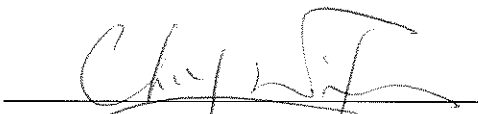


China State - ATAL Joint Venture

**Contract No. DC/2009/17
HATS Stage 2A – Upgrading
Works at Stonecutters Island STW –
Sludge Dewatering Facilities**

**Final Environmental Monitoring and Audit
Report**

(Version 1.0)

Certified By 
(Environmental Team Leader)

REMARKS:

The information supplied and contained within this report is, to the best of our knowledge, correct at the time of printing.

CINOTECH accepts no responsibility for changes made to this report by third parties

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CE/Harbour Area Treatment Scheme
Drainage Services Department
Sewage Services Branch
Harbour Area Treatment Scheme Division
5/F, Western Magistracy
2A Pokfulam Road, Hong Kong

Attn: Mr. K K Kam

**Agreement No. CE 8/2009(EP) Harbour Area Treatment Scheme Stage 2A
Independent Environmental Checker for Construction Phase – Investigation**

Our Reference

EC/AFK/DC/bw/
T261332/22.01/L-1356

**Contract No. DC/2009/17 – Upgrading Works at Stonecutters Island Sewage
Treatment Works – Sludge Dewatering Facilities**

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Final EM&A Report on Construction Phase Activities

31 October 2018

By Post

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Dear Sir,

I refer to the captioned Final EM&A Report on construction phase activities under Contract No. DC/2009/17 as stipulated under Section 15.13 of the EM&A Manual and which was received on 25 October 2018 via email. Pursuant to Conditions 1.9 and 2.2 of Environmental Permit No. EP-322/2008/G, I hereby verify the captioned report.

Yours faithfully
for MOTT MACDONALD HONG KONG LIMITED



Dr. Anne F Kerr
Independent Environmental Checker
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c.c.

Ove Arup & Partners HK Ltd.
China State – ATAL JV
Cinotech Consultants Ltd.

Mr. Ted Y F Tang
Mr. Charles Tse / Mr. Leo Leung
Dr. Priscilla Choy

Fax: 2370 4377
By email
By email

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ABBREVIATION AND ACRONYM

AL Levels	Action and Limit Levels
DSD	Drainage Services Department
E / ER	Engineer/Engineer's Representative
EIA	Environmental Impact Assessment
EM&A	Environmental Monitoring and Audit
EMIS	Environmental Mitigation Implementation Schedule
EP	Environmental Permit
EPD	Environmental Protection Department
ET	Environmental Team
HATS 2A	Harbour Area Treatment Scheme Stage 2A
HVS	High Volume Sampler
IEC	Independent Environmental Checker
RE	Resident Engineer
RH	Relative Humidity
QA/QC	Quality Assurance / Quality Control
SLM	Sound Level Meter
WMP	Waste Management Plan

EXECUTIVE SUMMARY**Introduction**

1. This is the Final Environmental Monitoring and Audit (EM&A) Report prepared by Cinotech Consultants Limited for DSD Contract No. DC/2009/17 “HATS Stage 2A – Upgrading Works at Stonecutters Island Sewage Treatment Works - Sludge Dewatering Facilities” (The Project) which documents the key information of EM&A and environmental monitoring works undertaken by other Contracts at the SCISTW under HATS Stage 2A with same Environmental Permit (Permit No. EP-322/2008/G). The termination of the construction phase EM&A Programme for DSD Contract No. DC/2009/17 was approved by the Environmental Protection Department on 13th June 2018.
2. The construction works under this Project included the construction of new sludge dewatering building, sludge cake silos, sludge storage tanks, and workshop building, and provision of sludge conveyance, storage and dewatering facilities.

Environmental Monitoring Works

3. The environmental monitoring works of the Project were conducted by the ETs for the Contracts DC/2009/10 at the SCISTW under HATS 2A with same Environmental Permit in accordance with the EM&A Manual. The monitoring results were checked and reviewed. Site audits were conducted once per week. The implementation of the environmental mitigation measures, Event Action Plans and environmental complaint handling procedures were also checked.
4. Summary of the non-compliance recorded during construction phase is tabulated in **Table I**.

Table I Summary Table for Non-compliance Recorded during Construction phase

Monitored By	Monitoring Station	Parameter	No. of Exceedance		No. of Exceedance Due to the Project		Action Taken
			Action Level	Limit Level	Action Level	Limit Level	
DC/2009/10	AM6	1-hr TSP	0	0	0	0	N/A
		24-hr TSP	0	0	0	0	N/A
	AM6a ^(*)	1-hr TSP	0	0	0	0	N/A
		24-hr TSP	0	0	0	0	N/A
	NM5	Noise	0	0	0	0	N/A
	AM7	1-hr TSP	0	0	0	0	N/A
24-hr TSP		0	0	0	0	N/A	

Remark:

(*) The alternative monitoring station for AM6 was adopted in January 2016 as AM6A.

1-hour TSP and 24-hour TSP Monitoring

5. 1-hour and 24-hour TSP air quality monitoring were conducted as scheduled at all the designated monitoring stations during the Project’s construction period.

Construction Noise

-
6. Construction Noise monitoring was conducted as scheduled at all the designated monitoring stations during the Project's construction period.

Environmental Licenses and Permits

7. Licenses/Permits granted to the Project include the Environmental Permit (EP); wastewater discharge licences (Portion 3, 4, 5 and C); Registered as a Chemical Waste Producer, Billing account for Disposal of Construction Waste for the Project and Construction Noise Permit.

Environmental Mitigation Implementation Schedule

8. According to the EIA Report Section 3.74, 4.56 and 13.44, air quality, noise and landscape and visual would be the key environmental issues and mitigation measures shall be implemented during the construction phase. Details of the implementation of mitigation measures are provided in the **Appendix C**.

Summary of Complaints and Prosecutions

9. No environmental-related complaints, prosecution or summons was recorded at any of the site portions since the commencement of this Contract. The Summary of Complaint Log is presented in **Appendix E**.

Future Status of the Project

10. According to the information from the Contractor, the construction works of this contract was completed in April 2018. Therefore, there was no construction activities after April 2018 under Contract No. DC/2009/17. The EM&A Programme was ended on 13th June 2018 when the Proposal of Termination of EM&A Programme of the Project was approved by EPD on 13th June 2018.

1. INTRODUCTION

Background

- 1.1 The Project ‘HATS Stage 2A - Upgrading Works at Stonecutters Island Sewage Treatment Works (SCISTW) - Sludge Dewatering Facilities’ under Contract No: DC/2009/17 mainly comprises the expansion of the sludge dewatering and construction of a workshop building at Stonecutters Island Sewage Treatment Works. The general location plan of the Project is shown in **Figure 1**.
- 1.2 The Project is under Harbour Area Treatment Scheme (HATS) Stage 2A and is a designated project with Register No. : AEIAR-121/2008. The current works under the Project and other Contracts at SCISTW for HATS 2A are covered by the same Environmental Permit (Permit No. EP-322/2008/G), which was issued on 9th May 2014 by the Environmental Protection Department (hereinafter called EPD) to the Drainage Services Department (hereinafter called the DSD) as the Permit Holder.
- 1.3 The environmental monitoring works for the Project were covered by Contract DC/2009/10’s ET.
- 1.4 China State -ATAL Joint Venture (hereafter called the CSAJV) was commissioned by the DSD to undertake the construction of the Contract No. DC/2009/17 “HATS Stage 2A - Upgrading Works at Stonecutters Island Sewage Treatment Works (SCISTW) - Sludge Dewatering Facilities”.
- 1.5 Cinotech Consultants Limited was commissioned by China State -ATAL Joint Venture to undertake the Environmental Monitoring and Audit (EM&A) works for the project and was appointed as the Environmental Team (ET) of the Project under Condition 2.1 of the EP.
- 1.6 The termination of the construction phase EM&A Programme for DSD Contract No. DC/2009/17 was approved by the Environmental Protection Department on 13th June 2018.
- 1.7 This is the final report to summarise the EM&A works conducted under this Contract during the construction period.

Project Organizations

- 1.8 The contacts of the Project are shown in **Table 1.1** and the organization chart of ET for Contract is shown in **Figure 2**.
- 1.9 The organization chart of EM&A Programme for Construction Phase is shown in **Figure 3**.

Table 1.1 Key Project Contacts

Party	Role	Name	Position	Phone No.
Ove Arup & Partners Hong Kong Ltd	Engineer's Representative	Mr. Ted Tang	Principal Resident Engineer	2370 4311
	Coordinator	Mr. Natalie Kwok	Resident Engineer	2371 9407
Cinotech	Environmental Team	Dr. Priscilla Choy	ET Leader	2151 2089
		Mr. Tommy Cheng	Project Coordinator & Audit Team	2151 2092
Mott MacDonald	Independent Environmental Checker	Dr. Anne Kerr	Independent Environmental Checker	2828 5757
China State-ATAL Joint Venture	Contractor	Mr. Charles Tse	Site Agent	9270 3384
		Mr. Leo Leung	Environmental Officer	2370 3010

Summary of EM&A Requirements

1.10 The EM&A programme requires construction phase monitoring for air quality and construction noise, landscape and visual and environmental site audit. The EM&A requirements for each parameter are described in the following sections, including:

- All monitoring parameters;
- Action and Limit levels for all environmental parameters;
- Event Action Plans;
- Environmental mitigation measures, as recommended in the project EIA study final report; and
- Environmental requirements in contract documents.

1.11 The advice on the implementation status of environmental protection and pollution control/mitigation measures is summarized in **Section 4** of this report.

2. AIR QUALITY

Baseline Condition

- 2.1 Baseline air quality monitoring was conducted at the designated monitoring stations. The baseline data was used for the Project to derive the Action and Limit Level. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 2.2 Two designated monitoring stations, AM6a and AM7 were selected for impact dust monitoring for the Project. The location of AM6 was inaccessible due to planned construction works and therefore an alternative monitoring station AM6a was proposed and adopted for subsequent impact monitoring starting in January 2016. **Table 2.1** describes the air quality monitoring locations and **Figure 1** indicated their positions in relation to the site boundary.

Table 2.1 Locations for Air Quality Monitoring

Monitoring Station	Monitored by	Location of Measurement
AM6	DC/2007/23, DC/2009/10	Works site boundary
AM6a	DC/2009/10	Works site boundary
AM7		North West Kowloon Sewage Pumping Station

Monitoring Parameters, Frequency and Duration

- 2.3 **Table 2.2** summarizes the monitoring parameters and frequencies of impact dust monitoring for the whole construction period.

Table 2.2 Impact Dust Monitoring Parameters, Frequency and Duration

Monitoring Station	Parameter	Period	Frequency
All monitoring locations	1-hour TSP	0700-1900 hrs	3 times/ every 6 days
	24-hour TSP	0000-2400 hrs	once in every 6 days

Results and Observations

- 2.4 No Action/Limit Level exceedance of air quality monitoring result was recorded at all monitoring stations. Summary of exceedance is presented in **Appendix F**.
- 2.5 According to field observations during site inspection, identifiable dust sources near the monitoring stations were mainly from construction works and vehicles movement operating for the Project.

3 NOISE

Baseline Condition

- 3.1 Baseline noise monitoring was conducted at the designated monitoring stations. **Appendix A** shows the established Action and Limit Levels for the environmental monitoring works.

Monitoring Locations

- 3.2 Noise monitoring was conducted at one designated monitoring station as listed in **Table 3.1**.

Table 3.1 Location of Noise Monitoring Stations

Monitoring Station	Monitored By	Location of Measurement
NM5	DC/2007/23, DC/2009/10	Near FSD Diving Rescue and Training Centre

Monitoring Parameters, Frequency and Duration

- 3.3 **Table 3.2** summarizes the monitoring parameters, frequency and total duration of monitoring.

Table 3.2 Noise Monitoring Parameters, Frequency and Duration

Monitoring Stations	Parameter	Period	Frequency
NM5	$L_{eq}(30 \text{ min.})$ dB(A)	0700-1900 hrs. on normal weekdays	Once per week
	$L_{eq}(5 \text{ min.})$ dB(A)	During restricted hours	Monitoring to be conducted when construction works were to be carried out

Results and Observations

- 3.4 No Action/Limit Level exceedance was recorded. Summary of exceedance is presented in **Appendix F**.
- 3.5 The major noise sources identified at the designated noise monitoring stations were vehicle movement noise and construction activities from this Project.

4 REVIEW OF THE EM&A PROGRAMME

Implementation Status of Environmental Mitigation Measures

- 4.1 Site audits were carried out on a weekly basis to monitor the implementation of proper environmental mitigation measure for the Project. The mitigation measures listed in the approved Environmental Impact Assessment (EIA) Report, EM&A Manual and Environmental Permit as well as the relevant implementation status are provided in **Appendix C**. Based on the site inspection findings, the Contractor has implemented the required mitigation measures during construction period.
- 4.2 No non-compliance was recorded during the site inspections throughout the construction period. Observations and recommendations recorded during the site inspections were summarized in each of the Monthly EM&A Reports.

Review of Environmental Monitoring Procedures

- 4.3 The monitoring methodologies and procedure were regularly reviewed by the ET during construction period of the Project. The methodologies are considered to be effective as it has successfully monitored the environmental impact of the Project's site areas throughout the works period.
- 4.4 Event and Action Plans for noise, air quality as well as visual and landscape aspects have been developed as part of the Baseline Monitoring Report for the Project and the details are provided in **Appendix D**.

Comparison of the EM&A data with the EIA

Air Quality

- 4.5 The EIA Report has predicted that dust nuisance at ASRs would not be expected if the recommended mitigation measures has been implemented. No air quality complaints from EPD were received by the Project and no Project related exceedance at the monitoring stations were recorded during the construction period.

Noise

- 4.6 The EIA report had predicted that residual impacts of construction noise levels can be kept below the construction noise limit if the recommended mitigation measures has been implemented.
- 4.7 No Project related exceedance at the monitoring stations was recorded during the construction period. Detail of the non-projected related exceedances is provided in **Appendix F**.

Status of Waste Management

- 4.8 Both general refuse and C&D waste were delivered to Public Fill and Landfill appropriately. Both the trip ticket system and chit accounting system for disposal of waste were operated by the Contractor throughout the construction period for the Project.
- 4.9 The total waste generated during the construction period is summarized in **Appendix G**.
- 4.10 No non-compliances with regard to waste management were recorded during the works period of the Project. Hence the waste management system was considered to be effective for this Project. The implementation status for waste management is provided in **Appendix C**.

Implementation Status of Landscape and Visual Mitigation Measures

- 4.11 Landscape and visual monitoring was carried out on site in accordance with the EM&A Manual to ensure that the implementation and maintenance of landscape and visual mitigation measures were achieved.
- 4.12 No non-compliance was recorded during the works period of the Project. The implementation status for Landscape and Visual mitigation measures is provided in **Appendix C**.

Summary of Complaints and Prosecutions

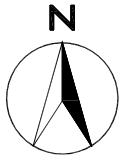
- 4.13 No environmental-related complaints, prosecution or summons was recorded at any of the site portions. The Summary of Complaint Log is presented in **Appendix E**.

5. CONCLUSIONS AND RECOMMENDATIONS

Comments on Overall EM&A Programme

- 5.1 This Final Environmental Monitoring and Audit (EM&A) Report presented the EM&A programme undertaken during the period from 3rd November 2010 to 12th June 2018 in accordance with the EM&A Manual and the requirement under EP-322/2008/G.
- 5.2 The implementation of mitigation measures for Contract No. DC/2009/17 had been carried out according to the environmental monitoring data obtained during the Project. The weekly site inspections were effective to ensure the implementation and efficiency of the mitigation measures. Therefore, the overall performance of the monitoring methodology and environmental management system for this Project was considered to be effective.
- 5.3 This EM&A programme was found to be cost effective in preventing the occurrence of monitoring impacts caused by the Project. The findings of the environmental monitoring program suggested that no major adverse impacts on the sensitive receivers were caused by the Project's works, which conformed to the findings of the EIA report.

FIGURES



AM7
North West Kowloon
Sewage Pumping Station

Stonecutters Island
Sewage Treatment Plant

NM5
FSD Diving Rescue and
Training Centre

AM6a
Works Site Boundary

AM6
Works Site Boundary

LEGEND:

DC/2009/17' SITE AREA



AIR QUALITY MONITORING
STATION



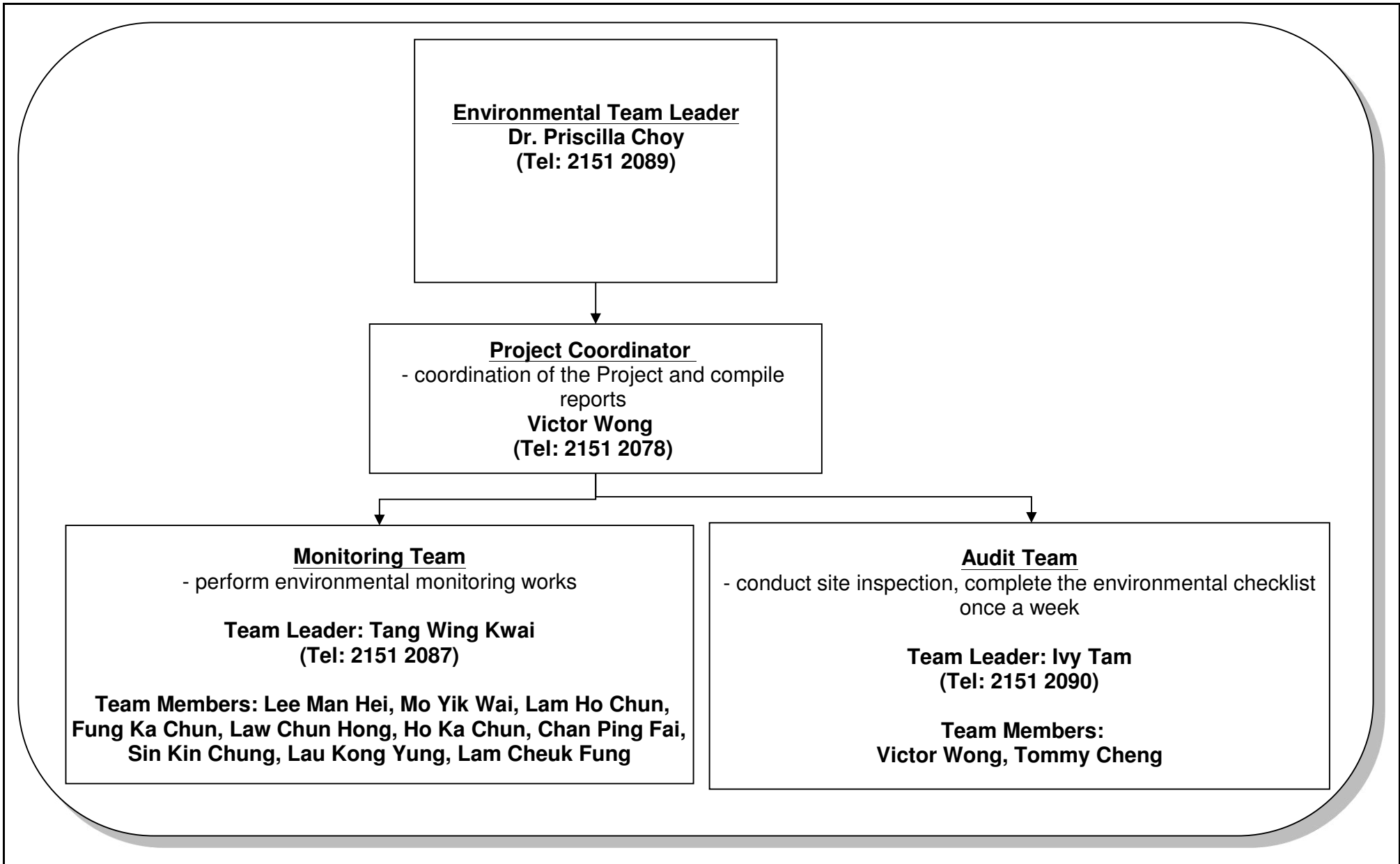
NOISE MONITORING STATION



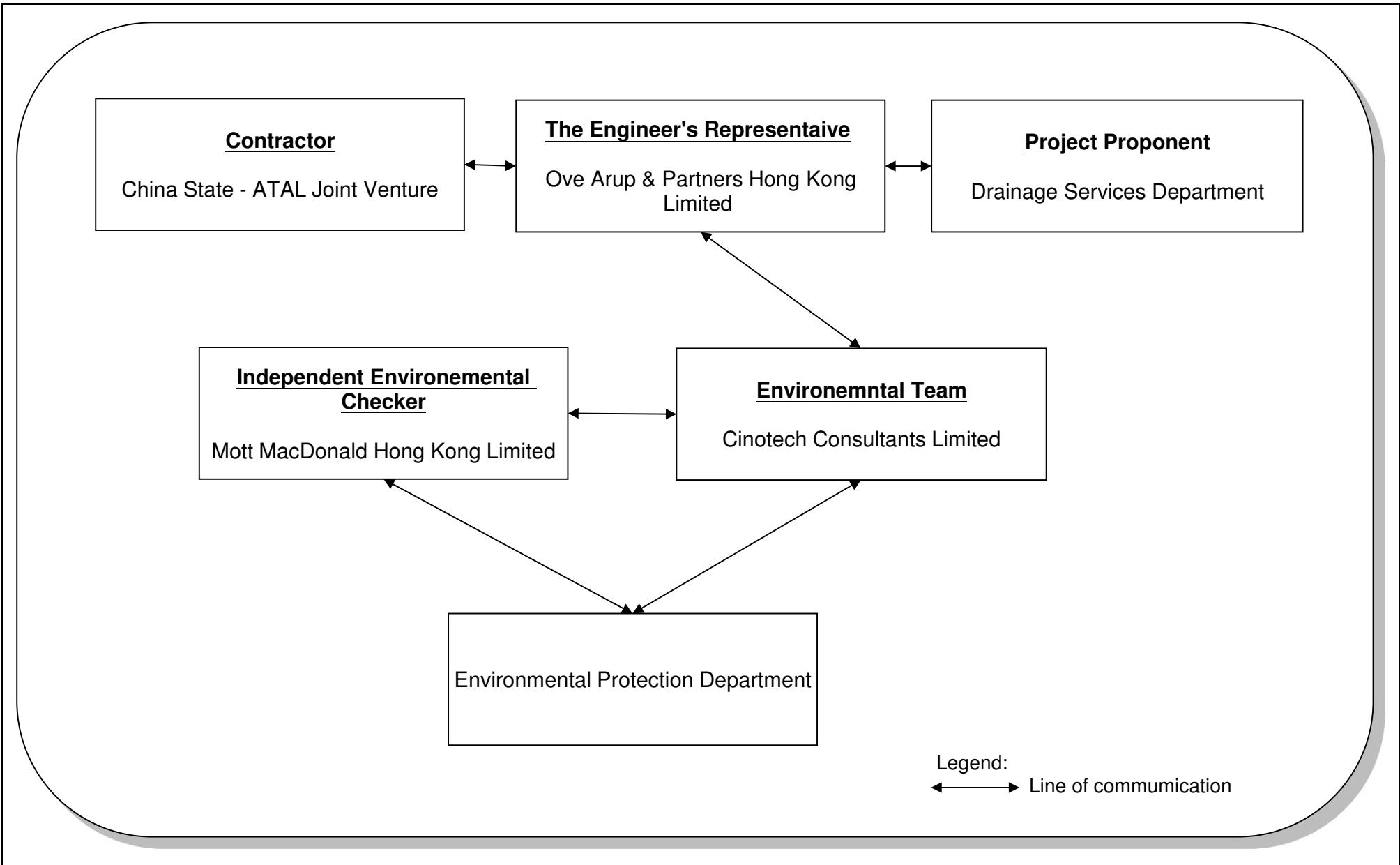
Contract No. DC/2009/17
HATS 2A - Sludge Dewatering Facilities at Stonecutters Island STW

General Location Plan of the Project and Locations of Air
Quality and Noise Monitoring Stations

SCALE	N.T.S	DATE	11/2015
CHECK	-	DRAWN	VW
JOB No.	MA10063	FIGURE NO.	1
		REV	-



Title	Contract No. DC/2009/17 HATS Stage 2A – Upgrading Works at SCISTW Sludge Dewatering Facilities ET's Organization Chart	Scale	N.T.S	Project No.	MA10063	CINOTECH
		Version	v.1	Figure	2	



Title	Contract No. DC/2009/17	Scale	Project No.	CINOTECH
	HATS Stage 2A – Upgrading Works at SCISTW Sludge Dewatering Facilities	N.T.S	MA10063	
	Organization Chart - EM&A Programme for Construction Phase	Version	Figure	
		v.1	3	

**APPENDIX A
ACTION AND LIMIT LEVELS FOR AIR
QUALITY AND NOISE**

Appendix A Action and Limit Levels

Table A-1 Action and Limit Levels for 1-Hour TSP and 24-Hour TSP

Monitoring Stations	Action Level ($\mu\text{g}/\text{m}^3$)		Limit Level ($\mu\text{g}/\text{m}^3$)	
	1-hour	24-hour	1-hour	24-hour
AM6 / AM6a	346	196	500	260
AM7	322	207	500	260

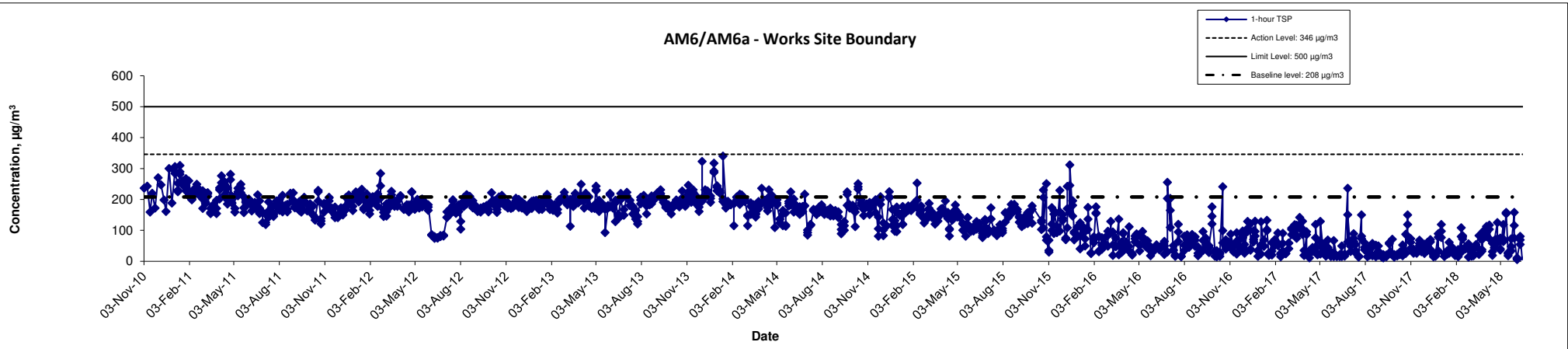
Table A-2 Action and Limit Level for Construction Noise

Monitoring Stations	Time Period	Action Level	Limit Level in dB(A)
NM5	0700-1900 hours on normal weekdays	When one documented complaint is received	75
	0700-2300 hours on holidays; and 1900-2300 hours on all other days		70
	2300-0700 hours of next day		55

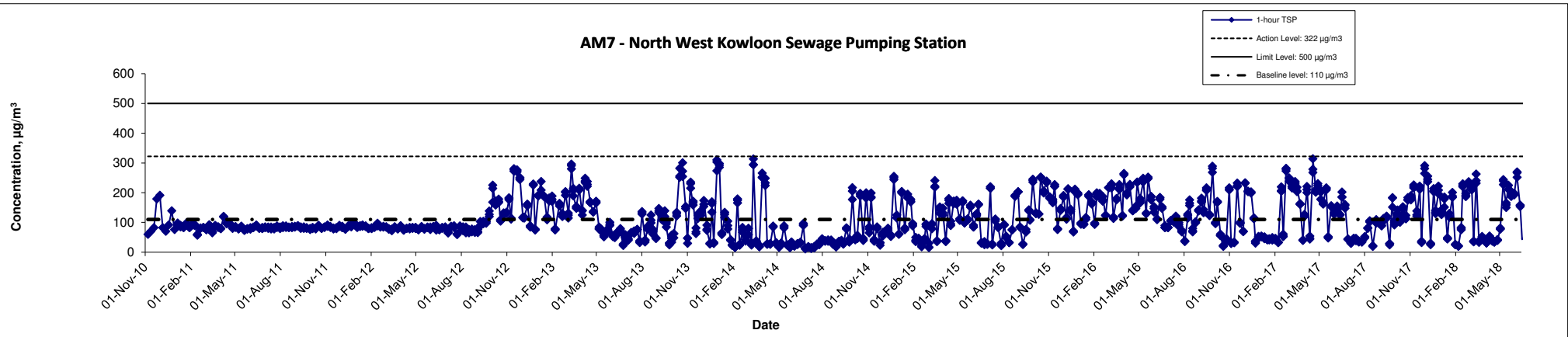
**APPENDIX B
GRAPHICAL PRESENTATION OF AIR
QUALITY AND NOISE**

1-hr TSP Concentration Levels

AM6/AM6a - Works Site Boundary

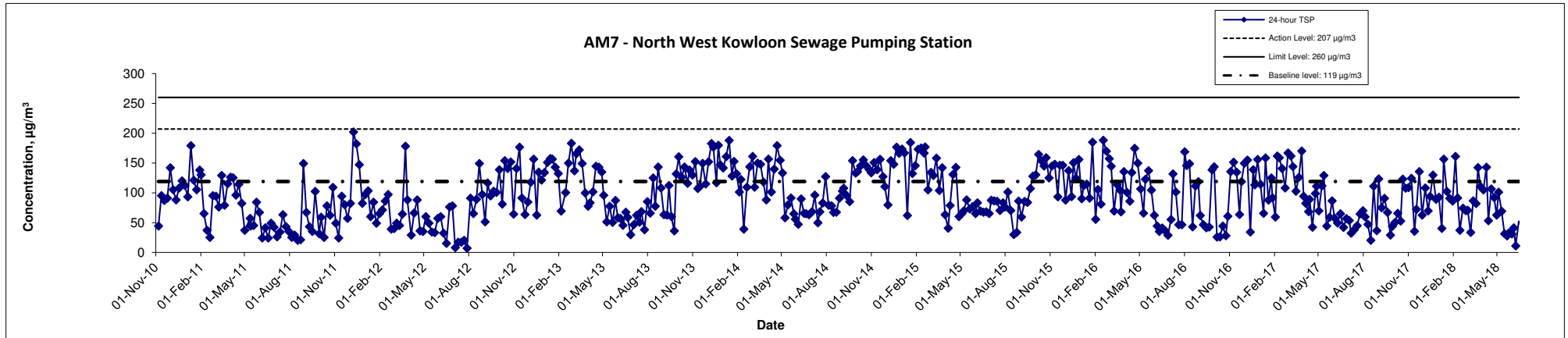
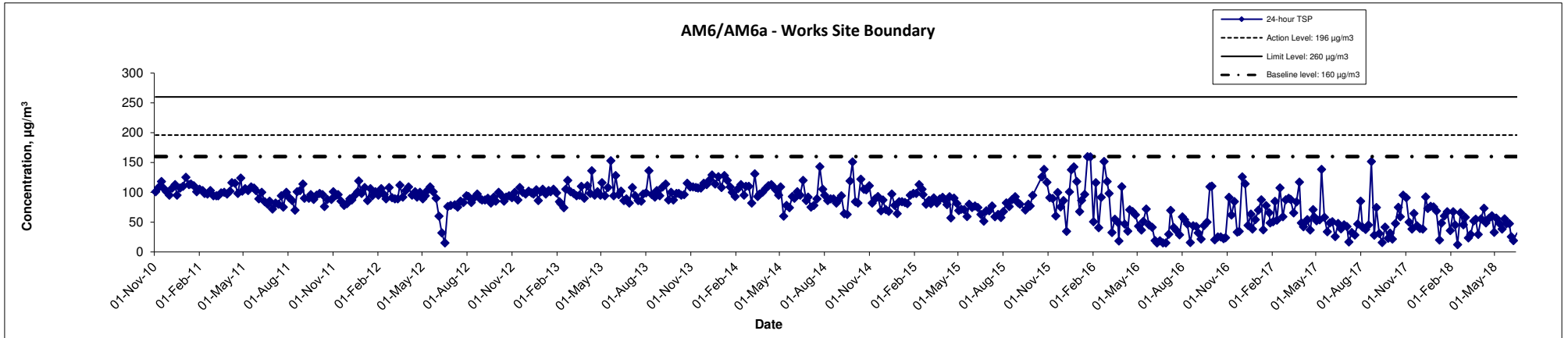


AM7 - North West Kowloon Sewage Pumping Station



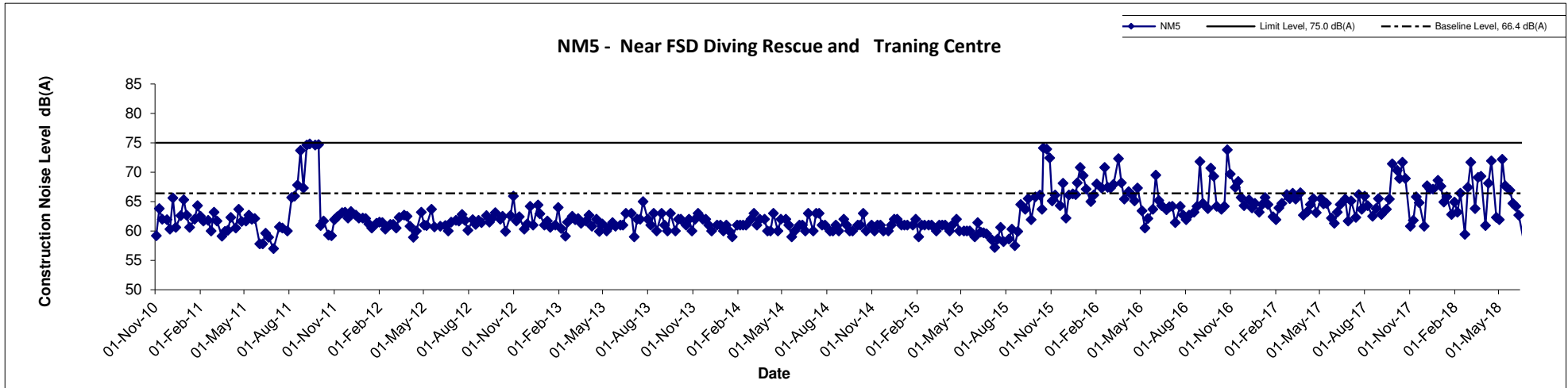
Title	Contract No. DC/2009/17 HATS 2A – Upgrading Works at Stonecutters Island STW Sludge Dewatering Facilities	Scale	N.T.S	Project	MA10063	CINOTECH
	Graphical Presentation of 1-hour TSP Monitoring Results	Date	Nov 2010 to Jun 2018	No. Appendix	B	

24-hr TSP Concentration Levels



Title	Contract No. DC/2009/17 HATS 2A – Upgrading Works at Stonecutters Island STW Sludge Dewatering Facilities	Scale	N.T.S	Project	MA10063	CINOTECH
	Graphical Presentation of 24-hour TSP Monitoring Results	Date	Nov 2010 to Jun 2018	No. Appendix	B	

Noise Levels (0700-1900 hrs on Normal Weekdays)



Title	Contract No. DC/2009/17 HATS 2A – Upgrading Works at Stonecutters Island STW Sludge Dewatering Facilities	Scale	N.T.S	Project No.	MA11007	CINOTECH
	Graphical Presentation of Noise Monitoring Result	Date	Jun 18	Appendix	B	

**APPENDIX C
SUMMARY OF ENVIRONMENTAL
MITIGATION IMPLEMENTATION
SCHEDULE**

APPENDIX C - IMPLEMENTATION SCHEDULE OF ENVIRONMENTAL MITIGATION MEASURES (EMIS)

EIA Ref.	Recommended Mitigation Measures	Location of the measure	DC/2009/17
A	Air Quality		
3.74	Skip hoist for material transport should be totally enclosed by impervious sheeting.	All construction sites	^
	Vehicle washing facilities should be provided at every vehicle exit point.		*
	The area where vehicle washing takes place and the section of the road between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcore.		^
	Where a site boundary adjoins a road, streets or other areas accessible to the public, hoarding of not less than 2.4 m high from ground level should be provided along the entire length except for a site entrance or exit.		N/A
	Use of regular watering, with complete coverage, to reduce dust emissions from exposed site surfaces and unpaved roads, particularly during dry weather.		*
	Side enclosure and covering of any aggregate or dusty material storage piles to reduce emissions. Where this is not practicable owing to frequent usage, watering shall be applied to aggregate fines.		*
	Open stockpiles shall be avoided or covered. Where possible, prevent placing dusty material storage piles near ASRs		*
	Tarpaulin covering of all dusty vehicle loads transported to, from and between site locations.		^
	Imposition of speed controls for vehicles on unpaved site roads. Ten kilometers per hour is the recommended limit.		^
	Every stock of more than 20 bags of cement should be covered entirely by impervious sheeting placed in an area sheltered on the top and the 3 sides.		^
	Every vehicle should be washed to remove any dusty materials from its body and wheels before leaving the construction sites.		*
3.74	Instigation of an environmental monitoring and auditing program to monitor the construction process in order to enforce controls and modify method of work if dusty conditions arise.		*
B	Airborne Noise		
4.56 - 4.61	Use of quiet PME, movable barriers and acoustic mats.	All construction sites	^
4.67	Only well-maintained plant shall be operated on-site and plant shall be serviced regularly during the construction program.		^
	Silencers or mufflers on construction equipment shall be utilized and shall be properly maintained during the construction program.		^
	Mobile plant, if any, shall be sited as far away from NSRs as possible.		^
	Machines and plant (such as trucks) that may be in intermittent use shall be shut down between works periods or shall be throttled down to a minimum.	^	

EIA Ref.	Recommended Mitigation Measures	Location of the measure	DC/2009/17
	Plant known to emit noise strongly in one direction shall, wherever possible, be orientated so that the noise is directed away from the nearby NSRs.		^
	Material stockpiles and other structures shall be effectively utilized, wherever practicable, in screening noise from on-site construction activities.		^
C	Water Quality		
6.349 to 6.375	Construction Site Runoff and General Construction Activities The mitigation measures as outlined in the ProPECC PN 1/94 Construction Site Drainage should be adopted where applicable.	All construction sites	*
6.376	Effluent Discharge There is a need to apply to EPD for a discharge licence for discharge of effluent from the construction site under the WPCO. The discharge quality must meet the requirements specified in the discharge licence. If monitoring of the treated effluent quality from the works areas is required during the construction phase of the Project, the monitoring should be carried out in accordance with the WPCO license which is under the ambit of regional office (RO) of EPD. Minimum distances of 100 m should be maintained between the discharge points of construction site effluent and the existing saltwater intakes.		*
6.377	Accidental Spillage of Chemicals Contractor must register as a chemical waste producer if chemical wastes would be produced from the construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes.		*
6.378	Any service shop and maintenance facilities should be located on hard standings within a bunded area, and sumps and oil interceptors should be provided. Maintenance of vehicles and equipment involving activities with potential for leakage and spillage should only be undertaken within the areas appropriately equipped to control these discharges.		*
6.379	Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: <ul style="list-style-type: none"> • Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. • Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. • Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area. 		*
6.380	Construction Works in Close Proximity of Storm Drains or Seafront To minimize the potential water quality impacts from the construction works located at or near any watercourse, the practices outlined below should be adopted where applicable.		*

EIA Ref.	Recommended Mitigation Measures	Location of the measure	DC/2009/17
	<ul style="list-style-type: none"> • The use of less or smaller construction plants may be specified to reduce the disturbance to the storm water courses or marine environment. • Temporary storage of materials (e.g. equioilnt, filling materials, chemicals and fuel) and temporary stockpile of construction materials should be located well away from any water courses during carrying out of the construction works. • Stockpiling of construction materials and dusty materials should be covered and located away from any water courses. • Construction debris and spoil should be covered up and/or disposed of as soon as possible to avoid being washed into the nearby water receivers. Construction activities, which generate large amount of wastewater, should be carried out in a distance away from the waterfront, where practicable. • Proper shoring may need to be erected in order to prevent soil/mud from slipping into the storm culvert or sea. 		
D	Waste Management		
9.107	<p>Reusable steel or concrete panel shutters, fencing and hoarding and signboard should be used as a preferred alternative to items made of wood, to minimize wastage of wood. Attention should be paid to WBTC No. 19/2001 - Metallic Site Hoardings and Signboards to reduce the amount of timber used on construction sites. Metallic alternatives to timber are readily available and should be used rather than new timber. Precast concrete units should be adopted wherever feasible to minimize the use of timber formwork.</p>	All construction sites	*
9.109	<p>All waste materials should be segregated into categories covering:</p> <ul style="list-style-type: none"> • excavated materials suitable for reuse on-site; • excavated materials suitable for public filling facilities; • remaining C&D waste for landfill; • chemical waste; and • general refuse for landfill. 		*
9.113	Sort C&D waste from demolition of existing facilities to recover recyclable portions such as metals;		*
	Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal.		*
	Encourage collection of aluminium cans, PET bottles and paper by providing separate labelled bins to enable these wastes to be segregated from other general refuse generated by the work force.		*
	Any unused chemicals or those with remaining functional capacity shall be recycled.		^
	Proper storage and site practices to minimise the potential for damage or contamination of construction materials.		*
9.115	Nomination of an approved person, such as a site manager, to be responsible for good site practices, arrangements for collection and effective disposal to an appropriate facility, of all wastes generated at the site.		^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	DC/2009/17
	Training of site personnel in proper waste management and chemical waste handling procedures.		^
	Develop and provide toolbox talk for on-site sorting of C&D materials to enhance worker's awareness in handling, sorting, reuse and recycling of C&D materials.		*
	Provision of sufficient waste disposal points and regular collection of waste.		*
	Regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors.		^
9.125	Bentonite slurries used in diaphragm wall construction should be reconditioned and reused wherever practicable. The disposal of residual used bentonite slurry should follow the good practice guidelines stated in ProPECC PN 1/94 "Construction Site Drainage"		^
9.131	Adequate number of portable toilets at temporary works areas or the PTWs to ensure that sewage from site staff would be properly collected.		^
9.133	General refuse should be stored in enclosed bins, skips or compaction units separating from C&D material and disposed of at designated landfill.		*
9.135	The recyclable component of the municipal waste generated by the workforce, such as aluminium cans, paper and cleansed plastic containers should be separated from other waste. Provision and collection of recycling bins for different types of recyclable waste should be set up by the Contractor. The Contractor should also be responsible for arranging recycling companies to collect these materials.		*
9.137	If chemical wastes are produced at the construction site, the Contractor would be required to register with the EPD as a chemical waste producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste, such as explosive, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc. The Contractor shall use a licensed collector to transport and dispose of the chemical wastes, to either the approved Chemical Waste Treatment Centre, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.		*
9.142	Prior to excavation of the marine deposit layer, the deposit should be tested in accordance with the ETWB TC(W) No. 34/2002 and the results should be presented in a Preliminary Sediment Quality Report. The marine deposit should be disposed of at the disposal site designated by the Marine Fill Committee (MFC) or Director of Environmental Protection (DEP) depending on the test results.		N/A
E	Terrestrial Ecology		
10.94	To implement effective noise mitigation measures as recommended in Section 4 of EIA.	All construction sites	^
10.95	Dust control practices such as regular watering, complete coverage of any aggregate or dusty material storage piles, and re-schedule of dusty activities during high-wind conditions as well as other measures recommended in Section 3 of EIA, should be implemented.		*
10.96	Fences/hoardings should be erected and installed along the boundary of the works areas.		^

EIA Ref.	Recommended Mitigation Measures	Location of the measure	DC/2009/17
10.97	Standard good site practices as suggested in Section 10 of EIA should be implemented.		N/A
10.98	Provision of proper drainage system and runoff control measures such as use of sand/silt traps, oil/grease separators, sedimentation tanks, etc.		^
F	Landscape and Visual		
Table 13.7	Topsoil, where identified, should be stripped and stored for re-use in the construction of the soft landscape works, where practical.	All construction sites	^
	Existing trees to be retained on site should be carefully protected during construction.		*
	Trees unavoidably affected by the works should be transplanted where practical.		^
	Compensatory tree planting should be provided to compensate for felled trees.		^
	Control of night-time lighting.		^
Table 13.7	Erection of decorative screen hoarding compatible with the surrounding setting.		N/A
G	Marine Ecology		
11.137	To minimize the potential indirect impacts on water quality from construction site runoff and various construction activities, the practices outlined in ProPECC PN 1/94 Construction Site Drainage should be adopted.	All construction sites	^
H	Hazard to Life		
14A.201	Limiting use of cranes in terms of locations, lifting height, swing angle and setting up safety zone.	Location determined on construction site by the engineer	^
I	Cultural Heritage		
Tables 15.8 - 15.11	The construction vibration control limit (ppv of 25mm/s) shall be strictly followed.	EM&A Manual Tables 15.8, 15.9,15.10 and 15.11	N/A

Remarks:	^ Compliance of mitigation measure;
	<> Compliance of mitigation measure but need improvement';
	N/A Not Applicable;
	* Recommendation was made during site audit but improved/rectified by the contractor.
	@ Partially implemented
	X Non-compliance of mitigation measure;
	• Non-compliance but rectified by the contractor;
	# Recommendation was made during site audit and to be improved / rectified by the contractor.

APPENDIX D
EVENT/ACTION PLANS

APPENDIX D – Event / Action Plans

Table D-1 Event / Action Plan For Air Quality

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
ACTION LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC and ER; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by 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 source; 2. Inform IEC and ER; 3. Advise the ER on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; 8. If exceedance stops, cease additional monitoring	1. Check monitoring data submitted by ET; 2. Check Contractor’s working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET on the effectiveness of the proposed remedial measures; 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures properly implemented	1. Submit proposals for remedial to ER within 3 working days of notification; 2. Implement the agreed proposals; 3. Amend proposal if appropriate

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
LIMIT LEVEL				
1. Exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ER on the effectiveness of the proposed remedial measures; 5. Supervise implementation of remedial measures	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Ensure remedial measures 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 IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Ensure remedial measures 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. Resubmit proposals if problem still not under

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
	<p>implemented;</p> <p>6. Arrange meeting with IEC and ER to discuss the remedial actions to be taken;</p> <p>7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results;</p> <p>8. If exceedance stops, cease additional monitoring</p>	<p>advise the ER accordingly;</p> <p>5. Supervise the implementation of remedial measures.</p>	<p>5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.</p>	<p>control;</p> <p>5. Stop the relevant portion of works as determined by the ER until the exceedance is abated</p>

Table E-2 Event / Action Plan For Construction Noise

EVENT	ACTION			
	ET	IEC	ER	CONTRACTOR
Action Level being exceeded	<ol style="list-style-type: none"> 1. Notify ER, IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC, ER and Contractor; 4. Discuss with the IEC and Contractor on remedial measures required; 5. Increase monitoring frequency to check mitigation effectiveness 	<ol style="list-style-type: none"> 1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures 	<ol style="list-style-type: none"> 1. Submit noise mitigation proposals to IEC and ER; 2. Implement noise mitigation proposals
Limit Level being exceeded	<ol style="list-style-type: none"> 1. Inform IEC, ER, Contractor and EPD; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with the IEC, Contractor and ER on remedial measures required; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring 	<ol style="list-style-type: none"> 1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly. 	<ol style="list-style-type: none"> 1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes the exceedance until the exceedance is abated 	<ol style="list-style-type: none"> 1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC and ER within 3 working days of notification; 3. Implement the agreed proposals; 4. Submit further proposal if problem still not under control; 5. Stop the relevant portion of works as instructed by the ER until the exceedance is abated

**APPENDIX E
COMPLAINT LOG**

APPENDIX E – COMPLAINT LOG

Log Ref.	Location	Received Date	Details of Complaint	Investigation/Mitigation Action	Status
N.A.	N.A.	N.A.	N.A.	N.A.	N.A.

Remarks: No environmental complaint was received during Construction Phase.

**APPENDIX F
SUMMARY OF EXCEEDANCE
RECORDED OVER THE PROJECT
PERIOD**

APPENDIX F– SUMMARY OF EXCEEDANCE

- a) Exceedance Report for 1-hr TSP (NIL)**
- b) Exceedance Report for 24-hr TSP (NIL)**
- c) Exceedance Report for Construction Noise (NIL)**

APPENDIX G
TOTAL WASTE FLOW TABLE

MONTHLY SUMMARY WASTE FLOW TABLE

Contract No.: DC/2009/17

Monthly summary waste Flow Table for 2018 (year)

Date	Actual Quantities of Inert C & D Materials Generated Monthly							Actual Quantities of non-inert C & D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Soil/Slurry	Reused in the contract	Reused in other Projects on site	Disposed to Public Fill	Imported Fill	Metals	Paper cardboard packaging	Plastics (see Note 3)	Chemical wastes	Others e.g. General refuses
	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in '000m ³)	(in Ton)	(in '000kg)	(in '000kg)	(in 'L)	(in 'TON)
2010 Aug to Dec	403.61	72.86	330.76	0	0	403.61	0	0	0	0	0	0
2011 Jan to Dec	16714.03	777.82	15936.21	0	0	16713.98	0	25.51	0.325	0	54	118.73
2012 Jan to Dec	2770.73	316.23	2454.50	0	0	2770.73	0	65.96	0.891	0.0085	0	343.97
2013 Jan to Dec	2837.06	377.29	2459.77	0	0	2837.06	0	28.13	1.59	0	200.0	314.32
2014 Jan to Dec	576.68	194.93	381.75	0	0	576.68	0	0.00	2.21	0	2000.0	145.52
2015 Jan to Dec	15878.75	1521.26	14073.58	40	244	15350.96	0	274.1	0.59	0	0	241.24
2016 Jan to Dec	2960.01	593.23	2005.86	361	0	2599.09	0	37.23	0	0	0	342.07
2017 Jan to Dec	2425.66	717.37	1708.29	0	0	2312.25	0	0	0	0	400	384.15
2018 Jan	22.40	20.20	2.20	0.00	0.00	22.40	0	0	0	0	0	7.86
2018 Feb	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0	0	0	4.46
2018 Mar	48.82	20.22	28.6	0	0	48.82	0	0	0	0	0	8.99
2018 Apr	43.15	43.15	0	0	0	43.15	0	0	0	0	0	7.94
2018 May	162.02	162.02	0.00	0	0	162.02	0	0	0	0	0	2.24
2018 Jun	47.96	47.96	0.00	0	0	47.96	0	0	0	0	0	0
2018 Jul												
2018 Aug												
2018 Sep												
2018 Oct												
2018 Nov												
2018 Dec												
Total	44890.88	4864.55	39381.51	400.92	243.91	43888.71	0.00	430.93	5.60	0.01	2654.00	1921.49

Forecast of Total quantities of C&D Materials to be Generated from the Contract							Forecast of Total quantities of non-inert C&d Materials to be Genated from the Contract				
Total Quantity Generated	Hard Rock and Large Broke Concrete	Soil/Slurry	Reused in the contract	Reused in other Projects	Disposed to Public Fill	Imported Fill	Metals	Paper cardboard packaging	Plastics (see Note 3)	Chemical wastes	Others e.g. General refuses
(in m3)	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in m ³)	(in '000m ³)	(inTon)	(in '000kg)	(in '000kg)	(in 'L)	(inTon)
36,698	8,561	28,137	/	1,700	36,698	/	2000	100	20	15000	1650

- Notes:
- (1) The performance targets are given in PS Clause 6(14)
 - (2) The waste flow table shall also include C& D materials that are specified in the Contract to be imported for use at the Site
 - (3) Plastics refer to plastic bottles/containers, Plastic sheets/form from packaging material.
 - (4) The Contractor shall also submit the latest forecast of the total amount of C& D materials aspected to be generated from the Works together with a breakdown of the nature where the total amount of C & D materials expected to be generated from the Works is equal to or exceeding 30,000m (PS Clause 8(4) (to refers))[Delete Note (4) and the table above on the foreman where inapplicable.
 - (5) The assumed density for inert C & D material and rock/broken concrete are 2000kg/m³ and 2500kg/m³ respectively. The asumed density for the general refuse is 1000kg/m³.

**APPENDIX H
PROJECT'S CONSTRUCTION ACTIVITY
PROGRAMME**

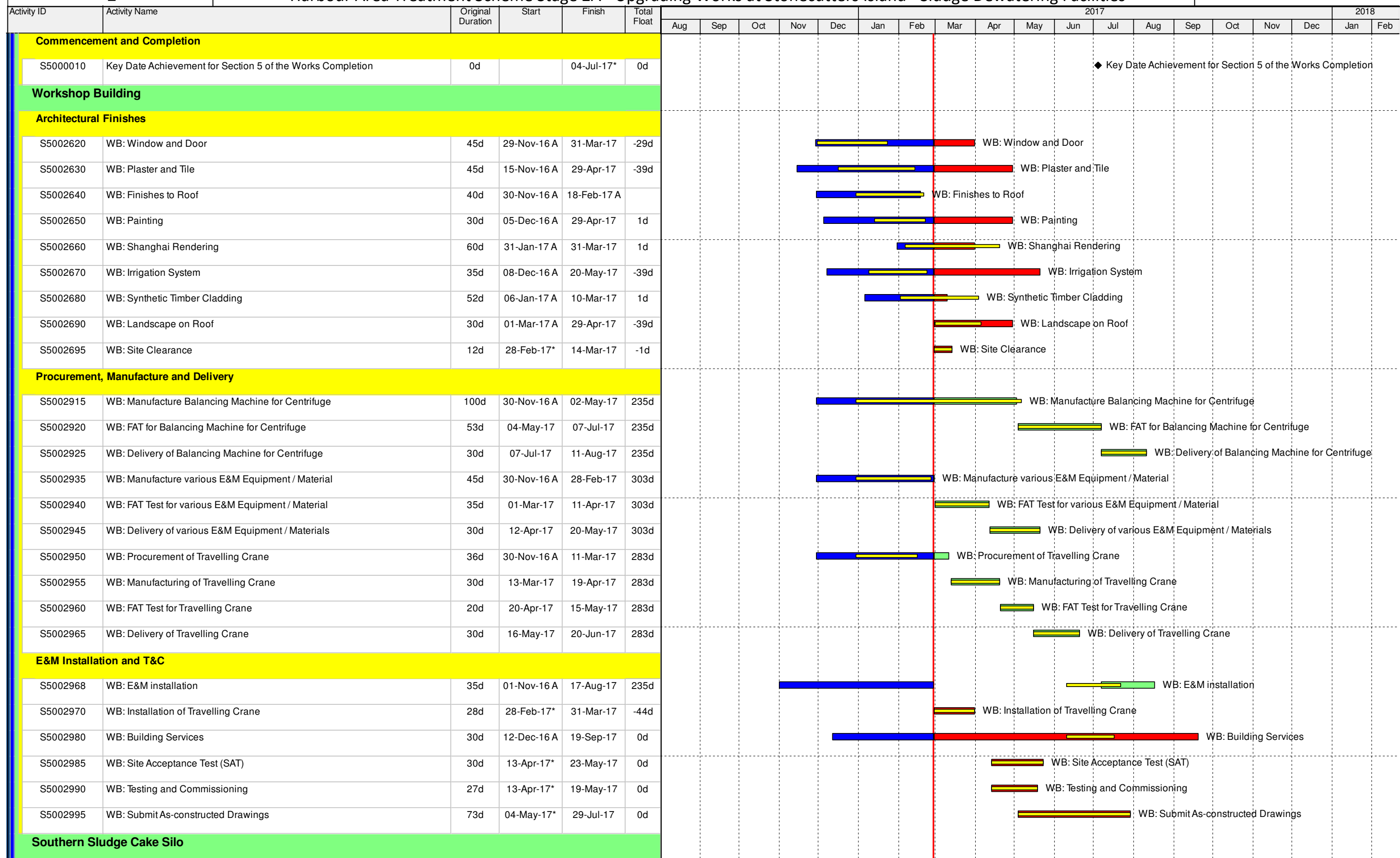
Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017												2018	
						Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
DC/2009/17 Detailed Works Programme Revision 3B_Updated up to 28-Feb-17																			
KEY DATE																			
Contract Dates																			
Commencement and Completion																			
Section 5 of the Works																			
KD000058	Expected Revised (EOT=125) Completion of Section 5 of the Works (2379 days)	0d		27-Feb-17 A		◆ Expected Revised (EOT=125) Completion of Section 5 of the Works (2379 days)													
KD0000582	Expected Revised (EOT=84) Completion of Section 5 of the Works (2463 days)	0d		22-May-17*	0d	◆ Expected Revised (EOT=84) Completion of Section 5 of the Works (2463 days)													
KD0000602	Expected Revised (EOT=43) Completion of Section 5 of the Works (2506 days)	0d		04-Jul-17*	0d	◆ Expected Revised (EOT=43) Completion of Section 5 of the Works													
Maintenance Period																			
KD000060	Original Completion of Maintenance Period	0d		19-May-17*	0d	◆ Original Completion of Maintenance Period													
KD000061	Revised (EOT=14) Completion of Maintenance Period	0d		02-Jun-17*	0d	◆ Revised (EOT=14) Completion of Maintenance Period													
KD000062	Revised (EOT=54) Completion of Maintenance Period	0d		26-Jul-17*	0d	◆ Revised (EOT=54) Completion of Maintenance Period													
KD000063	Revised (EOT=77) Completion of Maintenance Period	0d		11-Oct-17*	0d	◆ Revised (EOT=77) Completion of Mail													
KD000064	Revised (EOT=14) Completion of Maintenance Period	0d		24-Oct-17*	0d	◆ Revised (EOT=14) Completion of													
KD000065	Expected Revised (EOT=125) Completion of Maintenance Period	0d		27-Feb-18*	0d														
KD582	Expected Revised (EOT=84) Completion of Maintenance Period	0d		22-May-18*	0d														
KD592	Expected Revised (EOT=43) Completion of Maintenance Period	0d		04-Jul-17*	0d	◆ Expected Revised (EOT=43) Completion of Maintenance Period													
Completion																			
Vacating of Area																			
AD000150	Vacate of Portion 6 of the Site	0d		04-Jul-17*	0d	◆ Vacate of Portion 6 of the Site													
AD000180	Vacate of Portion C of the Site	0d		04-Jul-17*	0d	◆ Vacate of Portion C of the Site													
AD000190	Vacate of Portion D of the Site	0d		04-Jul-17*	0d	◆ Vacate of Portion D of the Site													
AD000200	Vacate of Portion E of the Site	0d		04-Jul-17*	0d	◆ Vacate of Portion E of the Site													
AD000210	Vacate of Portion F of the Site	0d		04-Jul-17*	0d	◆ Vacate of Portion F of the Site													
AD000220	Vacate of Portion G of the Site	0d		04-Jul-17*	0d	◆ Vacate of Portion G of the Site													
Extension of Time																			
Section 5 of the Works																			
KD0000472	Section 5 of the Works expected 125days EOT	126d	25-Oct-16 A	28-Apr-17	274d	◆ Section 5 of the Works expected 125days EOT													
KD0000473	Section 5 of the Works expected 84 days EOT	84d	29-Apr-17	21-Jul-17	274d	◆ Section 5 of the Works expected 84 days EOT													
KD0000483	Section 5 of the Works expected 43 days EOT	43d	22-Jul-17	02-Sep-17	274d	◆ Section 5 of the Works expected 43 days EOT													
Section 5 of the Works																			
Completion																			

■ Actual Work ■ Remaining Level of Effort
■ Remaining Work ■ Actual Level of Effort
■ Critical Remaining Work
 Project Baseline Bar
◆ Milestone

Page 1 of 6

Monthly Progress Report updated up to 28-Feb-17
(Based on Detail Works Programme Rev.3B)

Updated Detail Works Programme Revision 3-B			
Date	Revision	Checked	Approved
28-Feb-17			



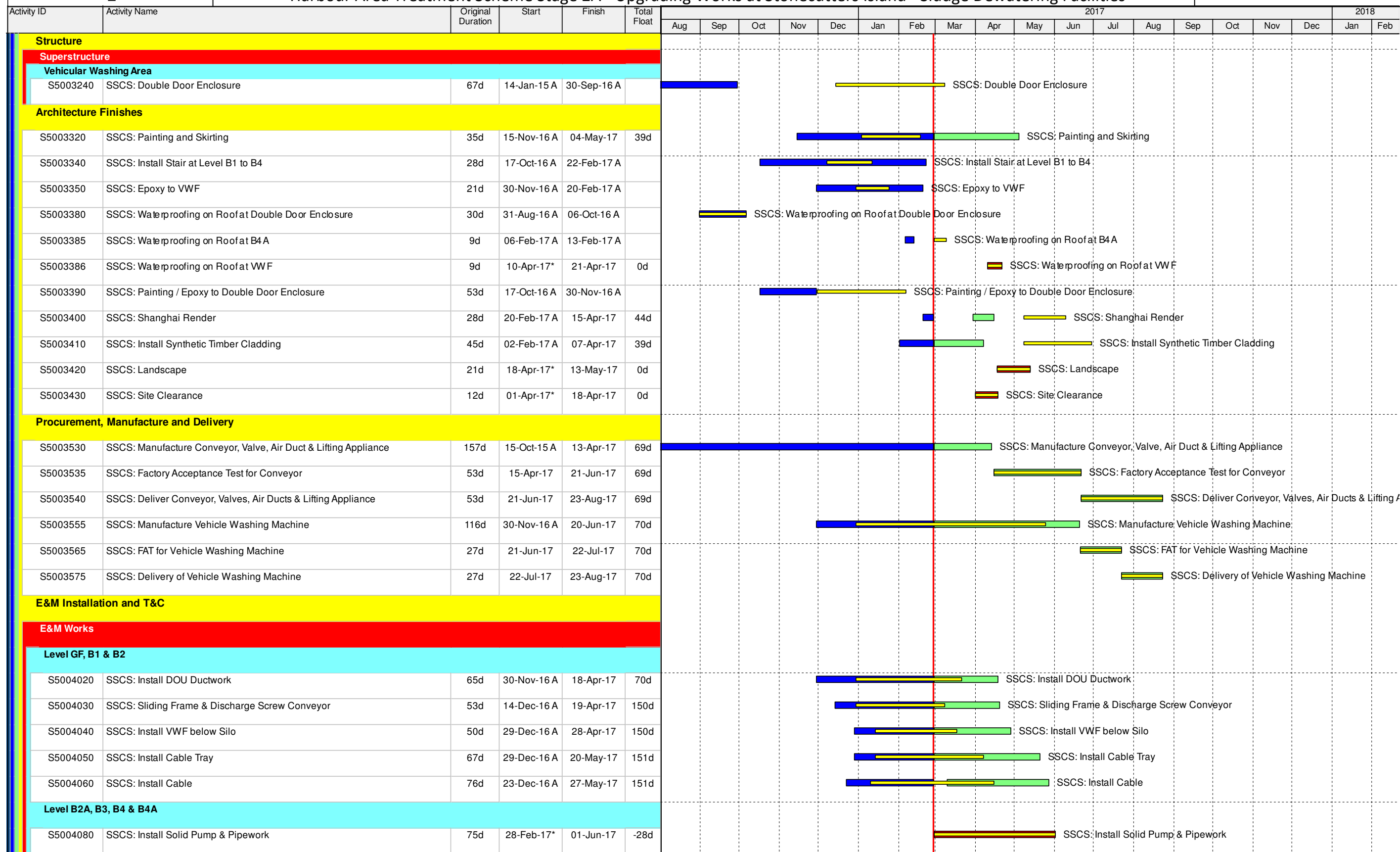
■ Actual Work ■ Remaining Level of Effort
■ Remaining Work ■ Actual Level of Effort
■ Critical Remaining Work
 Project Baseline Bar
◆ Milestone

Page 2 of 6

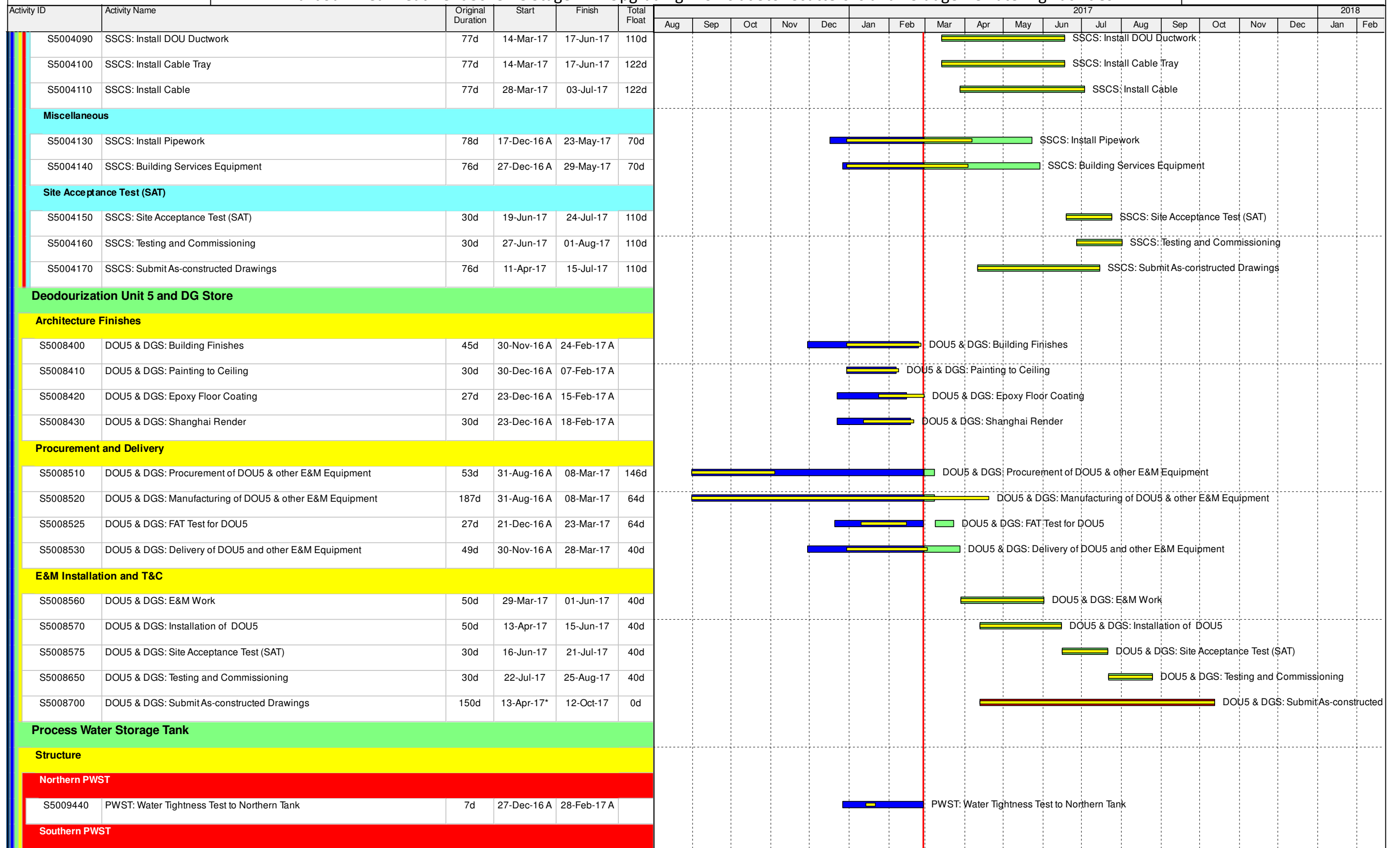
Monthly Progress Report updated up to 28-Feb-17

(Based on Detail Works Programme Rev.3B)

Updated Detail Works Programme Revision 3-B			
Date	Revision	Checked	Approved
28-Feb-17			



Updated Detail Works Programme Revision 3-B			
Date	Revision	Checked	Approved
28-Feb-17			



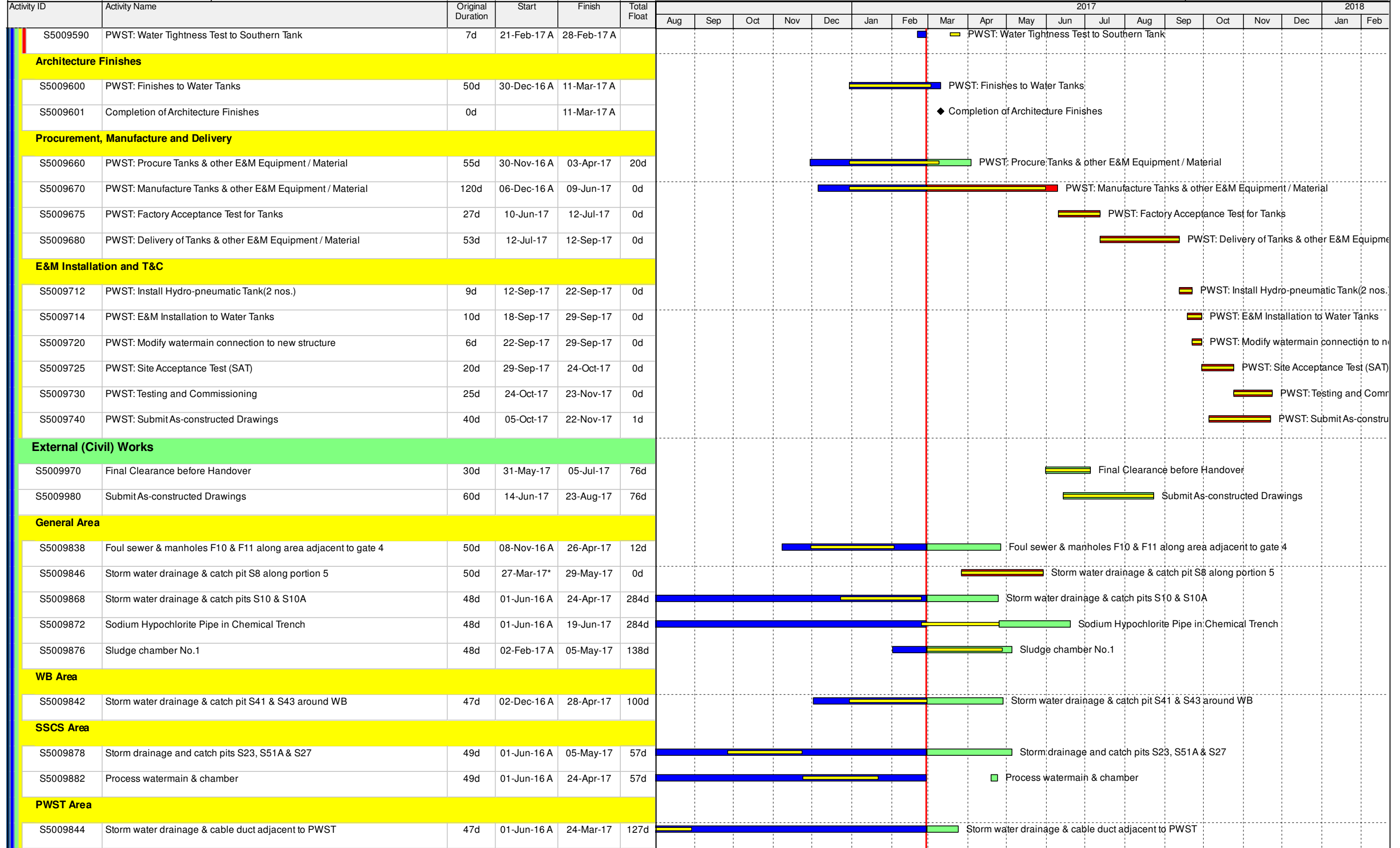
- █ Actual Work
- █ Remaining Level of Effort
- █ Remaining Work
- █ Actual Level of Effort
- █ Critical Remaining Work
- Project Baseline Bar
- ◆ Milestone

Page 4 of 6

Monthly Progress Report updated up to 28-Feb-17

(Based on Detail Works Programme Rev.3B)

Updated Detail Works Programme Revision 3-B			
Date	Revision	Checked	Approved
28-Feb-17			



- █ Actual Work
- █ Remaining Work
- █ Critical Remaining Work
- █ Project Baseline Bar
- ◆ Milestone
- █ Remaining Level of Effort
- █ Actual Level of Effort

Monthly Progress Report updated up to 28-Feb-17
(Based on Detail Works Programme Rev.3B)

Updated Detail Works Programme Revision 3-B			
Date	Revision	Checked	Approved
28-Feb-17			

Activity ID	Activity Name	Original Duration	Start	Finish	Total Float	2017												2018																					
						Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb															
						Statutory Inspection and Training																																	
E&M: Testing and Commissionings																																							
S5010110	S5 Work: Submission of WWO46	43d	24-Oct-17	14-Dec-17	105d																																	S5 Work: Submissi	
S5010120	S5 Work: Inspect Water Supply by WSD	30d	14-Dec-17	22-Jan-18	105d																																		S5 Wor
S5010130	S5 Work: Submission of FS Form 501	25d	22-Aug-17	19-Sep-17	0d																																		S5 Work: Submission of FS Form 501
S5010140	S5 Work: Inspect FS Installation by FSD	12d	20-Sep-17	05-Oct-17	0d																																		S5 Work: Inspect FS Installation by FSD
S5010150	S5 Work: Inspect DG Store by FSD	11d	11-Sep-17	23-Sep-17	0d																																		S5 Work: Inspect DG Store by FSD
S5010210	S5 Work: Preparation & Submit Draft O&M Manuals	80d	23-Aug-17	27-Nov-17	69d																																		S5 Work: Preparation &
S5010220	S5 Work: Submit Training Programme and Syllabus	27d	27-Nov-17	30-Dec-17	69d																																		S5 Work: Subi
S5010230	S5 Work: Training of Employer Staff (3 Sessions)	53d	30-Dec-17	08-Mar-18	69d																																		
S5010250	S5: Preparation & Submit Modified O&M Manuals	53d	28-Feb-17	06-May-17	168d																																		S5: Preparation & Submit Modified O&M Manuals
S5010260	S5: Preparation & Submit Final O&M Manuals	53d	28-Feb-17	06-May-17	168d																																		S5: Preparation & Submit Final O&M Manuals

- Actual Work
- Remaining Work
- Critical Remaining Work
- Project Baseline Bar
- Milestone
- Remaining Level of Effort
- Actual Level of Effort

Monthly Progress Report updated up to 28-Feb-17
(Based on Detail Works Programme Rev.3B)

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28-Feb-17			