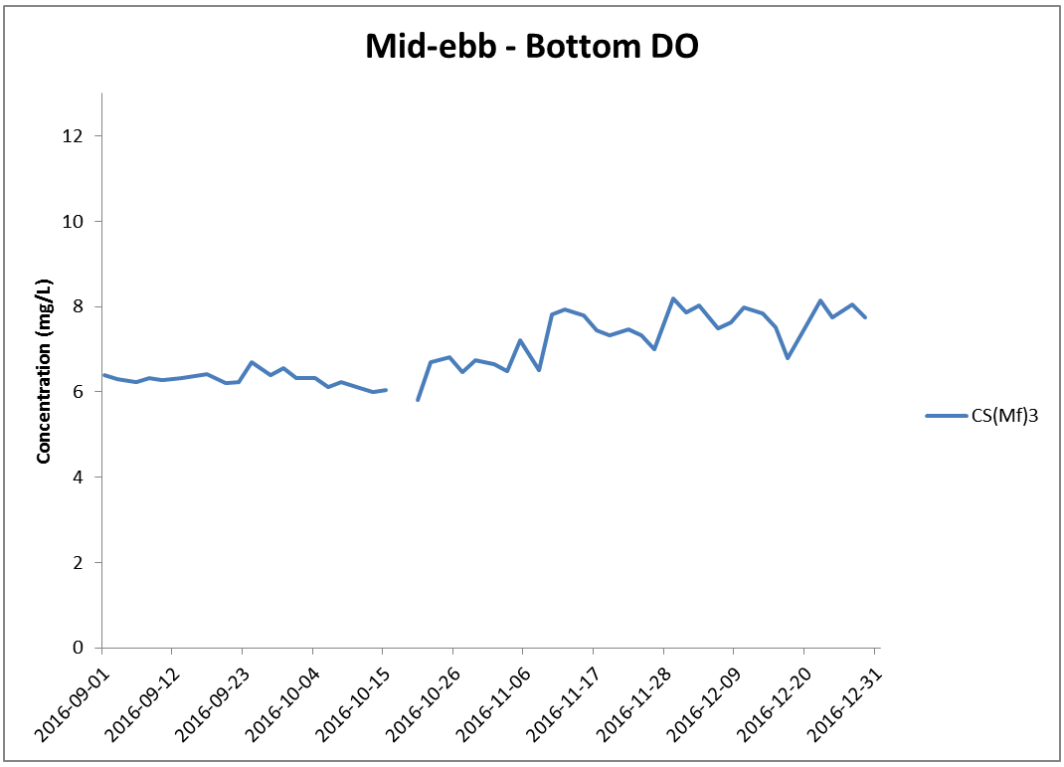


Figure J12 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in mid-depth waters during mid-flood tide between 1 September and 31 December 2016 at IS(Mf)16.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



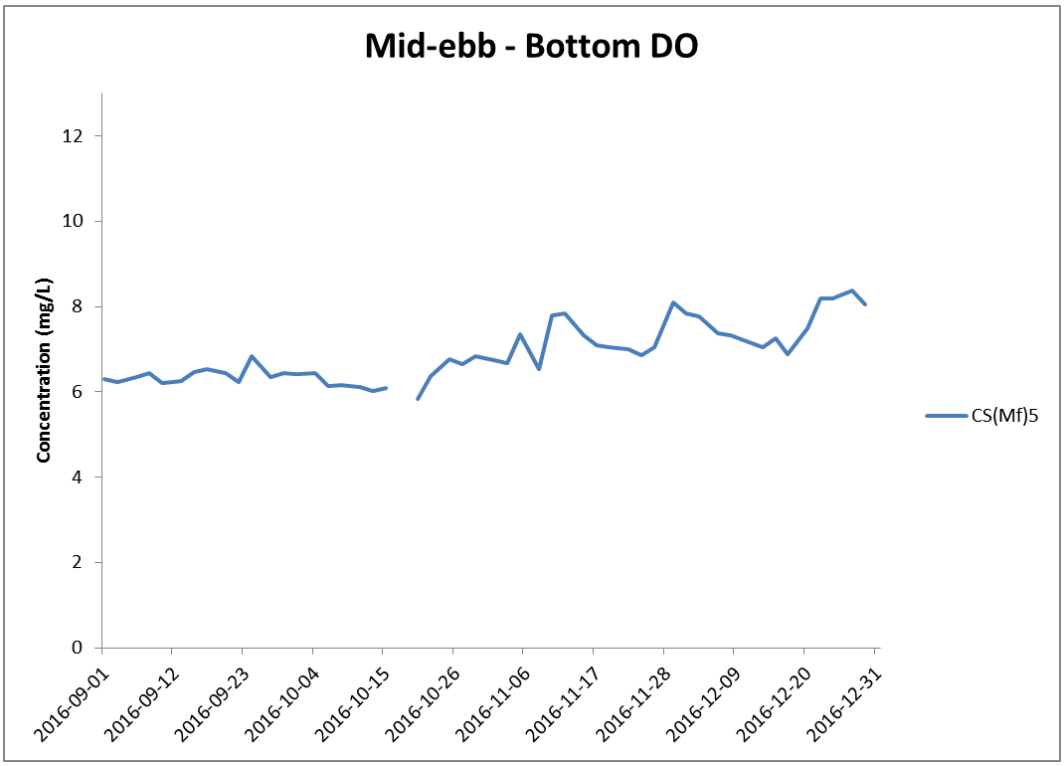
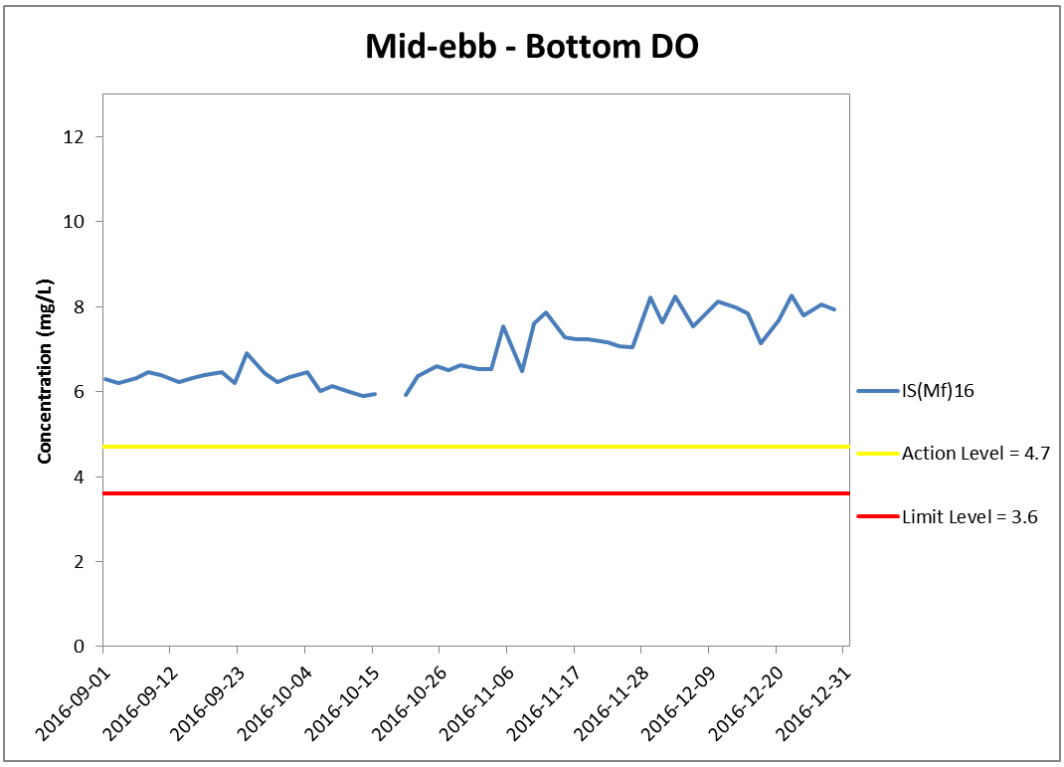


Figure J13 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



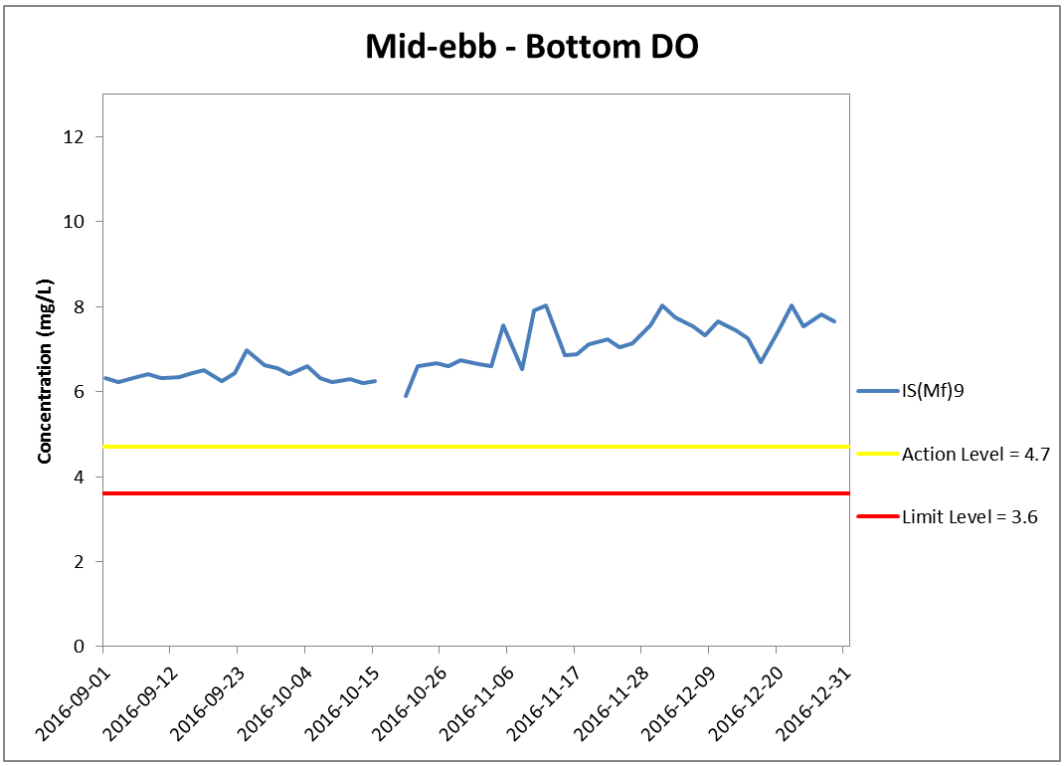
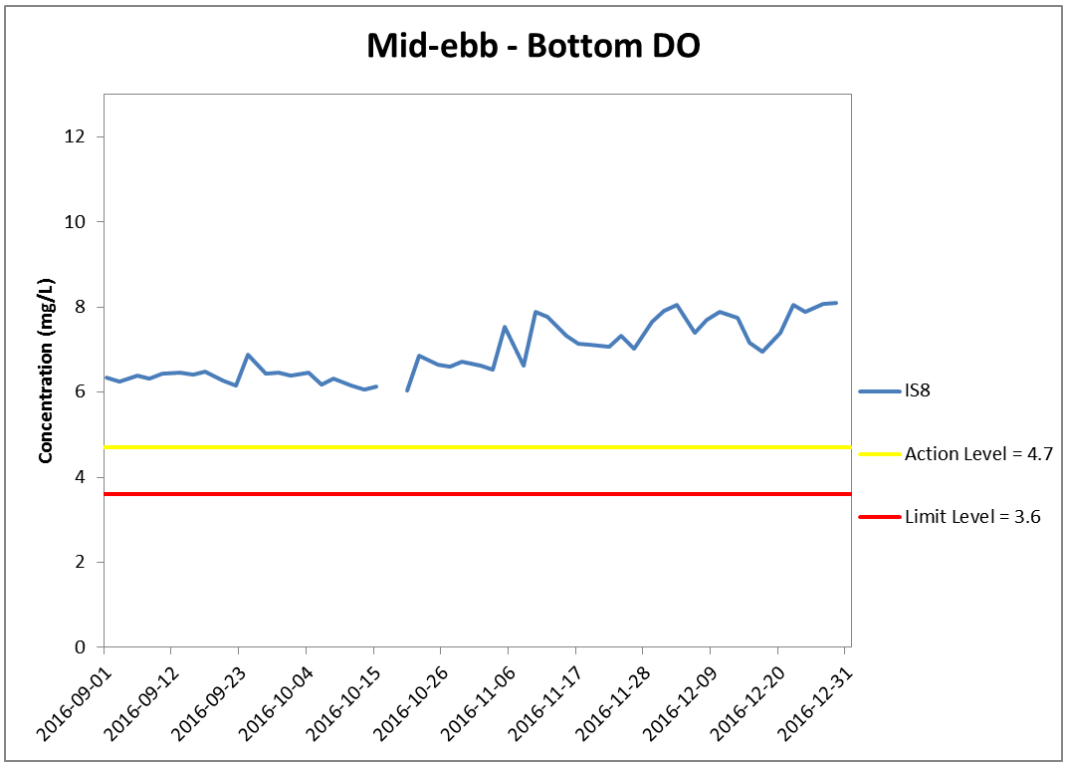


Figure J14 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



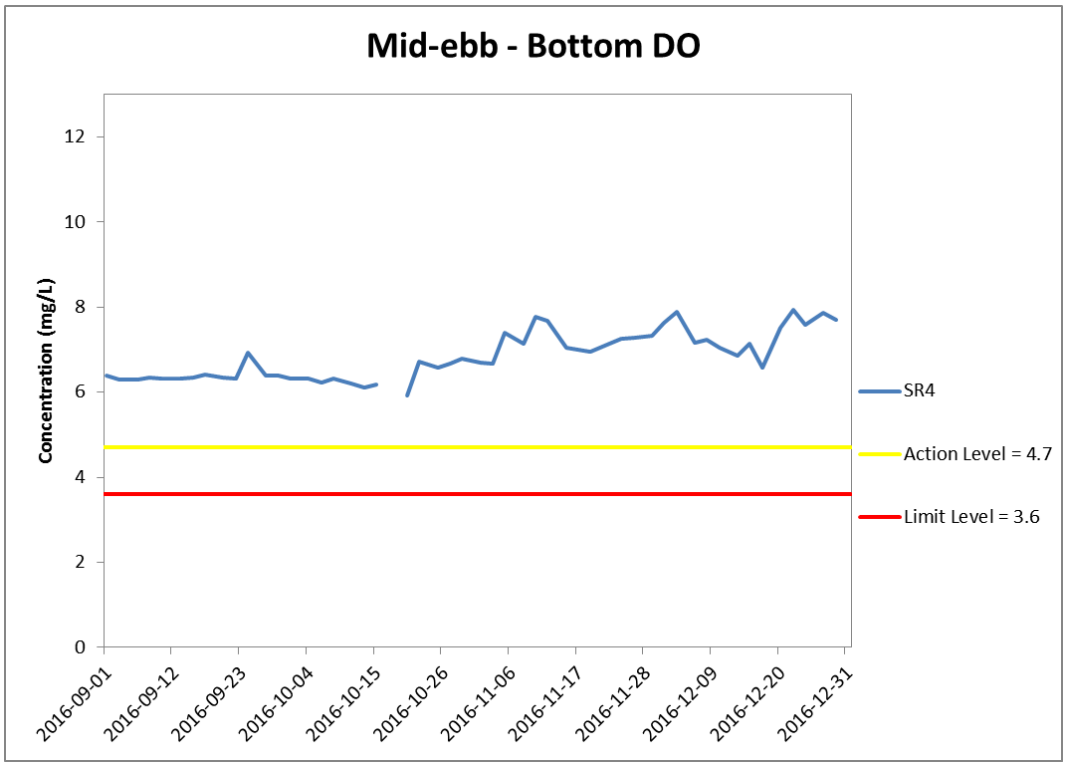


Figure J15 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

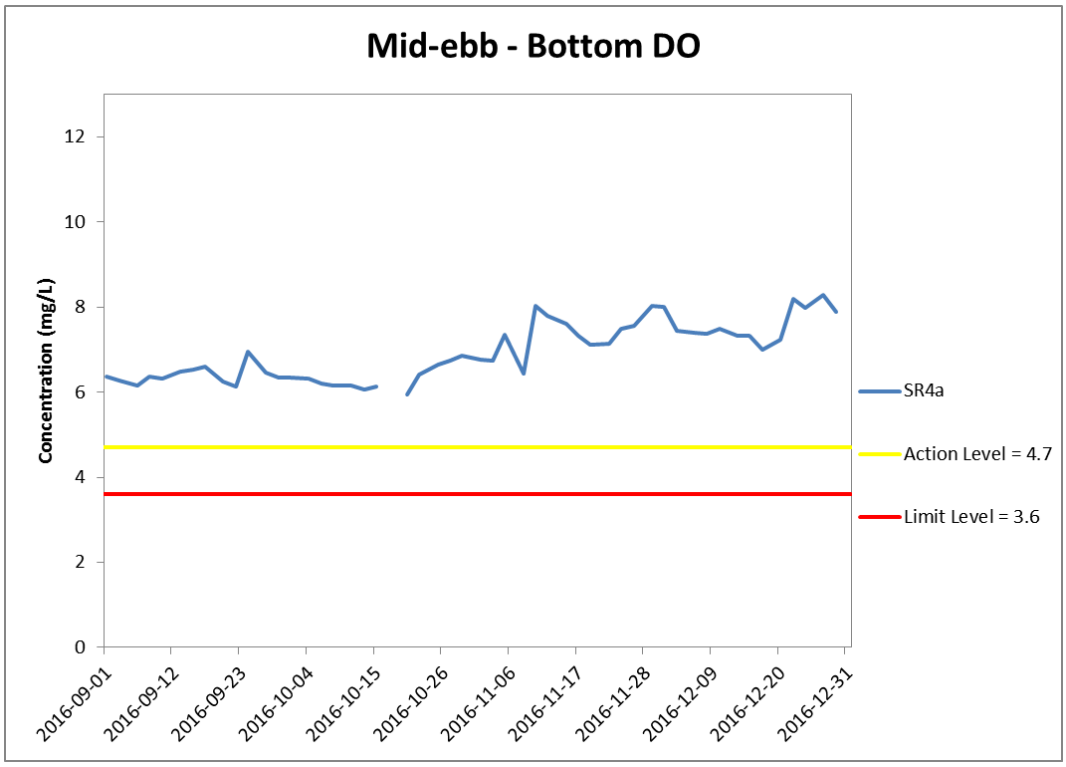
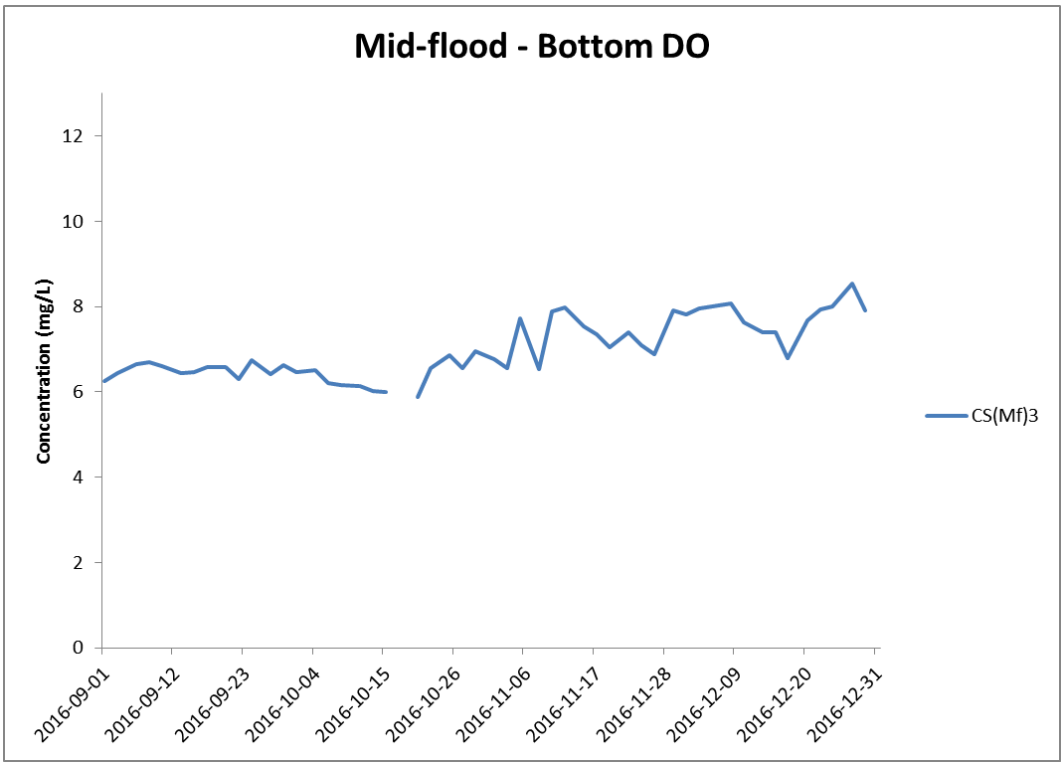


Figure J16 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-ebb tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



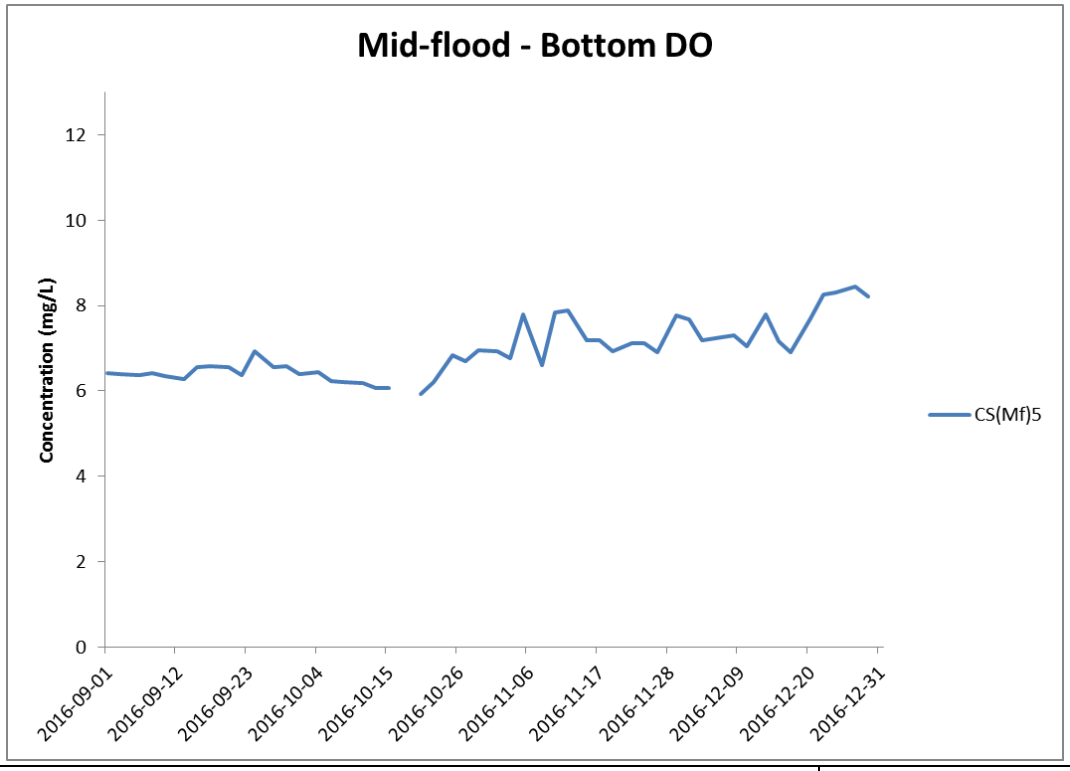


Figure J17 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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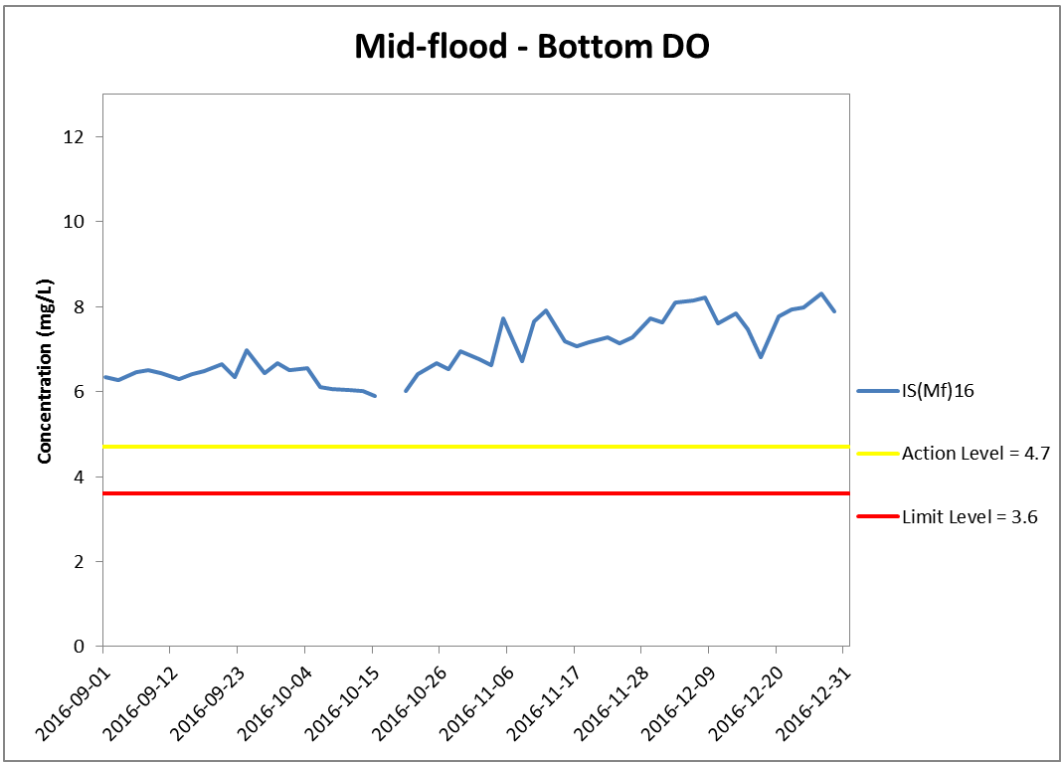

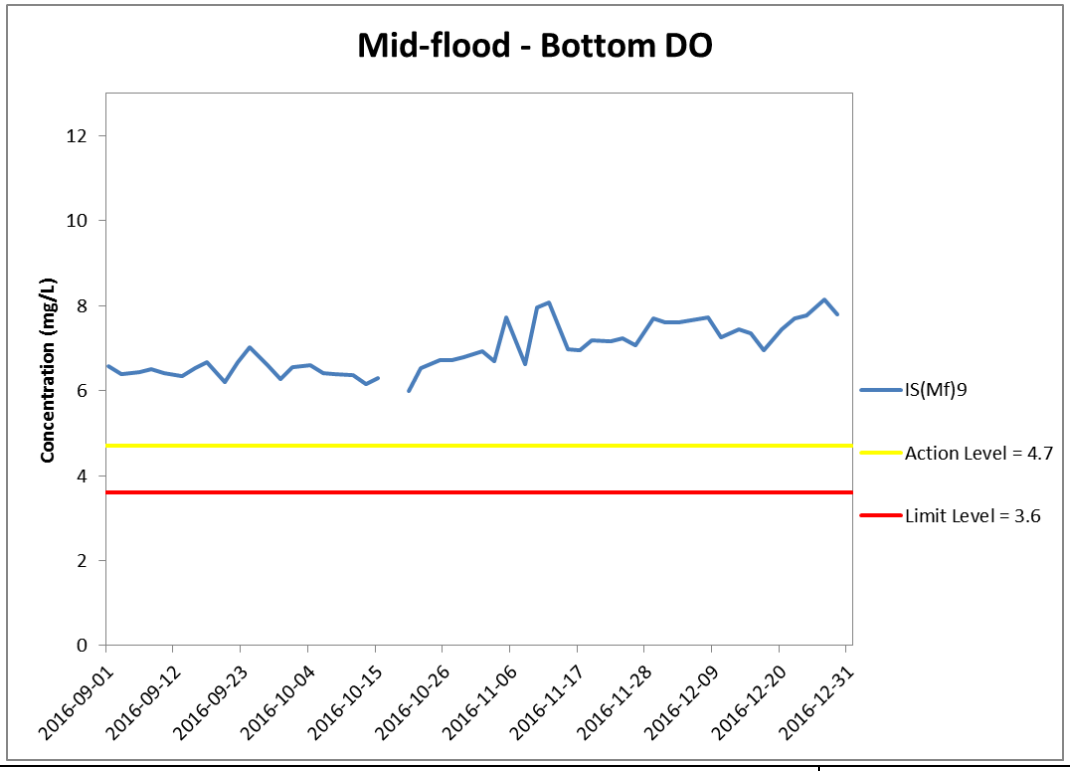

Figure J18 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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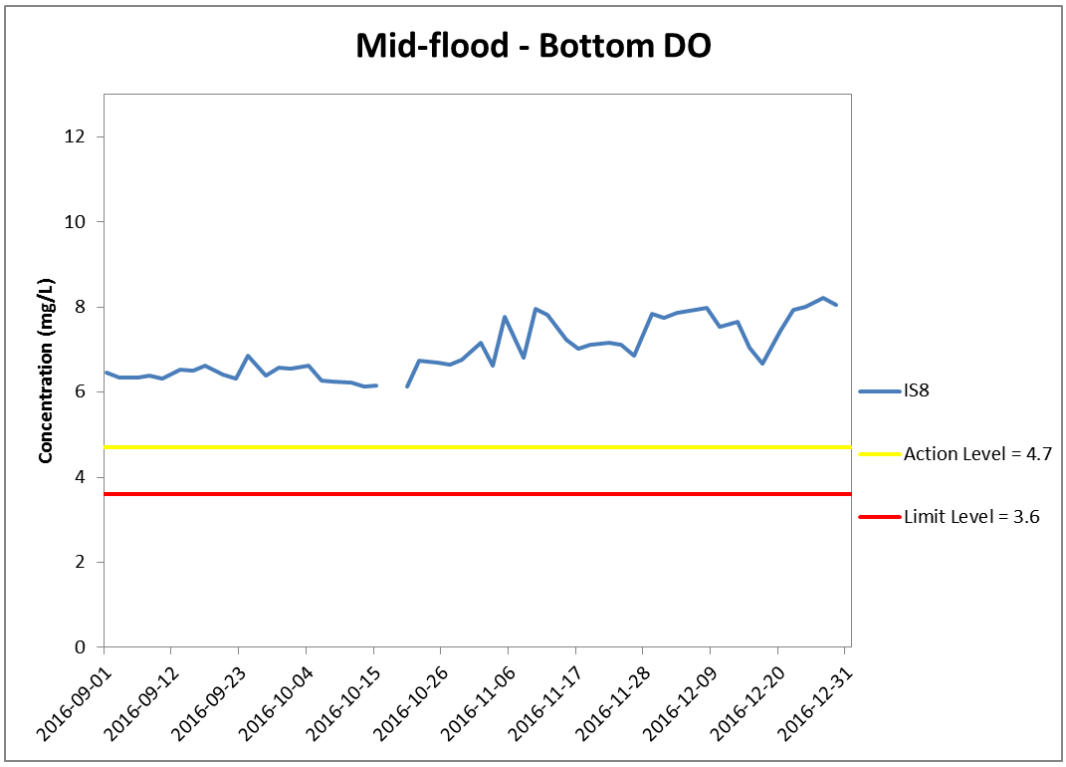


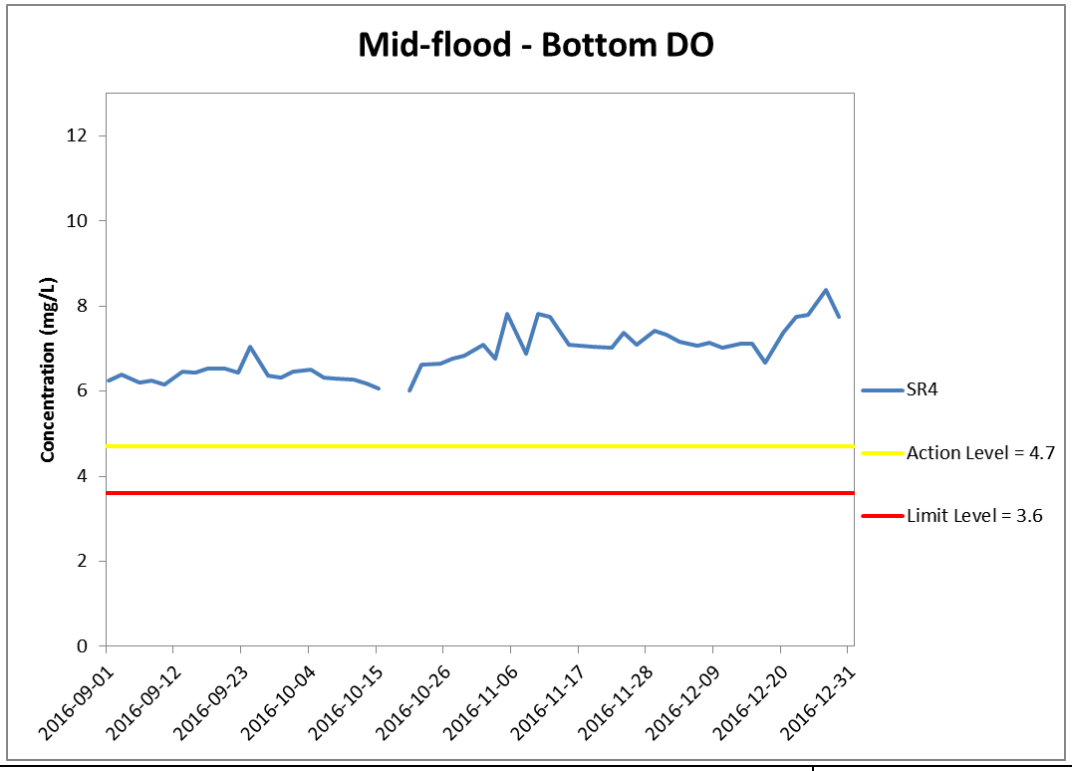


Figure J19 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

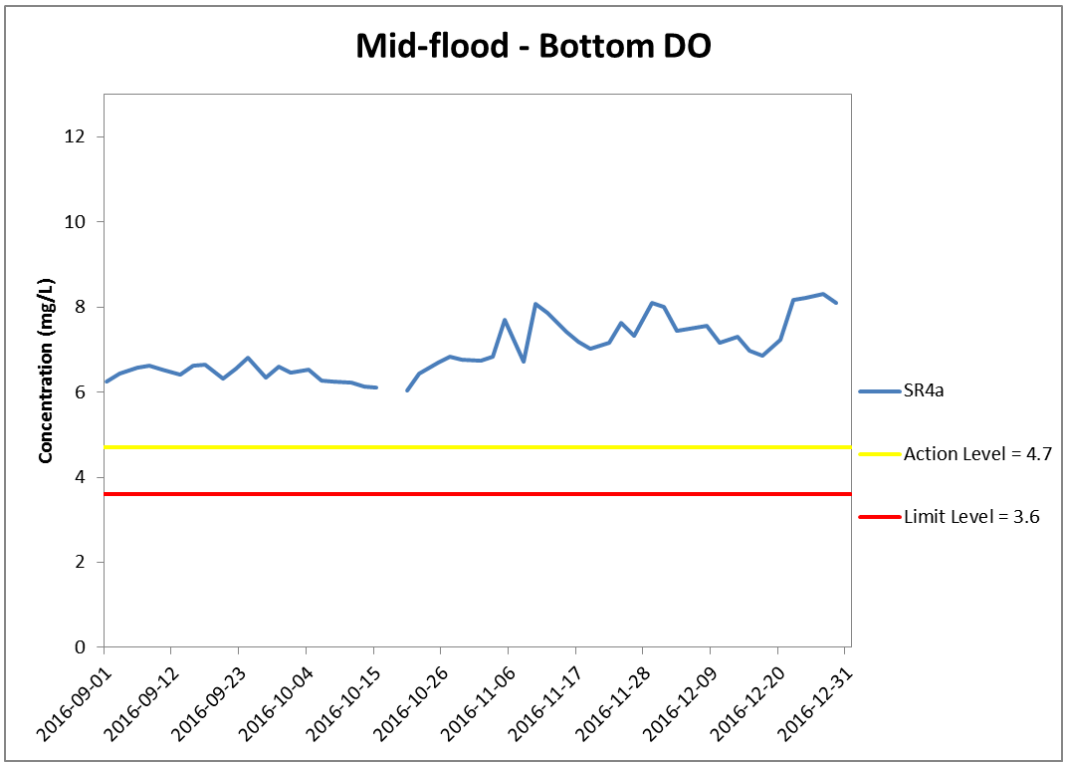
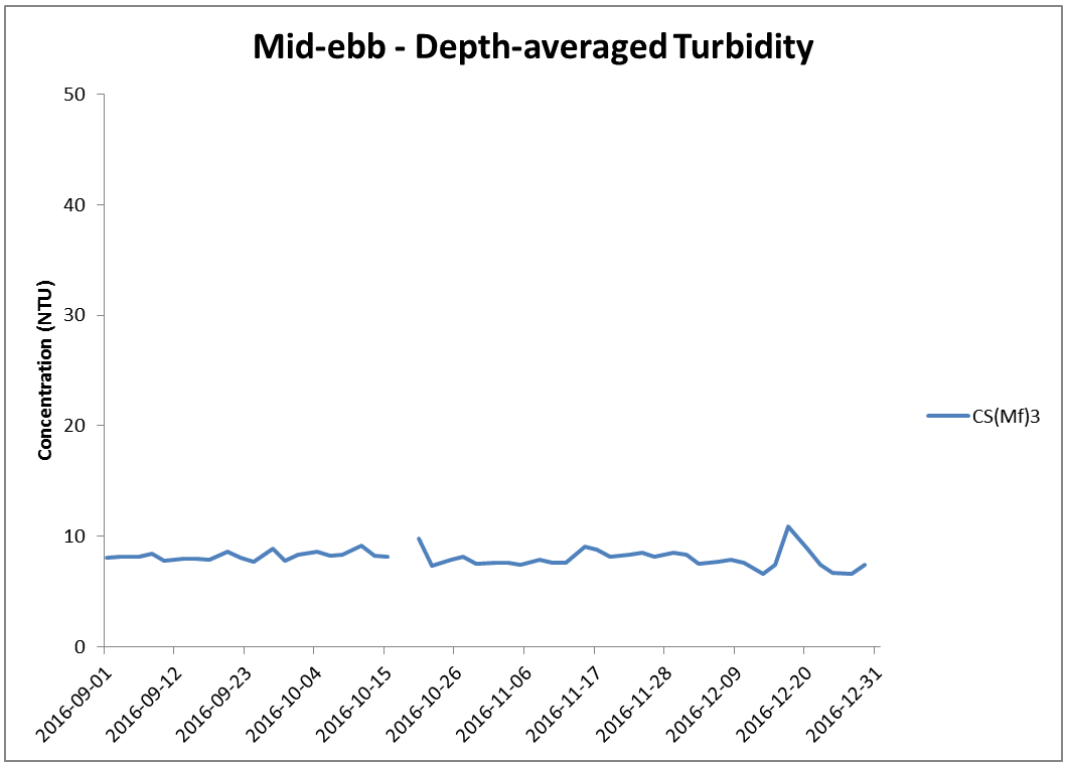


Figure J20 Impact Monitoring – Mean Level of Dissolved Oxygen (mg/L) in bottom waters during mid-flood tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



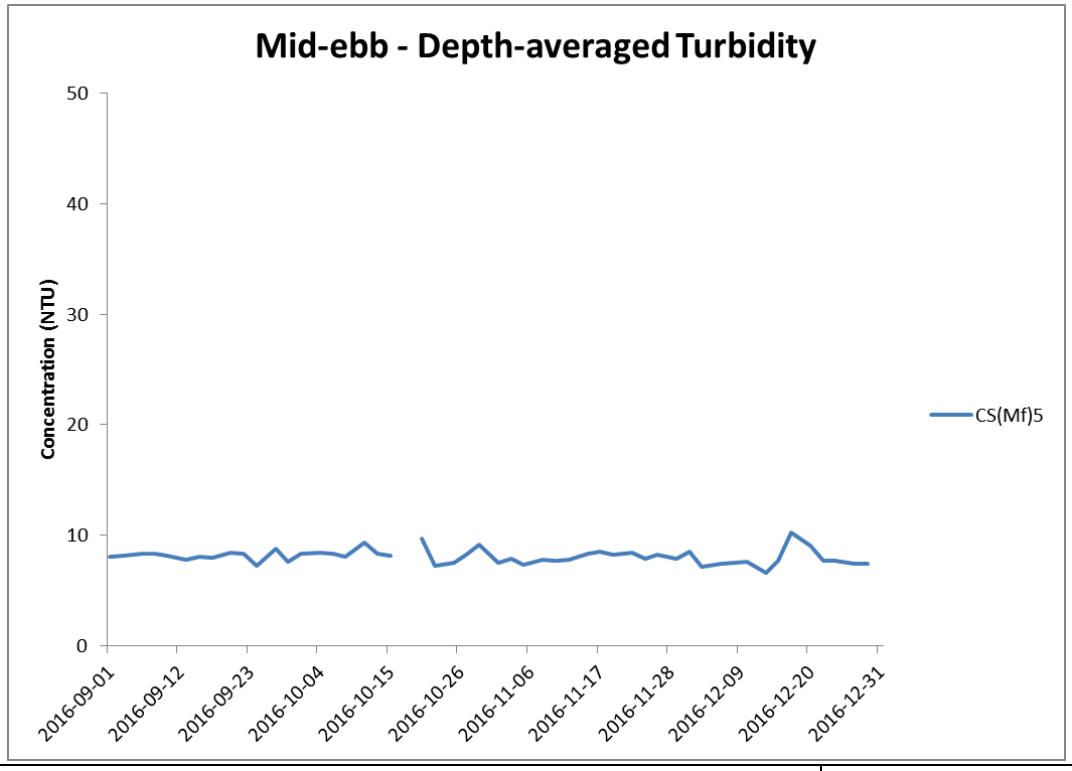
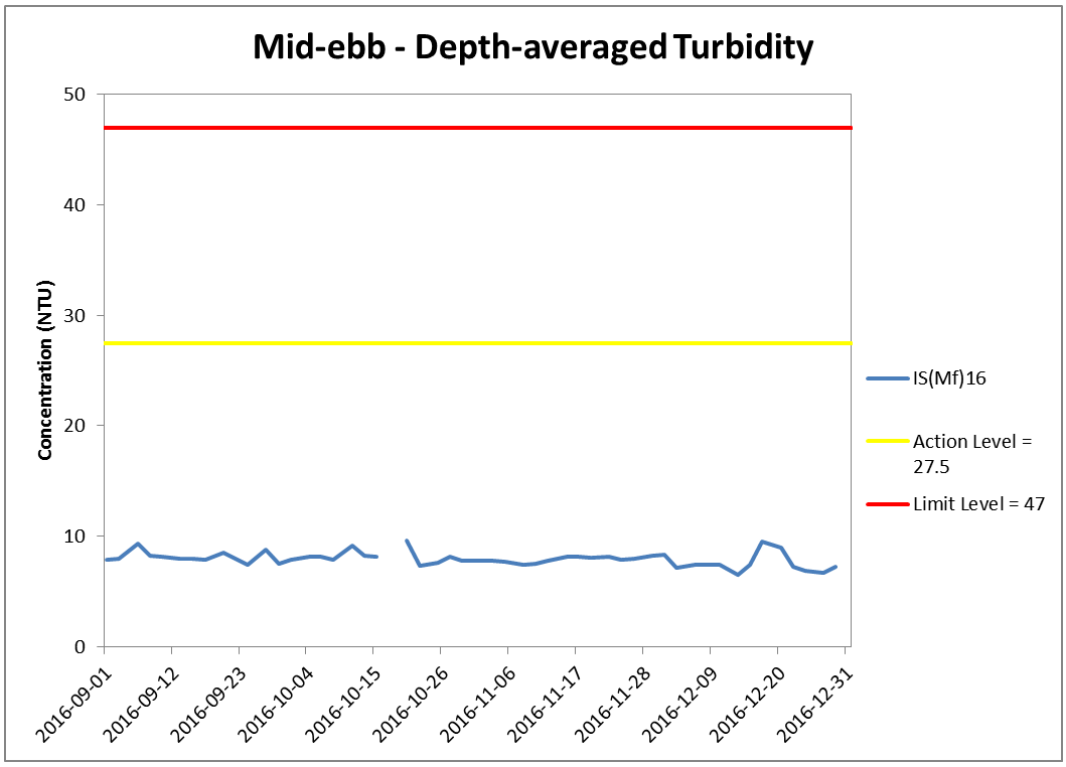


Figure J21 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.



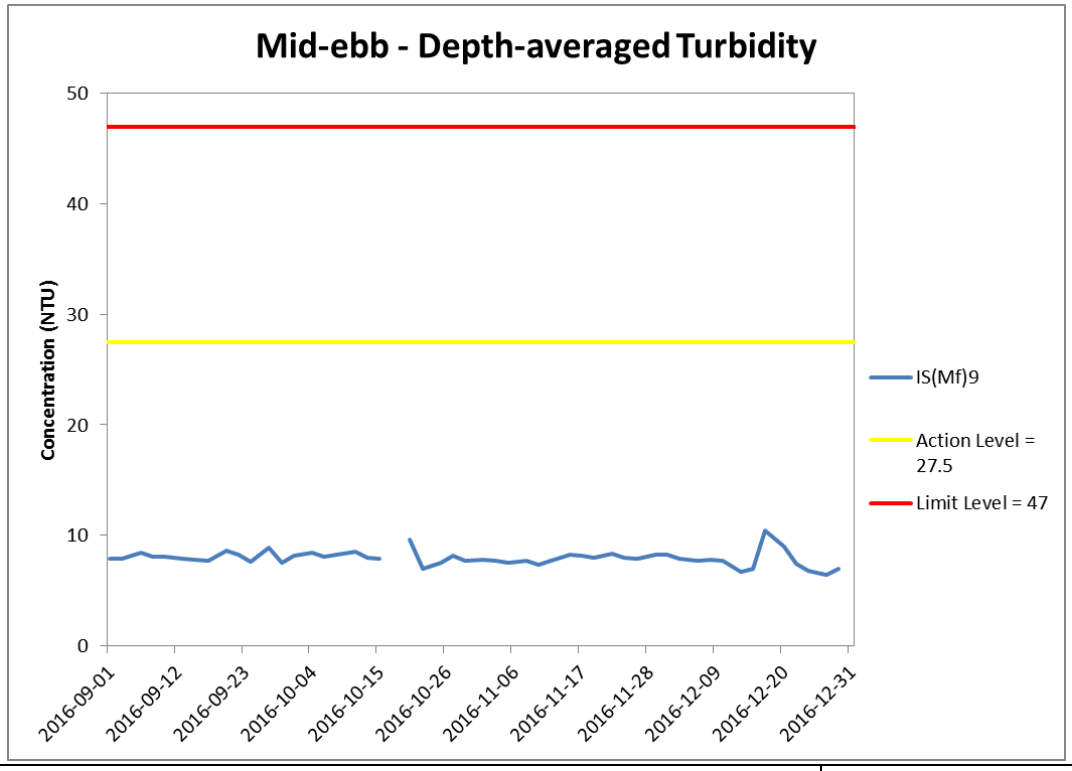
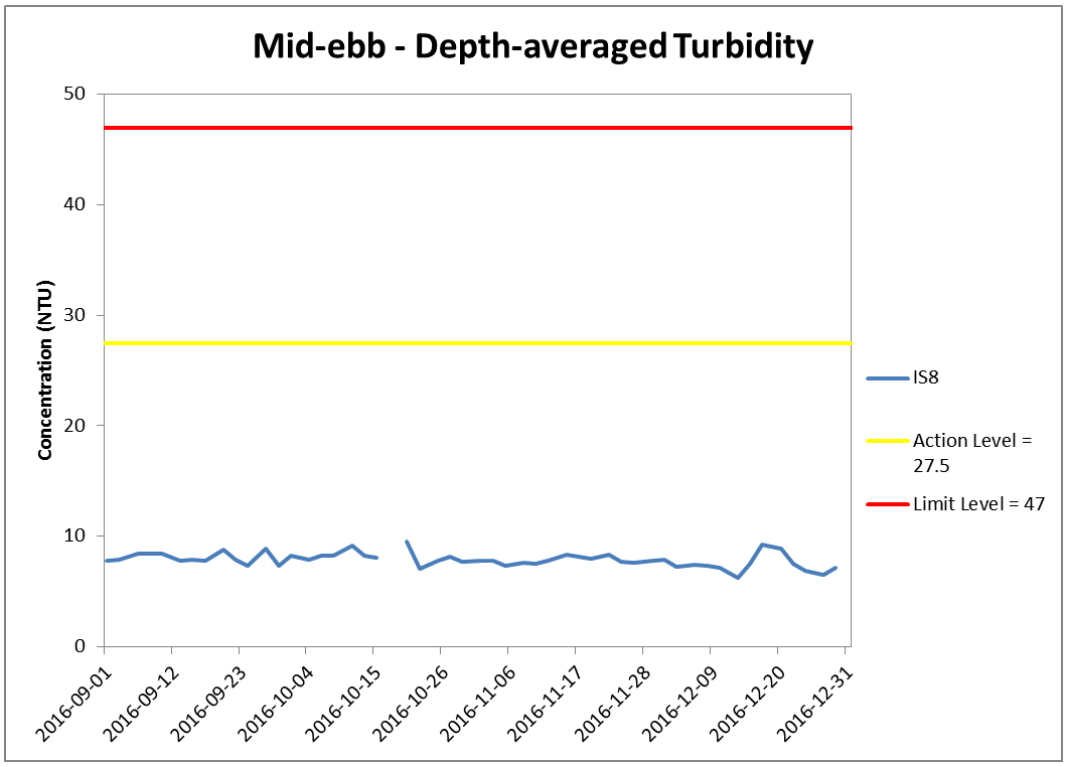


Figure J22 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



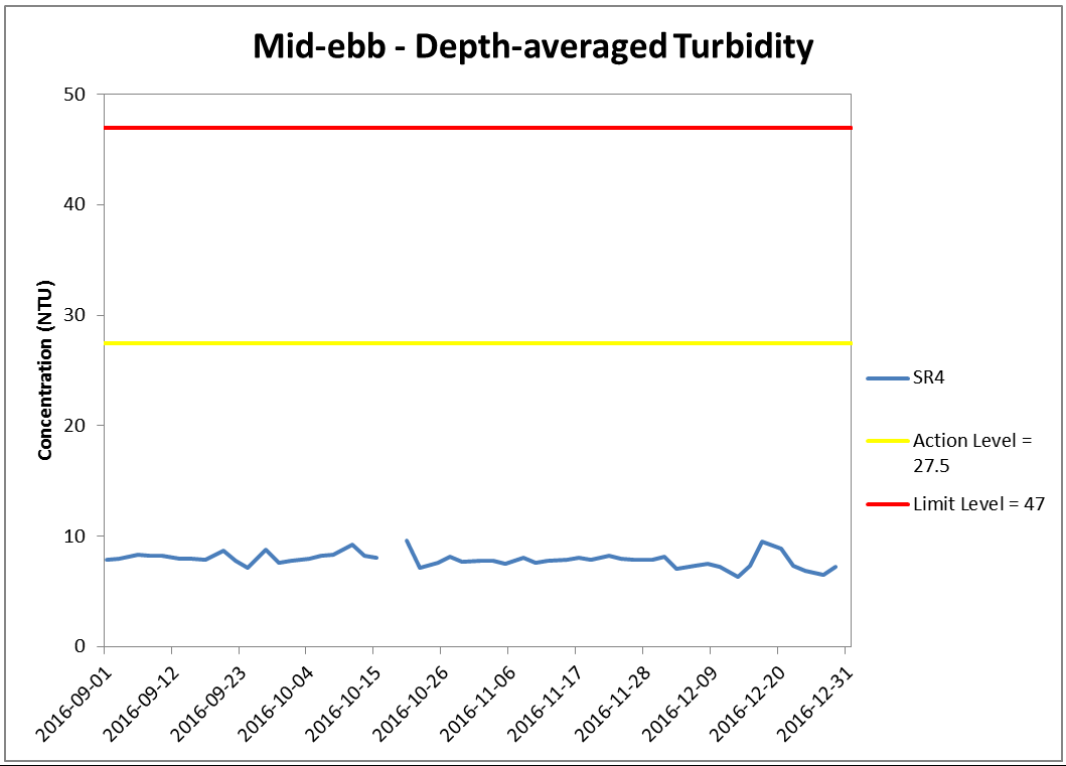


Figure J23 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

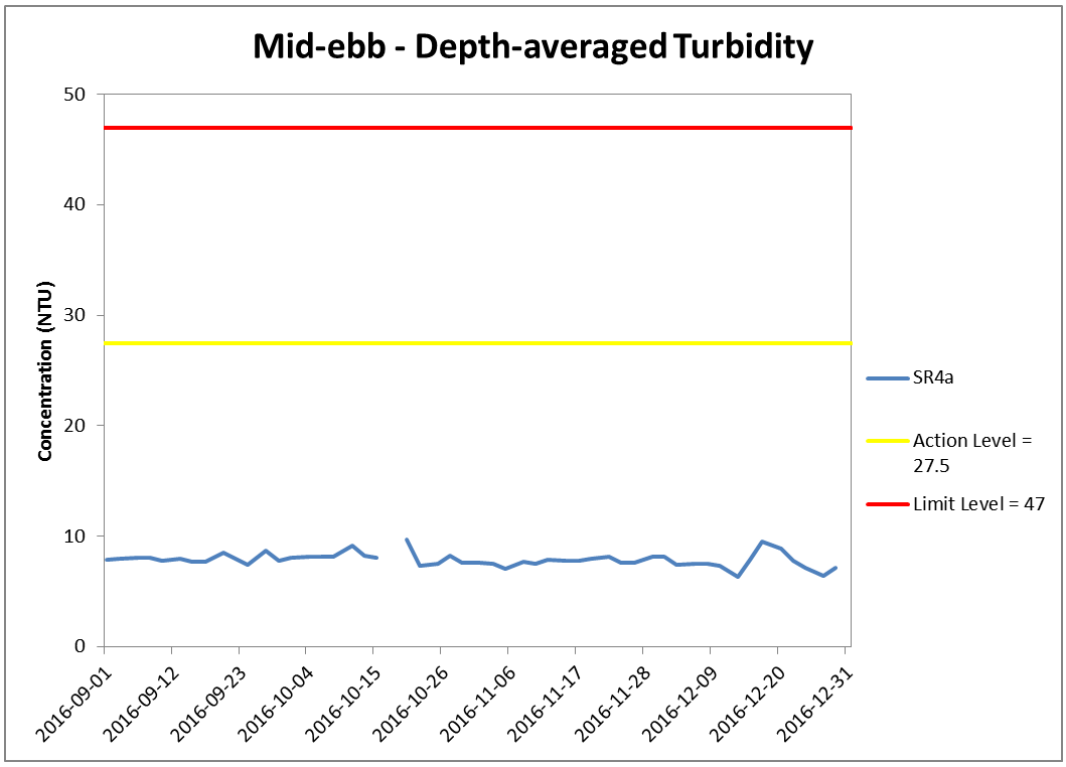


Figure J24 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-ebb tide between1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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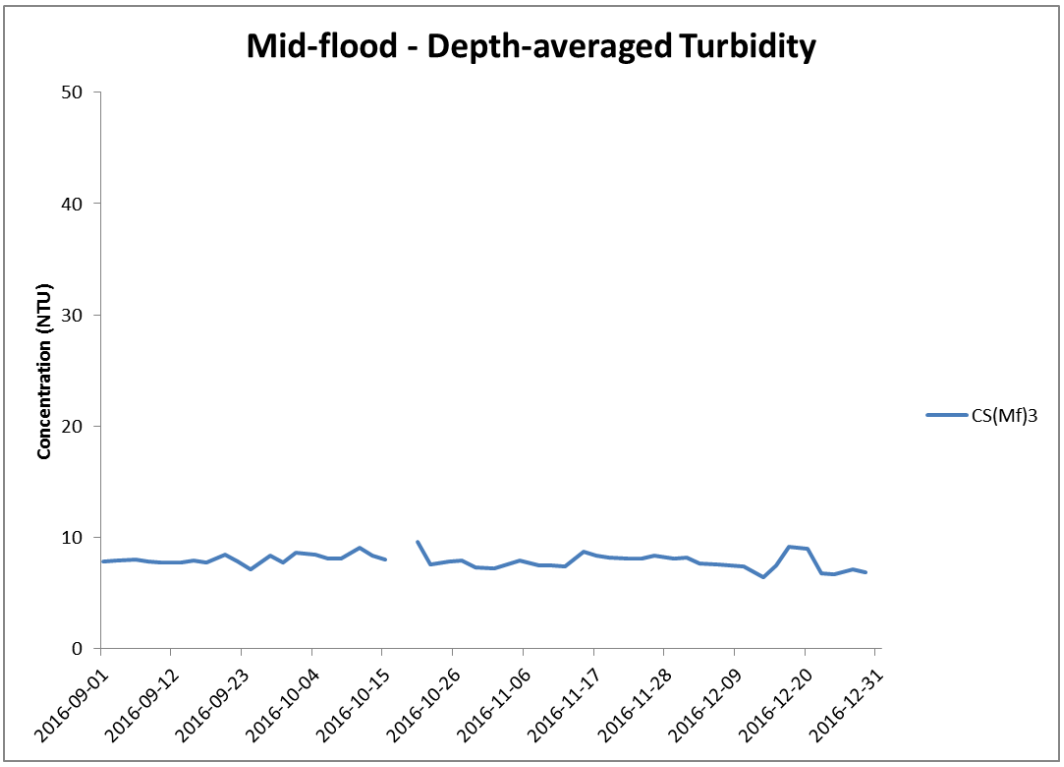


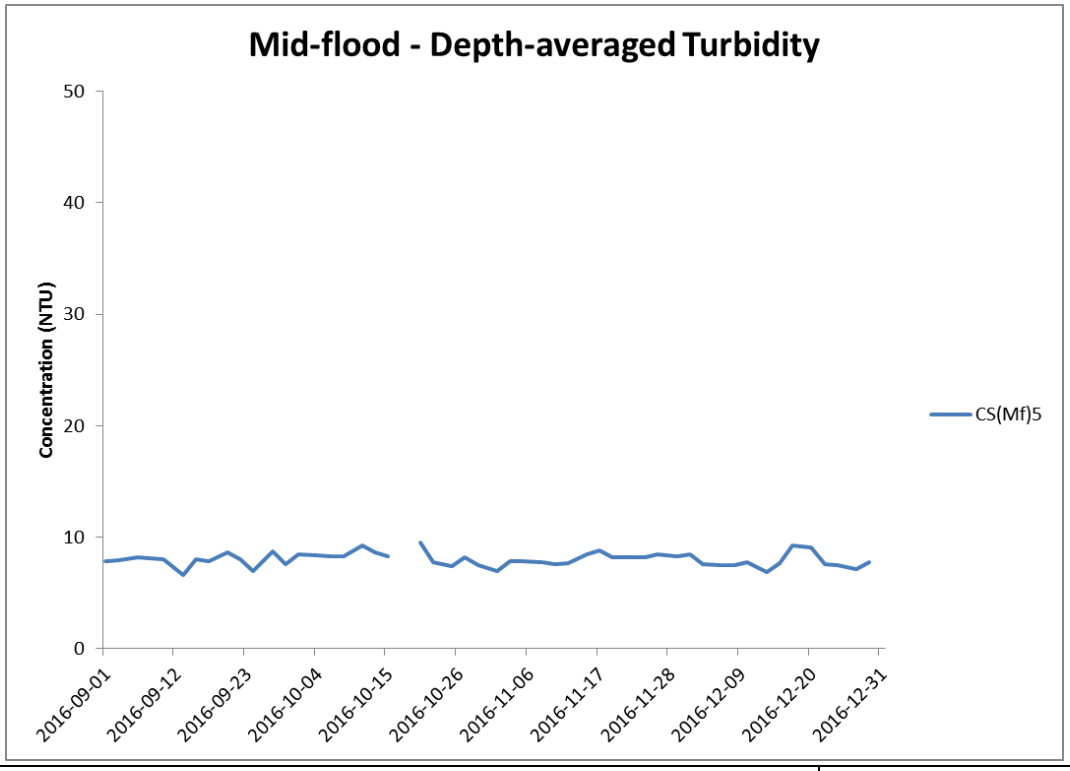
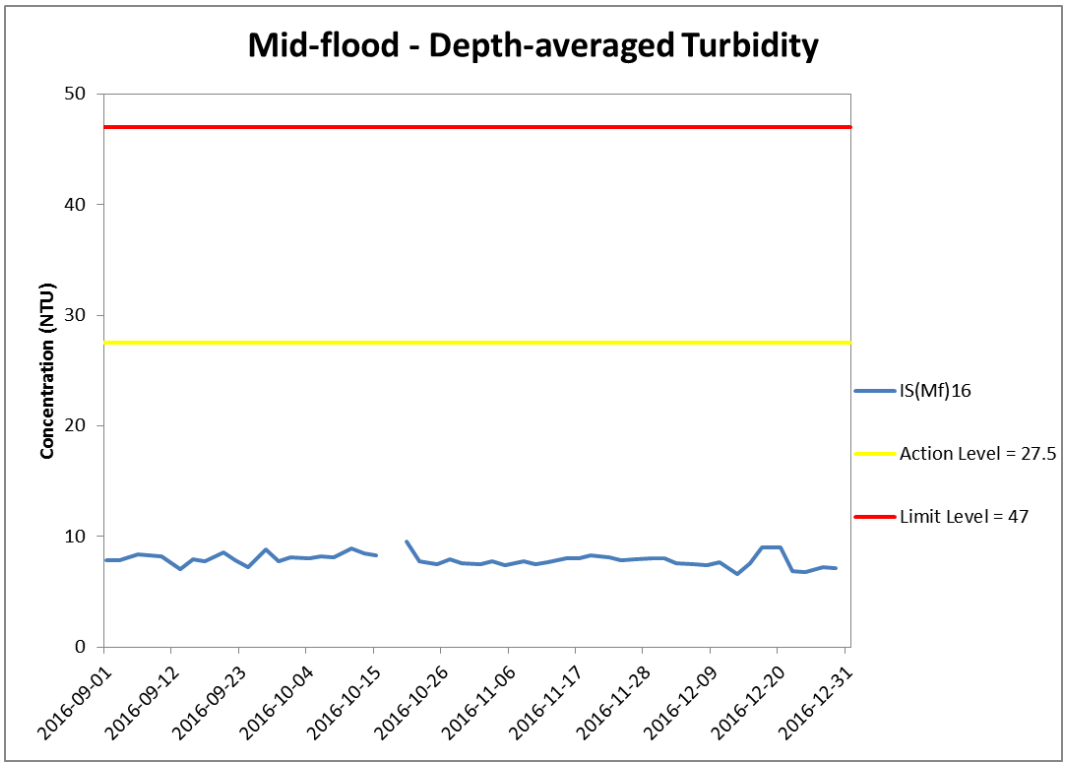


Figure J25 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(MF)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.



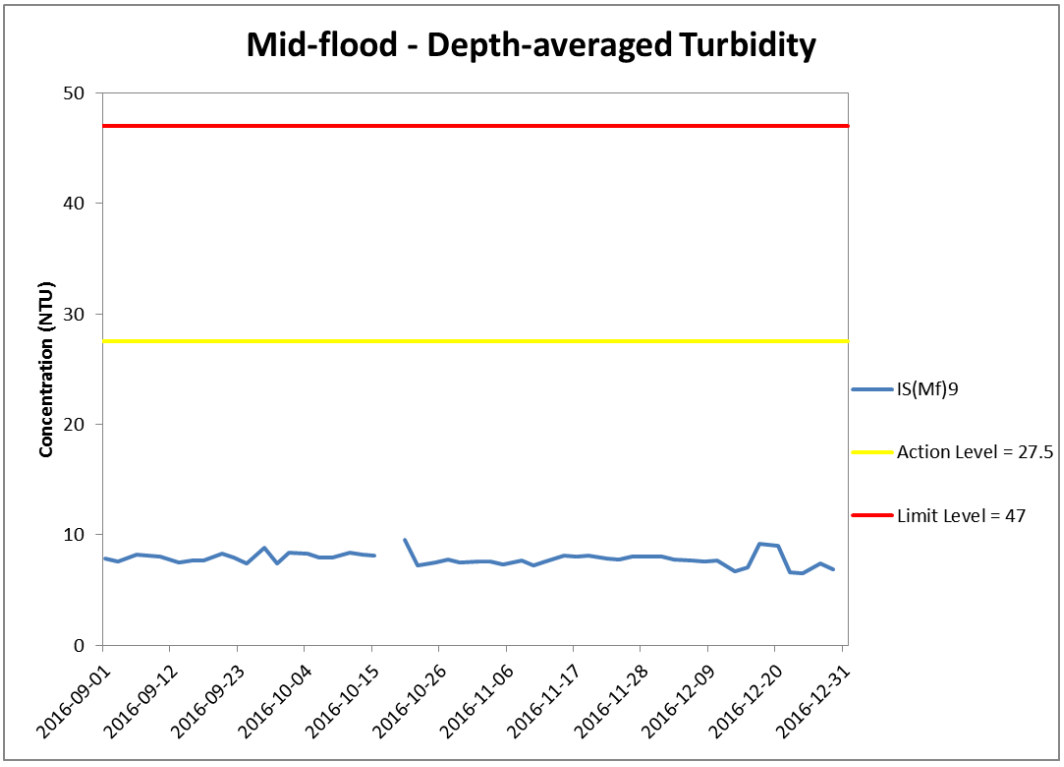


Figure J26 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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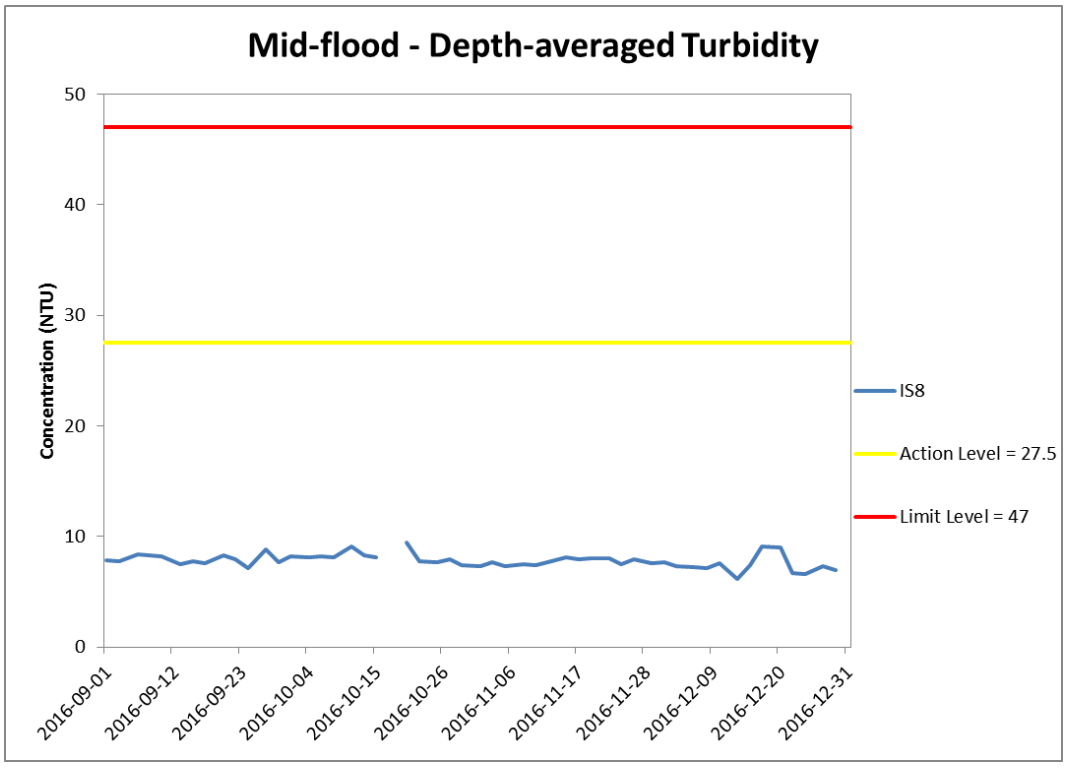

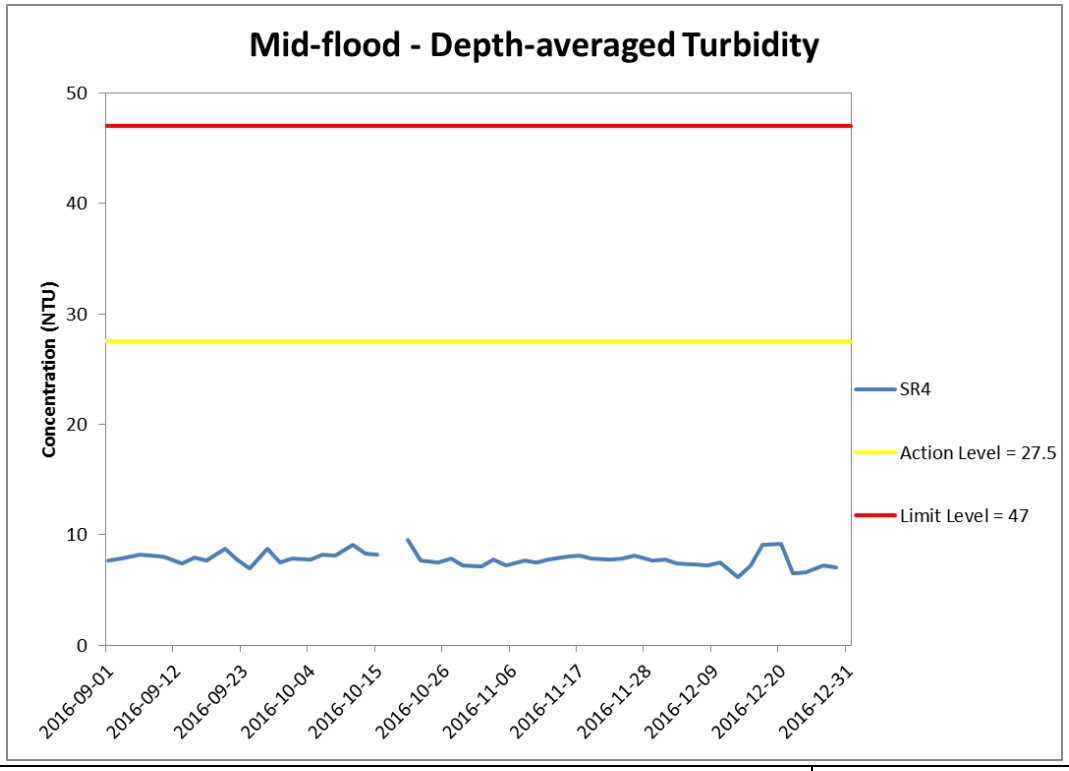

`Figure J27 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

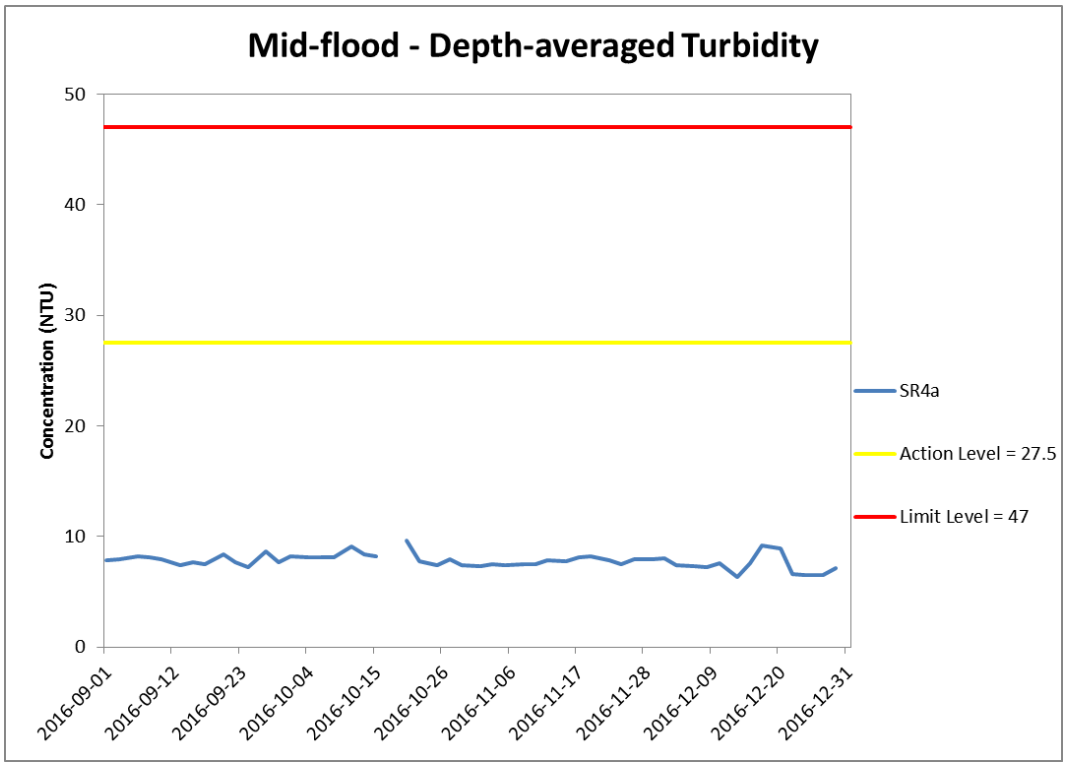

Figure J28 Impact Monitoring – Mean Level of depth-averaged Turbidity (NTU) during mid-flood tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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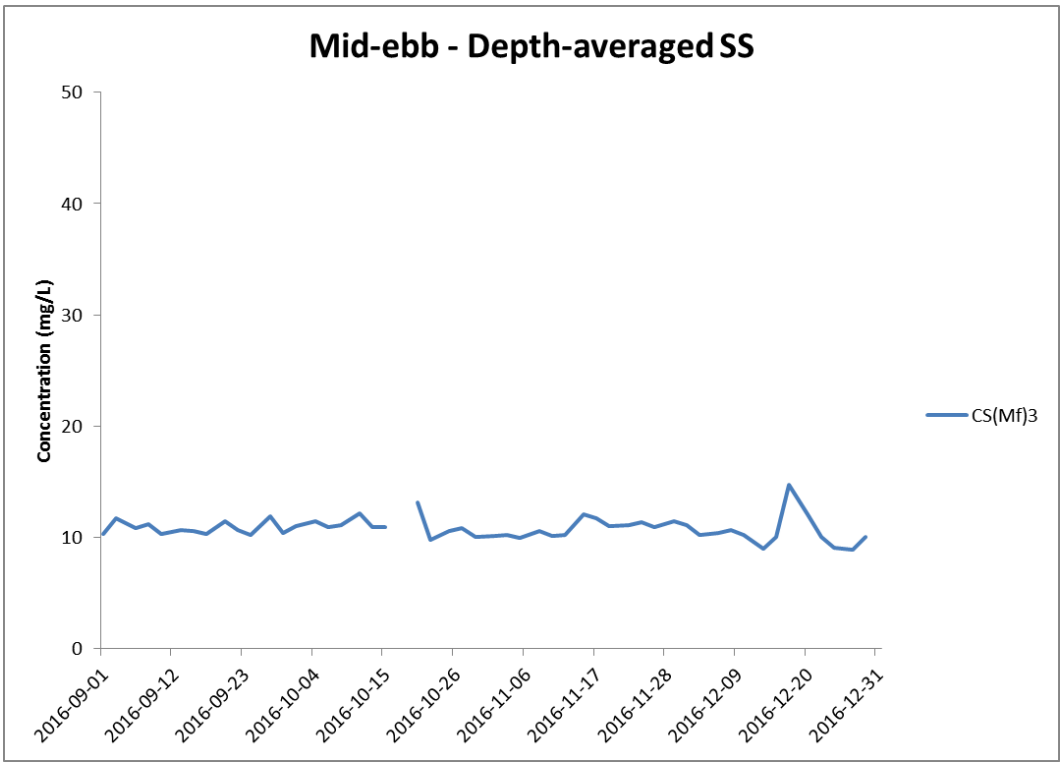

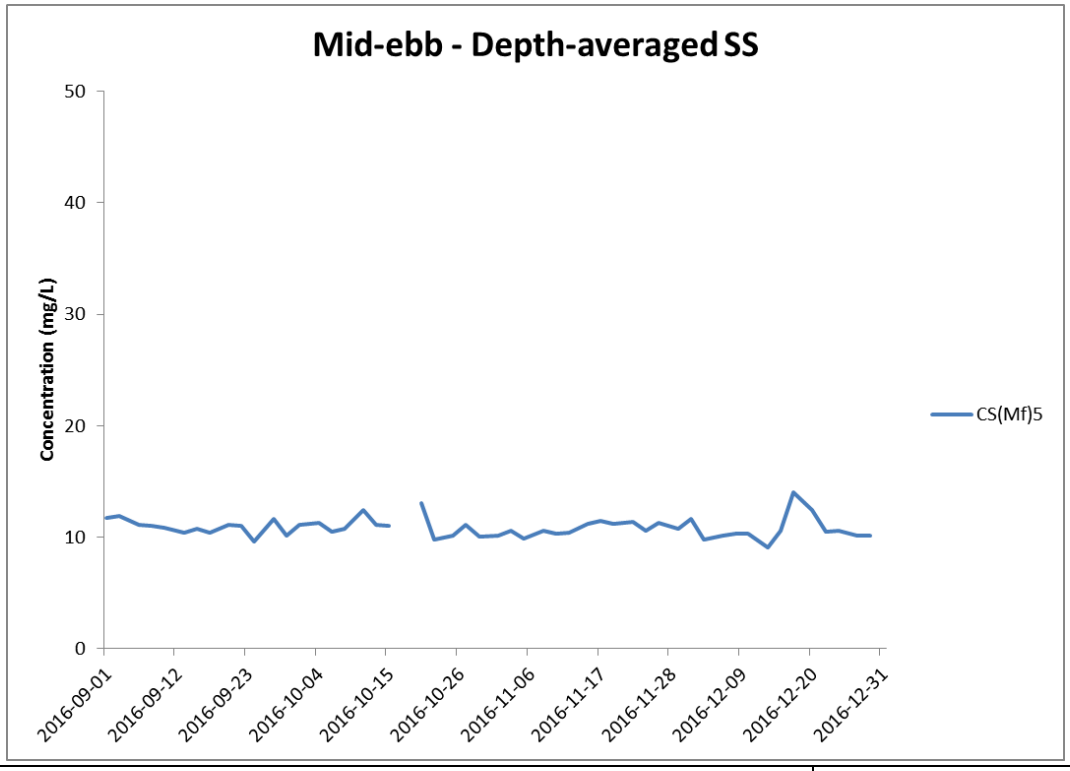

Figure J29 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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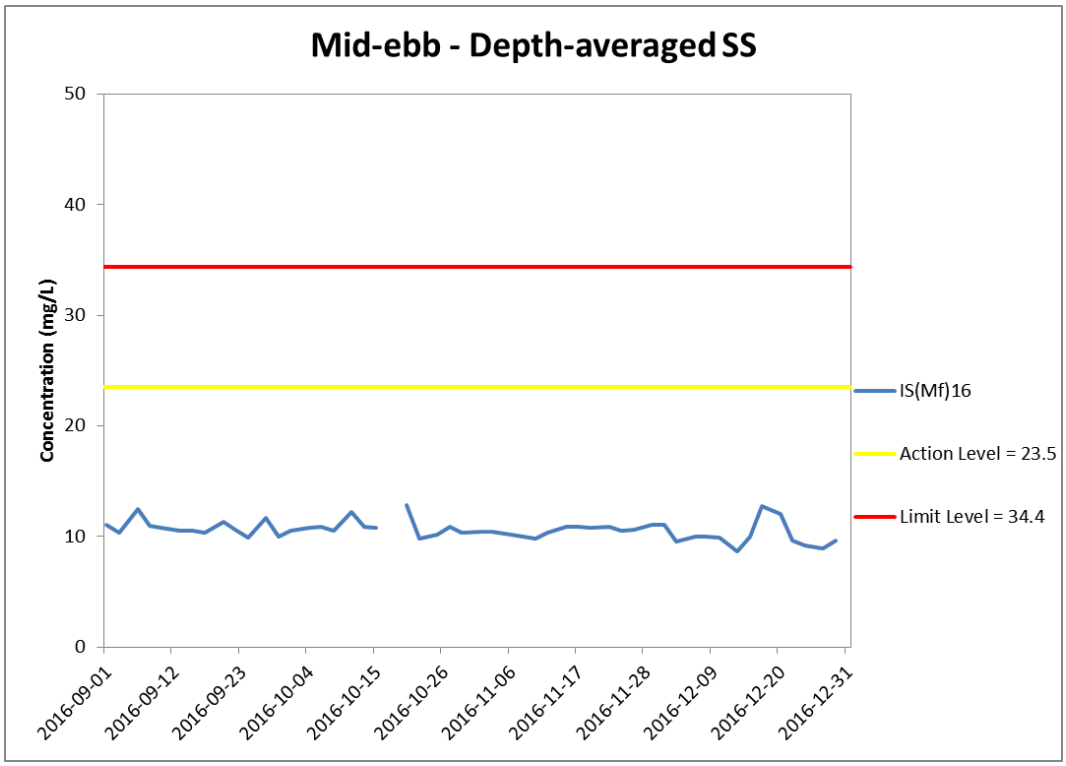

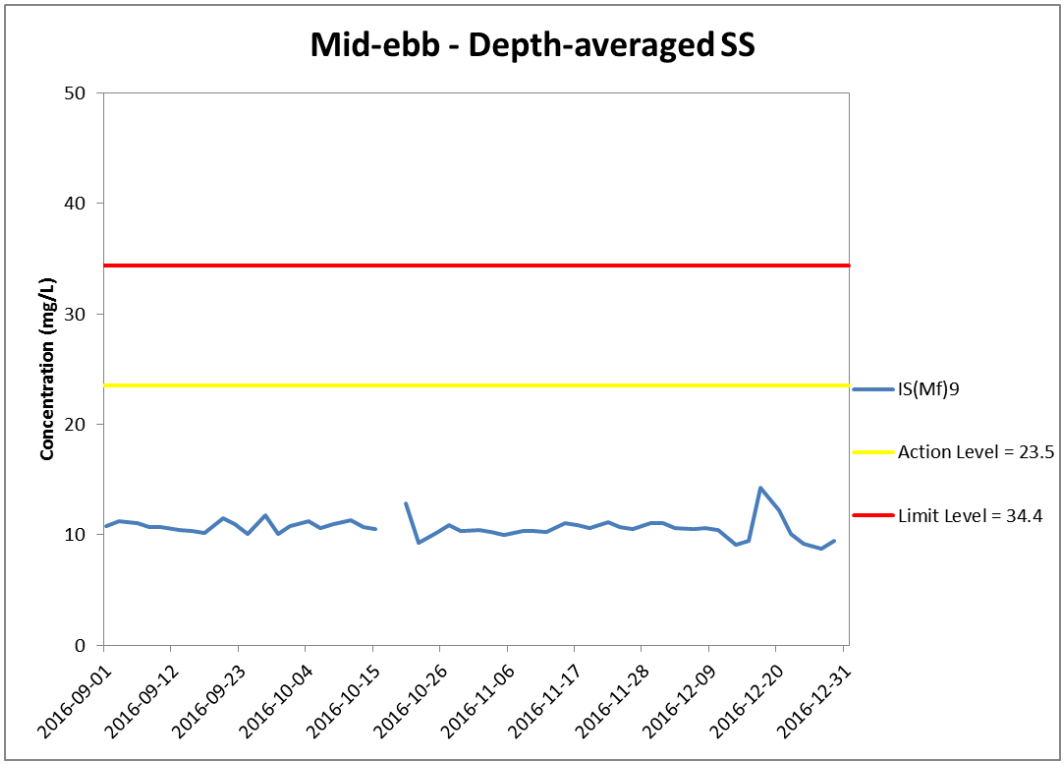

Figure J30 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

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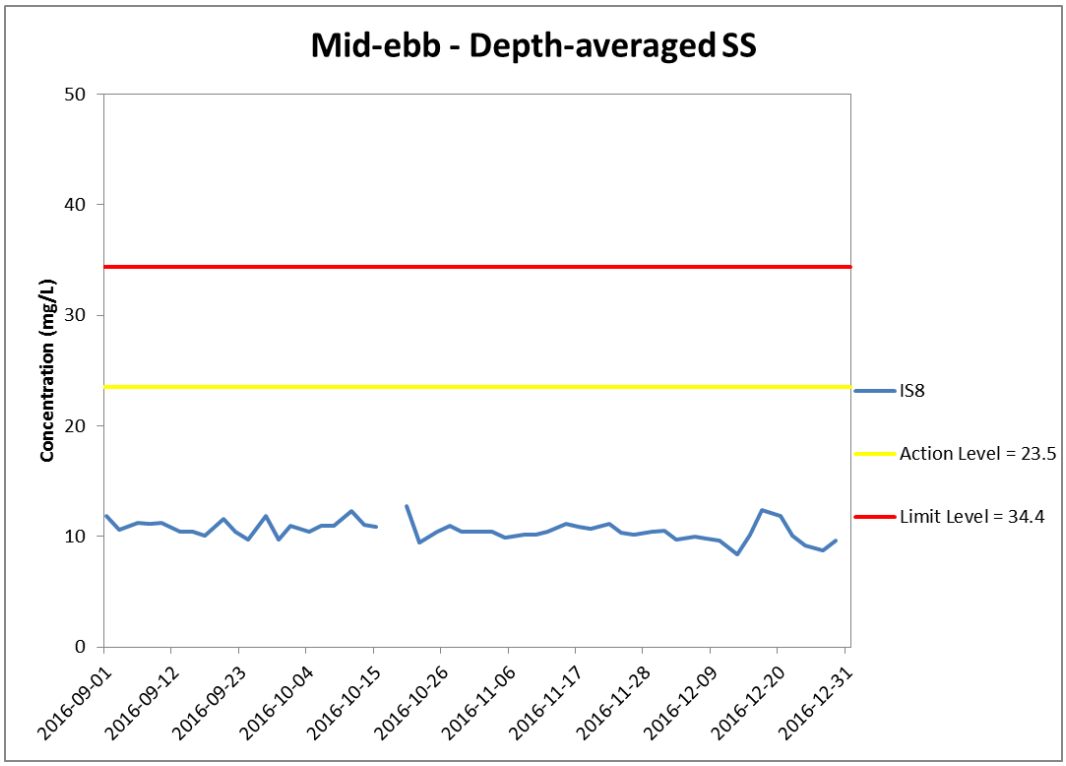


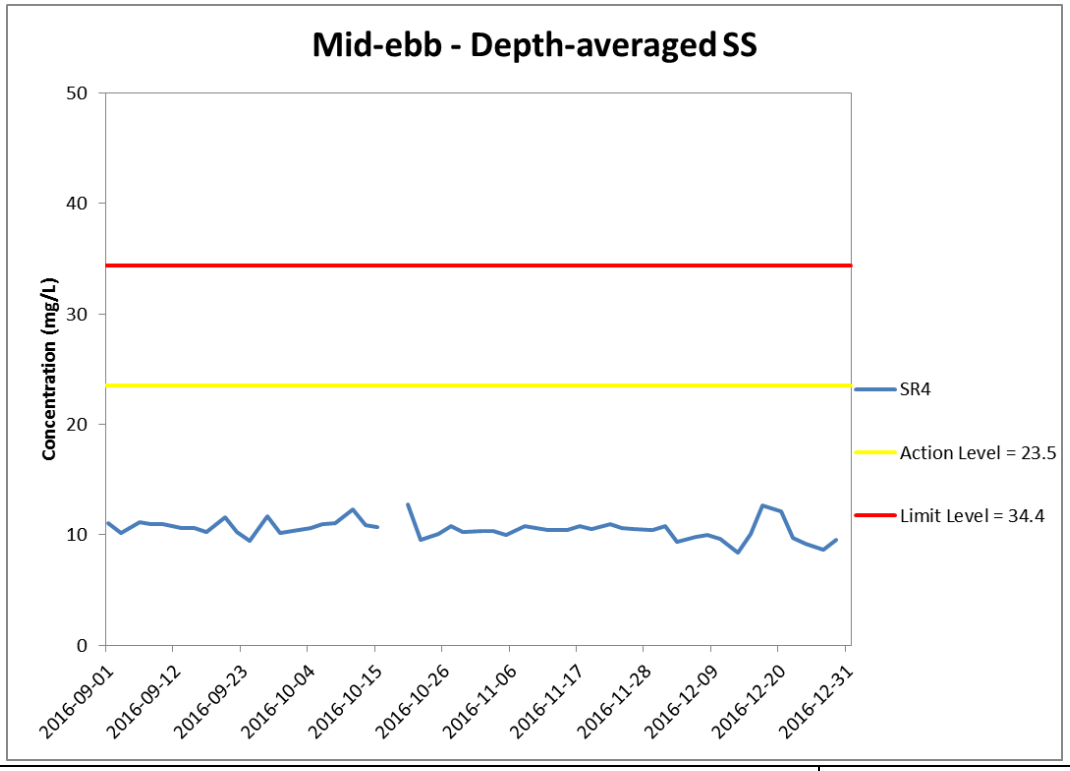


Figure J31 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

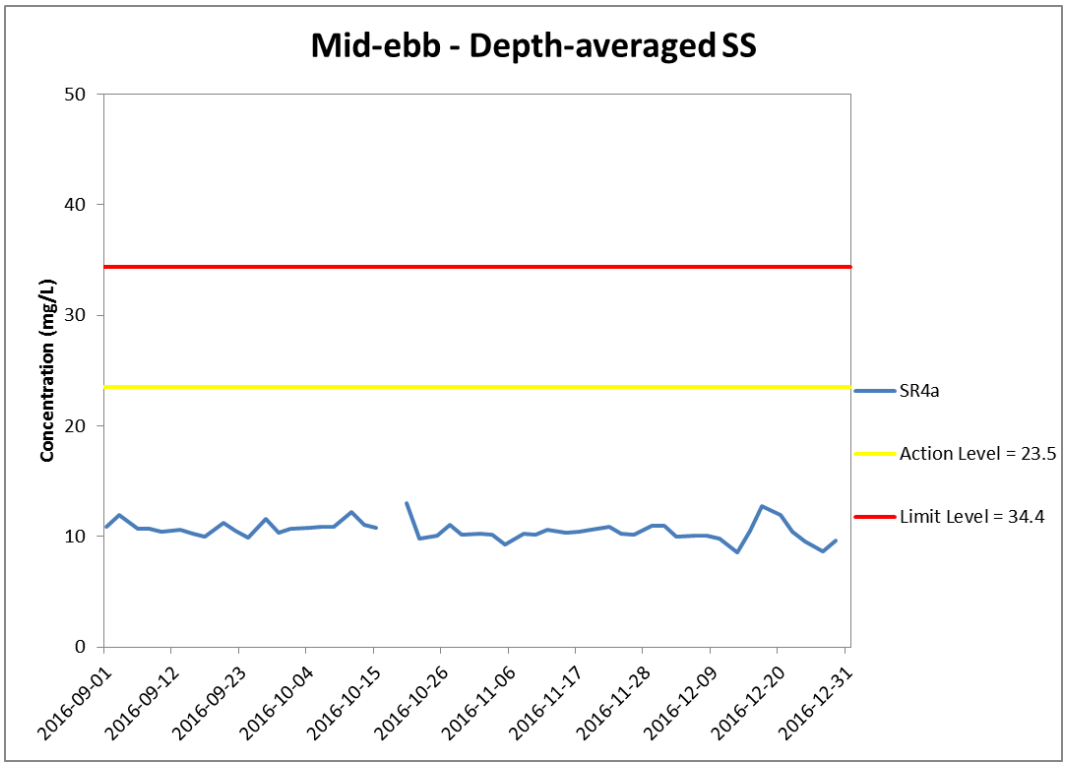
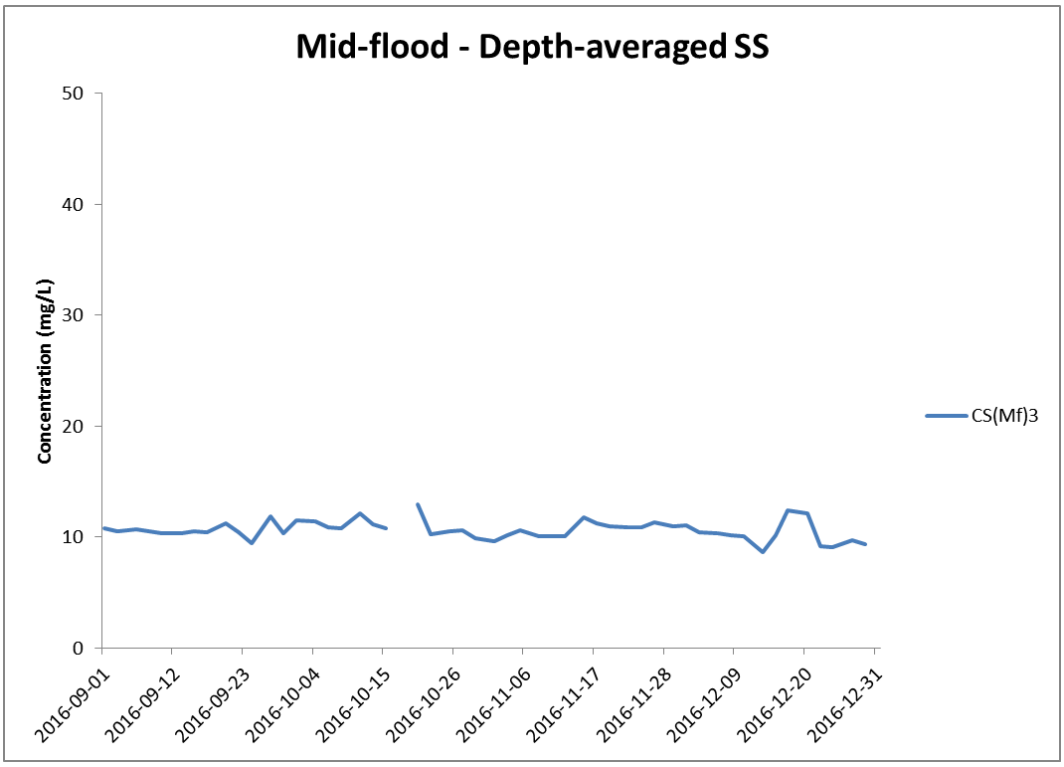


Figure J32 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-ebb tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



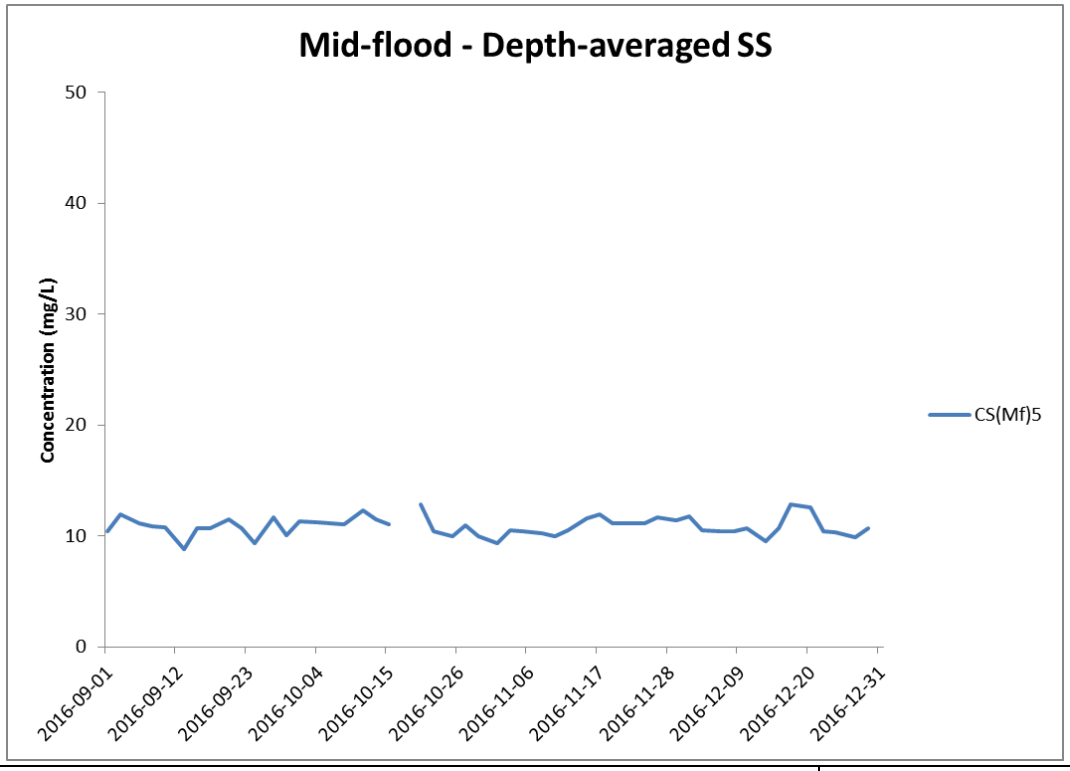
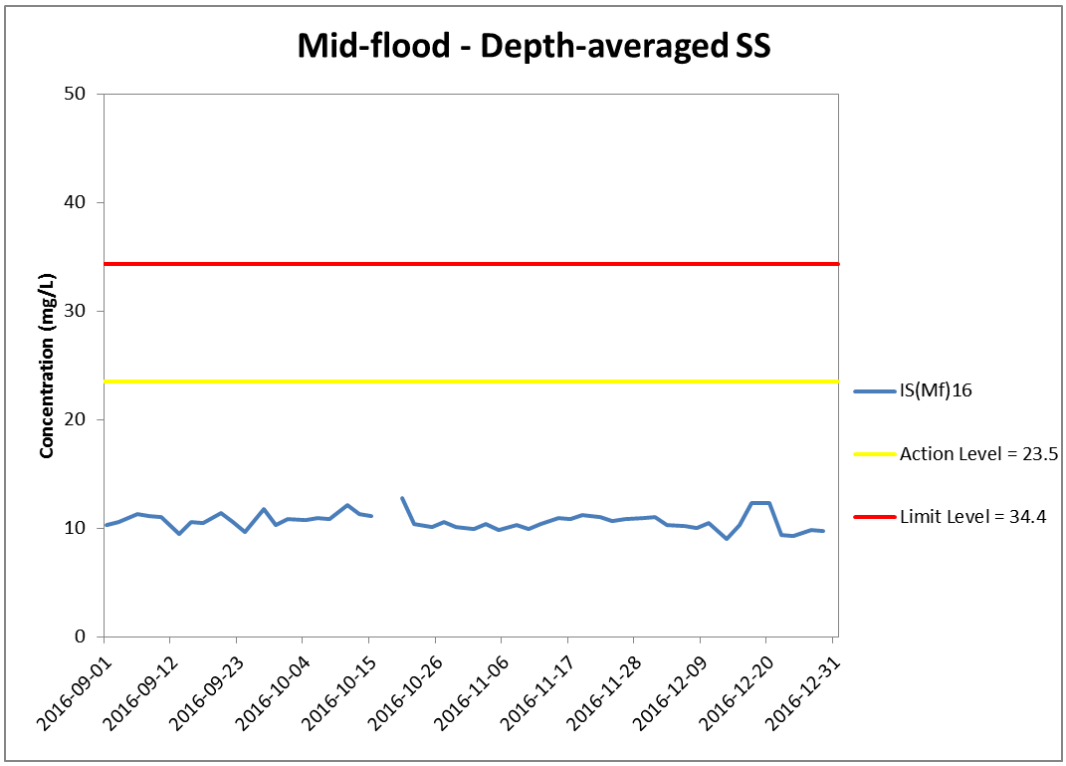


Figure J33 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September and 31 December 2016 at CS(Mf)3 and CS(Mf)5.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.



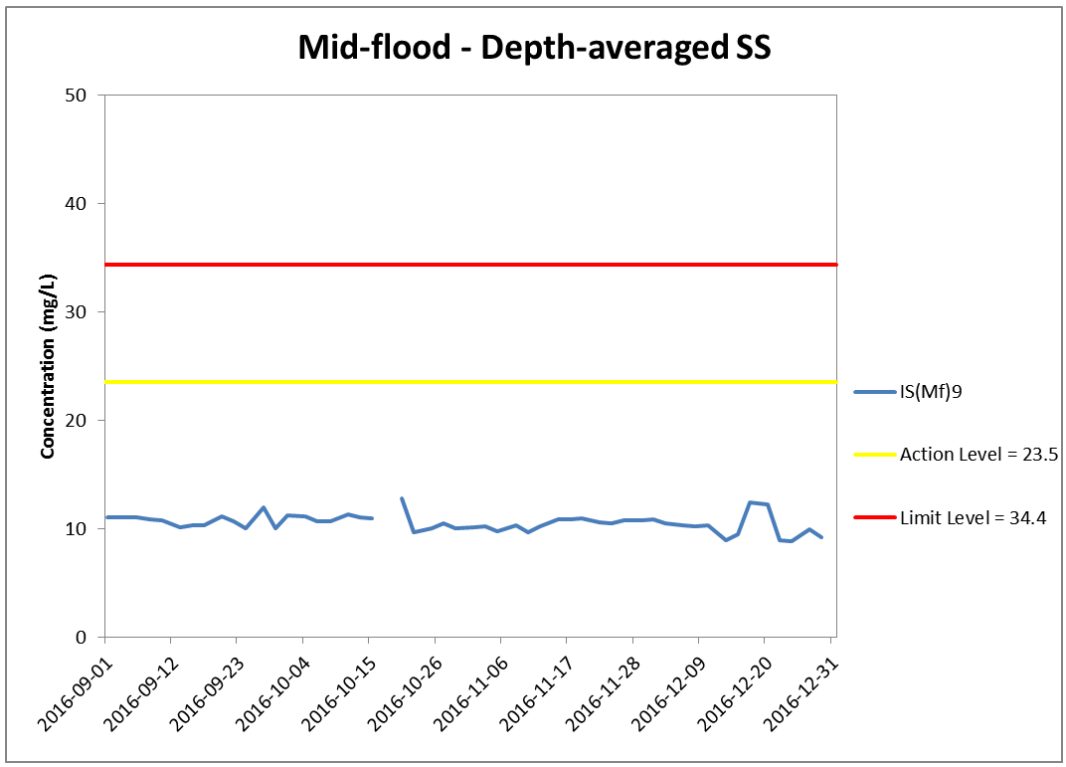
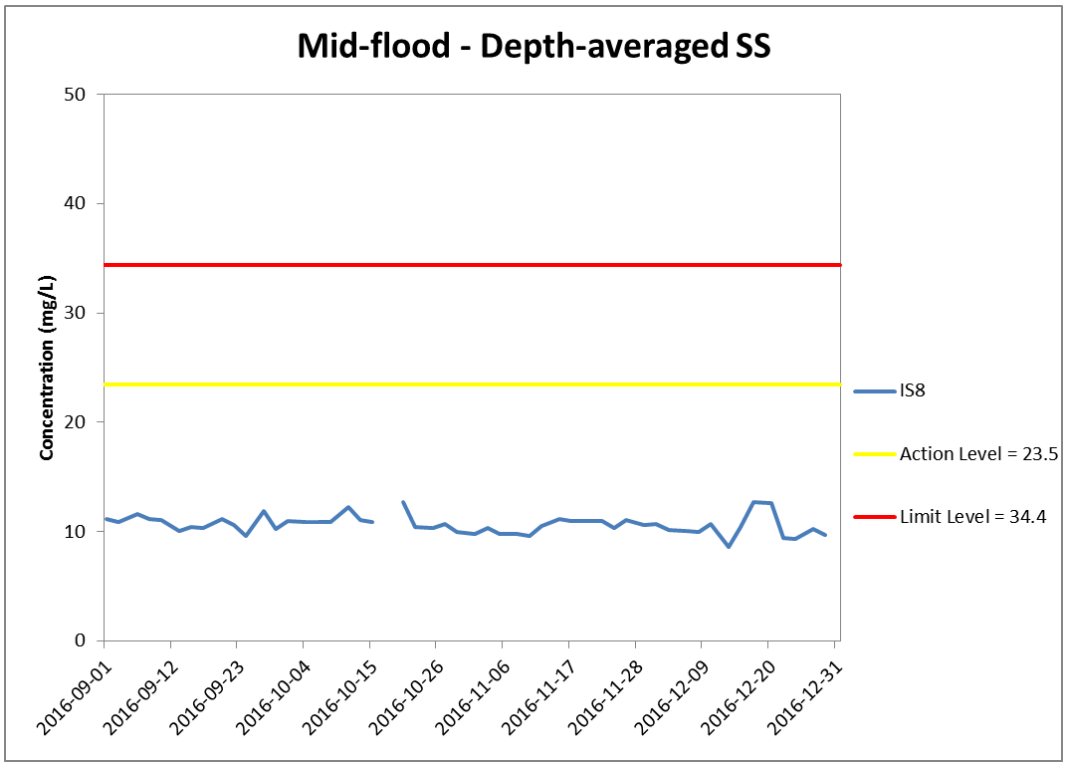


Figure J34 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September and 31 December 2016 at IS(Mf)16 and IS(Mf)9.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM



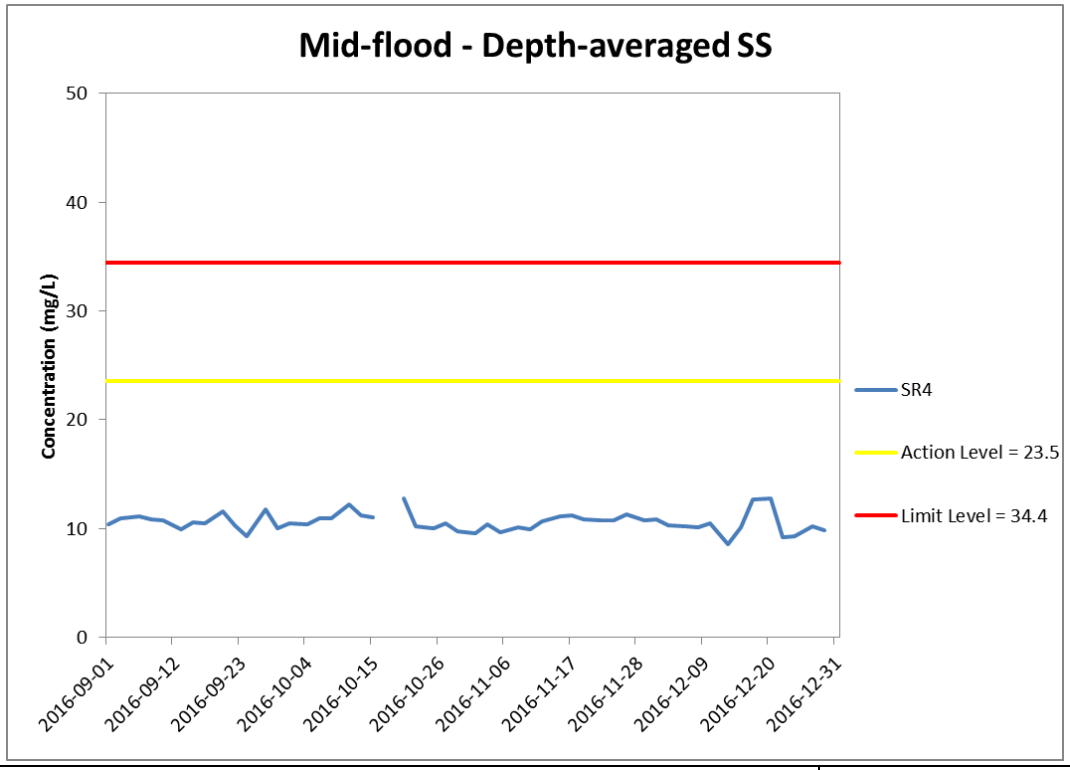


Figure J35 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September and 31 December 2016 at IS8 and SR4.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

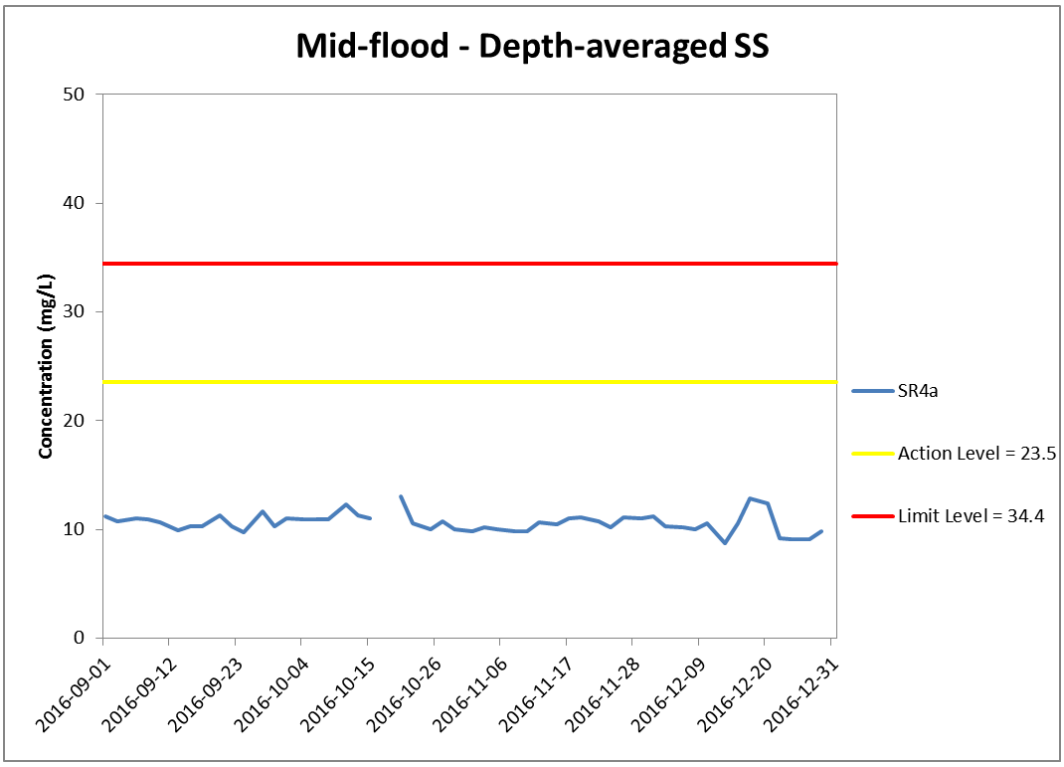


Figure J36 Impact Monitoring – Mean depth-averaged level of Suspended Solids (mg/L) during mid-flood tide between 1 September and 31 December 2016 at SR4a.

(Weather condition varied between sunny to rainy within the reporting period.) Marine works within the reporting period include Uninstallation of marine piling platform; Pier construction; Launching gantry operation; and Installation of deck segment and pier head segment.

Environmental Resources Management

ERM

Appendix K

Impact Dolphin Monitoring Survey Results

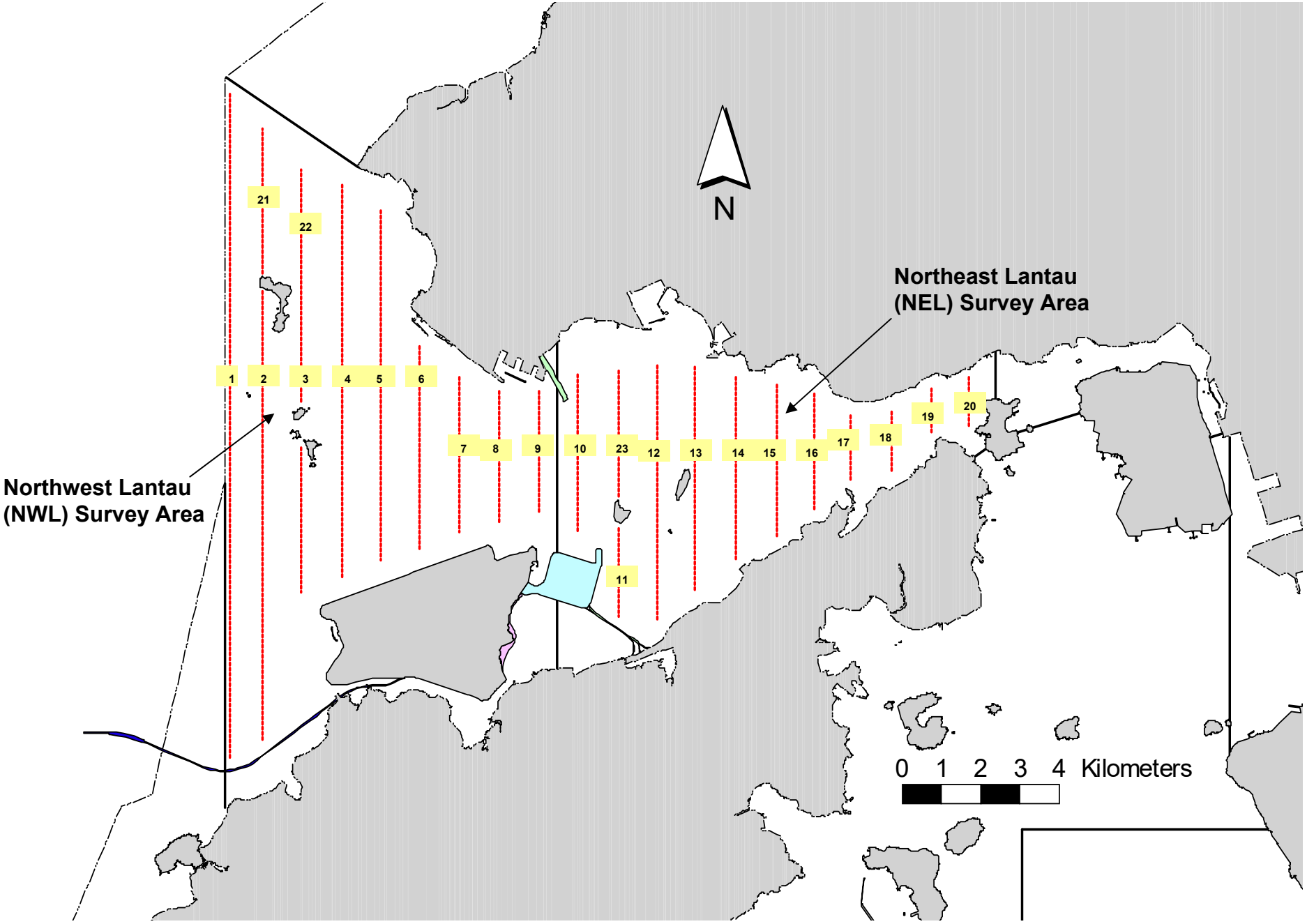


Figure 1. Transect Line Layout in Northwest and Northeast Lantau Survey Areas

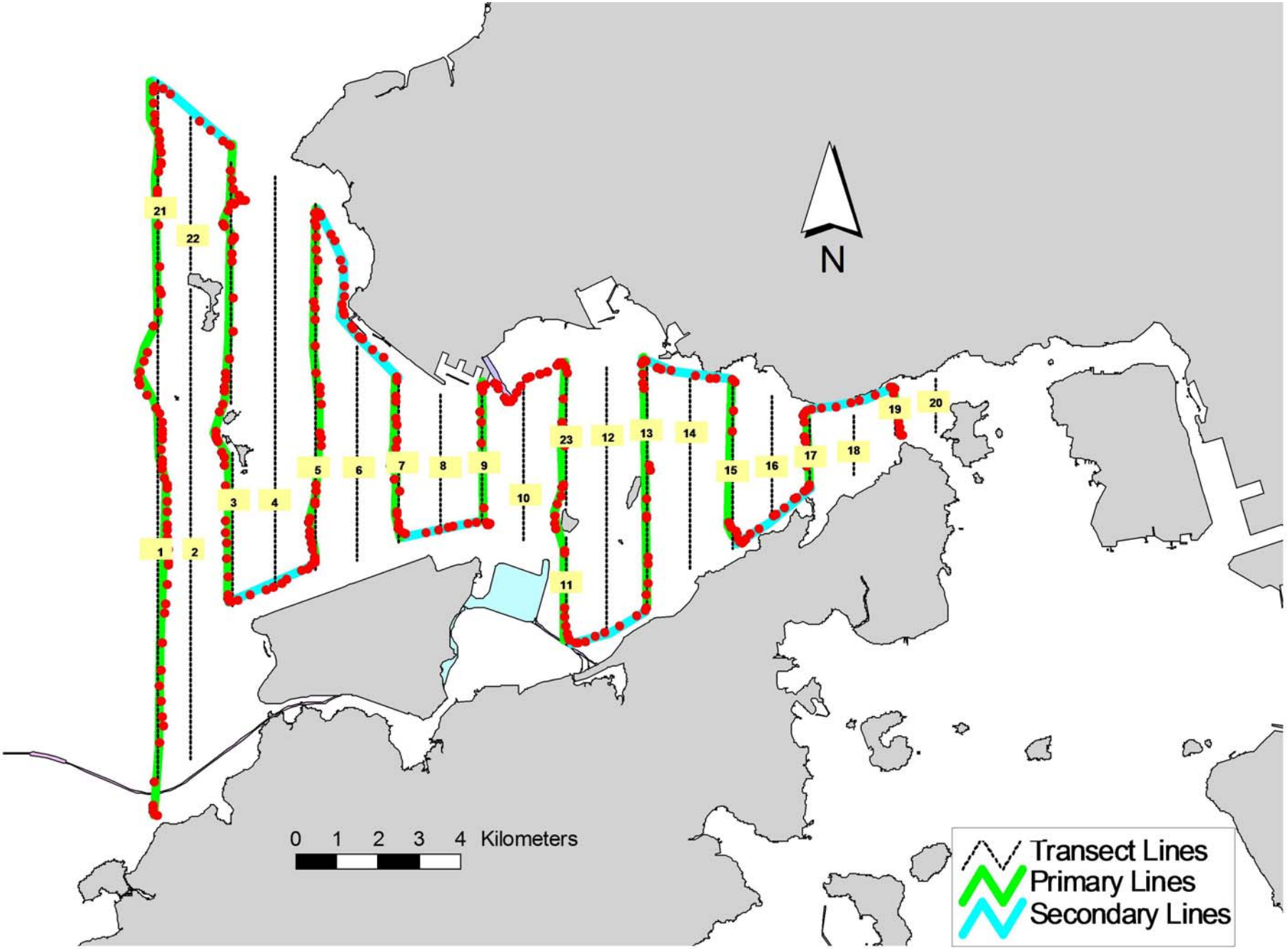


Figure 2. Survey Route on December 1st, 2016 (from HKLR03 project)

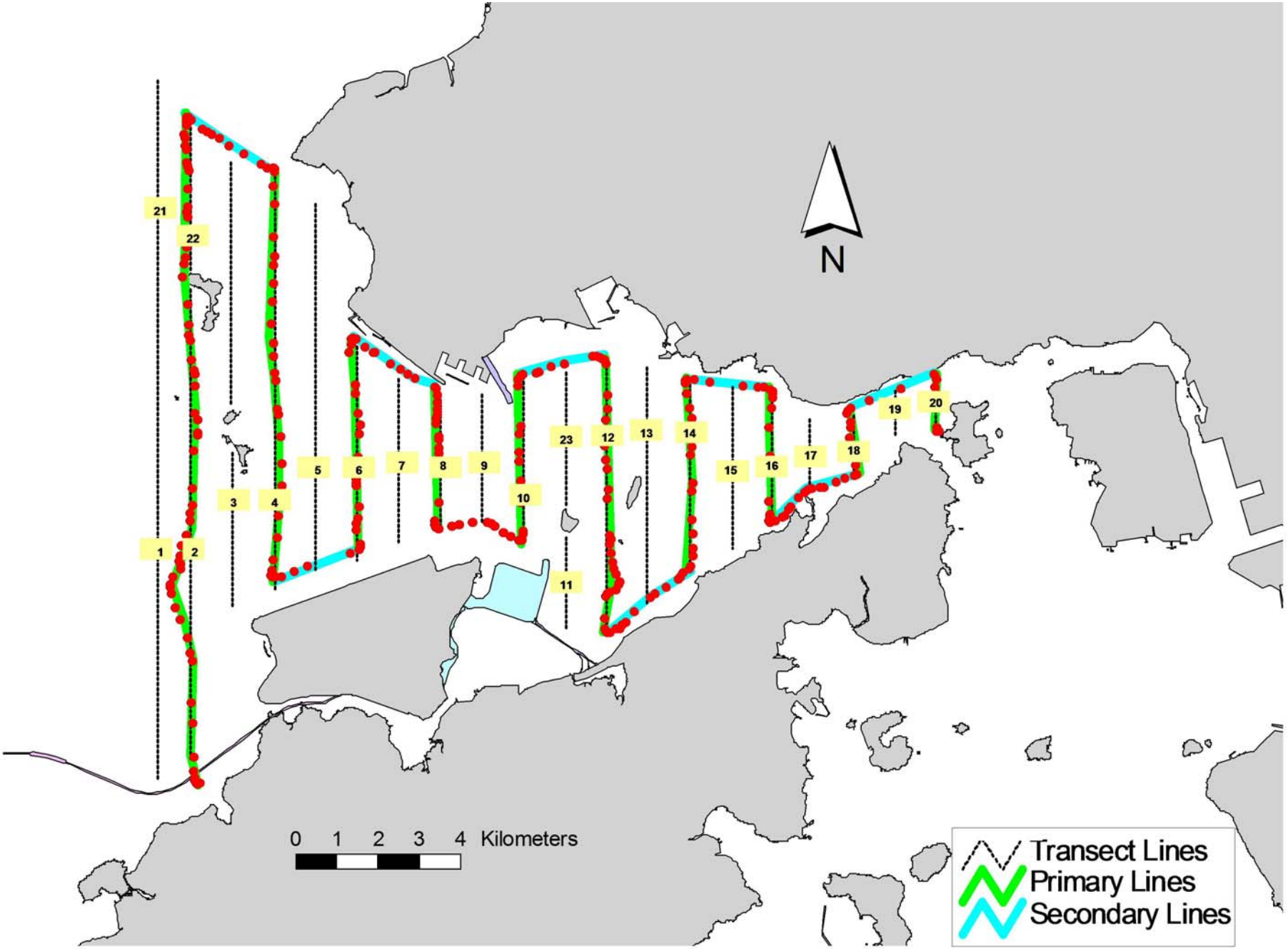


Figure 3. Survey Route on December 6th, 2016 (from HKLR03 project)

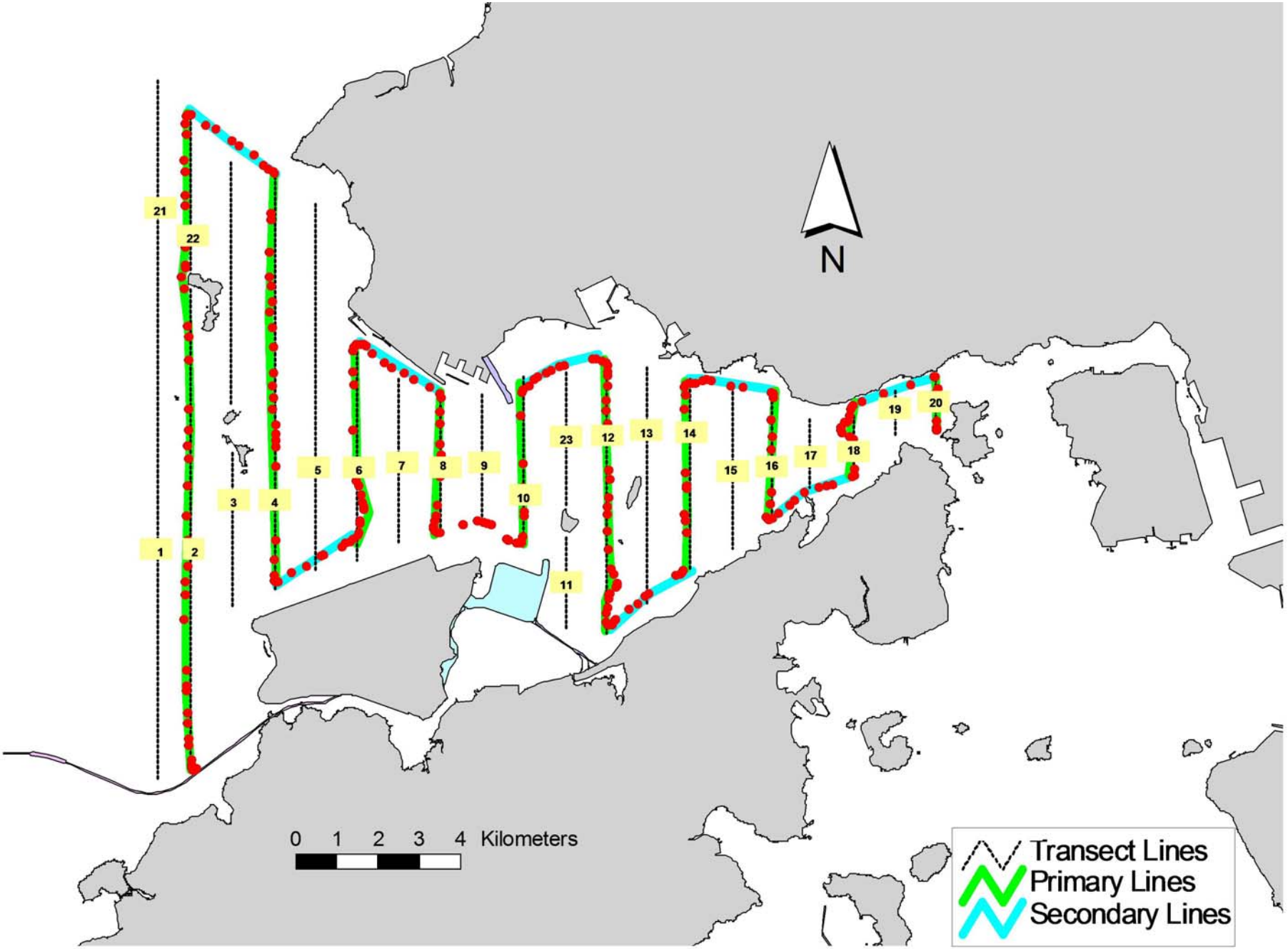


Figure 4. Survey Route on December 16th, 2016 (from HKLR03 project)

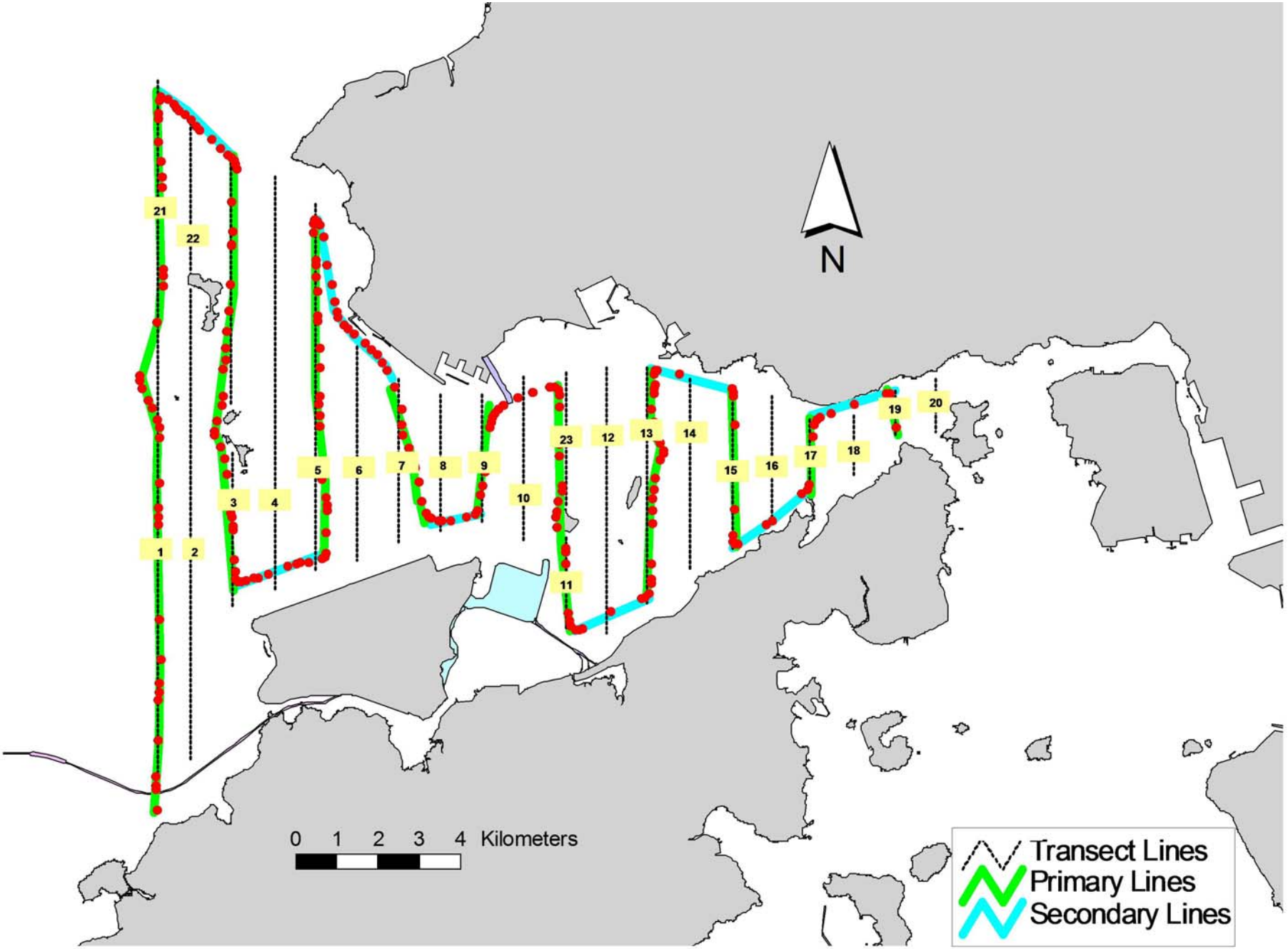


Figure 5. Survey Route on December 19th, 2016 (from HKLR03 project)

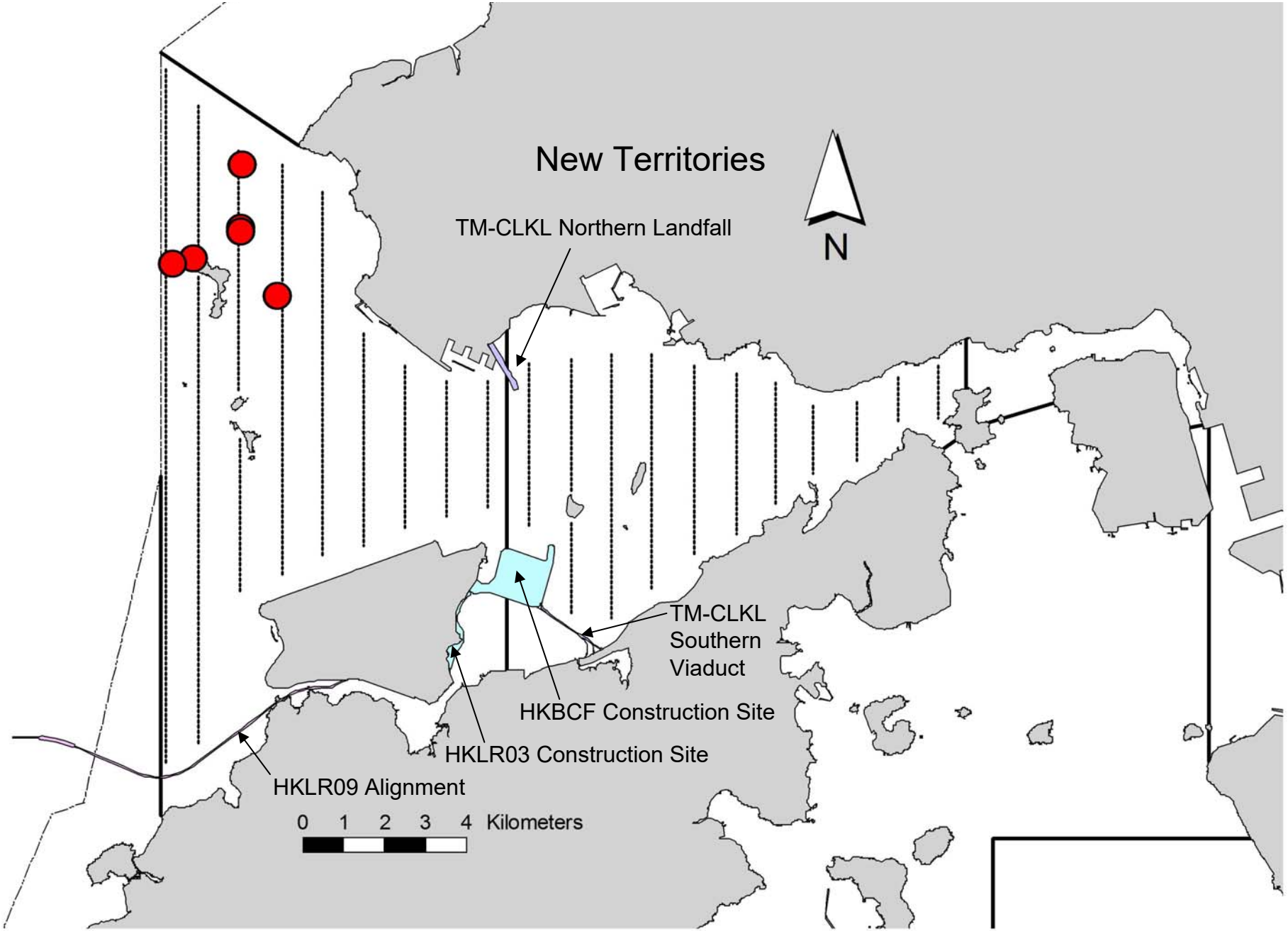


Figure 6. Distribution of Chinese White Dolphin Sightings during December 2016 HKLR03 Monitoring Surveys

Appendix I. HKLR03 Survey Effort Database (December 2016)

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

DATE	AREA	BEAU	EFFORT	SEASON	VESSEL	TYPE	P/S
1-Dec-16	NE LANTAU	1	1.10	WINTER	STANDARD36826	HKLR	P
1-Dec-16	NE LANTAU	2	14.04	WINTER	STANDARD36826	HKLR	P
1-Dec-16	NE LANTAU	3	2.70	WINTER	STANDARD36826	HKLR	P
1-Dec-16	NE LANTAU	2	6.99	WINTER	STANDARD36826	HKLR	S
1-Dec-16	NE LANTAU	3	2.87	WINTER	STANDARD36826	HKLR	S
1-Dec-16	NW LANTAU	2	7.78	WINTER	STANDARD36826	HKLR	P
1-Dec-16	NW LANTAU	3	30.29	WINTER	STANDARD36826	HKLR	P
1-Dec-16	NW LANTAU	4	2.10	WINTER	STANDARD36826	HKLR	P
1-Dec-16	NW LANTAU	2	0.10	WINTER	STANDARD36826	HKLR	S
1-Dec-16	NW LANTAU	3	12.43	WINTER	STANDARD36826	HKLR	S
6-Dec-16	NE LANTAU	2	8.24	WINTER	STANDARD36826	HKLR	P
6-Dec-16	NE LANTAU	3	12.45	WINTER	STANDARD36826	HKLR	P
6-Dec-16	NE LANTAU	2	5.56	WINTER	STANDARD36826	HKLR	S
6-Dec-16	NE LANTAU	3	5.85	WINTER	STANDARD36826	HKLR	S
6-Dec-16	NW LANTAU	2	3.30	WINTER	STANDARD36826	HKLR	P
6-Dec-16	NW LANTAU	3	21.96	WINTER	STANDARD36826	HKLR	P
6-Dec-16	NW LANTAU	4	6.80	WINTER	STANDARD36826	HKLR	P
6-Dec-16	NW LANTAU	2	2.34	WINTER	STANDARD36826	HKLR	S
6-Dec-16	NW LANTAU	3	5.60	WINTER	STANDARD36826	HKLR	S
16-Dec-16	NE LANTAU	2	1.84	WINTER	STANDARD36826	HKLR	P
16-Dec-16	NE LANTAU	3	15.94	WINTER	STANDARD36826	HKLR	P
16-Dec-16	NE LANTAU	4	2.10	WINTER	STANDARD36826	HKLR	P
16-Dec-16	NE LANTAU	2	2.56	WINTER	STANDARD36826	HKLR	S
16-Dec-16	NE LANTAU	3	8.66	WINTER	STANDARD36826	HKLR	S
16-Dec-16	NW LANTAU	2	8.49	WINTER	STANDARD36826	HKLR	P
16-Dec-16	NW LANTAU	3	22.63	WINTER	STANDARD36826	HKLR	P
16-Dec-16	NW LANTAU	2	3.41	WINTER	STANDARD36826	HKLR	S
16-Dec-16	NW LANTAU	3	4.41	WINTER	STANDARD36826	HKLR	S
19-Dec-16	NW LANTAU	2	25.43	WINTER	STANDARD36826	HKLR	P
19-Dec-16	NW LANTAU	3	10.26	WINTER	STANDARD36826	HKLR	P
19-Dec-16	NW LANTAU	2	6.14	WINTER	STANDARD36826	HKLR	S
19-Dec-16	NW LANTAU	3	5.93	WINTER	STANDARD36826	HKLR	S
19-Dec-16	NE LANTAU	2	2.66	WINTER	STANDARD36826	HKLR	P
19-Dec-16	NE LANTAU	3	12.82	WINTER	STANDARD36826	HKLR	P
19-Dec-16	NE LANTAU	2	4.15	WINTER	STANDARD36826	HKLR	S
19-Dec-16	NE LANTAU	3	5.57	WINTER	STANDARD36826	HKLR	S

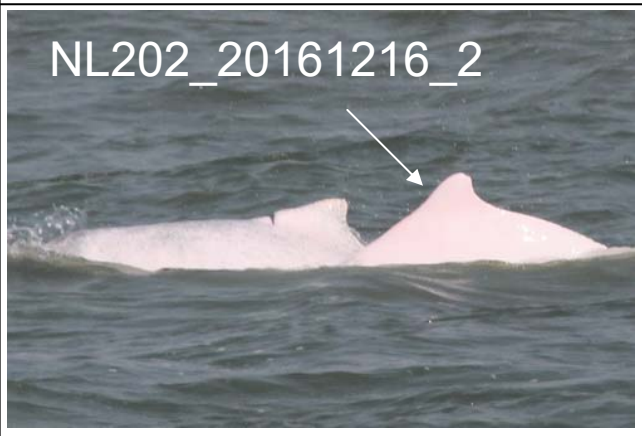
Appendix II. HKLR03 Chinese White Dolphin Sighting Database (December 2016)

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

DATE	STG #	TIME	HRD SZ	AREA	BEAU	PSD	EFFORT	TYPE	NORTHING	EASTING	SEASON	BOAT ASSOC.	P/S
1-Dec-16	1	1337	1	NW LANTAU	3	233	ON	HKLR	827758	806489	WINTER	NONE	P
16-Dec-16	1	1308	3	NW LANTAU	3	74	ON	HKLR	826206	807351	WINTER	NONE	P
16-Dec-16	2	1359	8	NW LANTAU	3	ND	OFF	HKLR	827051	805334	WINTER	NONE	
19-Dec-16	1	1105	6	NW LANTAU	2	17	ON	HKLR	826942	804829	WINTER	NONE	P
19-Dec-16	2	1204	4	NW LANTAU	2	272	ON	HKLR	829219	806502	WINTER	NONE	P
19-Dec-16	3	1222	2	NW LANTAU	2	26	ON	HKLR	827680	806489	WINTER	NONE	P

Appendix III. Individual dolphins identified during HKLR03 monitoring surveys in December 2016

ID#	DATE	STG#	AREA
CH34	19/12/16	1	NW LANTAU
NL46	16/12/16	2	NW LANTAU
NL98	16/12/16	2	NW LANTAU
NL104	19/12/16	1	NW LANTAU
NL120	16/12/16	1	NW LANTAU
NL136	16/12/16	2	NW LANTAU
NL182	01/12/16	1	NW LANTAU
	16/12/16	2	NW LANTAU
NL202	16/12/16	2	NW LANTAU
	19/12/16	1	NW LANTAU
	19/12/16	3	NW LANTAU
NL203	19/12/16	2	NW LANTAU
NL226	16/12/16	1	NW LANTAU
NL286	16/12/16	2	NW LANTAU
	19/12/16	1	NW LANTAU
	19/12/16	3	NW LANTAU
NL296	16/12/16	1	NW LANTAU
NL321	19/12/16	1	NW LANTAU
WL17	19/12/16	2	NW LANTAU



Appendix IV. Photographs of Identified Individual Dolphins in December 2016 (HKLR03)

Appendix IV. (cont'd)

Appendix IV. (cont'd)

Appendix L

Event Action Plan

Appendix L1 Event/ Action Plan for Air Quality

	ACTION			
EVENT	**ET** [(1)]	**IEC** [(1)]	**SOR** [(1)]	**Contractor**
Action Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the IEC and the SOR. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by the ET. 2. Check Contractor's working method.	1. Notify Contractor.	1. Rectify any unacceptable practice 2. Amend working methods if appropriate
2. Exceedance for two or more consecutive samples	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.	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.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures properly implemented.	1. Submit proposals for remedial actions to IEC within 3 working days of notification 2. Implement the agreed proposals 3. Amend proposal if appropriate

	ACTION			
EVENT	**ET** [(1)]	**IEC** [(1)]	**SOR** [(1)]	**Contractor**
Limit Level				
1. Exceedance for one sample	1. Identify the source. 2. Inform the SOR and the DEP. 3. Repeat measurement to confirm finding. 4. Increase monitoring frequency to daily. 5. Assess effectiveness of Contractor's remedial actions and keep the IEC, the DEP and the SOR informed of the results.	1. Check monitoring data submitted by the ET. 2. Check Contractor's working method. 3. Discuss with the ET and the Contractor on possible remedial measures. 4. Advise the SOR on the effectiveness of the proposed remedial measures. 5. Supervisor implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. Ensure remedial measures are properly implemented.	1. Take immediate action to avoid further exceedance 2. Submit proposals for remedial actions to IEC within 3 working days of notification 3. Implement the agreed proposals 4. Amend proposal if appropriate
2. Exceedance for two or more consecutive samples	1. Notify the IEC, the SOR, the DEP and the Contractor. 2. Identify the source. 3. Repeat measurements to confirm findings. 4. Increase monitoring frequency to daily. 5. Carry out analysis of the Contractor's working procedures to determine possible mitigation to be implemented. 6. Arrange meeting with the IEC and the SOR to discuss the remedial actions to be taken. 7. Assess effectiveness of the Contractor's remedial actions	1. Discuss amongst the SOR, ET and the Contractor on the potential remedial actions. 2. Review the Contractor's remedial actions whenever necessary to assure their effectiveness and advise the SOR accordingly. 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing. 2. Notify the Contractor. 3. In consultation with the IEC, agree with the Contractor on the remedial measures to be implemented. 4. Ensure remedial measures are properly implemented. 5. If exceedance continues, consider what activity of the work is responsible and instruct the Contractor to stop that activity of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance. 2. Submit proposals for remedial actions to IEC within 3 working days of notification. 3. Implement the agreed proposals. 4. Resubmit proposals if problem still not under control. 5. Stop the relevant activity of works as determined by the SOR until the exceedance is abated.

and keep the IEC, the DEP and the SOR informed of the results. 8. If the exceedance stops, cease additional monitoring.	

Appendix L2 Event/ Action Plan for Construction Noise

	ACTION			
EVENT	**ET**	**IEC**	**SOR**	**Contractor**
Action Level	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.	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.	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.	1. Submit noise mitigation proposals to IEC 2. Implement noise mitigation proposals
Limit Level	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.	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.	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.	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	1. Repeat in situ measurement on next day of exceedance to confirm findings; 2. Identify source(s) of impact; 3. Inform IEC, contractor and SOR; 4. Check monitoring data, all plant, equipment and Contractor's working methods.	1. Check monitoring data submitted by ET and Contractor's working methods.	1. Confirm receipt of notification of non-compliance in writing; 2. Notify Contractor.	1. Inform the SOR and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Amend working methods if appropriate.
Action level being exceeded by two or more consecutive sampling days	1. Repeat measurement on next day of exceedance to confirm findings; 2. Identify source(s) of impact; 3. Inform IEC, contractor, SOR and EPD; 4. Check monitoring data, all plant, equipment and Contractor's working methods; 5. Discuss mitigation measures with IEC, SOR and Contractor; 6. Ensure mitigation measures are implemented; 7. Increase the monitoring frequency to daily until no exceedance of Action level;	1. Check monitoring data submitted by ET and Contractor's working method; 2. Discuss with ET and Contractor on possible remedial actions; 3. Review the proposed mitigation measures submitted by Contractor and advise the SOR accordingly; 4. Supervise the implementation of mitigation measures.	1. Discuss with IEC on the proposed mitigation measures; 2. Ensure mitigation measures are properly implemented; 3. Assess the effectiveness of the implemented mitigation measures.	1. Inform the Supervising Officer and confirm notification of the non-compliance in writing; 2. Rectify unacceptable practice; 3. Check all plant and equipment and consider changes of working methods; 4. Submit proposal of additional mitigation measures to SOR within 3 working days of notification and discuss with ET, IEC and SOR; 5. Implement the agreed mitigation measures.
Limit level being exceeded by one sampling day	1. Repeat measurement on next day of exceedance to confirm findings;	1. Check monitoring data submitted by ET and Contractor's working method;	1. Confirm receipt of notification of failure in writing;	1. Inform the SOR and confirm notification of the non-compliance in writing;

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

Appendix L4 Implementation of Event-Action Plan for Dolphin Monitoring

Event	ET Leader	IEC	SOR	Contractor
Action Level	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.	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring results and findings with the ET and the Contractor.	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.	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	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.	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.	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.	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**
Action Level With the numerical values presented in *Table 5.7* of *Baseline Monitoring Report*, 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 *Table 5.8* of *Baseline Monitoring Report*), 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	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	1. Check monitoring data submitted by ET and Contractor; 2. Discuss monitoring with the ET and the Contractor;	1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented.	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**
Limit Level With the numerical values presented in Table 5.7 of *Baseline Monitoring Report*, when any of the response variable for dolphin acoustic behaviour recorded in the construction phase monitoring is 40% lower or higher than that recorded in the baseline monitoring (see Table 5.8 of *Baseline Monitoring Report*), 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	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.	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.	1. Discuss with the IEC the repeat monitoring and any other measures proposed by the ET; 2. Make agreement on measures to be implemented.	1. Inform the SO and confirm notification of the non- compliance in writing; 2. Discuss with the ET and the IEC and propose measures to the IEC and the SO; 3. Implement the agreed measures.

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

Appendix M

Monthly Summary of Waste Flow Table

Contract No. : HY/2012/07

Tuen Mun Chek Lap Kok Link – Southern Connection Viaduct Section

Monthly Summary Waste Flow Table for 2016 (Year)

Month\Material	Actual Quantities of Inert C&D Materials Generation						Actual Quantities of C&D wastes Generation						Actual Quantities of Recyclables Generation			
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fills	Imported Fill	Marine Sediment, Cat. L	Marine Sediment, Cat. Mp	Marine Sediment, Cat. Mf	Marine Sediment, Cat. H	Chemical Waste	General Refuse	Metals	Felled trees	Paper/ cardboard packaging	Plastics
Unit	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000m^3)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)	('000Kg)
Jan	1.941	0.263	0.606	-	1.334	-	-	-	-	-	-	69.400	-	-	0.105	-
Feb	0.783	0.185	0.092	-	0.692	-	-	-	-	-	-	85.890	-	-	0.112	-
Mar	1.502	0.429	0.537	-	0.965	-	-	-	-	-	2.000	88.360	-	-	-	-
Apr	1.354	0.402	0.789	-	0.565	-	-	-	-	-	3.000	79.580	-	8.640	0.084	-
May	1.057	0.192	0.617	-	0.440	-	-	-	-	-	3.000	75.620	-	-	-	-
Jun	0.499	0.277	0.116	-	0.383	-	-	-	-	-	-	103.270	-	-	0.105	-
SUB-TOTAL	**7.136**	**1.747**	**2.757**	**-**	**4.379**	**0.000**	**-**	**-**	**-**	**-**	**8.000**	**502.120**	**-**	**8.640**	**0.406**	**-**
Jul	0.507	0.211	0.230	-	0.277	-	-	-	-	-	2.200	94.760	-	1.540	0.350	-
Aug	1.294	0.144	0.684	-	0.610	-	-	-	-	-	-	116.990	-	9.790	0.098	-
Sep	2.584	0.155	0.270	-	2.314	-	-	-	-	-	-	130.060	-	-	0.105	-
Oct	2.338	0.180	0.156	-	2.183	-	-	-	-	-	-	141.300	-	-	0.028	-
Nov	3.873	0.328	0.536	-	3.337	-	0.473	-	-	-	1.567	138.270	-	-	0.063	-
Dec	4.129	0.322	0.732	-	3.397	-	0.990	-	-	-	-	130.900	-	-	0.063	-
TOTAL	**21.860**	**3.087**	**5.364**	**-**	**16.496**	**-**	**1.463**	**-**	**-**	**-**	**11.767**	**1,254.400**	**-**	**19.970**	**1.113**	**-**

Notes :

1 - The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.

2 - Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.

3 - Broken concrete for recycling into aggregates.

4 - Assumed 5 kg per damaged water-filled barrier.

5 - Disposed as Public Fills includes Hard Rock and Large Broken Concrete.

Appendix N

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

Appendix N1 Cumulative Statistics on Exceedances

		Total No. recorded in this reporting month	**Total No. recorded since project commencement**
1-Hr TSP	Action	0	0
	Limit	0	0
24-Hr TSP	Action	0	2
	Limit	0	0
Noise	Action	0	0
	Limit	0	0
Water Quality	Action	0	2
	Limit	0	0
Impact Dolphin Monitoring	Action	0	9
	Limit	0	7

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 (December 2016)	1	0	0
Total No. received since project commencement	7	0	0

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

ENVIRONMENTAL COMPLAINT/ ENQUIRY FORM

Complaint/ ~~Enquiry~~ Received*
Date: 13 December 2016
Time: Undisclosed
From: Environmental Protection Department (EPD)
Via: Email
Complainant/ ~~Enquirer~~*:
Name: Undisclosed
Tel: Undisclosed
Address: Undisclosed
Media: ~~Dust~~ Noise ~~Water Quality~~ ~~Other~~
Description: On 13 December 2016, a complaint was received by the EPD from Seaview Crescent regarding the hammering noise nuisance generated during midnights over the past month. The complainant believed that the noise source was possibly from construction sites of the Hong Kong Zhuhai Macao Bridge Projects. The Environmental Team (ET) received the complaint notification from the Independent Environmental Checker (IEC) on 14 December 2016.

Investigation Report & Response

The Construction Noise Permit (CNP) for night-time works (CNP no. GW-RS1159-16) and night-time working record were reviewed immediately upon receiving the complaint. Night-time works under this Contract in recent months were mainly segment erection works over the MTR tracks, North Lantau Highway and Cheung Tung Road. Under the Noise Control Ordinance, the works area of this Contract is located in non-designated area such that hammering would be allowed with reference to Technical Memorandum on Noise from Construction Work in Designated Areas. According to the Contractor, hammering was involved only occasionally during night-time between 14 November 2016 and 13 December 2016. In addition, works area under this Contract was located far from where the complainant lived i.e. distance between Seaview Crescent and the closest works area at night was approximate 2.7km (refer to the diagram below), therefore it is believed that noise generated at the sites is unlikely to be heard by the complainant.
Besides, the Contractor has been implementing the Restricted Hours Permit-to-Work System to monitor works at night or during holidays. Under the system, works that carried out during restricted hours would be reviewed to ensure works were in compliance with CNP requirement. Additionally, PMEs within the Contract works boundary were operated in accordance with the conditions stipulated in the CNP. Based on the above, the night-time works under this Contract are considered complying with the corresponding requirements stipulated in the CNP granted and the complaint is considered invalid for the Contract.

Mitigation Measures and Follow-Up Actions Recommended to Contractor

The Contractor has been reminded to implement all relevant noise mitigation measures recommended or specified in the EIA Report, EM&A Manual, EMP, Method Statements, General and Particular Specifications of this Project to avoid causing noise nuisance to the Public. The Contractor is also reminded to ensure that the construction plant deployed for the works during restricted hours is in strict compliance with the relevant CNP granted.

Date of File Closed : 16 December 2016

Approved and Filed by:

(Jovy Tam, ET Leader)
Date: 16 December 2016