**Drainage Service Department** 

Monthly Environmental Monitoring & Auditing report for

Contract No.DC/2009/22 Drainage Improvement in Shuen Wan, Tai Po – Contract 1

September 2012

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Contract No. DC/2009/22 - Drainage Improvement in Shuen Wan, Tai Po - Contract 1 Monthly EM&A Report for September 2012

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#### **Environmental Pioneers & Solutions Limited**

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## **EXECUTIVE SUMMARY**

This is the nineteenth monthly Environmental Monitoring and Audit (EM&A) Report for the drainage improvement works in Shuen Wan, Tai Po under Drainage Services Department Contract No. DC/2009/22 entitled "Drainage Improvement Works in Shuen Wan, Tai Po – Contract 1". This report concludes the impact monitoring for the activities undertaken during the period from 1<sup>st</sup> of September 2012 to 30<sup>th</sup> September 2012. The major site activities in this reporting period were mainly internal finishing for the proposed Transformer room & Switchroom, heading tunnel for the proposed DN225 sewer, Excavation for the proposed DN1200 & DN1200 concrete pipe trench, Concreting for the proposed discharge chamber, concreting top slab for Bay 10 and grouting for second layer of grout hole at the proposed DN2800 twin pipes.

The Environmental Team (ET) is responsible for the EM&A works required in the EM&A manual (revision 3). Site inspections were carried out on weekly basis to investigate and audit the equipment and work methodologies with respect to pollution control and environmental mitigation. The weekly inspections records and photos taken were kept.

In general, waste management was satisfactory during the reporting period.

Impact monitoring for construction noise was conducted in the reporting period. No exceedance of A/L level was reported.

Furthermore, impact monitoring for water quality was conducted. Total 11 abnormal incidents of water quality criteria were recorded in this reporting month. It was observed that the river was narrowed for construction of mechanical penstocks; and increases the speed of water current. During the reporting period, no construction works were carried out at the river bed. Proper mitigation measures were implemented by contractor to avoid site water release to the Wai Ha river and no particular observation of defective site activities were found causing water contamination; The exceedance of Turbidity and Total Suspended Solid were believed to be mainly attributed by high water flow rate and for the high level of turbidity and SS, it was also believed to be mainly attributed by natural fluctuation. And, since the recorded

levels of DO at control station had also exceeded its baseline action level, the exceedances recorded at W2 were unlikely to be related to the Project.

No exceedance of A/L level was reported for the monitoring of hydrological characteristics in the reporting period.

The ecological monitoring of the Ecological Compensatory Area (ECA) of the project is conducted. Details of the findings are referred to sections 6.2.

Visual and landscape monitoring has been conducted for the project. Details of the observations are referred to sections 7.3.

There was no complaint, notification of any summons and successful prosecutions against the project received during the reporting period.

Site works proposed to be carried out in the upcoming month at Area A, B & C are refer to section 2.2.

It is expected that noise, air and water quality impacts will be resulted from the works. ET has reminded the contractor to provide environmental pollution control measures wherever necessary and to keep a good environmental management at site practice. The recommended mitigation measures proposed for the project as well as implementation status are refer to section 12.3.

The ET will continue to implement the environmental monitoring & audit programme in accordance with the EM&A Manual (revision 3) and Environmental Permit requirement.

## 1 Introduction

This is the seventeenth monthly Environmental Monitoring and Audit (EM&A) Report for the drainage improvement works in Shuen Wan, Tai Po under Drainage Services Department Contract No. DC/2009/22 entitled "Drainage Improvement Works in Shuen Wan, Tai Po – Contract 1". The site layout plan is shown in Appendix A. The Environmental Team, Environmental Pioneers & Solutions Limited was appointed by Kwan Lee – Kuly Joint Venture to prepare the report. The report is to be submitted to the Contractor, the Engineer and the IEC.

This report presents the results of the environmental monitoring of the project activities conducted within the reporting period from 1<sup>st</sup> September 2012 to 30<sup>th</sup> September 2012. This report included the noise monitoring, water quality monitoring, hydrological characteristics monitoring, ecological monitoring, visual and landscape monitoring, and regular site inspections once per week for verification of implementation of the mitigation measures as recommended in the Environmental Permit (EP-303/2008) (EP), EM&A Manual (revision 3) and the Contractor's Environmental Management Plan (EMP).

## 2 Construction Stage

## 2.1 Construction activities in the reporting period

Major activities in the reporting period included the followings:

Area A.:

- Internal Finishing for the proposed Transformer room & Switch room.
- Laying of E&M ducting for the proposed screen house and store room.
- Concreting the U-channel at +11.85mPD and stairs.
- Laying of blinding layer for receiving pit.
- Heading tunnel for the proposed DN225 sewer.
- Excavation for the proposed DN1200 & DN1200 concrete pipe trench.
- Heading excavation for the proposed DN225 sewer.
- Concreting for the proposed discharge chamber.
- Road reinstatement of the proposed DN2100 trench (CH70 to CH120)

Area B.:

- Concreting top slab for Bay 10.
- Installation of sheetpiles for the proposed box culvert bay 9, 4 & 1.
- Grouting for second layer of grout hole at the proposed DN2800 twin pipes.
- Backfilling of trench for the proposed Box Culvert.

Area C.:

- In Maintenance period.

## 2.2 Construction activities for the coming month

Proposed key construction works in the coming month will include:

## Area A (Pumping Station)

- 1. Internal finishing for the proposed transformer room and switch room.
- 2. Construction of screen house and store room.
- 3. Construction of flowmeter chamber and DN1200 concrete pipe.
- Construction of DN2100 Storm relief drains (CH80 to CH120) at Ting Kok Road.

- 5. Construction of receiving pit for cross road DN2800 twin pipe.
- 6. Construction of the proposed receiving pit.
- 7. Construction of the proposed discharge chamber

Area B (Tung Tsz Nursery)

- 1. Construction of box culvert CH156 to CH214.5 & CH0.0 CH55
- 2. Construction of jacking pit for cross road DN2800 twin pipe.

Area C (HCA)

1. In Maintenance Period

## 2.3 Environmental Status

Appendix A shows the drawing of the project area.

Locations of the monitoring and control stations with environmental sensitive receivers are presented in Section 3.3, 4.3, and 5.3 for noise, water quality, and hydrological characteristics respectively.

## **3** Noise Monitoring

#### 3.1 Monitoring Parameters and Methodology

The construction noise level was measured in terms of the A-weighted equivalent continuous sound pressure level ( $L_{eq}$ ).  $L_{eq (30minutes)}$  was used as the monitoring parameter for the impact monitoring in the time period between 0700 to 1900 hours on normal weekdays. For all other time period,  $L_{eq (5minutes)}$  was employed for comparison with the Noise Control Ordinance (NCO) criteria.

Noise measurement results obtained from each monitoring location were recorded in the Construction Noise Monitoring Data Sheet (Appendix D) immediately after the measurement. As supplementary information for data auditing, statistical results  $L_{10}$  and  $L_{90}$  were also be recorded for reference.

In case of non-compliance with the construction noise criteria, more frequent monitoring, as specified in the Action plan in Table 3.5.2, shall be carried out. This additional monitoring shall be carried out until the recorded noise levels are rectified or proved to be irrelevant to the construction activities.

## 3.2 Monitoring Equipment

The sound level meters and calibrators comply with the International Electrotechnical Commission Publications 651:1979 (Type 1) and 804:1985 (Type 1) specifications as referred to in the Technical Memorandum (TM) to the Noise Control Ordinance was deployed as monitoring equipment for noise measurement.

Noise measurement was not be made in the presence of fog, rain, wind with a steady speed exceeding 5ms<sup>-1</sup> or wind with gust exceeding 10ms<sup>-1</sup>. Thus wind speed was checked by the portable wind speed indicator capable of measuring the wind speed in m/s. Table 3.2.1 summarizes the equipment list for noise monitoring

Equipment	Manufacturer & Model No.	Precision Grade	Qty		
Integrated sound	Svantek 949	IEC 651 Type 1	1		
level meter		IEC 804 Type 1			
Windscreen	Microtech gefell model W2	N/A	1		
Acoustical	Svantek SV30A	IEC 942 Type 1	1		
calibrator					
Wind speed	Kestrel K1000	N/A	1		
indicator					
Remarks: Calibration details of the sound level meter is given in Appendix C for					
reference					

Table 3.2.1 Equipment List for No.	oise Monitoring
------------------------------------	-----------------

## **3.3** Monitoring Locations

According to the Environmental Monitoring and Audit manual, impact noise monitoring for contract 1 was undertaken at two locations during the construction phase of the project. The proposed monitoring locations are summarized in Table 3.3.1. Figure 3.3.1 shows the Noise Monitoring Locations

Noise measurement at each monitoring location was taken at a point 1m from the exterior of the selected premises and at a height of 1.2m above ground with no disturbance to the dweller and least obstructed view.

Noise Station	Monitoring	Location
M1		14, Shuen Wan Chim Uk
AL1		Joint Village Office for Villages in Shuen Wan, Tai Po

Table 3.3.1 Noise Monitoring Locations during Construction Phase

In accordance with the requirements in the EM&A manual (revision 3), weekly impact monitoring was conducted. For the time period between 0700 and 1900 hours on normal weekdays, and noise parameter of  $L_{eq (30minutes)}$  was measured. As if the construction works were carried out during restricted period (i.e. 1900-2300, 2300-0700 of next day and Sundays / general holiday), impact monitoring that comprises 3 consecutive  $L_{eq (5minutes)}$  would be carried out.

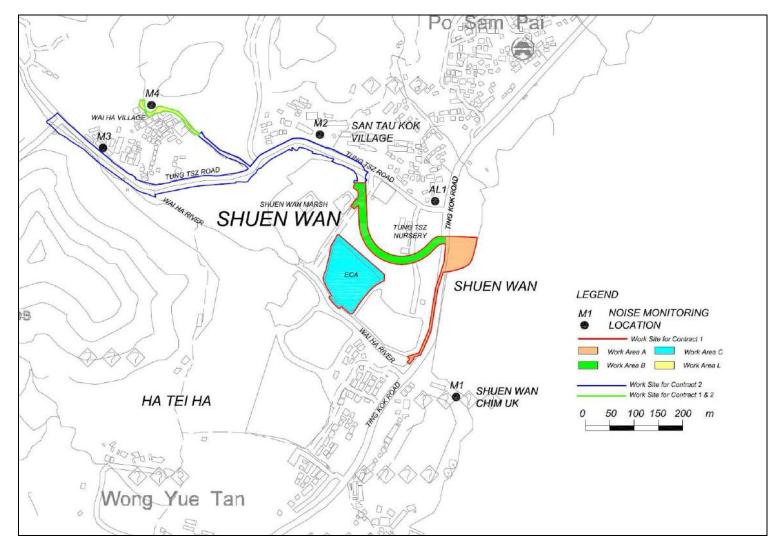


Figure 3.3.1 Impact noise monitoring locations

## 3.4 Monitoring Results and Interpretation

Relevant details of the noise monitoring results are presented in Table 3.4.1. The results of M1 ranged between 60.1dB (A) and 62.3dB (A), and AL1 ranged between 64.1dB (A) and 68.5dB (A), were within the limit levels and therefore, no exceedance was found.

Table 3.4.1 Noise Monitoring Results for the reporting period							
Location	Parameter	Date*	Time	L <sub>Aeq</sub> dB(A)	Limit dB(A)	Exceedance	Weather
M1	Leq 30mins	5-Sep-12	10:20	60.1	75	Ν	Sunny
M1	Leq 30mins	9-Sep-12	10:30	62.3	75	Ν	Sunny
M1	Leq 30mins	19-Sep-12	9:50	60.1	75	Ν	Sunny
M1	Leq 30mins	26-Sep-12	10:50	62.3	75	Ν	Sunny
AL1	Leq 30mins	5-Sep-12	10:55	64.1	75	Ν	Sunny
AL1	Leq 30mins	9-Sep-12	11:05	67.4	75	Ν	Sunny
AL1	Leq 30mins	19-Sep-12	10:25	68.5	75	Ν	Sunny
AL1	Leq 30mins	26-Sep-12	11:20	66.3	75	Ν	Sunny

Remarks: Raw datasheet for noise monitoring are attached in Appendix D for reference.

## 3.5 Action and Limit level for Construction noise

The Action and Limit (A/L) levels for construction noise are defined in Table 3.5.1. Should non-compliance of the criteria occur, action in accordance with the Action Plan in Table 3.5.2 should be carried out.

There was no exceedance recorded in the reporting period.

Time Period	Action Level	Limit Level	
0700 – 1900 hours on	When one documented	75dB(A)	
normal weekdays	complaint is received	/30B(A)	
Remarks: If	works are to be carried out du	ring restricted hours, the	
conditions st	ipulated in the construction no	oise permit issued by the	
Noise Contro	d.		

Table 3.5.1 Action and Limit Levels for Construction noise

## **3.6** Monitoring Schedule for the next reporting period

Noise monitoring schedule is proposed to be carried out on  $3^{rd}$ ,  $10^{th}$ ,  $17^{th}$ ,  $24^{th}$  and  $31^{st}$  of October 2012.

EVENT	ET Leader	IEC	ER	CONTRACTOR
<b>EVENT</b> Action Level	ET Leader 1. Notify IEC and Contractor. 2. Carry out investigation. 3. Report the results of investigation to the IEC, ER and Contractor. 4. Discuss with the Contractor and formulate remedial measures. 5. Increase monitoring frequency to check mitigation effectiveness.	IEC 1. Review the analysed results submitted by the ET. 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly. 3. Supervise the implementation of remedial measures.	ER 1. Confirm receipt of notification of failur e in writing. 2. Notify Contractor. 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Check remedial measures are properly implemented.	CONTRACTOR 1. Submit noise mitigation proposals to IEC. 2. Implement noise mitigation proposals.

<b></b>			Γ	
Limit	1. Notify IEC, ER,	1. Discuss	1. Confirm	1. Take immediate
Level	EPD and	amongst ER,	receipt of	action to avoid
	Contractor.	ET, and	notification of	f
	2. Identify source.	Contractor on	2. Notify	urther
	3. Repeat	the potential	Contractor.	exceedance.
	measurements to	remedial	3. Require	2. Submit
	confirm findings.	actions.	Contractor	proposals for
	4. Increase	2. Review	4. Check remedial	remedial
	monitoring	C ontractor's'	measures	actions to IEC
	frequency.	remedial	properly	within 3
	5. Carry out	actions	implemented.	working days
	analysis of	whenever	5. If exceedance	of notification.
	Contractor's	necessary to	continues,	3. Implement the
	working	assure their	consider what	agreed
	procedures to	effectiveness	portion of the	proposals.
	determine	and advise	work is	4. Resubmit
	possible	the	responsible	proposals if
	mitigation to be	ER	and instruct the	problem still
	implemented.	accordingly.	Contractor to	not under
	6. Inform IEC, ER	3. Supervise the	stop that	control.
	and EPD the	implementation	portion of work	5. Stop the
	causes and	of remedial	until the	relevant portion
	actions taken for	measures.	exceedance is	of works as
	the exceedances.		abated.	determined by
	7. Assess			the ER until the
	effectiveness of			exceedance is
	Contractor's			abated.
	remedial actions			
	and keep IEC,			
	EPD and ER			
	informed of the			
	results.			
	8. If exceedance			
	stops, cease			
	additional			
	monitoring.			
	$\mathcal{O}^{\circ}$			

## 4 Water Monitoring

## 4.1 Water Quality Monitoring Parameters and methodology

Turbidity in Nephelometric Turbidity Unit (NTU), and Dissolved Oxygen (DO) in mg/L, temperature, and pH measurements were in-situ measurements and suspended solids measurements were performed by a HOKLAS accredited laboratory using recommended reference method APHA 2540D.

## 4.2 Monitoring Equipment

Turbidity, DO, Salinity, pH and temperature was measured by an instrument complied with the following requirements:

The instrument is a portable as well as weatherproof multimeter complete with cable and uses a DC power source. It is capable of measuring:

- A turbidity between 0-800NTU;
- A dissolved Oxygen level in the range of 0-20mg/L and 0-200% saturation;
- A temperature of  $0-50^{\circ}$ C;
- Salinity in the range of 0-40ppt;
- pH in the range of 0-14.

The measurements were performed by a portable and weatherproof multi-meter, model TOA-DKK WQC-24. The equipment was calibrated and verified by certified laboratory every 3 months to ensure they perform to the same level of accuracy as stated in the manufacturer's specification. Detailed calibration records of the multi-meter were shown in Appendix C for reference

Suspended solids were determined by the water samples collected from the monitoring locations for further analysis in accredited HOKLAS laboratory. Water samples were contained by polythene bottles, packed in ice (cooled in 4°C without frozen) and delivered to the laboratory for analysis as soon as possible after collection.

## 4.3 Monitoring Locations

In accordance with the EM&A Manual (revision 3), monitoring stations for contract 1 were established at two locations, which are summarized in Table 4.3.1.

Monitoring Station	Location	Coordinates
W1	Between the Shuen Wan Marsh	E:839301
vv 1	and ECA	N:836386
wo	Between Tolo Harbour and	E:839542
W2	Proposed Penstock	N:836184

 Table 4.3.1 – Water Quality Monitoring Stations

As illustrated in Figure 4.3.1, W1 served as the control station while W2 was the monitoring location of water quality.

According to the approved proposal of revision for Action/Limit Level Criteria of Water Quality Monitoring, two reference points (C1 & C2) were added.

Should the water quality parameters monitoring results at the monitoring station W2 exceed the water quality criteria, the water quality monitoring data of two reference points (C1 and C2) will be used as the supplementary information. The monitoring data of C1 should be used for comparison with the monitoring data of W2 that taken at flood tide; and the monitoring data of C2 should be used for comparison with the monitoring data of W2 that taken at ebb tide. The comparison of water quality between W2 and C1 at flood tide and between W2 and C2 at ebb tide is to prove whether influence of water quality is caused by the construction activities. The details of C1 and C2 are presented in **Appendix O**.

In accordance with the EM&A Manual (revision 3), measurements shall be taken at 3 water depths, namely, 1m below water surface, mid-depth and 1m above river bed, except where the water depth less than 6m, the mid-depth station may be omitted. Should the water depth be less than 3m, only the mid-depth station will be monitored. As the depth of water was less than 3m, water samples were collected at mid-depth of each proposed monitoring stations for measurements and sample collection.

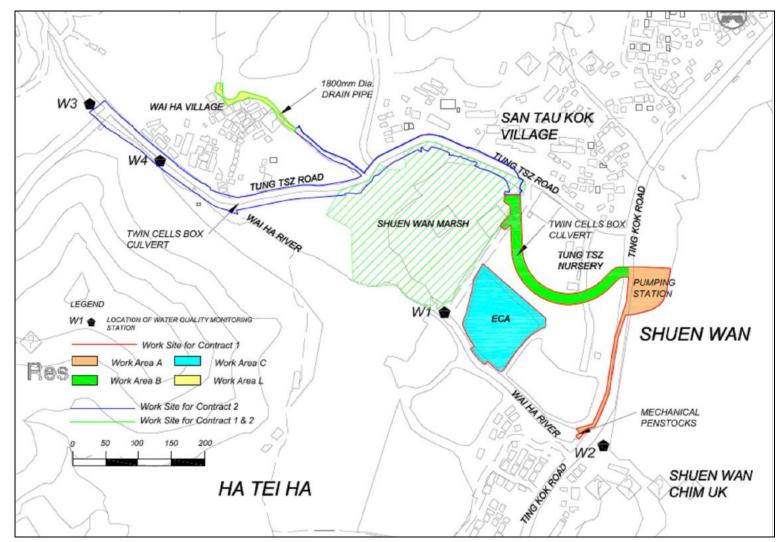


Figure 4.3.1 Water Quality Monitoring Locations

## 4.4 Monitoring Frequency

Impact water quality monitoring for each monitoring station were performed at mid-flood or mid-ebb tides for 3 days per week during the course of the construction river works.

Monitoring were carried out on 3<sup>rd</sup>, 5<sup>th</sup>, 7<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup>, 14<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>, 21<sup>st</sup>, 24<sup>th</sup>, 26<sup>th</sup> and 28<sup>th</sup> of September 2012.

## 4.5 Monitoring Results and Interpretation

Water quality monitoring was carried out twelve times in this reporting month. Detailed on-site measurements are shown in Appendix E. Table 4.5.1 presents consolidated results throughout the reporting month.

There were 11 abnormal incidents of water quality limits (Dissolved Oxygen, Suspended Solid and Turbidity) were recorded in this reporting month according to the established action and limit levels. ET has arranged site investigations for the abnormal incidents and it was observed that the river was narrowed for construction of mechanical penstocks; and increases the speed of water current. No construction activities were carried out at the river bed during the reporting period. Proper mitigation measures were implemented by contractor to avoid site water release to the Wai Ha river and no particular observation of defective site activities were found causing water contamination; The exceedance of Turbidity and Total Suspended Solid were believed to be mainly attributed by high water flow rate and adverse weather. The exceedances of DO were believed to be mainly attributed by natural fluctuation, since the recorded levels of DO at control station had also exceeded its baseline action level, the exceedances recorded at W2 were unlikely to be related to the Project.

The water condition of Wai Ha River is presented in photo attached in Appendix N.

	Average of M	Average of Monitoring Results					
	Temperature (°C)	Turbidity (NTU)	pН	Dissolved Oxygen (mg/L)	Dissolved Oxygen (%)	Suspended Solids (mg/L)	
W1	30.38	13.3	6.81	5.86	81.1	11.83	
W2	30.1	11.4	7.38	7.02	89.2	6.58	
C1	31.9	11.4	7.41	6.75	86.0	11.0	
C2	30.5	23.0	8.03	6.48	89.4	23.8	

 Table 4.5.1 Summary of Water Quality Monitoring Results of this reporting month

Table 4.5.2 Interpretations of abnorma	l incidents recorded in the reporting month

Date	Tide	Parameter	Interpretations	
3/9/2012	Ebb	Turbidity	Incident was regarded as high river flow rate since	
3/9/2012	EUU	Turbiany	river narrowed was observed.	
5/9/2012	Ebb	Turkidity	Incident was regarded as high river flow rate since	
3/9/2012	EUU	Turbidity	river narrowed was observed.	
7/9/2012	Ebb	Turbidity	Incident was regarded as high river flow rate since	
7/9/2012	EUU	Turbidity	river narrowed was observed.	
			Incident was regarded as high river flow rate since	
10/9/2012	Ebb	Turbidity	river narrowed was observed.	
			Insident was recorded as high river flow rate since	
12/9/2012	Flood	Turbidity	Incident was regarded as high river flow rate since river narrowed was observed.	
14/9/2012	Ebb	Turbidity	Incident was regarded as high river flow rate since	
			river narrowed was observed.	
17/9/2012	Ebb	Turbidity	Incident was regarded as high river flow rate since	
			river narrowed was observed.	
21/9/2012	Ebb	Turbidity	Incident was regarded as high river flow rate since	
			river narrowed was observed.	
24/9/2012	Flood	Turbidity	Exceedances were caused by adverse weather	
21772012	11000	SS		
		<b>77</b> 1 1 1 1	Incident was regarded as high river flow rate since	
26/9/2012	Ebb	Turbidity	river narrowed was observed.	
28/9/2012	Ebb	DO	Natural fluctuation	

The site activities of September 2012 were shown in Appendix P.

## 4.6 Action and limit level for Water Quality

Based on the criteria stipulated in EM&A manual (revision 3) and baseline water quality monitoring data obtained, the A/L levels are shown in Table 4.6.1, Table 4.6.2. The A/L levels for W1 were ignored since W1 functions as the control station for contract 1. If the water quality monitoring results at any impact stations exceeded the criteria, the actions in accordance with the Event and Action Plan in Table 4.6.3 should be taken.

Table 4.6.1 Action and Limit Levels for Water Quality at All Monitoring Stations

Parameters	Action	Limit	
DO in mg/L	5 percentile of baseline data	4 mg/L or 1 percentile of baseline data	
pН	N/A	6.0 - 9.0	
SS in mg/L	95 percentile of baseline data or 120% of upstream control station's SS	99 percentile of baseline data or 130% of upstream control station's SS	
Turbidity in NTU	95 percentile of baseline data or 120% of upstream control station's Turbidity	<ul><li>99 percentile of baseline data or</li><li>130% of upstream control</li><li>station's Turbidity</li></ul>	

	Monitor	Monitoring Stations (Flood Tide)			Monitoring Stations (Ebb Tide)			
W1			W2		W1		W2	
Parameters	Action	Limit	Action	Limit	Action	Limit	Action	Limit
	Level	Level	Level	Level	Level	Level	Level	Level
DO (mg/L)	8.07	8.07	7.81	7.69	7.12	7.02	6.77	6.31
рН	N/A	6.0-9.0	N/A	6.0-9.0	N/A	6.0-9.0	N/A	6.0-9.0
SS (mg/L)	7.7	8.1	7.7	8.6	10.5	10.9	9.4	9.9
Turbidity (NTU)	4.9	5.3	1.7	1.8	4.2	4.7	3.0	3.5

Table 4.6.2 Action and Limit Levels for Water Quality at All Monitoring Stations

Remarks:

For DO, non-compliance of the water quality limits occurs when monitoring result is lower than the limits

For SS and turbidity, non-compliance of the water quality limits occurs when monitoring result is higher than the limits.

Event	ET Leader	IEC	ER	Contractor
ACTION LEV	EL		•	
Action level	1. Repeat in-situ	1. Discuss	1. Discuss	1. Inform Engineer
being	measurements to	mitigation	proposed	and confirm in
exceeded by	confirm findings;	measures with	mitigation	writing
one sampling	2. Identify reasons for	ET, Engineer	measures with	n notification of the
day	non-compliance	and Contractor;	IEC, ET and	non-compliance;
	and source(s) of	2. Review	Contractor;	2. Rectify
	impact;	proposals on	2. Make	unacceptable
	3. Inform IEC,	mitigation	agreement or	n practice;
	Contractor and	measures	mitigation	3. Check all plant
	Engineer;	submitted by	measures to	1 1 '
	4. Check monitoring	Contractor and	be	4. Consider changes
	data, all plant,	advise the	implemented;	in working
	equipment and	Engineer	3. Assess	methods;
	Contractor's	accordingly;	effectiveness	5. Discuss with ET,
	working methods;	3. Assess	of	IEC and Engineer
	5. Discuss mitigation	effectiveness of	implemented	and propose
	measures with	implemented	mitigation	mitigation
	IEC, Engineer and	mitigation	measures.	measures to IEC
	Contractor;	measures.		and Engineer
	6. Ensure mitigation			within three
	measures are			working days;
	implemented.			6. Implement
	7. Repeat			agreed mitigation
	measurement on			measures.
	next day of			
	exceedance.			

Table 4.6.3 Event and action Plan for Water Quality

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		1.51		
Action level	1. Repeat in-situ	1. Discuss		. Inform Engineer
being	measurements to	mitigation	proposed	and confirm in
exceeded by	confirm findings;	measures with	e	writing
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consecutive	and source(s) of	2. Review	Contractor; 2.	. Rectify
sampling	impact;	proposals on	2. Make	unacceptable
days	3. Inform IEC,	mitigation	agreement on	practice;
	Contractor and	measures	mitigation 3.	. Check all plant
	Engineer;	submitted by	measures to	and equipment;
	4. Check monitoring	Contractor and	be 4.	. Consider changes
	data, all plant,	advise the	implemented;	in working
	equipment and	Engineer	3. Assess	methods;
	Contractor's	accordingly;	effectiveness 5.	. Discuss with ET,
	working methods;	3. Assess	of	IEC and Engineer
	5. Discuss mitigation	effectiveness of	implemented	and propose
	measures with	implemented	mitigation	mitigation
	IEC, Engineer and	mitigation	measures.	measures to IEC
	Contractor;	measures.		and Engineer
	6. Ensure mitigation			within three
	measures are			working days;
	implemented.		6.	. Implement
	7. Prepare to increase			agreed mitigation
	the monitoring			measures.
	frequency to			
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	8. Repeat			
	measurement on			
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LIMIT LEV	'EL			
Limit level	1. Repeat in-situ	1. Discuss	1. Discuss 1.	. Inform Engineer
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5. Discuss mitigation effectiveness of measures to and pro
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7. Increase the mitigation agreed mitigation
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two non-compliance and and Contractor; IEC, ET and non-complian
consecutive source(s) of impact; 2. Review Contractor; 2. Rectify
sampling 3. Inform EPD, IEC, proposals on 2. Request unacceptable
days Contractor and mitigation Contractor to practice;
Engineer; measures critically 3. Check all p
4. Check monitoring submitted by review the and equipment
data, all plant, Contractor and working 4. Consider cha
equipment and advise the methods; in wor
Contractor's Engineer 3. Make methods;
working methods; accordingly; agreement on 5. Discuss with
5. Discuss mitigation 3. Assess mitigation IEC and Engi

Encincon	implemented	ha	mitication
Engineer and	implemented	be	mitigation
Contractor;	mitigation	implemented;	measures to IEC
6. Ensure mitigation	measures.	4. Assess	and Engineer
measures are		effectiveness	within three
implemented.		of	working days;
7. Increase the		implemented 6.	. Implement
monitoring		mitigation	agreed mitigation
frequency to daily		measures;	measures;
until no exceedance		5. Consider and 7.	. As directed by
of Limit level for		if necessary	the Engineer,
two consecutive		instruct	slow down or
days.		Contractor to	stop all or part of
		slow down or	the construction
		to stop all or	activities until no
		part of the	exceedance of
		construction	Limit level.
		activities until	
		no exceedance	
		of Limit	
		Level.	

## 4.7 Monitoring Schedule for the next reporting period

Water quality monitoring schedule is proposed to be carried out on 3<sup>rd</sup>, 5<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, 12<sup>th</sup>, 15<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>, 22<sup>nd</sup>, 24<sup>th</sup>, 26<sup>th</sup>, 29<sup>th</sup> and 31<sup>st</sup> of October 2012.

## 5 Hydrological Characteristics Monitoring

# 5.1 Hydrological Characteristics Monitoring Parameters and methodology

Impact monitoring of hydrological characteristics was undertaken to establish hydrological characteristics of sections of Wai Ha River adjacent to Drainage Improvement Works in Shuen Wan, Tai Po.

The hydrological characteristics of sections of Wai Ha River were measured by water flow rate and depth.

## 5.2 Monitoring Equipment

Monitoring performed by a portable echo-sounder, model Greyline Stingray. The equipment was calibrated and verified by certified laboratory or manufacturer every year to ensure they perform to the same level of accuracy as stated in the manufacturer's specification.

Calibration Certificate of the multi-meter is given in Appendix C.

## 5.3 Monitoring Locations

In accordance with the EM&A Manual (revision 3), monitoring stations for contract 1 were established at two locations and summarized in Table 5.3.1.

Monitoring Station	Location	Coordinates
H1	Between the Shuen Wan Marsh	E:839301
	and ECA	N:836386
H2	Route to Sam Kung Temple	E:839163
		N:836433

Table 5.3.1 – Water Quality Monitoring Stations

As illustrated in Figure 5.3.1, H2 served as the control station while H1 was the monitoring location of hydrological characteristics.

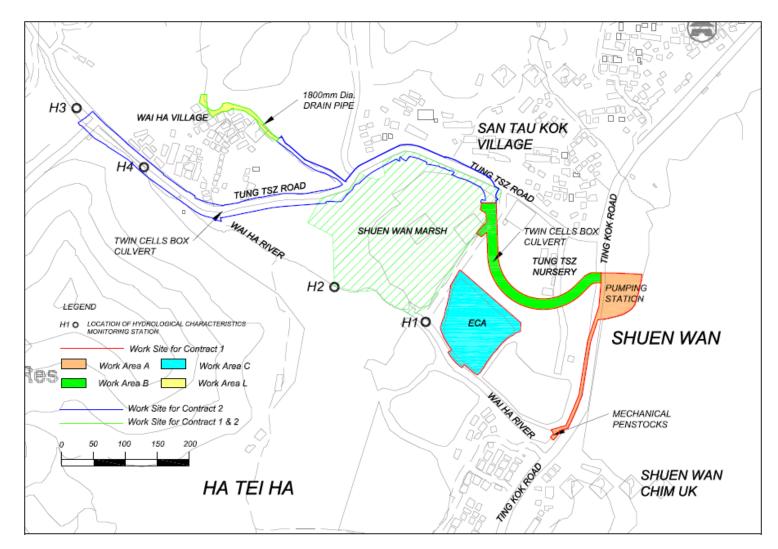


Figure 5.3.1 Hydrological Characteristics Monitoring Locations

## 5.4 Monitoring Frequency

Hydrological characteristics monitoring for each monitoring station were performed at mid-flood and mid-ebb tides for once per week during the course of the construction river works.

Monitoring was carried out on 7<sup>th</sup>, 14<sup>th</sup>, 21<sup>st</sup> and 28<sup>th</sup> of September 2012.

## 5.5 Monitoring Results and Interpretation

Hydrological characteristics monitoring was carried out four times in this reporting period. The monitoring results are summarized in Table 5.5. All results were within the action and limit levels, therefore, no exceedance was found.

	Average of Monitoring Results			
	Water Depth (m)	Water Flow Rate (m <sup>3</sup> /s)		
H1(Floor)	~0.420	0.075		
H1(Ebb)	~0.165 0.113			
H2(Floor)	~0.330	0.471		
H2(Ebb)	~0.165	0.584		

 Table 5.5
 Summary of Water Quality Monitoring Results

Details of the monitoring data were presented in Appendix F.

## 5.6 Action and limit level for Hydrological Characteristics

The Action and Limit levels for all monitoring stations are summarized in Table 5.6.1, which would be applied for compliance assessment of hydrological characteristics for this project. If the hydrological characteristics monitoring results at any impact stations exceeded the criteria, the actions in accordance with the Event and Action Plan in Table 5.6.2 should be taken.

Parameters	Action	Limit
Water Depth at Mid-flood (m)	0.08	0.06
Water Depth at Mid-ebb (m)	0.08	0.06
Water Flow Rate (m <sup>3</sup> /s)	120% of control station's water flow rate on the same day of measurement	140% of control station's water flow rate on the same day of measurement

Table 5.6.1 Action and Limit Levels for Hydrological Characteristics at All Monitoring Stations

Table 5.6.2 Event and action Plan for Hydrological Characteristics

Event	ET	Leader	IEC	ER	Contractor
ACTION LE	VEL	4			
Action	1.	Repeat in-situ	1. Discuss	1. Discuss	1. Inform Engineer
level being		measurements to	mitigation	proposed	and confirm in
exceeded		confirm findings;	measures with	mitigation	writing
by one	2.	Identify reasons for	ET, Engineer	measures	notification of
sampling		non-compliance and	and Contractor;	with IEC, ET	the
day		source(s) of impact;	2. Review	and	non-compliance;
	3.	Inform IEC,	proposals on	Contractor;	2. Rectify
		Contractor and	mitigation	2. Make	unacceptable
		Engineer;	measures	agreement or	n practice;
	4.	Check monitoring	submitted by	mitigation	3. Check working
		data, Contractor's	Contractor and	measures to	methods and
		working methods	advise the	be	any excavation
		and any excavation	Engineer	implemented;	, works or
		works or dewatering	accordingly;	3. Assess	dewatering
		processes;	3. Assess	effectiveness	processes;
	5.	Discuss mitigation	effectiveness of	of	4. Consider
		measures with IEC,	implemented	implemented	changes in
		Engineer and	mitigation	mitigation	working
		Contractor;	measures.	measures.	methods and
	6.	Ensure mitigation			plans;
		measures are			5. Discuss with ET,
		implemented.			IEC and

	7.	Repeat measurement				Engineer and
		on next day of				propose
		exceedance.				mitigation
						measures to IEC
						and Engineer
						within three
						working days;
					6.	Implement
						agreed
						mitigation
						measures.
Action	1.	Repeat in-situ	1. Discuss	1. Discuss	1.	Inform Engineer
level being		measurements to	mitigation	proposed		and confirm in
exceeded		confirm findings;	measures with	mitigation		writing
by more	2.	Identify reasons for	ET, Engineer	measures		notification of
than two		non-compliance and	and Contractor;	with IEC, ET		the
consecutive		source(s) of impact;	2. Review	and		non-compliance;
sampling	3.	Inform IEC,	proposals on	Contractor;	2.	Rectify
days		Contractor and	mitigation	2. Make		unacceptable
		Engineer;	measures	agreement on		practice;
	4.	Check monitoring	submitted by	mitigation	3.	Check working
		data, Contractor's	Contractor and	measures to		methods and
		working methods	advise the	be		any excavation
		and any excavation	Engineer	implemented;		works or
		works or dewatering	•••	3. Assess		dewatering
		processes;	3. Assess	effectiveness		processes;
	5.	Discuss mitigation			4.	
		measures with IEC,	implemented	implemented		changes in
		Engineer and	e	mitigation		working
	~	Contractor;	measures.	measures.		methods and
	6.	Ensure mitigation			~	plans;
		measures are			5.	Discuss with ET,
	7	implemented.				IEC and
	7.	Prepare to increase the monitoring				Engineer and
		e				propose
	Q	frequency to daily;				mitigation
	8.	Repeat measurement				measures to IEC

		, 1 d				1 5		
		on next day of				and Engineer		
		exeedance.				within three		
						working days;		
						6. Implement		
						agreed		
						mitigation		
						measures.		
	LIMIT LEVEL							
Limit level	1.	Repeat in-situ	1. Discuss	1	. Discuss	1. Inform Engineer		
being		measurements to	mitigation		proposed	and confirm in		
exceeded		confirm findings;	measures with	L	mitigation	writing		
by one	2.	Identify reasons for	ET, Engineer	•	measures	notification of the		
sampling		non-compliance and	and Contractor;		with IEC, ET	non-compliance;		
day		source(s) of impact;	2. Review		and	2. Rectify		
	3.	Inform AFCD, IEC,	proposals on	L	Contractor;	unacceptable		
		Contractor and	mitigation	2	. Request	practice;		
		Engineer;	measures		Contractor to	3. Check working		
	4.	Check monitoring	submitted by	r	critically	methods and any		
		data, and	Contractor and	-	review the	excavation works		
		Contractor's	advise the	5	working	or dewatering		
		working methods	Engineer		methods;	processes;		
		and any excavation	accordingly;	3.	. Make	4. Consider changes		
		works or dewatering	3. Assess		agreement on	in working		
		processes;	effectiveness of		mitigation	methods and		
	5.	Discuss mitigation	implemented		measures to	plans;		
		measures with IEC,	mitigation		be	5. Discuss with ET,		
		Engineer and	measures.		implemented;	IEC and Engineer		
		Contractor;		4	. Assess	and propose		
	6.	Ensure mitigation			effectiveness	mitigation		
		measures are			of	measures to IEC		
		implemented;			implemented	and Engineer		
	7.	Increase the			mitigation	within three		
		monitoring			measures.	working days;		
		frequency to daily				6. Implement agreed		
		until no exceedance				mitigation		
		of Limit level.				measures.		
Limit level	1.	Repeat in-situ	1. Discuss	1.	Discuss	1. Inform Engineer		

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being	measurements to	mitigation	proposed	and confirm in
exceeded	confirm findings;	measures with	mitigation	writing
by more 2.	Identify reasons for	ET, Engineer	measures	notification of the
than two	non-compliance and	and Contractor;	with IEC, ET	non-compliance;
consecutive	source(s) of impact;	2. Review	and 2.	Rectify
sampling 3.	Inform AFCD, IEC,	proposals on	Contractor;	unacceptable
days	Contractor and	mitigation 2	2. Request	practice;
	Engineer;	measures	Contractor to 3.	Check working
4.	Check monitoring	submitted by	critically	methods and any
	data, and	Contractor and	review the	excavation works
	Contractor's working	advise the	working	or dewatering
	methods and any	Engineer	methods;	processes;
	excavation works or	accordingly; 3	3. Make 4.	Consider changes
	dewatering processes;	3. Assess	agreement on	in working
5.	Discuss mitigation	effectiveness of	mitigation	methods and
	measures with IEC,	implemented	measures to	plans;
	Engineer and	mitigation	be 5.	Discuss with ET,
	Contractor;	measures.	implemented;	IEC and Engineer
6.	Ensure mitigation	4	I. Assess	and propose
	measures are		effectiveness	mitigation
	implemented.		of	measures to IEC
7.	Increase the		implemented	and Engineer
	monitoring frequency		mitigation	within three
	to daily until no		measures;	working days;
	exceedance of Limit	5	5. Consider and 6.	Implement agreed
	level for two		if necessary	mitigation
	consecutive days.		instruct	measures;
			Contractor to 7.	As directed by the
			slow down or	Engineer, slow
			to stop all or	down or stop all
			part of the	or part of the
			construction	construction
			activities	activities until no
			until no	exceedance of
			exceedance	Limit level.
			of Limit	
			Level.	

## 5.7 Monitoring Schedule for the next reporting period

Hydrological characteristics monitoring schedule is proposed to be carried out on 5<sup>th</sup>, 12<sup>th</sup>, 19<sup>th</sup> and 26<sup>th</sup> of October 2012.

## 6 Ecological Monitoring of ECA

#### 6.1 Introduction

The Ecological Monitoring of the Ecological Compensatory Area (ECA) of the Project is conducted to fulfill Clauses 5.2 and 5.4 of EP-303/2008 and the monitoring requirements in accordance with Section 6 of the approved updated EM&A Manual (approved by EPD on 31st May 2012) and the approved updated Habitat Creation Plan (HCP) (approved by EPD on 8th December 2011) of the Project.

This report documents monitoring findings on the site inspections in the ECA undertaken in September 2012.

#### 6.2 Ecological Monitoring of ECA

#### 6.2.1 Scope of Monitoring

A specific ecological monitoring programme and ecological monitoring requirements of the ECA are detailed in Section 7 of the approved Habitat Creation Plan (HCP) and Section 6.18 of the approved updated Environmental Monitoring & Audit (EM&A) Manual of the Project.

During the construction phase of the ECA, monthly monitoring of vegetation health (including the planted, retained and transplanted trees and shrubs, and the proposed planting) and weekly site inspections should be undertaken. Monthly monitoring of *in situ* water quality will be carried out once the ECA is filled with water from the nearby Wai Ha River.

During the 12-month establishment phase of the ECA, monitoring of habitat types, vegetation cover, intertidal fauna and other fauna (including avifauna, herpetofauna, fish, odonates and butterflies) will be undertaken on a six-monthly basis, while the vegetation health and *in situ* water quality will be monitored monthly. Site inspections will be conducted twice per month.

## 6.2.2 Monitoring Methodology during the construction phase

#### Monitoring of vegetation health

Monthly monitoring of the health condition of the retained and transplanted trees and vegetation will be conducted. Following planting of vegetation in the ECA, monitoring of the growth and health conditions of the planted vegetation in the created habitats (i.e. brackish marsh, mangrove, woodland areas of planted trees and shrubs, and wooded areas with retained and (trans)planted trees) within the ECA is to be conducted during the construction and establishment phases. General health and growth status of the retained trees within the ECA are recorded and recommendation of appropriate tree care will be made to the maintenance party.

All planted, retained and transplanted trees and shrubs will be surveyed to update their growth and health status. Any signs of pests and/ or poor growth of planted, retained and transplanted trees and shrubs will be recorded. Appropriate treatment or removal of pests will be implemented if necessary. Supplemental planting will be arranged if needed.

A fixed transect line will be run through the wetland habitats (including intertidal mudflat, brackish marsh and mangrove) and the general growth and health of the planted vegetation along both sides of the transect will be inspected and evaluated. Any adverse plant health, such as dieback of planted species, will be noted and supplemental planting will be arranged. Any signs of pests which cause adverse health problems to the plants will be identified and recorded.

#### Monitoring of water quality

Since there will be free movement of brackish river water in and out of the ECA, water quality in the ECA will be largely dependent on water quality in the river. In this open system it is not appropriate to set specific targets for water quality parameters. Nevertheless, baseline data on water quality, in particular seasonal patterns, would potentially be useful long term management of the ECA. Once the ECA is filled with water during the construction phase of the ECA, *in-situ* water quality will be measured once per month during both Construction and Establishment Phases. Parameters, including temperature, pH, salinity, turbidity and dissolved oxygen, will be monitored. Additional measurements of these parameters should also be made by the ecologist in response to unexpected events (e.g. algal blooms or fish die-offs) in order to inform remedial

management measures.

#### Site inspection

Weekly site inspection will be carried out by the Wetland Specialist to update the status and monitor the progress of the construction of the ECA. Any adverse ecological impact resulting from the construction should be identified and remedial action should be undertaken.

# 6.2.3 Monitoring Methodology during the establishment phase

#### Monitoring of vegetation health

Same monitoring methodology as in Section 2.2.

#### Monitoring of water quality

Same monitoring methodology as in Section 2.2.

#### Site inspection

Site inspection during the establishment phase of the ECA will be conducted twice per month for monitoring the health and condition of the wetland during the establishment period. Any unsatisfied health and habitat criteria of the wetland will be identified and remedial action should be recommended.

Twice monthly establishment phase monitoring has been commenced in

November 2011.

#### Monitoring of habitat types and vegetation cover

Monitoring of habitat types and vegetation cover will be conducted twice during the 12 month Establishment Phase of the ECA; specifically at the end of the dry season and the end of the subsequent wet season after completion of the planting work. The monitoring aims to determine the exact extent of the wetland habitats and vegetation cover (i.e. open water, intertidal mudflat, brackish marsh and mangrove) during the establishment period and control any excessive colonization of unwanted vegetation specific habitats.

#### Monitoring of intertidal fauna

As the ECA largely comprises an intertidal mudflat, monitoring for intertidal fauna will be conducted. Recolonisation will take time: accordingly monitoring will be tentatively conducted in February 2012 and August 2012. As the important aim of monitoring of intertidal fauna in the ECA is to examine the diversity of the colonising community, a qualitative manner by walk-through survey (i.e. walk through the site with species and relative abundance recorded) will be conducted. Core sampling will also be conducted at different levels to record infauna. Three samples at each level (low, middle and high) will be conducted at low tide.

#### Monitoring of other fauna

Monitoring of other faunal groups, including birds, herpetofauna, fish, odonate and butterflies, will be conducted. Monitoring of any aquatic invertebrates will be covered by the intertidal surveys. Since the site will be intertidal, it is considered unsuitable for local amphibian species. Therefore, no nighttime survey for detection of mating calls of amphibians is necessary and only daytime surveys are needed. Monitoring of these faunal groups will be conducted on a walk-through survey basis. The surveyor will walk through the site, recording and counting the fauna observed. Microhabitats for herpetofauna will be actively searched. This monitoring will be conducted twice within the establishment period (once in the dry season (tentatively in February 2012) and once in the wet season (tentatively in August 2012).

Monitoring of wild mammals is not necessary in this case; however, if signs of wild mammals are observed (such as footprints) during any field surveys, these will be recorded.

#### 6.2.4 Monitoring time and weather condition

Site inspection and monitoring of vegetation, fauna groups and water quality should be carried out during day-time with calm weather. Monitoring of birds should commence within one hour of sunrise, when is the peak activity period for birds. Other fauna groups shall be undertaken during the warmer part of the monitoring day.

# 6.3 Monitoring Results

# 6.3.1 Description of vegetation monitoring in Ecological Compensatory Area

The vegetation health monitoring during the construction and establishment period required to be conducted on a monthly basis in the Ecological Compensatory Area (ECA). The growth and health of the recorded vegetation was inspected in 26 September 2012 and detail vegetation information was shown in **Appendix L**.

Monitoring of transplanted trees were carried out in 26 September 2012 and continued since the first transplantation (**Appendix L(B**)).

Three specimens of protected species *Pavetta hongkongensis* were transplanted to ECA. Weekly monitoring was carried out since transplantation on 20<sup>th</sup> December 2011.

All trees surveyed were evaluated according to the following criteria (Webb 1991)

• Trees of good form, moderate to large size and in good health are classified as good;

• Trees of reasonable form, with few or no visible defects or health problems are classified as being fair;

• Trees that are of poor form, badly damaged or clearly suffering from decay die back or the effects of very heavy vine growth are classified as poor.

#### 6.3.2 Description of vegetations and remarks

Vegetation monitoring in the ECA was carried out on site and growth/health conditions were recorded.

A total of 23 plant species were retained or newly re-colonized within ECA in which 6 of them were retained plant species including Terminalia catappa, Cocculus orbiculatus, Mangifera indica, Dimocarpus longan, Michelia x alba and Macaranga tanarius. Some green algae, such as c.f. Ulothrix sp. and Enteromorpha sp.were re-colonized in the water body or attached to the substratum in the ECA. Those algae could attract algae feeding organisms and it also provide mirco-habitat for some marine or brackish water species especially juveniles. Detailed information of the recorded vegetation is given in **Appendix L.** Ecological monitoring report was shown in **Appendix M.** 

The general growth/health of the retained or newly re-colonized vegetations was in fair condition.

The trees transplanted from works area under Contract 1 and 2 to ECA, including 13 Bombax ceiba, 2 Melaleuca quinquenervia and 1 Celtis sinensis, were in fair condition since the transplantation in June, except for Celtis

sinensis (**Appendix L B**). However, Melaleuca quinquenervia (T165) & Celtis sinensis (T250) were dead already, so that the removal & replacement of T165 & T250 are recommended.

A total of 370 trees were newly planted for amenity purpose within the ECA since September 2011. The 370 individual trees were randomly planted at different zones, except for zone F, as showed in **Figure 6.3.2.1**.

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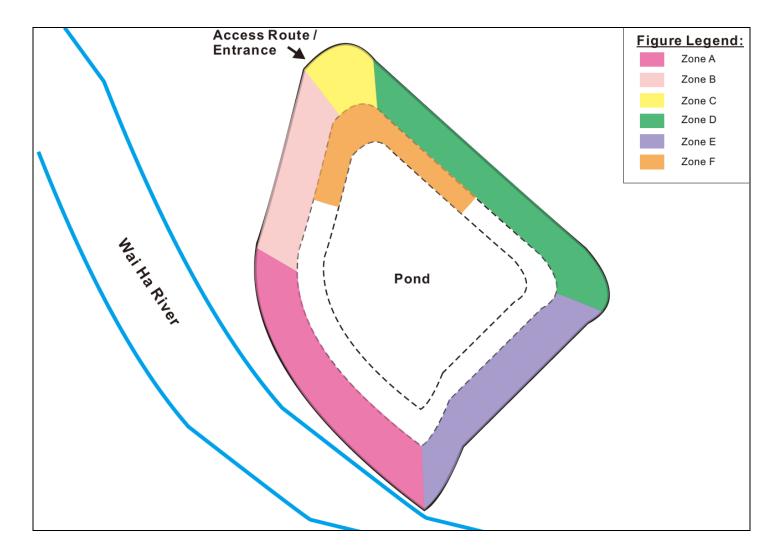


Figure 6.3.2.1 Landscape floor plan of ECA during establishment phase.

The newly planted trees included *Celtis sinensis* (95), *Hibiscus tiliaceus* (114), *Macarango tanarius* (57), *Ficus superb var japonica* (28) and *Viburnum odoratissimum* (76).

Newly planted trees in Zone A, B and C were in fair condition, but some trees were dead, these trees are suggested to be removed or replaced. These are.

Trees suggested to be removed & replaced

- Celtis sinensis: tag no. 198, 210, 222
- Macaranga tanarius: tag no. 331,337, 340, 345
- Hibiscus tiliaceus : tag no. 288, 291, 304, 307, 310

Moreover, Viburnum odoratissimum (tag no 44, 47), Celtis sinensis (tag no 195, 207, 211) & Hibiscus tiliaceus (tag no , 304, 312, 316, 318, 319) were in poor condition in terms of sparse crown, application of fertilizer and continuous monitoring of the health condition is suggested

However, some trees in Zone D and E were in poor condition in terms of sparse crown. These are:

# Sparse Crown and yellow leaves

- Celtis sinensis : tag no. 1, 7, 23, 26, 32, 191, 208
- Hibiscus tiliaceus : tag no. 244
- Viburnum odoratissimum : tag no. 167

Those planted tree poor condition were caused during trans-location or plantation, application of fertilizer and continuous monitoring of the health condition is suggested.

Moreover, some trees in Zone D and E were dead, these trees are suggested to be removed & replaced. These are:

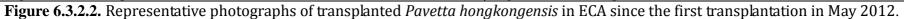
Trees suggested to be removed & replaced

- *Celtis sinensis*: tag no. 6, 8, 9, 13, 17, 22, 28, 33, 35, 130, 131, 132
- Hibiscus tiliaceus: tag no. 255, 256, 262, 268, 270, 272
- Macaranga tanarius: tag no. 158

Mangrove seedlings were planted in Zone F, but most of them were in poor to fair condition. It is expected they may grow better in wet season.

Three specimens of protected species *Pavetta hongkongensis* were transplanted from work area under Contract 2 to ECA at Zone D on 20<sup>th</sup> December 2011. Monthly monitoring was carried out and their overall conditions are fair so far (**Appendix L**(**C**)). Representative photographs of the transplanted *P. hongkongenesis* are showed on **Figure 6.3.2.2**.





A total of 66 trees, including 6 Celtis Sinensis, 4 Ficus Superba Var. Japonica, 52 Hibiscus Tiliaceus, 3 Macaranga Tanarius and 1 Viburnum Odoratissimum, were removed by contractor from ECA in June 2012, new trees has been transplanted to ECA for replacement in July 2012

After the typhoon on 23 & 24 July, around 10% of trees were found leaning slightly, those trees were then be re-erected by contractors to resume it's tree forms.

Regular watering is recommended to improve the condition of the planted or transplanted plants during non-raining period. Relevant mitigation measures will be proposed when necessary

There is no sign of pest outbreak or dieback took place in the current monitoring.

# 6.3.3 Summary

In total, 23 species of trees, shrubs, climbers and herbs were retained or naturally colonized in the ECA during initial establishment period. Starting in August 2011, a total of 16 tree and three specimens of protected species Pavetta hongkongensis were transplanted to ECA. Most of them were in fair condition. In addition, 370 trees, including Celtis sinensis, Hibiscus tiliaceus, Macaranga tanarius, Ficus superb var japonica and Viburnum odoratissimum, were newly planted in ECA since September 2011 for amenity purpose. A total of 66 trees were removed in June 2012 and has been replace by new trees in July 2012. However, there are some trees in Zone A-E were dead, these trees are suggested to be removed & replaced, Although there is no sign of pest outbreak , application of fertilizer or mulch, regular watering and close monitoring are still be recommended.

# 6.3.4 References

Webb, R (ed.) 1991, Tree Planting & Maintenance in Hong Kong, Hong Kong Government, Hong Kong

# 6.3.5 Monitoring of Water Quality

The point of linkage between the ECA and Wai Ha River at the southern pond bund of the wetland was completed on  $30^{\text{th}}$  August 2011. The constructed wetland habitats in the ECA have been filled with the tidal water from Wai Ha River. Monitoring of in situ water quality in the ECA was commenced in September 2011 by the IEC's ecologist. In addition, Ecological water quality monitoring at ECA was conducted on 26/9 with result: Turbidity: 19.5NTU; Temperature:  $30.8^{\circ}$ C; DO: 5.45 mg/L; pH: 5.7.

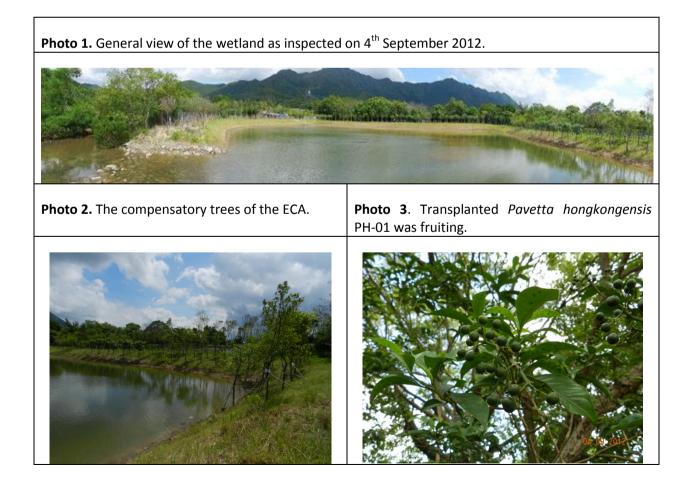
# 6.3.6 Site Inspections

Twice monthly establishment phase monitoring has commenced in November 2011. Two site inspections were carried out on 4<sup>th</sup> and 19<sup>th</sup> September 2012. Table 1 summarizes the observations and recommendations for each site inspection.

Inspection Dates	Observation	Recommendations
4 <sup>th</sup> September 2012	A routine site inspection and a joint site inspection with the Main Contractor to identify the compensatory trees that were in unsatisfactory condition (such as trees with dry leaves). The created wetland and the remaining planted vegetation (including the compensatory trees, shrubs, and mangrove seedlings) have been maintained in good condition ( <b>Photo 1</b> ). Patches of planted wetland herbs ( <i>Bacopa monnieri</i> and <i>Cyperus malaccensis</i> ) have colonized successfully in the created marshy area, while some of the newly planted wetland herbs <i>Commelina diffusa</i> have spread at the toe of the pond bund. With the naturally established herbs (such as <i>Alternanthera</i> spp. and <i>Lindernia</i> spp.), wetland herb composition at the marshy area and terrestrial pond bund have been formed progressively.	The Contractor should replace the identified compensatory trees that were in unsatisfactory condition as soon as possible, and replace the temporary site hoardings with permanent wire mesh fence prior to the final handover meeting with the relevant government departments in October 2012.
	The trees transplanted from Area A to the ECA have been maintained generally in fair to good condition. The three transplanted shrubs of conservation interest, <i>Pavetta</i>	
	hongkongensis, were fruiting by the time of	

Table 6-1. Observations and recommendations for each site inspection, September 2012

	site visit and have shown satisfactory performance ( <b>Photos 2-3</b> ). The temporary site hoardings at the main entrance of the ECA have not yet replaced with permanent wire mesh fences.	
19 <sup>th</sup> September 2012	This is the second site visit in September 2012 to update the general site and vegetation maintenance and their condition. Replacement of compensatory trees had not yet been undertaken by the Contractor by the time of site visit, but as informed by the Contractor, the trees will be replaced in the week of 24 <sup>th</sup> September 2012. The created wetland and vegetation have remained in similar condition as inspected in the last site visit on 4 <sup>th</sup> September 2012 ( <b>Photo 4</b> ). Wetland birds (Chinese Pond Heron and Little Egret), and terrestrial birds (Spotted Dove and Black-necked Starling) were found in the ECA. The temporary site hoardings at the main entrance of the ECA have still not yet been replaced with permanent wire mesh fences.	The Contractor should replace the identified compensatory trees that were in unsatisfactory condition as soon as possible, and replace the temporary site hoardings with permanent wire mesh fence prior to the formal handover meeting with the relevant government departments in October 2012.



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# 6.4 Management Activities

#### 6.4.1 Ecological Issues/ Management Activities

No significant ecological issues were identified from the site inspection by the Wetland Specialist from the site inspections in September 2012.

The ECA has been maintained in satisfactory condition. The planted and replaced compensatory trees, shrubs and mangrove seedlings have showed fair health condition. The Main Contractor should replace the identified compensatory trees, which were of unsatisfactory performance, as soon as possible. The main entrance of the ECA should be reinstated prior to the formal handover in October 2012.

# 6.5 Implication of the Survey Findings

#### 6.5.1 Implication to the Wetland design of the ECA

No implication to the wetland design from these two site inspections in September

2012.

## 6.6 Recommendations

The Contractor should continue the regular monitoring, and maintain frequent and adequate watering of all planted, replaced and transplanted terrestrial trees (including the newly planted compensatory trees for the replacement) and shrubs (including the shrubs of conservation interest *Pavetta hongkongensis*) throughout the establishment period of the ECA. The unwanted plant species should be removed to prevent their colonization in the ECA. The Main Contractor should arrange for the landscape contractor to replant the compensatory trees with poor growth performance and reinstate the wire mesh fence at the main entrance of the ECA prior to the formal handover in October 2012.

# 7 Landscape and Visual

# 7.1 Introduction

The Landscape and Visual Monitoring of the Project is conducted to fulfill Clauses 5.2 and 5.4 of EP-303/2008 and the monitoring requirements in accordance with Section 7 of the approved updated EM&A Manual (approved by EPD on 31<sup>st</sup> May 2012) of the Project. A Baseline Review on updating the landscape and visual condition, and the mitigation measures of the Project (including Contracts 1 and 2 of the Project) was undertaken before the commencement of the Project. The review findings were updated in the Baseline Environmental Monitoring Report submitted to the EPD on 14<sup>th</sup> February 2011.

This monthly monitoring report will detail the scope of landscape and visual monitoring work, monitoring findings and observations, and any recommendations and advice on proper implementation of the landscape mitigation measures in the works areas under Contract 1 of the Project.

# 7.2 Scope of Monitoring

# 7.2.1 Monitoring Objectives

Landscape and Visual Monitoring of the Project should be conducted in a bi-weekly basis for checking the design, implementation and maintenance of the landscape and visual mitigation measures throughout the construction phase and in a quarterly basis during operational phase of the Project. Observations of any potential conflicts between the proposed mitigation measures and the project works carried out by the Contractors should be recorded. Recommendation and advice on proper implementation of the landscape mitigation measures should be provided to the Contractor for minimizing any potential impacts on the landscape and visual elements.

# 7.2.2 Monitoring during Construction Phase

The following landscape and visual mitigation measure should be implemented during the construction phase of the project to minimize the potential impacts:

- Visual Screen Use of hoardings as visual screens for the construction in the works areas;
- Contaminant/ Sediment Control Use of temporary barriers, covers and drainage provision around the construction works as contaminant/ sediment control to prevent the contaminants and sediments from entering the sensitive water-based habitats;
- Pollution Control Implementation of pollution control measures to minimize any adverse environmental impacts to the surrounding habitats;
- Liaison with Nursery Liaison with the nursery operator as necessary to minimize any adverse impact to the daily operation and plant holding capacity of the nursery;
- Existing Trees within Works Area Maintenance and protection of the existing trees, especially their crowns, trunks and roots, within work sites; and
- Construction Light Provision of construction light should be controlled at night to avoid excessive glare to the surrounding villages and to Plover Cove.

# 7.2.3 Monitoring during Operational Phase

The following landscape and visual mitigation measure should be implemented during the operational phase of the project to minimize the potential impacts:

• Viewing area formation by planting with shrubs, grasses and benches along the area;

- Architectural design of the pump house will help it fit into the existing suburban, natural to semi-natural surroundings;
- Landscape design of pump house by providing sufficient planting around its boundary fence;
- Enhancement planting along Tung Tsz Road with shrubs/ trees of suitable species to help protect the stream and marshes;
- Construction of box culvert should be with at least 1.0m soil depth for enhancement planting;
- Transplanting of existing affected trees to adjacent locations should be carried out;
- Preparation for transplanting is needed to allow sufficient time for root pruning and rootball preparation prior to transplanting; and
- Reinstatement of affected area should be carried out to check that the works areas are properly reinstated.

# 7.3 Landscape and Visual Monitoring Results

# 7.3.1 Monitoring Date(s)

This monthly Landscape and Visual Monitoring (September 2012) was conducted to cover only Areas A, B and C of Contract 1 of the Project. The bi-weekly monitoring was conducted on 4<sup>th</sup> and 19<sup>th</sup> September 2012.

All photos stated in this section are recorded in Appendix G.

The bi-weekly monitoring for Contract 2 was also undertaken on 4<sup>th</sup> and 19<sup>th</sup> September 2012. The monitoring findings and recommendation will be submitted in a separate Monthly EM&A Report under Contract DC/2010/02.

## 7.3.2 Visual Screen

No follow-up action by the Contractor is required as from the *Monthly EM&A Report for August 2012*.

#### **Observation**

Construction hoardings have been erected in Area A along the entire site boundary.

Temporary construction hoardings have been erected around Wai Ha River estuary since the commenced work for building an automatic mechanical penstock at the area (**Photo 1**). Since February 2012, temporary construction hoardings have also been erected to surround the works area for constructing a drain pipe along Ting Kok Road (**Photo 2**).

A section of temporary hoarding has been erected from northwest to southwest parts (i.e. Phase I construction works) of Tung Tsz Nursery in Area B (approximately along the works boundary from Trees U42 to U62). Another section of temporary hoarding has been erected from southwest to eastern parts of the Nursery since May 2012 and connected with the Phase I construction works area. An open section with no construction work has been maintained as a major road access inside Tung Tsz Nursery for their daily operations.

A line of chain link fence has been maintained around the boundary of Area C since the onset of its establishment period.

# **Recommendation**

No specific recommendation is required.

# 7.3.3 Contaminant/ Sediment Control

No follow-up action by the Contractor is required as from the *Monthly EM&A Report for August 2012*.

# **Observation**

Area A

Provision of dust control measure (such as vehicle wheel washing facilities) has been maintained at the exit point of Area A.

Used water for washing vehicle wheel and groundwater from the excavated sites were pumped into the silt/sand removal facilities for filtration before discharging into the manhole adjacent to Area A. No unauthorized discharge of contaminated water/ sewerage was observed during the monitoring.

# Area B

Used water and groundwater from the built box culvert and the construction site within the Nursery were collected and drained directly to the sedimentation tank placed adjacent to the fenced Area C. The water was further filtered through the silt/sand removal facilities in the tank before discharging into the manhole adjacent to Area C.

Area C

The establishment phase of the Ecological Compensatory Area (ECA) has commenced and the pond of the ECA is connected with the Wai Ha River directly. No water resulting from normal wetland maintenance practice was pumped out from the ECA.

# **Recommendation**

No specific recommendation is required.

# 7.3.4 Pollution Control

All used water for washing vehicle wheel and construction works was filtered and drained to the manholes, as following the recommendation stated in *Monthly EM&A Report for August 2012*.

# **Observation**

Area A

Provision of vehicle wheel washing facilities was observed at the exit point of Area A to reduce the contamination to the surrounding habitats in Plover Cove. Used water for washing vehicle wheel and groundwater from the excavated sites were pumped into the silt/sand removal facilities for filtration before discharging into the manhole adjacent to Area A. The drainage pipes were maintained appropriately to discharge the used water to the manhole at Ting Kok Road. No direct discharge of polluted water into the adjacent Wai Ha River was observed from the works area for building the automatic mechanical penstock at Wai Ha River estuary.

# Area B

All used water was collected and drained directly to the sedimentation tank placed adjacent to the fenced Area C. This water was further filtered through the silt/sand removal facilities in the tank before discharging into the manhole adjacent to Area C.

Area C

The pond of the ECA was observed to be connected to Wai Ha River directly as following the scheme design of Habitat Compensatory Plan. No direct discharge of turbid water into the adjacent Wai Ha River was observed (**Photo 3**).

# **Recommendation**

No specific recommendation is required for Areas A, B and C. As a reminder, the Contractor should regularly check the condition and locations of the drainage pipes and ensure that all used water should be appropriately filtered and discharged to the manhole/other discharge points agreed by the Engineer and EPD. This is to avoid any potential contamination to the vegetation in Shuen Wan marsh and other vegetated/marinated areas adjacent to the active works area.

# 7.3.5 Liaison with Nursery

Active construction works within Tung Tsz Nursery has been extended to the east of the nursery in connection with Ting Kok Road since May 2012. All of these active construction works area were demarcated with construction hoardings.

The health condition and stability of the tree *Grevillea robusta* (U58) has been closely monitored on a bi-weekly basis and regular watering of the retained trees and transplanted trees was anticipated. New leaves were observed along the trunk.

The works practice and maintenance of trees within the nursery generally follow the recommendation as stated in *Monthly EM&A Report for August 2012*. Any observed issues related to the liaison with the nursery are highlighted in this section.

# **Observation**

The temporary hoarding has been erected from northwest to southwest parts of Tung Tsz Nursery in Area B since April 2011. Phase 2 construction work (i.e. from the eastern part of the nursery in connection with Ting Kok Road and finally connects with Phase 1 construction area at the southwest part) has commenced and temporary hoardings have been erected since May 2012. The major road access within the Nursery has been maintained to minimize the impact on the nursery's daily operation resulting from the construction works.

Regular monitoring for all transplanted trees within the nursery was conducted on a bi-weekly basis. For tree U58 (*Grevillea robusta*) (**Photo 4**), the broken scaffold branch was still found to be overhung in the canopy (**Photo 5**). New but small leaves were observed along the branches (**Photo 5**) and watersprouts was found along the trunk (**Photo 6**). The physiological condition of U58 has remained fairly poor in September 2012 and close monitoring has to be continued to update its health and structural conditions.

The transplanted tree U61 (*Lysidice rhodostegia*) was still found leaning severely with uplifted bamboo propping (**Photo 7**), and the crack on the planter of U75 (*Dolichandrone cauda-felina*) was still presence (**Photo 8**). There is a concern on the long-term stability on both trees.

No muddy water was found leaking out through the temporary hoarding into the nursery.

# **Recommendation**

The works area and the construction works should be properly managed and implemented without influencing the daily operation of the nursery (i.e. provide enough access road and works area for the nursery operation).

All transplanted trees should be watered regularly (e.g. at least every two days) by the appointed landscape contractor. Meanwhile, the Contractor should prevent forming waterlogged areas or leakage of used water from the active construction works area into

the Nursery. This is to prevent causing any nuisance to the nursery's daily operation.

Regular monitoring and watering of *Grevillea robusta* (U58) are still recommended to be the major treatment to the tree. The appointed landscape contractor and the Contractor should closely monitor the health conditions throughout the establishment period.

The leaning tree *Lysidice rhodostegia* (U61) should be restored to its proper position or guyed appropriately to prevent its further hazard to the targets. The planter of *Dolichandrone cauda-felina* (U75) should be rebuilt to provide better support and protection of its root ball. Both mitigation measures should be carried out by the Nursery Operator or other relevant parties as soon as possible.

# 7.3.6 Existing Trees within Works Areas

Tree Protection Zones (TPZs) in Areas A and B were demarcated within the construction sites as following the recommendation stated in the *Monthly EM&A Report for August 2012*, no piling of construction materials within or close to the TPZs were observed in Area A (see details in the following section).

Regular watering of the retained trees, transplanted trees and the compensatory planting was anticipated. Maintenance of the existing trees within the works areas generally follows the recommendation as stated in *Monthly EM&A Report for August 2012*, except the observations as highlighted in the following sections.

#### **Observation**

#### Area A

TPZs with temporary storage of construction materials were not observed for trees to be transplanted (E17 to E20) at the southwestern part of Area A (**Photo 9**) during the monitoring in September 2012.

The tree to be transplanted E17 (*Bombax ceiba*) had minor bark tearing on the trunk which was believed to be created by machinery (**Photo 10**).

As observed since July 2012, the tree to be transplanted E16 (*Bombax ceiba*) was relocated to the southern side of Area A next to the site hoarding. A TPZ was set up at the base.

No other significant damages on the crowns, trunks and roots of the remaining trees were observed during the monitoring in September 2012 in Area A.

#### Area B

As highlighted in the Section "Liaison with Nursery", small watersprouts and new leaves were observed on the trunk and branches of the transplanted tree U58 (*Grevillea robusta*) but its physiological condition has still remained fairly poor after the transplant. One of its scaffold branches was still found overhanging in the canopy.

The transplanted tree U61 (*Lysidice rhodostegia*) was still found leaning severely with its propping uplifted (**Photo 7**), and the crack on the planter of U75 (*Dolichandrone cauda-felina*) was still presence (**Photo 8**). There is a concern on the long-term stability on both trees.

A broken scaffold branch of the tree to be transplanted T102 (*Melaleuca cajuputi* subsp. *cumingiana*) was still found hanging in the canopy (**Photo 11**).

No recovery signs have been observed on the relocated trees U34 (**Photo 12**), U35 (**Photo 13**) and U37 (**Photo 14**).

A42, U74, U72, U70, U69, A43, U62 and an untagged *Terminalia catappa* were inspected closely in September 2012 as construction of that section of the box culvert was about to be finished in the Nursery. They were in fair physiological condition.

A small sand pile next to three relocated trees (U76, U77 and U78) was removed in the monitoring in September 2012. However, waterlogging was still found in the areas around the trunk bases of these three trees. Irrigation water from the Nursery could be retained around the trunk bases of these trees, which were planted too deep previously. This would potentially damage the roots of these relocated trees (**Photos 15-17**). The relocated tree

U77 (Terminalia catappa) showed poor condition as shown in Photo 18.

All of the translocated trees were not guyed and only a few of these trees were protected within orange construction nets established as temporary TPZs.

Broken planters for three trees (U54 and two existing trees with no tag next to U54) were observed at their temporary receptor sites within the active works area to the northwest of the nursery. All of them have been surrounded by the orange construction nets to prevent further damage to the remained planters (**Photos 19-21**).

The remaining trees, including retained and transplanted specimens, within the nursery were maintained generally in fair condition, with no significant damage on tree crowns, trunks and roots observed during the monitoring in September 2012.

# Area C

The existing trees were maintained generally in fair health condition, except that a very few planted compensatory trees showing poor health condition (e.g. large amount of dry leaves in the canopy). No significant damage on the crowns, trunks and roots on trees within Area C were observed during the monitoring in September 2012.

The transplanted tree T152 has recovered after the typhoon (**Photo 22**), while the transplanted trees T153 (**Photos 23**) and the untagged transplanted tree (*Bombax ceiba*) (possibly T149) have remained in fair condition. No foliage was observed on T250.

The three transplanted specimens (Tree No.: PH01, PH02 and PH03) of the protected shrub species of conservation interest *Pavetta hongkongensis* have remained in satisfactory condition (**Photos 24-25**).

# **Recommendations**

Area A

Maintenance of proper TPZs with no temporarily stored construction materials, excessive

stockpiled soil and waterlogged condition around the tree trunk flares have been the major tree management issues in Areas A and B. The Contractor should continue notifying the on-site workers not to stockpile soil/construction materials or place construction equipment within and close to the TPZs or lower trunk/trunk flare. Any temporarily stored construction materials/ equipment and excessive water around the trunk flares should be removed or drained immediately. Operators of the construction machines should be aware of the presence of these relocated and retained trees nearby their works.

All retained trees or trees to be transplanted should be watered regularly (e.g. at least every two days) by the landscape contractor. The Contractor should conduct regular inspection on the health condition and protection measures of each existing trees within the Area A. In particular, regular watering should be applied on those recently relocated trees with regard to their poor health condition. For E17 (*Bombax ceiba*), the torn tree bark could be removed cleanly.

#### Area B

All transplanted trees should be watered regularly (e.g. at least every two days) by the landscape contractor. This is a necessary maintenance practice to improve the survival rates and growth for trees showing poor health condition as a result of the transplantation shock. Regular check of the tree health should be conducted. Proper protective measures such as guying and TPZs are recommended especially for the newly transplanted trees. Waterlogged areas (e.g. around trunk bases of U76, U77 and U78) should be avoided and excessive water around the tree trunk flares should be drained immediately. To prevent accidental drainage of used water into the tree root zone of the relocated trees, the Contractor is recommended to establish sandbags barriers or maintain a proper line of soil barriers between the trees (especially U76, T77 and U78) and the ground of the active construction work.

Regular inspection of the tree health of U58, U34, U35 and U37 should be undertaken to update their health condition and any tree defects. If these trees are found to be dead specimens in the wet season, the Contractor should replace these specimens.

The Contractor has to repair the planters or establish proper TPZs for the tree U54 and the two untagged trees adjacent to U54 as soon as possible. In addition, the Contractor should

ensure that all planters have been properly maintained.

The Contractor is recommended to re-tag the translocated trees and regularly check the condition of the tags. All tree tags on the trees should be managed properly by the Contractor throughout the construction and establishment phases. A good tree tag system is important for the Contractor, subcontractor and the auditor to undertake routine maintenance, monitoring and rapid remedial actions (if any).

The leaning tree *Lysidice rhodostegia* (U61) should be restored to its proper position or guyed appropriately to prevent its further hazard to the targets. The planter of *Dolichandrone cauda-felina* (U75) should be rebuilt to provide better support and protection of its root ball. Both mitigation measures should be carried out by the Nursery Operator or other relevant parties as soon as possible.

# Area C

All transplanted trees, planted compensatory trees and the three transplanted individuals of *Pavetta hongkongensis* should be watered regularly (e.g. at least every two days) by the appointed landscape contractor. Regular check of the health conditions of these trees should be conducted. If any of these trees are found to be dead specimens for a prolonged period in the wet season, the Contractor should replace these specimens for compensation. Any broken tree parts from the existing and compensatory trees should be removed.

# 7.3.7 Construction Lights

No follow-up action on maintenance of construction light is required as from the *Monthly EM&A Report for August 2012*.

# **Observation**

No construction light impact to the surrounding villages and to Plover Cove as all construction activities and construction sites are halted at 1800. No construction light at night is provided by the Contractor.

**Recommendation** 

No specific recommendation is required.

# 7.4 Audit Schedule

The next bi-weekly Landscape & Visual Monitoring in October 2012 is scheduled to be conducted in the weeks of 1<sup>st</sup>, 15<sup>th</sup> and 29<sup>th</sup> October 2012.

# 8 Action taken in Event of Exceedance

If the measurements (Noise, Water, Hydrological Characteristics, and Ecology) exceed the action / limit level, exceedance details will be reported and follow-up actions will be taken by relevant parties involved.

During the reporting month there was no exceedance for noise, hydrological characteristics, and ecological measurements recorded; therefore, no actions were taken.

For water quality monitoring, total 11 abnormal incidents of water quality limits (Dissolved Oxygen, Suspended solids and Turbidity) were recorded in this reporting month according to the established level. ET has arranged site investigations for the abnormal incidents and it was observed that the river was narrowed for construction of mechanical penstocks; and increases the speed of water current. No construction activities were carried out at the river bed during the reporting period. Proper mitigation measures were implemented by contractor to avoid site water release to the Wai Ha river and no particular observation of defective site activities were found causing water contamination; The exceedance of Turbidity and Total Suspended Solid were believed to be mainly attributed by high water flow rate and adverse weather. The exceedances of DO were believed to be mainly attributed by natural fluctuation, since the recorded levels of DO at control station had also exceeded its baseline action level, the exceedances recorded at W2 were unlikely to be related to the Project.

The water condition of Wai Ha River is presented in photo attached in **Appendix N**.

# 9 Construction waste disposal

It is the contractor's responsibility to ensure that all wastes produced during the construction phase for the drainage improvement works are handled, stored and disposed of in accordance with good waste management practices and EPD's regulation and requirement. Waste materials generated during construction activities, such as construction and demolition (C&D) material, chemical wastes and general refuse, are recommended to be audited at regular intervals to ensure that proper storage, transportation and disposal practices are being implemented.

Table 9.1 is a summary of figures of the construction wastes disposal provided by Contractor.

	Actual Quantities of Inert C & D Materials Generated Monthly						Actual Quantities of C & D Wastes Generated Monthly				
Month	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/cardboar d packaging	Plastics (see note3)		Others, e.g. general refuse
	(in'000m3)	(in'000m3)	(in'000m3)	(in'000m3)	( in'000m3	( in'000m3	(in'000kg	(in'000kg)	(in'000kg	(in'000kg)	(in'000kg)
Year2011	11.758	0.00	9.703	0.665	0.750	0.556	0.00	0.00	0.00	0.00	0.165
Jan-12	0.010	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.005
Feb-12	0.130	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mar-12	0.125	0.00	0.125	0.00	0.00	0.00	2.37	0.00	0.00	0.00	0.01
Apr-12	0.265	0.00	0.26	0.00	0.005	0.00	0.00	0.00	0.00	0.00	0.01
May-12	0.705	0.00	0.705	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
June-12	1.375	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02
July-12	1.870	0.00	1.72	0.15	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Aug-12	1.83	0.00	0.895	0.935	0.00	0.00	0.00	0.00	0.00	0.00	0.02
Sep-12	1.635	0.00	1.635	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.035
Total	20.418	0.00	17.402	1.75	0.71	0.556	2.37	0.00	0.00	0.00	0.035
Total	20.110								0.00	0.00	0.055
	Forecast of Total Quantities of C & D Materials to be Generated from the Contract										
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/cardboar d packaging	Plastics (see note3)	Chemical Waste	Others, e.g. general refuse
	(in'000m3)	(in'000m3)	(in'000m3)	(in'000m3)	(in'000m3)	<b>`</b> )	<b>`</b> ) <b>`</b>	(in'000kg)	(in'000kg	(in'000kg)	(in'000kg)
	37.37	8.27	12.09	0.00	25.28	2.1	10	2	0.5	1	1

Table 9.1 Summary of Construction Waste Disposal

Notes (1) The Performance targets are given in PS Clause 26.23 (14)

(2) The waste flow table shall also include C & D materials that are specified in the Contract to be imported for used at the sites

(3) Plastics refer to plastics bottles/containers, plastic sheets/foam from packaging materials.

(4) The summary table shall be submitted to the Engineer's Representative monthly together with the Waste Flow Table for review and monitoring in accordance with the PS Clause 25.20A(4)

# 10 Status of Permits and Licenses obtained

Table 10.1 is the updated status of environmental related permits/ license obtained for the construction activities

Description	License / Permit No.#	Date of Issue	Site	Date of expiry	Status
Environmental Permit	EP-303/2008	2008/2/25	Area A, B & C	not applicable	Valid
Discharge Licence	WT00006448-2010	2010/6/15	Area A, B & C	30/6/2015	Valid
Registration as a Chemical Waste Producer	316597	2010/4/26	Area A, B & C	not applicable	Valid
Waste Disposal	7010348	2010/3/2	Area A, B & C	not applicable	Valid

Table 10.1 Status of Permits and Licenses Obtained

# 11 Compliant Log

There was no formal complaint received during the reporting period. Therefore, follow up actions for the environmental complaint is not required.

	Noise	Water	Ecology	Others
Year 2011	0	0	0	0
January 2012	0	0	0	0
February 2012	0	0	0	0
March 2012	0	0	0	0
April 2012	0	0	0	0
May 2012	0	0	0	0
June 2012	0	0	0	0
July 2012	0	0	0	0
August 2012	0	0	0	0
September 2012	0	0	0	0
Total	0	0	0	0

Table 11.1 Summary of Formal Complaints received

# 12 Site Environmental Audits

# 12.1 Site Inspection

Site inspections were undertaken weekly to inspect the construction activities in active site areas to ensure that appropriate environmental protection and pollution control mitigation measures are properly implemented.

Within this reporting period, site inspections were conducted on 6<sup>th</sup>, 13<sup>th</sup>, 20<sup>th</sup> and 25<sup>th</sup> of September 2012. A detailed checklist of each site inspection together with comments and relevant photos have been filed and kept. The findings from inspection were summarized in Table 12.1.

Date	Findings	Identification	Advice from ET	Action taken	Closing date	Remarks
& 30 Aug 12 6, 13, 20	Construction materials were observed inside the tree protection zone at Area B.	Observation	Contractor was reminded to remove the construction materials as soon as possible	Outstanding		
Aug 12	Drip tray was not provided for the power generator at Area A.	Observation	_		13 Sep 12	
30 Aug 12 6, 13, 20 & 25 Sep 12	Damaged tree protection zone was observed at Area A	Observation	Contractor was reminded to replace the tree protection fence immediately.	Outstanding		
	Haul was dry and dusty at Area A	Observation	Contractor was reminded that routine water spraying should be	Routine water spraying was implemented by contactor	20 Sep 12	

Table 12.1 Summary results of site inspections findings

Date	Findings	Identification	Advice from ET	Action taken	Closing date	Remarks
			implemented for dust suppression.			
20 & 25 Sep 12	Stagnant water was observed at Area B.	Observation	Contractor was reminded that stagnant water should be removed regularly to prevent mosquito breeding.	Outstanding		
20 Sep 12	Collapsed tree protection zone was observed at Area A.	Observation	Contractor was reminded to repair the collapsed tree protection zone as soon as possible.	Collapsed tree protection zone was repaired by contractor	25 Sep 12	
25 Sep 12	Construction materials were near the U-channel of Cycle track.	Observation	Contractor was reminded to clean construction materials and keep away from the U-channel to prevent surface run-off.	Outstanding		
25 Sep 12	Mixed construction materials were observed at Area A	Observation	Contractor was reminded that all the C&D wastes should be sorted into different types and stored properly.	Outstanding		

### 12.2 Compliance with legal and Contractual requirement

There was no non-compliance recorded for the month of September 2012.

#### 12.3 Implementation status and effectiveness of the mitigation measures

Contractor has implemented mitigation measures to address those problems as

advised by ER and ET. Some of the measures taken by the contractor were considered as effective to minimize negative impact to the environment. Ongoing investigation will be carried out to observe performance and effectiveness of those measures. Outstanding environmental items will be inspected in next month.

As there were some ongoing follow up practices, contractor was reminded to regularly review and rectify the discrepancy once found and maintain good site condition. The contractor implemented various environmental mitigation measures as recommended in the Environmental Permit and Final Mitigation Measures Report.

The recommend mitigation measures of EM&A manual (revision 3) are presented in Appendix H (A).

The implemented statues of mitigation measures are presented in Appendix H (B)

### 13 Future Key issues and recommendations

According to the forecasted site activities, key environmental issued to be considered should at least include:

- Site water control and relevant protective measures.
- Quality of effluent discharge from Area A.
- Control and disposal for construction wastes generated from works.

Tree protective measure for tree planting and transplanting, such as tree protection zone and regular watering.

### 14 Conclusions

Internal finishing for the proposed Transformer room & Switchroom, heading tunnel for the proposed DN225 sewer, Excavation for the proposed DN1200 & DN1200 concrete pipe trench, Concreting for the proposed discharge chamber, concreting top slab for Bay 10 and grouting for second layer of grout hole at the proposed DN2800 twin pipes were major site activities being carried out within this reporting period.

Regular site meetings and inspection audits led by the seniors for discussing site environmental matters were held among Project Proponent, Contractor and the ET on weekly basis. Also monthly site meeting and inspection audits with the above parties and IEC were carried out on 25<sup>th</sup> of September 2012.

For noise level monitoring, all results were within the established A/L limits.

For water quality monitoring, total 11 abnormal accidents of water quality limits (Dissolved Oxygen, Suspended solids and Turbidity) were recorded in this reporting month according to the established level. ET has arranged site investigations for the abnormal incidents and it was observed that the river was redirected and narrowed for construction of mechanical penstocks; and increases the speed of water current. No construction activities were carried out at the river bed during the reporting period. Proper mitigation measures was implemented by contractor to avoid site water release to the Wai Ha river and No particular observation of defective site activities were found causing water contamination; The exceedance of Turbidity and Total Suspended Solid were believed to be mainly attributed by high water flow rate and adverse weather. The exceedance of DO were believed to be mainly attributed by natural fluctuation, since the recorded levels of DO at control station had also exceeded its baseline action level, the exceedances recorded at were unlikely to be related to the Project.

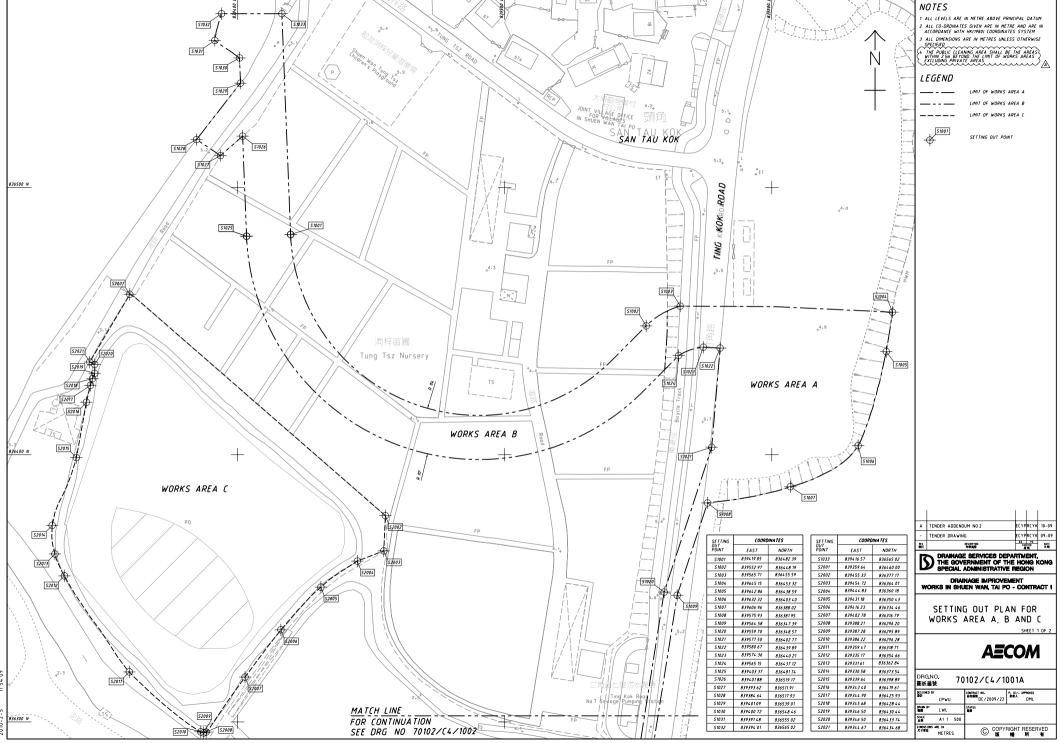
For ecological monitoring survey, all vegetations recorded were in fair condition, with no significance sign of health deterioration for the retained trees. In addition, Ecological water quality monitoring at ECA was conducted on 26/9 with result: Turbidity: 19.5NTU; Temperature:  $30.8^{\circ}$ C; DO: 5.45mg/L and pH: 5.7.

Also, there were not any notifications of summons recorded during the reporting period. Furthermore, there were not any formal prosecution and complaints recorded.

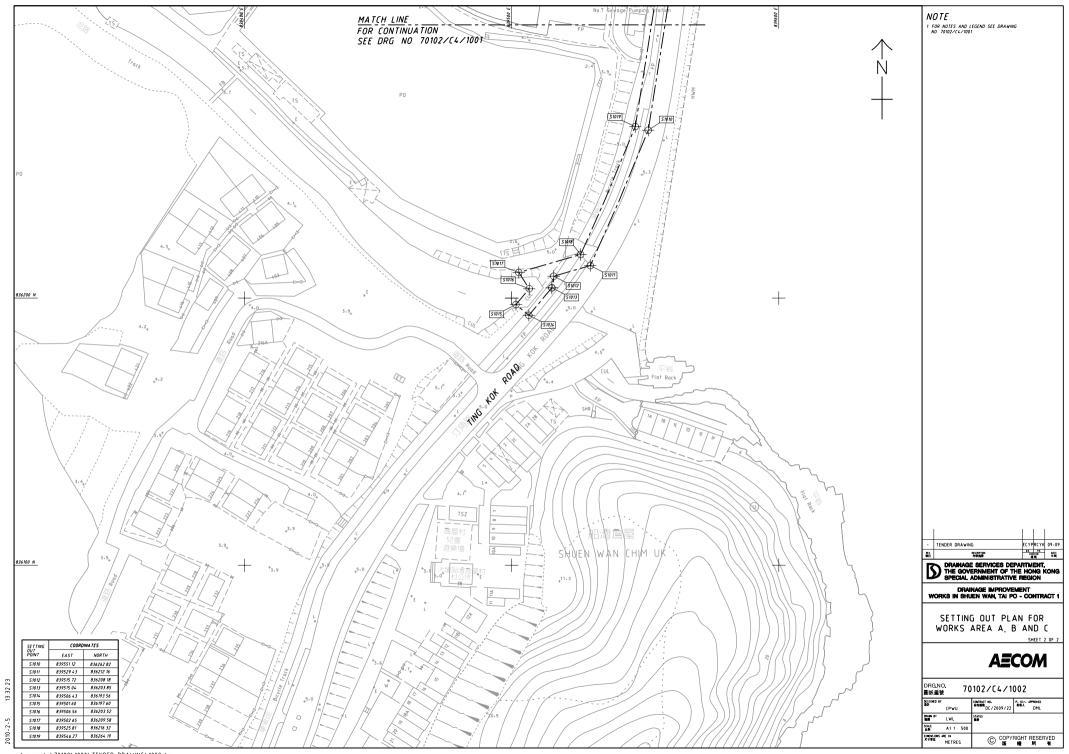
ET has reminded the contractor to provide environmental pollution control measures wherever necessary, and to keep a good environmental management at site practice.

The ET will continue to implement the environmental monitoring & audit programme in accordance with the EM&A Manual (revision 3) and Environmental Permit requirement.

Appendix A: Site Location



p:\projects\70102\1000\TENDER\_ADDENDUM\_NO\_2\1001A.dgn

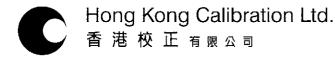


p:\projects\70102\1000\TENDER\_DRAWING\1002.dgn

Appendix B: Key Personal Contact information chart

Post	Name	Contact No.	Contact Fax	e-mail
Project Manager	Mr. W. K. Chan	6821 1136	2674 6688	dc200922jv_pmcwk @yahoo.com.hk
Site Agent	Mr. C. L. Wong	9280 0166	2674 6688	dc200922jv_sa@yaho o.com.hk
Environmental Officer / Sub-agent	Mr. K. M. Ma	9552 1734	2674 6688	dc200922jv_suba@ya hoo.com.hk
Environmental Supervisor	Mr. Anthony Chan	9179 2092	2674 6688	anthony277@hotmail. com
Asia Ecological Consultants Ltd. (Wetland Specialist)	Dr. Mike Leven	2486 2885	2471 8389	mrleven@asiaecol.co m.hk
Environmental Pioneers & Solutions Limited (Environmental Team)	Miss. Goldie Fung	2556 9172	2856 2010	goldiefung@fseng.co m.hk

Appendix C: Calibration Certificates for measuring instruments



Certificate No. 21289	Page 1 of 3 Pages
Customer: Environmental Pioneers and Solutions Limited	
Address : Flat A, 19/F., Chai Wan Industrial Centre Building	, 21 Lee Chung Street, Chai Wan, HK.
Order No.: Q20468	Date of receipt : 2-Mar-12
Item Tested	· · · · ·
Description : Digital Sound Level Meter Manufacturer : SVAN Model : 949	Serial No. : 8571
Test Conditions	
Date of Test: 5-Mar-12 Ambient Temperature: (23 ± 3)°C	Supply Voltage : Relative Humidity : (50 ± 25) %
Test Specifications	
Calibration check. Ref. Document/Procedure: Z01.	
Test Results	
All results were within the IEC 651 Type 1 & IEC 804 Type 1 spec The results are shown in the attached page(s).	ification after adjustment.
Main Test equipment used:	
Equipment No. Description Cert. No.	Traceable to
S017AMulti-Function Generator07279S024Sound Level Calibrator15136	SCL-HKSAR NIM-PRC & SCL-HKSAR

The values given in this Calibration 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 environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI). The test results apply to the above Unit-Under-Test only

Calibrated by :

P. F. Wong

Approved by :

Date: 7-Mar-12

Dorothy Cheuk

This Certificate is issued by: Hong Kong Calibration Ltd. Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong. Tel: 2425 8801 Fax: 2425 8646

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Certificate No. 21289

Page 2 of 3 Pages

Results :

#### 1. SPL Accuracy

UUT Setting				UUT Reading (dB)		
Level Range	Octave Filter	Weight	Response	Applied Value (dB)	Before	After
			-		adjust	adjust
105 dB	OFF	Α	Fast	94.0	*92.0	94.0
			Slow			94.0
		С	Fast			94.0
130 dB	OFF	Α	Fast	94.0		94.0
			Slow			94.0
		С	Fast			94.0
	OFF	Α	Fast	114.0		114.1
			Slow			114.1
		С	Fast			114.1

IEC 651 Type 1 Spec. :  $\pm$  0.7 dB Uncertainty :  $\pm$  0.1 dB

Level Stability : 0.0 dB
 IEC 651 Type 1 Spec. : ± 0.3 dB
 Uncertainty : ± 0.01 dB

#### 3. Linearity

#### 3.1 Level Linearity

UUT Range	Applied			IEC 651 Type 1 Spec.
(dB)	Value (dB)	UUT Reading (dB)	Variation (dB)	(inside Primary)
130	114.0	114.0	0.0	± 0.7 dB
	104.0	104.0	0.0	
	94.0	94.0 (Ref.)		
105	84.0	84.0	0.0	
	74.0	74.0	0.0	
	64.0	64.0	0.0	
	54.0	54.0	0.0	

Uncertainty :  $\pm 0.1 \text{ dB}$ 



#### Certificate No. 21289

Page 3 of 3 Pages

#### 3.2 Differential level linearity

UUT Range (dB)	Applied Value (dB)	UUT Reading (dB)	Variation (dB)	IEC 651 Type 1 Spec.
130	84.0	84.0	0.0	± 0.4 dB
	94.0	94.0 (Ref.)	0.0	
i i	95.0	95.0	0.0	± 0.2 dB

Uncertainty :  $\pm 0.1 \text{ dB}$ 

#### 4. Frequency Weighting

. .

A weighting		
Frequency	Attenuation (dB)	IEC 651 Type 1 Spec.
31.5 Hz	-40.4	- 39.4 dB, ± 1.5 dB
63 Hz	-27.2	- 26.2 dB, ± 1.5 dB
125 Hz	-17.0	$-16.1 \text{ dB}, \pm 1 \text{ dB}$
250 Hz	-9.4	- 8.6 dB, $\pm 1$ dB
500 Hz	-2.6	$- 3.2  dB, \pm 1  dB$
1 kHz	0.0 (Ref)	$0 dB, \pm 1 dB$
2 kHz	+1.8	$+ 1.2  dB, \pm 1  dB$
4 kHz	+1.8	$+ 1.0  dB, \pm 1  dB$
8 kHz	-0.4	- 1.1 dB, + 1.5 dB ~ -3 dB
16 kHz	-6.3	$- 6.6 \text{ dB}, + 3 \text{ dB} \sim -\infty$

Uncertainty :  $\pm 0.1 \text{ dB}$ 

#### 5. Time Averaging

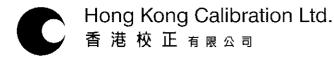
Applied Burst duty Factor	Applied Leq. Value (dB)	UUT Reading (dB)	IEC 804 Type 1 Spec.
continuous	50.0		
1/10	50.0	50.2	± 0.5 dB
1/10 <sup>2</sup>	50.0	49.8	
1/10 <sup>3</sup>	50.0	50.1	± 1.0 dB
1/10	50.0	49.9	<u> </u>

Uncertainty :  $\pm 0.1 \text{ dB}$ 

Remarks : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Atmospheric Pressure : 1 001 hPa.
- 4. \*Out of specification.

----- END -----



Certificate No.	21290		Page	1 of	2 Pages
Customer :	Environmental Pioneers and So	olutions Limited			
Address :	Flat A, 19/F., Chai Wan Industr	ial Centre Building, 2	1 Lee Chung Stre	eet, Chai V	Van, HK.
Order No. :	Q20468		Date of receipt	:	2-Mar-12
Item Tested					
Description :	Sound Level Calibrator				
Manufacturer :	Svantek				
Model :	SV30A		Serial No.	: 7908	
Test Conditi	ons	,			
Date of Test :	5-Mar-12		Supply Voltage	<b>;</b>	
Ambient Temp	erature : (23 ± 3)°C		Relative Humic	<b>lity:</b> (50 ±	25) %
Test Specific	cations				
Calibration chec	: <b>k</b>				
	Procedure : F21, Z02.				
Test Results	;				
All results were	within the IEC 942 Class 1 spec	ification.			
	shown in the attached page(s).				
Main Test equip	ment used:				
Equipment No.	Description	<u>Cert. No.</u>		Traceable	<u>to</u>
S014	Spectrum Analyzer	13535		NIM-PRC	& SCL-HKSAR
S024	Sound Level Calibrator	15136		NIM-PRC	& SCL-HKSAR
S041	Universal Counter	15610		SCL-HKS	AR
S206	Sound Level Meter	16338		SCL-HKS	AR

The values given in this Calibration 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 environmental changes, vibration and shock during transportation, overloading, mis-handling, or the capability of any other laboratory to repeat the measurement. Hong Kong Calibration Ltd. shall not be liable for any loss or damage resulting from the use of the equipment.

The test equipment used for calibration are traceable to International System of Units (SI). The test results apply to the above Unit-Under-Test only

Calibrated by :

P. F. Wona

Approved by : \_

Date: 7-Mar-12

 This Certificate is issued by:
 Di

 Hong Kong Calibration Ltd.
 Di

 Unit 8B, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street, Kwai Chung, NT, Hong Kong.

 Tel: 2425 8801
 Fax: 2425 8646



#### Certificate No. 21290

Page 2 of 2 Pages

Results :

#### 1. Level Accuracy

UUT Nominal Value (dB)	Measured Value (dB)	IEC 942 Class 1 Spec.
94	94.10	± 0.3 dB
114	114.18	

Uncertainty :  $\pm 0.1 \text{ dB}$ 

#### 2. Frequency

UUT Nominal Value	Measured Value	IEC 942 Class 1 Spec.
1 kHz	1.000 kHz	± 2 %

Uncertainty :  $\pm$  3.6 x 10<sup>-6</sup>

- 3. Level Stability : 0.0 dB IEC 942 Class 1 Spec. : ± 0.1 dB Uncertainty : ± 0.01 dB
- 4. Total Harmonic Distortion : < 0.8 % IEC 942 Class 1 Spec. : < 3 % Uncertainty : ± 2.3 % of reading

#### Remark : 1. UUT : Unit-Under-Test

- 2. The above measured values are the mean of 3 measurements.
- 3. The uncertainty claimed is for a confidence probability of not less than 95%.
- 4. Atmospheric Pressure : 1001 hPa.

----- END -----



## ALS Technichem (HK) Pty Ltd

## **REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

CONTACT: MR CHI HANG LAI CLIENT: ENVIRONMENTAL PIONEERS & SOLUTIONS LTD ADDRESS: FLAT 19A, CHAI WAN INDUSTRIAL CENTRE BUILDING, 20 LEE CHUNG STREET, CHAI WAN, HONG KONG. PROJECT: -- 
 WORK ORDER:
 HK1221859

 LABORATORY:
 HONG KONG

 DATE RECEIVED:
 17/08/2012

 DATE OF ISSUE:
 24/08/2012

COMMENTS

It is certified that the item under calibration/checking has been calibrated/checked by corresponding calibrated equipment in the laboratory. Maximum Tolerance and calibration frequency stated in the report, unless otherwise stated, the internal aceptance criteria of ALS will be followed.

Scope of Test:	Conductivity, Dissolved Oxygen, pH, Temperature and Turbidity
Description:	Multi-meter
Brand Name:	TOA-DKK
Model No.:	WQC-24, WMS-24
Serial No.:	682337
Equipment No.:	
Date of Calibration:	23 August, 2012
Date of Calibration:	23 August, 2012

### **NOTES**

This is the Final Report and supersedes any preliminary report with this batch number. Results apply to sample(s) as submitted. All pages of this report have been checked and approved for release.

### **ISSUING LABORATORY: HONG KONG**

#### Address

ALS Technichem (HK) Pty Ltd

11/F Chung Shun Knitting Centre 1–3 Wing Yip Street Kwai Chung HONG KONG Phone: Fax: Email:

852-2610 1044 852-2610 2021 <u>hongkong@alsglobal.com</u>

Mr Chan Kwok Fai, Godfrey Laboratory Manager - Hong Kong

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Page 1 of 3

ADDRESS 11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, N.T., Hong Kong PHONE +852 2610 1044 FAX +852 2610 2021 ALS TECHNICHEM (HK) PTY LTD Part of the ALS Laboratory Group A Campbell Brothers Limited Company

Environmental 💭

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## **REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

Work Order: Date of Issue: Client:

HK1221859 24/08/2012 ENVIRONMENTAL PIONEERS & SOLUTIONS LTD



Description:	Multi-meter		
Brand Name:	TOA-DKK		
Model No.:	WQC-24, WMS-24		
Serial No.:	682337		
Equipment No.:			
Date of Calibration:	23 August, 2012	Date of next Calibration:	23 November, 2012

#### Parameters:

Conductivity	Method Ref: APHA (21st edition), 2510B
--------------	--

Expected Reading (uS/cm)	Displayed Reading (uS/cm )	Tolerance (% )
142.6	138.0	-3.2
6667	6420	-3.7
12890	12200	-5.4
58670	56800	-3.2
	Tolerance Limit (%)	10.0

#### Dissolved Oxygen

#### Method Ref: APHA (21st edition), 45000: G

	icalou kei. Al fix (215t cuttoli), 45000. d						
E>	<pre>kpected Reading (mg/L)</pre>	Displayed Reading (mg/L)	Tolerance (mg/L)				
	4.68	4.83	0.15				
	6.53	6.60	0.07				
	8.23	8.35	0.12				
		Tolerance Limit (±mg/L)	0.20				

#### pH Value

#### Method Ref: APHA (21st edition), 4500H:B

Expected Reading (pH Unit)	Displayed Reading (pH Unit)	Tolerance (pH unit)
4.0	3.92	-0.08
7.0	6.95	-0.05
10.0	10.05	0.05
	Tolerance Limit (±unit)	0.20

#### Temperature

ALS Technichem (HK) Pty Ltd

**ALS Environmental** 

#### Method Ref: Section 6 of International Accreditation New Zealand Technical

Guide No. 3 Second edition March 2008: Working Thermometer Calibration Procedure.

Expected Reading (°C )	Displayed Reading (°C )	Tolerance (°C )
12.5	12.7	0.2
22.0	21.9	-0.1
40.5	40.8	0.3
	Tolerance Limit (°C)	2.0

Mr Chan Kwok Fai, Godfrey Laboratory Manager - Hong Kong Page 2 of 3

## **REPORT OF EQUIPMENT PERFORMANCE CHECK/CALIBRATION**

Work Order: HK1221859 Date of Issue: 24/08/2012 Client: **ENVIRONMENTAL PIONEERS & SOLUTIONS LTD** 



Description:	Multi-meter		
Brand Name:	TOA-DKK		
Model No.:	WQC-24, WM		
Serial No.:	682337		
Equipment No.:			
Date of Calibration:	23 August, 2		

К WMS-24 st, 2012

Date of next Calibration:

23 November, 2012

#### **Parameters:**

Turbidity

#### Method Ref: APHA (21st edition), 2130B

Expected Reading (NTU)	Displayed Reading (NTU)	Tolerance (%)
0	0	
4	4.2	5.0
40	43.4	8.5
80	86.8	8.5
400	438.0	9.5
800	870.9	8.9
	Tolerance Limit (±%)	10.0

Mr Chan Kwok Fai, Godfrey Laboratory Manager - Hong Kong



Certificate N	lo. 17082		Page 1 of	2 Pages
Customer	: Environmental Pioneers an	d Solutions Limited		
Address	: Flat A, 19/F., Chai Wan Inc	lustrial Centre Building, 21 Le	e Chung Street, Chai	Wan, HK.
Order No.			te of receipt :	28-Nov-11
Item Test	ed			
Description	: Protable Level-Velocity Log	jger		
Manufactur	er: Greyline	_		05
Model	: Stingray	Se	rial No. : 455	
Test Con	ditions			
Date of Tes	t: 6-Dec-11		pply Voltage :	
Ambient Te	emperature : (23 ± 3)°C	Re	lative Humidity : (50	± 25) %
Test Spe	cifications			
Calibration of Ref. Docum	check. ient/Procedure : V12, T03, M07	,		
Test Res	ults			
• •	·			
	vere within the tolerance(s).			
i ne results	are shown in the attached page	5(5).		
Main Test e	equipment used:			
	No. Description	Cert. No.	Traceal	
S179	Std. Tape	10789	NIM-PF	
S136A	Stop Watch	07481	SCL-HI	
S223	Std. Thermometer	13173	NIM-PF	RC
will not includ overloading, r for any loss o	ven in this Calibration Certificate only r e allowance for the equipment long ter nis-handling, or the capability of any o r damage resulting from the use of the	ther laboratory to repeat the measure equipment.	ement. Hong Kong Calibra	
The test equi	pment used for calibration are traceabl Its apply to the above Unit-Under-Test	e to International System of Units (S only	I).	
	$\langle \rangle$	_	The the	Alt.
Calibrated	i by :	_ Appro	ved by :	
	Y, K. Wong	Date:	7-Dec-11	)
This Contificate is	iscued by			

Hong Kong Calibration Ltd. Unit 88, 24/F., Well Fung Industrial Centre, No. 58-76, Ta Chuen Ping Street,Kwai Chung, NT,Hong Kong. Tel: 2425 8801 Fax: 2425 8646

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#### Certificate No. 17082

Page 2 of 2 Pages

Results :

#### 1. Flow Rate

Γ	Applied Value (Ft/s)	UUT Reading (Ft/s)	Tolerance	Uncertainty
ł	1.67	1.6	± 5 %	±1%

#### 2. Level

Applied Value (Ft)	UUT Reading (Ft)	Tolerance	Uncertainty
1.00	1.00	± 5 %	± 0.1 %
1.75	1.75		
3.00	3.00		

#### 3. Temperature

Applied Value (°C)	UUT Reading (°C)	Tolerance	Uncertainty
23.0	24	± 2 °C	± 0.2 ℃

#### Remarks : 1. UUT : Unit-Under-Test

- 2. The uncertainty claimed is for a confidence probability of not less than 95%.
- 3. Sensor Used : Model : QZ02L-UT-01-PS

S/N:10D18289

----- END -----

Appendix D: Construction Noise Monitoring Data

## **Noise Monitoring Data Sheet**

Monitoring Location		M1	AL1
Monitoring Method		Façade Façade	
Date of Monitorin	g	5/9/2012	5/9/2012
Weather Conditio	n	Sunny	Sunny
Measurement Sta	art Time (hh:mm)	10:20	10:55
Measurement Tin	ne Length (mins)	30 r	nins
SLM Model & S/N	I	SVAN	N 955
Wind Speed (m/s	)	0.2	0.2
	L <sub>eq</sub> (dB(A))	60.1	64.1
Measurement Results	L <sub>10</sub> (dB(A))	62.1	66.9
	L <sub>90</sub> (dB(A))	46.7	49.9
Major Construction Noise Source(s) During Monitoring		The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities
Other Noise Source(s) During Monitoring		– Background Noise – Traffic Noise	– Background Noise – Traffic Noise

NameSignatureDatePerpared by:Lau Kai ChungLau Kai Chung5/9/2012

## **Noise Monitoring Data Sheet**

Monitoring Location		M1	AL1
Monitoring Method		Façade Façade	
Date of Monitoring	g	12/9/2012	12/9/2012
Weather Conditio	n	Sunny	Sunny
Measurement Sta	art Time (hh:mm)	10:30	11:05
Measurement Tin	ne Length (mins)	30 r	nins
SLM Model & S/N	I	SVA	N 955
Wind Speed (m/s	)	0.2	0.2
	L <sub>eq</sub> (dB(A))	62.3	67.4
Measurement Results	L <sub>10</sub> (dB(A))	65.1	68.1
	L <sub>90</sub> (dB(A))	48.3	52.4
Major Construction Noise Source(s) During Monitoring		The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities
Other Noise Source(s) During Monitoring		– Background Noise – Traffic Noise	– Background Noise – Traffic Noise

NameSignatureDatePerpared by:Lau Kai ChungLau Kai Chung12/9/2012

## Noise Monitoring Data Sheet

Monitoring Location		M1	AL1
Monitoring Method		Façade Façade	
Date of Monitorin	g	19/9/2012	19/9/2012
Weather Conditio	n	Sunny	Sunny
Measurement Sta	art Time (hh:mm)	9:50	10:25
Measurement Tin	ne Length (mins)	30 r	nins
SLM Model & S/N	I	SVA	N 955
Wind Speed (m/s	)	0.4	0.4
	L <sub>eq</sub> (dB(A))	60.1	68.5
Measurement Results	L <sub>10</sub> (dB(A))	59.9	69.3
	L <sub>90</sub> (dB(A))	47.1	50.3
Major Construction Noise Source(s) During Monitoring		The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities
Other Noise Source(s) During Monitoring		– Background Noise – Traffic Noise	– Background Noise – Traffic Noise

NameSignatureDatePerpared by:Lau Kai ChungLau Kai Chung19/9/2012

## Noise Monitoring Data Sheet

Monitoring Location		M1	AL1
Monitoring Method		Façade	Façade
Date of Monitorin	g	26/9/2012	26/9/2012
Weather Conditio	n	Sunny	Sunny
Measurement Sta	art Time (hh:mm)	10:50	11:20
Measurement Tin	ne Length (mins)	30 r	nins
SLM Model & S/N	I	SVA	N 955
Wind Speed (m/s	)	0.6	0.6
	L <sub>eq</sub> (dB(A))	62.3	66.3
Measurement Results	L <sub>10</sub> (dB(A))	64.6	68.1
	L <sub>90</sub> (dB(A))	48.8	49.7
Major Construction Noise Source(s) During Monitoring		The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities	The measured noise level was dominated by the background noise in the immediate vicinity of the monitoring location due to its large distance from the construction activities
Other Noise Source(s) During Monitoring		– Background Noise – Traffic Noise	– Background Noise – Traffic Noise

NameSignatureDatePerpared by:Lau Kai ChungLau Kai Chung26/9/2012

Appendix E: Water Quality Monitoring Data

#### Remark:

Red highlighting: The value is exceeding limit level.

Yellow highlighting: The value is exceeding action level but within limit level.

#### **Environmental Pioneers and Solutions Limited**

Date of Sampling : 3/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	13:50	15:15	12:15
Tide Mode	Mid	-ebb	N/A
Water Depth (m)	<1	<1	<1
pH value	6.70	7.11	8.40
Temperature (°C)	34.6	31.1	33
Turbidity (NTU)	6.5	11.2	2.7
DO (mg/L)	5.00	7.28	4.60
DO Saturation (%)	69%	88%	65.00
Suspended Solids (mg/L)	9.0	5.8	5.0

Remark or Observation :

Name

**Signature** 

Date

Prepared By: Lau kai chung Lau kai chung

3/9/2012

\_\_\_

Date of Sampling : 5/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	14:50	16:00	10:20
Tide Mode	Mid	-ebb	N/A
Water Depth (m)	<1	<1	<1
pH value	7.30	7.50	8.20
Temperature (°C)	31.5	31	32
Turbidity (NTU)	3.5	9.8	2.1
DO (mg/L)	6.60	6.80	6.40
DO Saturation (%)	92%	88%	94%
Suspended Solids (mg/L)	8.0	7.6	5.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By : Lau kai chung

Lau kai chung

5/9/2012

\_\_\_\_

Date of Sampling : 7/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	15:30	15:20	10:45
Tide Mode	Mid	-ebb	N/A
Water Depth (m)	<1	<1	<1
pH value	7.00	7.43	8.20
Temperature (°C)	29	29.5	29.5
Turbidity (NTU)	4.30	8.5	1.70
DO (mg/L)	5.40	6.87	5.20
DO Saturation (%)	70%	87%	69%
Suspended Solids (mg/L)	6.0	9.2	2.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By : Lau kai chung

Lau kai chung

Date of Sampling : 10/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	9:00	9:20	9:30
Tide Mode	Mid	-ebb	N/A
Water Depth (m)	<1	<1	<1
pH value	6.30	7.01	8.00
Temperature (°C)	31.8	32.1	30.0
Turbidity (NTU)	10.2	9.8	3.9
DO (mg/L)	5.90	7.23	7.30
DO Saturation (%)	81%	93%	95%
Suspended Solids (mg/L)	11.0	5.8	26.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_

Date

Prepared By : \_\_\_\_ Lau kai chung

Lau kai chung

Date of Sampling : 12/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C1
Time (hhmm)	16:45	10:30	
Tide Mode	Mid-	flood	N/A
Water Depth (m)	<1	<1	<1
pH value	7.00	7.38	7.41
Temperature (°C)	31	31.9	31.9
Turbidity (NTU)	4.2	9.8	11.4
DO (mg/L)	4.40	7.15	6.75
DO Saturation (%)	59%	88%	86%
Suspended Solids (mg/L)	8.0	3.6	11.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By : Lau kai chung

Lau kai chung

Date of Sampling : 14/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	10:45	12:10	11:00
Tide Mode	Mid	-ebb	N/A
Water Depth (m)	<1	<1	<1
pH value	6.80	7.29	8.40
Temperature (°C)	31.6	29.9	32
Turbidity (NTU)	2.0	12.3	0.9
DO (mg/L)	6.10	7.05	6.70
DO Saturation (%)	83%	90%	90%
Suspended Solids (mg/L)	8.0	4.6	2.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_

Date

Prepared By : Lau kai chung

Lau kai chung

Date of Sampling : 17/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	13:30	14:30	10:55
Tide Mode	Mid	-ebb	N/A
Water Depth (m)	<1	<1	<1
pH value	5.90	7.65	7.90
Temperature (°C)	29.1	30.1	29.7
Turbidity (NTU)	10.9	4.1	2.7
DO (mg/L)	5.90	6.67	7.30
DO Saturation (%)	77%	89%	96%
Suspended Solids (mg/L)	5.0	6.4	2.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_

Date

Prepared By : Lau kai chung

Lau kai chung

Date of Sampling : 19/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	14:25	15:30	
Tide Mode	Mid	-ebb	10:10
Water Depth (m)	<1	<1	<1
pH value	7.50	7.49	8.10
Temperature (°C)	29	28.3	28.8
Turbidity (NTU)	1.8	2.1	1.3
DO (mg/L)	6.10	7.38	7.60
DO Saturation (%)	80%	92%	98%
Suspended Solids (mg/L)	2.0	5.2	2.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_

Date

Prepared By: Lau kai chung

Lau kai chung

Date of Sampling : 21/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	16:45	16:00	10:00
Tide Mode	Mid-ebb		N/A
Water Depth (m)	<1	<1	<1
pH value	7.30	7.53	7.40
Temperature (°C)	26.8	29	27
Turbidity (NTU)	86.3	3.1	14.9
DO (mg/L)	7.00	7.62	7.80
DO Saturation (%)	87%	97%	101%
Suspended Solids (mg/L)	59.0	3.4	8.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By : \_\_\_\_ Lau kai chung

Lau kai chung

Date of Sampling : 24/9/2012

Weather: Rainy

Monitoring Location	W1	W2	C1
Time (hhmm)	9:15	15:30	15:40
Tide Mode	- Mid-flood		Mid-flood
Water Depth (m)	<1	<1	<1
pH value	7.60	6.94	7.69
Temperature (°C)	27	28.3	29.7
Turbidity (NTU)	13.8	59.0	26.1
DO (mg/L)	6.30	7.16	7.10
DO Saturation (%)	114%	87%	86%
Suspended Solids (mg/L)	8.0	16.0	23.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By: Lau kai chung

Lau kai chung

## **Environmental Pioneers & Solutions Limited** Water Quality Monitoring - Summary of On-Site Measurement Results

Date of Sampling : 26/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2	
Time (hhmm)	10:00	10:50	10:15	
Tide Mode	Mid	-ebb	N/A	
Water Depth (m)	<1	<1	<1	
pH value	5.80	7.39	8.20	
Temperature (°C)	31.9	29.8	32	
Turbidity (NTU)	10.3	4.8	192.0	
DO (mg/L)	6.30	7.04	5.60	
DO Saturation (%)	88%	86%	77%	
Suspended Solids (mg/L)	8.0	7.0	179.0	

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By : Lau kai chung

Lau kai chung

26/9/2012

## **Environmental Pioneers & Solutions Limited** Water Quality Monitoring - Summary of On-Site Measurement Results

Date of Sampling : 28/9/2012

Weather: Sunny

Monitoring Location	W1	W2	C2
Time (hhmm)	11:00	12:20	11:30
Tide Mode	Mid	-ebb	
Water Depth (m)	<1	<1	<1
pH value	6.50	7.84	7.70
Temperature (°C)	31.3	29.6	31
Turbidity (NTU)	5.5	1.8	7.9
DO (mg/L)	5.30	5.95	6.30
DO Saturation (%)	73%	85%	86%
Suspended Solids (mg/L)	10.0	4.4	7.0

Remark or Observation :

Name

<u>Signature</u>

\_\_\_\_\_

Date

Prepared By : \_\_\_\_ Lau kai chung

Lau kai chung

28/9/2012

Appendix F: Hydrological Characteristics Monitoring Data

Location	Position	Tide	Date**	Time	Weather	Water Depth (m)*	Water Flow (m/s)	Water Flow (m <sup>3</sup> /s)
H1	Mid	Flood	7-Sep-2012	11:30	Sunny	0.24	0.12	0.150
H1	Mid	Flood	14-Sep-2012		Sunny			0.000
H1	Mid	Flood	21-Sep-2012	11:00	Sunny	0.6	0.12	0.150
H1	Mid	Flood	28-Sep-2012		Sunny			0.000
H2	Mid	Flood	7-Sep-2012	11:00	Sunny	0.3	0.12	0.754
H2	Mid	Flood	14-Sep-2012		Sunny			0.000
H2	Mid	Flood	21-Sep-2012	10:30	Sunny	0.36	0.18	1.130
H2	Mid	Flood	28-Sep-2012		Sunny			0.000
H1	Mid	Ebb	7-Sep-2012	15:15	Sunny	0.12	0.12	0.150
H1	Mid	Ebb	14-Sep-2012	12:35	Sunny	0.12	0.12	0.150
H1	Mid	Ebb	21-Sep-2012	15:50	Sunny	0.18	0.06	0.075
H1	Mid	Ebb	28-Sep-2012	12:10	Sunny	0.24	0.06	0.075
H2	Mid	Ebb	7-Sep-2012	15:00	Sunny	0.18	0.06	0.075
H2	Mid	Ebb	14-Sep-2012	12:50	Sunny	0.12	0.12	0.754
H2	Mid	Ebb	21-Sep-2012	15:30	Sunny	0.12	0.12	0.754
H2	Mid	Ebb	28-Sep-2012	12:00	Sunny	0.24	0.12	0.754

\* : Since the water levels were too low for the depth detector to determine, a tape measure was used for estimation.

\*\*: Only one mid-tide is within working hours on 14, 28 Sep 2012.

Appendix G: Landscape and Visual Monitoring Photos



Photo 1 – Temporary hoardings have been established to surround the works area at Wai Ha River estuary.

Photo 2 – Temporary hoardings have been established to active works area along Ting Kok Road.





Photo 3 – No discharge of muddy water of Photo 4 – Overall view of the transplanted observed in Area C. tree U58 *Grevillea robusta*.





Photo 5 - A broken scaffold branch (indicated)Photo 6 - Watersprouts were observed alonghas overhung in the canopy of U58, while newthe trunk of the transplanted tree U58and small leaves were observed in theGrevillea robusta.canopy.



Photo 7 - Severe leaning tree trunk of the<br/>transplanted tree U61 was observed in AreaPhoto 8 - Crack on the planter of U75 became<br/>more obvious in Area B.B.



Photo 9 – No temporary storage of construction materials were observed within the TPZs in Area A.

Photo 10 – Minor bark tearing was found on the trunk of E17 (Bombax ceiba) which was believed to be created by machinery.





Photo 11 - A broken scaffold branch wasPhoto 12 - Declining health condition of U34observed on the tree to be transplantedin Area B.(T102) in Area B.

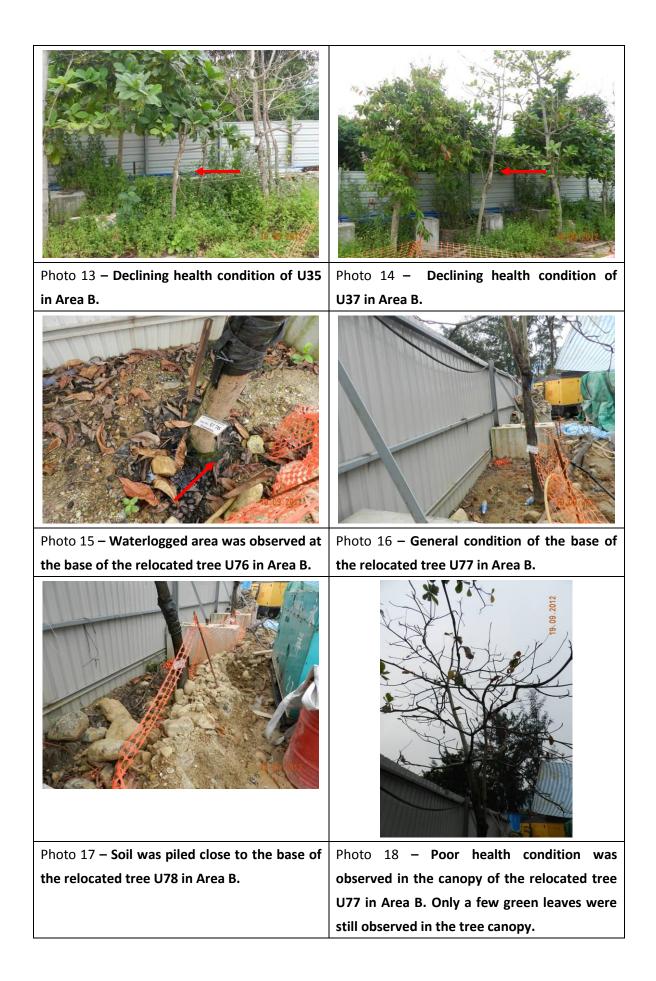




Photo 19 - The untagged tree at the south of<br/>U54 has been surrounded by the orange<br/>construction nets to prevent further damage<br/>to the tree trunk.Photo 20 -U54 has been surrounded by the<br/>orange construction nets to prevent further<br/>damage to the tree trunk.





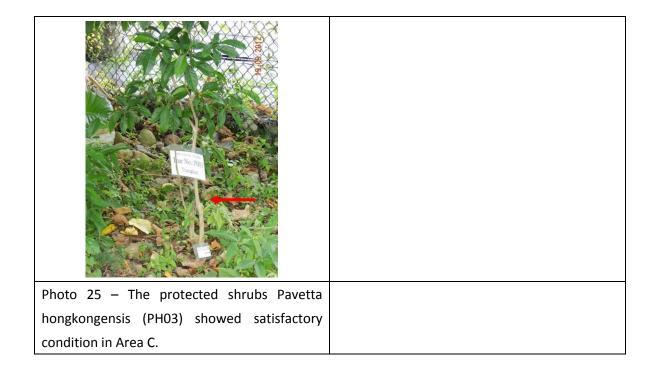
Photo 21 - The untagged tree at the north of<br/>U54 has been surrounded by the orange<br/>construction nets to prevent further damage<br/>to the tree trunk.Photo 22 - General view of the transplanted<br/>tree T152 in Area C.



Photo 23 – General view of the transplanted tree T153 in Area C.



transplanted Photo 24 – The protected shrubs Pavetta hongkongensis (PH01 and PH02) showed satisfactory condition in Area C.



Appendix H:

A)

The recommended mitigation measures of EM&A manual (revision 3)

B)

Implementation status of environmental protection and mitigation measures

## A) The recommended mitigation measures of EM&A manual (revision 3)

EIA Ref. A	EM&A Ref.	Recommended Mitigation Measures Noise Impact		Who to implement the measure?	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?
S 3.30	2.18	Good Site Practice:	To minimize construction	Contractor	Works areas	Construction	EIAO-TM
			noise impacts			phase	NCO
		<ul> <li>Only well-maintained plant shall</li> </ul>					
		be operated on-site and plant shall					
		be serviced regularly during the					
		construction program					
		<ul> <li>Silencers or mufflers on</li> </ul>					
		construction equipment shall be					
		utilized and shall be properly					
		maintained during the construction					
		program					
		<ul> <li>Mobile plant, if any, shall be sited</li> </ul>					
		as far from NSRs as possible					
		<ul> <li>Machines and plant (such as</li> </ul>					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		trucks) that may be in intermittent					
		use shall be shut down between					
		work periods or shall be throttled					
		down to a minimum					
		<ul> <li>Plant known to emit noise</li> </ul>					
		strongly in one direction shall,					
		wherever possible, be orientated so					
		that the noise is directed away from					
		the nearby NSRs					
		<ul> <li>Material stockpiles and other</li> </ul>					
		structures shall be effectively					
		utilized, wherever practicable, in					
		screening noise from on-site					
		construction activities.					
S 3.31 -	2.19	Use of quieter PME	To minimize construction	Contractor	Works areas	Construction	EIAO-TM
3.32			noise impacts			phase	NCO
S 3.33 –	2.20-2.	Use of temporary noise barrier	To minimize construction	Contractor	Works areas as	Construction	EIAO-TM
3.34	21		noise impacts		shown in Figure	phase	NCO

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
3.36-3.3	2.23-2.				3.5		
8	24						
S 3.35	2.22	Use of alternative quieter	To minimize construction	Contractor	Part of the works	Construction	EIAO-TM
and		construction method (the Low	noise impacts		area for pipe	phase	NCO
Table		Impact Method)			laying in Wai Ha		
3.6					(refer to Figure		
					3.5)		
3.36	2.23-2.	Use of noise enclosure	To minimize construction	Contractor	Part of the works	Construction	EIAO-TM
-3.38	24		noise impacts		area for pipe	phase	NCO
					laying in Wai Ha		
					(refer to Figure		
					3.5)		
В		Air Quality Impact					
S4.16	3.5	Implementation of mitigation	To minimize construction	Contractor	Construction	Construction	EIAO-TM
		measures stipulated in the Air	dust impacts		Sites	Phase	
		Pollution Control (Construction Dust)					
		Regulation and good site practices					
		including but not limited to the					
		following:					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		<ul> <li>Use of regular watering to reduce</li> </ul>					
		dust emissions from exposed site					
		surfaces and unpaved road, with					
		complete coverage, particularly					
		during dry weather;					
		<ul> <li>Use of frequent watering for</li> </ul>					
		particularly dusty static construction					
		areas and areas close to ASRs;					
		<ul> <li>Tarpaulin covering of all dusty</li> </ul>					
		vehicle loads transported to, from					
		and between site location;					
		<ul> <li>Establishment and use of vehicle</li> </ul>					
		wheel and body washing facilities at					
		the exit points of the site;					
		<ul> <li>Routing of vehicles and</li> </ul>					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		positioning of construction plant					
		should be at the maximum possible					
		distance from ASRs.					
		<ul> <li>Stockpiled excavated materials</li> </ul>					
		should be covered with tarpaulin,					
		and should be removed off-site					
		within 24 hours to avoid any odour					
		nuisance arising.					
С		Water Quality Impact			1	1	
S5.29	4.5	Construction Site Run-off and	To minimize water quality	Contractor	Works sites	Construction	ProPECC PN 1/94
		Drainage:	impacts			phase	Construction Site
							Drainage
		<ul> <li>Before commencing any site</li> </ul>					
		formation work, all sewer and					
		drainage connections shall be					
		sealed to prevent debris, soil, sand					
		etc. from entering public					

EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
		Main Concern to Address	measure?		measure?	measure to
						achieve?
	sewers/drains.					
	<ul> <li>Temporary ditches shall be</li> </ul>					
	provided to facilitate run-off					
	discharge into appropriate					
	watercourses, via a silt retention					
	pond. No site run-off shall enter the					
	fishponds at Shuen Wan.					
	<ul> <li>Sand/silt removal facilities such</li> </ul>					
	as sand traps, silt traps and					
	sediment basins shall be provided to					
	remove sand/silt particles from					
	runoff to meet the requirements of					
	the Technical Memorandum					
	standard under the Water Pollution					
	Control Ordinance. The design of					
	silt removal facilities shall be based					
	on the guidelines provided in					
	ProPECC PN 1/94. All drainage					
		Ref.       Measures         sewers/drains.       • Temporary ditches shall be provided to facilitate run-off discharge into appropriate watercourses, via a silt retention pond. No site run-off shall enter the fishponds at Shuen Wan.         • Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities shall be based on the guidelines provided in	Ref.       Measures       Recommended Measure & Main Concern to Address         sewers/drains.       • Temporary ditches shall be provided to facilitate run-off discharge into appropriate watercourses, via a silt retention pond. No site run-off shall enter the fishponds at Shuen Wan.       • Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities shall be based on the guidelines provided in	Ref.       Measures       Recommended Measure & measure?         sewers/drains.       •       Temporary ditches shall be provided to facilitate run-off discharge into appropriate watercourses, via a silt retention pond. No site run-off shall enter the fishponds at Shuen Wan.       •         •       Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities shall be based on the guidelines provided in	Ref.       Measures       Recommended Measure & implement the measure?       measure         sewers/drains.       •       Temporary ditches shall be provided to facilitate run-off discharge into appropriate watercourses, via a silt retention pond. No site run-off shall enter the fishponds at Shuen Wan.       •       Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities such an the guidelines provided in       •       •	Ref.       Measures       Recommended Measure & implement the measure?       measure       implement the measure?         sewers/drains.       • Temporary ditches shall be provided to facilitate run-off discharge into appropriate watercourses, via a silt retention pond. No site run-off shall enter the fishponds at Shuen Wan.       • Sand/silt removal facilities such as sand traps, silt traps and sediment basins shall be provided to remove sand/silt particles from runoff to meet the requirements of the Technical Memorandum standard under the Water Pollution Control Ordinance. The design of silt removal facilities shall be based on the guidelines provided in       • Implement the measure?

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		facilities and erosion and sediment					
		control structures shall be inspected					
		monthly and maintained to ensure					
		proper and efficient operation at all					
		times and particularly during					
		rainstorms.					
		<ul> <li>Water pumped out from</li> </ul>					
		excavated pits shall be discharged					
		into silt removal facilities.					
		<ul> <li>During rainstorms, exposed</li> </ul>					
		slope/soil surfaces shall be covered					
		by a tarpaulin or other means.					
		Other measures that need to be					
		implemented before, during, and					
		after rainstorms as summarized in					
		ProPECC PN 1/94 shall be followed.					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		<ul> <li>Exposed soil areas shall be</li> </ul>					
		minimized to reduce potential for					
		increased siltation and					
		contamination of runoff.					
		<ul> <li>Earthwork final surfaces shall be</li> </ul>					
		well compacted and subsequent					
		permanent work or surface					
		protection shall be immediately					
		performed to reduce the potential of					
		soil erosion.					
		<ul> <li>Open stockpiles of construction</li> </ul>					
		materials or construction wastes					
		on-site shall be covered with					
		tarpaulin or similar fabric during					
		rainstorms.					
S5.30	4.7	Further precautionary measures	To minimize water quality	Contractor	Works areas near	Rainy seasons	EIAO-TM
		during rainy season:	impacts to the designated		the Conservation	during	Water Pollution
			Conservation Area		Area	construction	Control Ordinance

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		<ul> <li>For the construction of the box</li> </ul>				phase	(WPCO)
		culvert next to the existing channel					
		of the Wai Ha River, sand bags					
		should be deployed around the					
		boundary of the works trench to					
		prevent muddy water ingress into					
		the adjacent CA or Wai Ha River.					
		Sand bags should also be used to					
		surround the excavated trench.					
		Generally, the sand bags will be					
		placed up to a height of 300mm to					
		provide adequate allowance for the					
		built-up water level during rainstorm					
		event. With sand bags in place,					
		surface runoff will be intercepted					
		and flow to Wai Ha River or					
		collected by the existing drainage					
		system as usual. For the construction of the box					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		culvert in the extreme northeast corner of Shuen Wan Marsh					
		Conservation Area sand bags					
		should be deployed along the limit					
		of the works area to prevent muddy water ingress into the CA. Sand					
		bags should be placed to a height					
		of at least 300mm from ground level and +2.5 mPD (whichever is					
		greater) to provide adequate allowance for the built-up water					
		level during rainstorm events.					
		Unpolluted surface runoff within the					
		works area should then be					
		collected and directed into the					
		existing drainage system.					
		<ul> <li>Sheet-piles, which would be</li> </ul>					
		installed around the works trench					
		near the Conservation Area, would					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		be extended above ground level for					
		about 2m to serve as hoardings to					
		isolate the works site.					
		<ul> <li>Tarpulin sheets would be used to</li> </ul>					
		cover the excavation areas during					
		heavy rainstorms. This would					
		prevent the ingress of rainwater into					
		the trench minimising the risk of					
		muddy water getting into Wai Ha					
		River and the adjacent Conservation					
		Area.					
		<ul> <li>Any concrete washing water</li> </ul>					
		would be contained inside the works					
		site surrounded by the extended					
		sheet piles. A pump sump at the					
		bottom of the trench would be					
		provided to pump any excess water					
		during concrete washing.					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		<ul> <li>Stockpiling the excavated</li> </ul>					
		materials adjacent to the					
		Conservation Area would not be					
		allowed. The excavated materials					
		would be either removed off site					
		immediately after excavation, or					
		stockpile at location(s) away from					
		the Conservation Area. The					
		stockpile locations shall be					
		approved by the site engineer.					
S5.31-S	4.8-4.9	General Construction Activities:	To minimize water quality	Contractor	Works sites	Construction	EIAO-TM
5.32		<ul> <li>Debris and refuse generated</li> </ul>	impacts			phase	WPCO
		on-site should be collected, handled					
		and disposed of properly to avoid					
		entering the Wa Ha River and fish					
		ponds at Shuen Wan. Stockpiles					
		of cement and other construction					
		materials should be kept covered					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		when not being used.					
		<ul> <li>Oils and fuels should only be</li> </ul>					
		used and stored in designated areas					
		which have pollution prevention					
		facilities. To prevent spillage of					
		fuels and solvents to nearby water					
		bodies, all fuel tanks and storage					
		areas should be provided with locks					
		and be sited on sealed areas, within					
		bunds of a capacity equal to 110%					
		of the storage capacity of the largest tank. The bund should be drained					
		of rainwater after a rain event.					
S5.33	4.10	Sewage from Construction	To minimize water quality	Contractor	Works sites	Construction	EIAO-TM
		workforce:	impacts			phase	WPCO
		<ul> <li>Temporary sanitary facilities,</li> </ul>					
		such as portable chemical toilets,					
		should be employed on-site. A					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		licensed contractor would be					
		responsible for appropriate disposal					
		and maintenance of these facilities.					
S5.34	4.11	River Channel Excavation Works:	To minimize water quality	Contractor	Works sites	Construction	EIAO-TM
			impacts			phase	WPCO
		<ul> <li>The excavation works within the</li> </ul>					
		upstream end of the existing river					
		channel of the Wai Ha River for the					
		construction of the proposed box					
		culvert shall be carried out in dry					
		condition. Containment					
		measures such as bunds and					
		barriers shall be used within the					
		affected length of the river channel					
		and the excavation works restricted					
		to within an enclosed dry section of					
		the channel. The excavation works					
		within Wai Ha River shall be					
		restricted to the period from October					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		to April.					
D		Waste Management Implications			I		
S6.20 –	5.5	Good site practices:	To reduce waste	Contractor	Works sites	Construction	ETWB TCW
6.22			management impacts			phase	No.19/2005
		<ul> <li>Nomination of approved</li> </ul>					ETWB TCW
		personnel, such as a site manager,					No.31/2004
		to be responsible for good site					
		practices and making arrangements					
		for collection of all wastes generated					
		at the site and effective disposal to					
		an appropriate facility.					
		<ul> <li>Training of site personnel in</li> </ul>					
		proper waste management and					
		chemical waste handling					
		procedures.					
		<ul> <li>Provision of sufficient waste</li> </ul>					
		disposal points and regular					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		collection for disposal.					
		<ul> <li>Appropriate measures to</li> </ul>					
		minimise windblown litter and dust					
		during transportation of waste by					
		either covering trucks or by					
		transporting wastes in enclosed					
		containers.					
		<ul> <li>Separation of chemical waste for</li> </ul>					
		special handling and appropriate					
		treatment at the Chemical Waste					
		Treatment Facility.					
		<ul> <li>Regular cleaning and</li> </ul>					
		maintenance programme for					
		drainage systems, sumps and oil					
		interceptors.					
		<ul> <li>A Waste Management Plan</li> </ul>					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		should be prepared and submitted to					
		the Engineer for approval. One					
		may make reference to ETWB TCW					
		No. 15/2003 for details.					
		<ul> <li>A recording system for the</li> </ul>					
		amount of wastes generated,					
		recycled and disposed (including the					
		disposal sites) should be proposed.					
S6.23-	5.7	Waste reduction measures:	To achieve waste reduction	Contractor	Works sites	Construction	EIAO-TM
6.24						phase	
		<ul> <li>Segregation and storage of</li> </ul>					
		different types of waste in different					
		containers, skips or stockpiles to					
		enhance reuse or recycling of					
		materials and their proper disposal.					
		<ul> <li>To encourage collection of</li> </ul>					
		aluminium cans by individual					
		collectors, separate labelled bins					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		shall be provided to segregate this					
		waste from other general refuse					
		generated by the work force.					
		<ul> <li>Any unused chemicals or those</li> </ul>					
		with remaining functional capacity					
		shall be recycled.					
		<ul> <li>Maximising the use of reusable</li> </ul>					
		steel formwork to reduce the amount					
		of C&D material.					
		<ul> <li>Proper storage and site practices</li> </ul>					
		to minimise the potential for damage					
		or contamination of construction					
		materials.					
		<ul> <li>Plan and stock construction</li> </ul>					
		materials carefully to minimise					
		amount of waste generated and					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		avoid unnecessary generation of					
		waste.					
S6.25-		Construction & Demolition (C&D)	To minimize off-site disposal	Contractor	Works sites	Construction	EIAO-TM
6.26		Material:	of C&D material			phase	
		Excavated material with suitable	To minimize environmental				
		characteristics/size should be	impacts during the handling				
		reused on-site as fill material as far	of C&D material				
		as practicable, such as for					
		backfilling of the box culvert and					
		drainage pipe works.					
		<ul> <li>Suitable areas should be</li> </ul>					
		designated within the works site					
		boundaries for temporary stockpiling					
		of C&D material.					
		<ul> <li>Within stockpile areas, the</li> </ul>					
		following measures should be taken					
		to control potential environmental					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		impacts or nuisance:					
		- covering material during					
		heavy rainfall;					
		- locating stockpiles to minimize					
		potential visual impacts; and					
		- minimizing land intake of					
		stockpile areas as far as possible.					
		<ul> <li>When disposing C&amp;D material at</li> </ul>					
		a public filling area, the material					
		shall only consist of soil, rock,					
		concrete, brick, cement					
		plaster/mortar, inert building debris,					
		aggregates and asphalt. The					
		material shall be free from marine					
		mud, household refuse, plastic,					
		metals, industrial and chemical					
		waste, animal and vegetable matter,					
		and other material considered to be					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		unsuitable by the Filling Supervisor.					
S6.27		Chemical waste:	To minimize environmental	Contractor	Works sites	Construction	EIAO-TM
		<ul> <li>Contractor should register with</li> </ul>	impacts during the handling,			phase	Waste Disposal
		the EPD as a Chemical Waste	transportation and disposal				(Chemical Waste)
		Producer and to follow the	of chemical waste				(General) Regulation
		guidelines stated in the Code of					
		Practice on the Packaging,					
		Labelling and Storage of Chemical					
		Wastes.					
		<ul> <li>Good quality containers</li> </ul>					
		compatible with the chemical					
		wastes should be used, and					
		incompatible chemicals should be					
		stored separately.					
		<ul> <li>Appropriate labels should be</li> </ul>					
		securely attached on each chemical					
		waste container indicating the					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		corresponding chemical					
		characteristics of the chemical					
		waste, such as explosives,					
		flammable, oxidizing, irritant, toxic,					
		harmful, corrosive, etc.					
		The Contractor should use a					
		licensed collector to transport and					
		dispose of the chemical wastes					
		generated at the Chemical Waste					
		Treatment Centre at Tsing Yi, or					
		other licenced facility, in accordance					
		with the Waste Disposal (Chemical					
		Waste) (General) Regulation.					
S6.28		General refuse:	To minimize environmental	Contractor	Works sites	Construction	EIAO-TM
		It should be stored in enclosed	impacts during the handling			phase	
			and transportation of general				
			refuse				
		<ul> <li>A reputable waste collector</li> </ul>					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		should be employed by the					
		contractor to remove general refuse					
		from the site, separately from C&D					
		material.					
		<ul> <li>An enclosed and covered area</li> </ul>					
		is preferred to reduce the					
		occurrence of 'wind blown' light					
		material.					
E		Ecological Impact					1
S. 7.95	6.6	<ul> <li>Sheet-pilings, which will be</li> </ul>	To minimize the impacts on	Contractor	Whole site	Construction	EIAO-TM
		installed around the trench of	the stream and natural river			Phase	
		excavation, should be extended	bank				
		above ground level for ~2m to act as					
		hoarding to isolate the works site.					
		<ul> <li>The trenching works for the</li> </ul>					
		construction of the proposed box					
		culvert should be carried out in					
		phases, with a trench length of not					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		more than 120m in each phase.					
		The trench should be backfilled and					
		compacted with suitable materials					
		upon completion of each phase of					
		the construction works.					
S7.117	6.6	The construction of intercept	To minimize the impacts on	Contractor	Whole site	Construction	EIAO-TM
		point of twin cell box culvert at the	the stream and natural river			Phase	
		upstream of Wai Ha River should be	bank				
		confined to only one side of the river					
		bank.					
		<ul> <li>To restore and enhance the</li> </ul>					
		ecological value of the stream, the					
		affected river bank should be					
		reinstated to its original condition or					
		lined with rock-filled gabion.					
		<ul> <li>Planting pits should be provided</li> </ul>					
		in the gabion bank to allow the					
		re-establishment of riparian					
		vegetation.					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
	ļ						achieve?
		<ul> <li>The existing natural riverbed and</li> </ul>					
		substrates should be retained and					
		the natural pool-riffle sequence					
		should be re-created in the new					
		channel bed.					
S 7.118	6.7	<ul> <li>All works carried out within the</li> </ul>	To minimise sedimentation/	Contractor	Whole Site	Construction	EIAO-TM
		the river channel of Wai Ha River	water quality impacts			Phase	
		should be carried out from October					
		to April, with construction carried out					
		by land-based plant.					
		<ul> <li>Works within river/stream</li> </ul>					
		channels should be restricted to an					
		enclosed dry section of the river,					
		with containment measures such as					
		bunds and barriers used within the					
		river to minimize the impacts upon					
		the downstream water body.					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		<ul> <li>Site runoff should be directed</li> </ul>					
		towards regularly cleaned and					
		maintained silt traps and oil/grease					
		separators to minimize the risk of					
		sedimentation and pollution of river					
		water.					
		<ul> <li>The silt and oil/grease separators</li> </ul>					
		should be appropriately designed for					
		the local drainage and ground					
		conditions.					
		• To minimize leakage and loss of					
		sediments during excavation in					
		narrow channels, tightly sealed					
		closed grab excavators should be					
		deployed where material to be					
		handled is wet.					
S 7.119	6.8	<ul> <li>The construction of the</li> </ul>	To protect plant species of	Contractor/	Whole site	Construction	EIAO-TM
		proposed box-culvert would have the	conservation interest	qualified		Phase	
		potential to directly impact a few		botanist/horticu			

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		individual of a plant species of		lturalist			
		conservation interest (Hong Kong					
		Pavetta, Pavetta hongkongensis).					
		The affected individuals should be					
		transplanted to a suitable nearby					
		habitats prior to the construction					
		phase.					
		<ul> <li>A detailed vegetation survey of</li> </ul>					
		the affected species of conservation					
		interest should be conducted by a					
		suitably qualified botanist/ecologist					
		to identify the affected individuals in					
		order to provide details for					
		transplantation scheme.					
		<ul> <li>Transplantation should be</li> </ul>					
		supervised by a suitably qualified					
		botanist/horticulturalist. A detailed					
		transplantation methodology should					
		be formulated during the detailed					
		design stage of this Project.					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
S 7.120	6.9	<ul> <li>Noise mitigation measures such</li> </ul>	To minimise disturbance	Contractor	Whole site	Construction	EIAO-TM
		as the use of quieter construction	impacts.			Phase	
		plant and temporary noise barriers					
		should be implemented to minimize					
		disturbance to habitats adjacent to					
		the works areas.					
		<ul> <li>Temporary noise barriers should</li> </ul>					
		be used during the construction of					
		the box-culvert along Tung Tsz					
		Road, the floodwater pumping					
		station, the mechanical gate, and					
		drainage pipe to minimize potential					
		construction phase disturbance to					
		ardeids and avifauna foraging in					
		marsh habitat.					
		<ul> <li>Noise generating construction</li> </ul>					
		works near the Shuen Wan Egretry					
		SSSI should be avoided as far as					
		practicable during the breeding					
		season (March to June) of the					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		ardeids.					
		<ul> <li>Works near the SSSI (i.e.</li> </ul>					
		installation of mechanical gate)					
		should be restricted to be executed					
		outside the breeding season by					
		provision of special conditions in the					
		contract document.					
		<ul> <li>Hoardings with minimum height</li> </ul>					
		of 2m should be set up along the					
		south side of the proposed box					
		culvert works area adjacent to the					
		marsh, extending at least 20m at					
		both ends, throughout the					
		construction period.					
S 7.121	6.10	<ul> <li>Placement of equipment or</li> </ul>	To minimise disturbance to	Contractor	Whole site	Construction	EIAO-TM
		stockpile in designated works areas	habitats.			Phase	
		and access routes selected on					
		existing disturbed land to minimise					
		disturbance to natural or					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		moderate-high ecological value					
		habitats.					
S 7.121	6.10	<ul> <li>Construction activities should be</li> </ul>	To minimise disturbance to	Contractor	Whole site	Construction	EIAO-TM
		restricted to work areas that would	natural habitats outside			Phase	
		be clearly demarcated. The work	works area.				
		areas should be reinstated after					
		completion of the works.					
S 7.121	6.10	<ul> <li>Waste skips should be provided</li> </ul>	To minimise disturbance to	Contractor	Whole site	Construction	EIAO-TM
		to collect general refuse and	habitats.			Phase	
		construction wastes. The wastes					
		would be disposed of timely and					
		properly off-site.					
S 7.121	6.10	General drainage arrangements	To minimise sedimentation/	Contractor	Whole site	Construction	EIAO-TM
		should include sediment and oil	water quality impacts			Phase	
		traps to collect and control					
		construction site run-off.					
S 7.121	6.10	<ul> <li>Open burning on works sites is</li> </ul>	To prevent accidental	Contractor	Whole site	Construction	EIAO-TM
		illegal, and should be strictly	hill-fires.			Phase	
		prohibited.					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
S 7.122	6.11	<ul> <li>De-silting should be limited to the</li> </ul>	To minimise sedimentation/	Maintenance	Whole site	Operation	EIAO-TM
		dry season.	water quality impacts	parties of the		Phase	
				channel			
S 7.122	6.11	<ul> <li>Waste material produced during</li> </ul>	To minimise sedimentation/	Maintenance	Whole site	Operation	EIAO-TM
		de-silting should be disposed of in a	water quality impacts	parties of the		Phase	
		timely and appropriate manner.		channel			
S 7.123	6.12	<ul> <li>Planting of trees should be</li> </ul>	To compensate the loss of	Contractor	Whole site	Construction	EIAO-TM
		provided within the project area to	vegetation			Phase	
		compensate for the unavoidable					
		loss of approximately 0.08ha					
		secondary woodland habitat due to					
		the Project.					
		<ul> <li>Planting of trees and other</li> </ul>					
		vegetation within project area along					
		the banks of Wai Ha River and Tung					
		Tsz Road should be carried out to					
		provide compensation for					
		unavoidable tree-felling and loss of					
		riparian vegetation resulting from the					

EIA Ref.	EM&A	Recommended Mitigation	Objectives of the	Who to	Location of the	When to	What requirements
	Ref.	Measures	Recommended Measure &	implement the	measure	implement the	or standards for the
			Main Concern to Address	measure?		measure?	measure to
							achieve?
		Project.					
		<ul> <li>The compensatory planting</li> </ul>					
		should make use of native plant					
		species with flowers/fruits attractive					
		to wildlife.					
S 7.124	6.13	<ul> <li>Compensation would be required</li> </ul>	To compensate the loss of	Contractor /	The recreational	Construction	EIAO-TM
		for the loss of a small area of marsh	marsh habitat and enhance	qualified	fish pond located	Phase	
		habitat (about 0.30ha) within the CA	the quality compensatory	ecologist	to the southwest		
		resulting from the construction of the	habitat		of the existing		
		box-culvert.			Tung Tsz Nursery		
		<ul> <li>An existing low ecological value</li> </ul>					
		recreational fishpond on government					
		land adjacent to the marsh would be					
		used as a proposed area (about					
		0.8ha) for the compensation for the					
		marsh as well as secondary					
		woodland habitats loss (0.08ha).					
		<ul> <li>The pond should be enhanced</li> </ul>					
		by removing boardwalks around the					

EIA Ref.	Measures	Recommended Measure &	measure	When to implement the measure?	What requirements or standards for the measure to
					achieve?
	<ul> <li>existing pond, and restoring</li> <li>vegetation along the pond bunds,</li> <li>and it would be re-profiled to provide</li> <li>areas of shallow water</li> <li>(approximately 15-50cm deep),</li> <li>creating a suitable foraging habitat</li> <li>for avifauna, particularly ardeids and</li> <li>other waders.</li> <li>Screen planting of shrubs and</li> <li>trees along the south-eastern bund</li> <li>of the pond should be implemented</li> <li>to minimise disturbance to avifauna</li> <li>and other wildlife from the adjacent</li> <li>recreational fishpond. The enhanced</li> <li>pond is expected to provide a</li> <li>moderate-high ecological value</li> </ul>				
	 wetland habitat.				

EIA Ref.	EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measure &	Who to implement the		When to implement the	What requirements or standards for the
			Main Concern to Address	measure?		measure?	measure to achieve?
F		Landscape and Visual					
Table 8.4	7.6	Visual screen, contaminant/ liaison with nursery, protection of existing trees with works area and construction light are used or practiced to mitigate the impacts during construction phase.	To mitigate the landscape	Contractor	Whole site	Construction	EIAO-TM
Table 8.4	7.7	Viewing area formation, architectural design for pump house, landscape design for pump house, enhancement planting along Tung Tsz Road, sufficient soil depth for enhancement planting, transplanting of trees to adjacent locations, preparation for transplanting and reinstatement of affected area are practiced to mitigate the impacts during operational phase.	To mitigate the landscape and visual impacts during the operational phase.	Contractor	Whole site	Detail Design / Operational Phase	EIAO-TM

Appendix H:

A)

The recommend mitigation measures of EM&A manual (revision 3)

B)

Implementation status of environmental protection and mitigation measures

B) Implementation status of environmental protection and mitigation

EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
	Use well maintained construction plant					Implemented
2.18	Shut down plants between work periods		Works areas	Construction phase		Implemented
	Install silencers on construction equipment	To minimize construction noise impact				Implemented
	Locate mobile plant far away from NSRs				EIAO-TM NCO	Implemented
	Quiet plants should be used					Implemented
2.19	Use of quieter PME					Not applicable
2.20 - 2.21	Use of temporary noise barrier		Pipe laying in Wai Ha			Not applicable
2.22	Use of alternative quieter construction method	Pa	Part of the Works Pipe laying in Wai Ha			Not applicable
2.23 - 2.24	Use of noise enclosure		Pipe laying in Wai Ha			Not applicable

#### Contract No. DC/2009/22 – Drainage Improvement in Shuen Wan, Tai Po – Contract 1 Monthly EM&A Report for September 2012

EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
	Implement regular watering and vehicle washing facilities				EIAO-TM	Outstandinng
3.5	Cover excavated or stockpile of dusty material by impervious sheeting or sprayed with water	To minimize construction dust impact	Construction Site	Construction phase		Implemented
	Use tarpaulin to cover dusty materials on vehicles					Implemented
4.5	Provide silt trap and oil interceptor to remove the oil, lubricants, grease, silt, grit and debris from the wastewater before pumped to the public storm water drainage system					Implemented
4.5	During rainstorms, exposed slope/soil surfaces shall be covered by a tarpaulin or other means. Others measures that need to be implemented before, during, and after rainstorms as summarized in ProPECC PN 1/94 shall be followed	To minimize water quality impact	Construction Site	Construction phase	EIAO-TM WPCO	Not applicable

<b>EM&amp;A</b> <b>Ref.</b> 4.10	Recommended         Mitgation Measures         Provide site toilet facilities	Objectives of the Recommended Measure & main concern to Address To minimize water quality impact	Location of the measure Construction Site	When to implement the measure?	What requirements or standards for the measure to achieve? EIAO-TM WPCO	Implementation status
4.7	<ul> <li>Further precautionary measures during rainy season:</li> <li>For the construction of the box culvert next to the existing channel of the Wai Ha River, sand bags should be deployed around the boundary of the works trench to prevent muddy water ingress into the adjacent CA or Wai Ha River. Sand bags should also be used to surround the excavated trench. Generally, the sand bags will be placed up to a height of 300mm to provide adequate allowance for the built-up water level during rainstorm event. With sand bags in place, surface runoff will be intercepted and flow to Wai Ha River or collected by the existing drainage system as usual.</li> <li>For the construction of the box culvert in the extreme northeast corner of Shuen Wan Marsh Conservation Area sand bags should be deployed along the limit of the works area to prevent muddy water ingress into the CA. Sand bags should be placed to a height of at least 300mm from round level and +2.5 mPD (whichever is greater) to provide adequate allowance</li> </ul>	To minimize water quality impact to the designated Conservation Area	Works areas near the Conservation Area	Rainy seasons during construction	EIAO-TM WPCO	Not applicable

EM&A	Recommended	Objectives of the	Location of the	When to implement	What requirements	Implementation status
Ref.	Mitgation Measures	Recommended	measure	the measure?	or standards for the	
		Measure & main			measure to achieve?	
		concern to Address				
	for the built-up water level during rainstorm					
	events. Unpolluted surface runoff within the					
	works area should then be collected and					
	directed into the existing drainage system.					
	Sheet-piles, which would be installed around					
	the works trench near the Conservation Area,					
	would be extended above ground level for					
	about 2m to serve as hoardings to isolate the					
	works site.					
	Tarpulin sheets would be used to cover the					
	excavation areas during heavy rainstorms.					
	This would prevent the ingress of rainwater					
	into the trench minimising the risk of muddy					
	water getting into Wai Ha River and the					
	adjacent Conservation Area.					
	Any concrete washing water would be					
	contained inside the works site surrounded by					
	the extended sheet piles. A pump sump at the					
	bottom of the trench would be provided to					
	pump any excess water during concrete Reuse excavated material as much as possible					
5.9	Reuse excavated material as much as possible					Implemented
5.7	Any unused chemicals or those with		XX 1			Not applicable
	remaining functional capacity shall be	To achieve waste reduction	Works areas	Construction phase	EIAO-TM	
	recycled.					
	Recycle scrap metals or abandoned equipment					Implemented

EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
5.5	A recording system for the amount of wastes generated, recycled and disposed should be proposed Adopt a trip ticket system for the disposal of	To reduce waste			ETWB TCW No. 19/2005	Implemented
5.9	All general refuse should be segregated and stored in enclosed bins or compaction units	management impacts	Works areas	Construction phase	ETWB TCW NO. 31/2004	Implemented
5.10	Contractor should be a required to register with the EPD as a Chemical Waste Producer and to follow the guidelines states 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 explosives, flammable, oxidizing, irritant, toxic, harmful, corrosive, etc.	To minimize the environmental impacts associated with the handling, transportation and disposal of chemical waste.	Work site	Construction phase	EIAO-TM Waste Disposal (Chemical Waste)(General) Regulation	Implemented Not applicable

EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
5.5	A recording system for the amount of wastes generated, recycled and disposed should be proposed	To reduce waste management impacts	Works areas	Construction phase	ETWB TCW No. 19/2005 ETWB TCW NO. 31/2004	Implemented
6.6	Sheet-pilings, which will be installed around the trench of excavation, should be extended above ground level for ~2m to act as hoarding to isolate the works site. The trenching works for the construction of the proposed box culvert should be carried out in phases, with a trench length of not more than 120m in each phase. The trench should be backfilled and compacted with suitable materials upon completion of each phase of the construction works.	To minimize the impacts on the steam and natural river bank.	Whole site	Construction phase	EIAO-TM	Implemented
6.6	The construction of intercept oint of twin cell box culvert at the upstream of Wai Ha River should be confined to only one side of the river bank. To restore and enhance the ecological value of the stream, the affected river bank should be reinstated to its original condition or lined with rock-filled gabion. Planting pits should be provided in the gabion bank to allow the re-establishment of riparian vegetation.	To minimize the impacts on the steam and natural river bank.	Whole site	Construction phase	EIAO-TM	No applicable

EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
	The existing natural riverbed and substrates should be retained and the natural pool-riffle sequence should be re-created in the new channel bed. All works carried out within the the river					
	channel of Wai Ha River should be carried out from October to April, with construction carried out by land-based plant. Works within river/stream channels should be restricted to an enclosed dry section of the river, with containment measures such as bunds and barriers used within the river to minimize the impacts upon the downstream water body.	To minimize sedimentation/		Construction phase	EIAO-TM	No applicable
6.7	Site runoff should be directed towards regularly cleaned and maintained silt traps and oil/grease separators to minimize the risk of sedimentation and pollution of river water. The silt and oil/grease separators should be appropriately designed for the local drainage and ground conditions. To minimize leakage and loss of sediments during excavation in narrow channels, tightly sealed closed grab excavators should be deployed where material to be handled is wet.	water quality impacts	Whole site			

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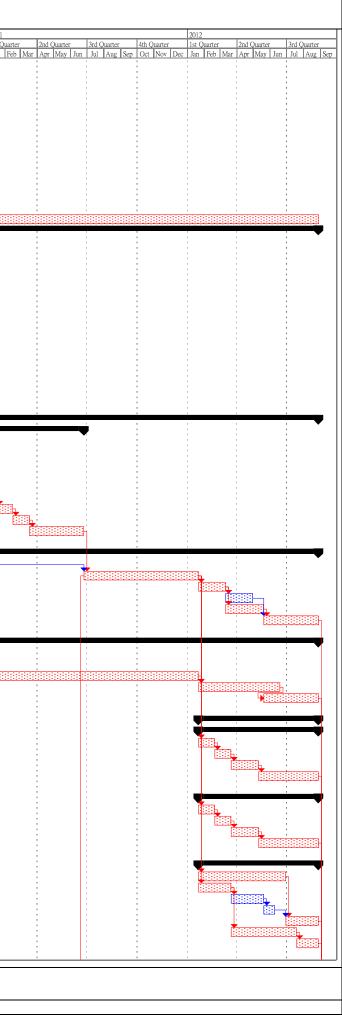
EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
6.8	The construction of the proposed box-culvert would have the potential to directly impact a few individual of a plant species of conservation interest (Hong Kong Pavetta, Pavetta hongkongensis). The affected individuals should be transplanted to a suitable nearby habitats prior to the construction phase. A detailed vegetation survey of the affected species of conservation interest should be conducted by a suitably qualified botanist/ecologist to identify the affected individuals in order to provide details for transplantation scheme. Transplantation should be supervised by a suitably qualified botanist/horticulturalist. A detailed transplantation methodology should be formulated during the detailed design stage of this Project.	To protect plant species of conservation interest	Whole site	Construction phase	EIAO-TM	No applicable
6.9	Placement of equipment or stockpile in designated works areas and access routes selected on existing disturbed land to minimize disturbance to natural or moderate-high ecological value habitats.	To minimise disturbance to habitats.	Whole site	Construction phase	EIAO-TM	No applicable
6.13	General drainage arrangements should include sediment and oil traps to collect and control construction site run-off.	To minimise sedimentation/ water quality impacts	Whole site	Construction phase	EIAO-TM	Implemented

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EM&A Ref.	Recommended Mitgation Measures	Objectives of the Recommended Measure & main concern to Address	Location of the measure	When to implement the measure?	What requirements or standards for the measure to achieve?	Implementation status
6.13	Construction activities should be restricted to work areas that would be clearly demarcated. The work areas should be reinstated after completion of the works.	To minimise disturbance to natural habitats outside works area.	Whole site	Construction phase	EIAO-TM	Implemented
6.13	Placement of equipment or stockpile in designated works areas and access routes selected on existing disturbed land to minimize disturbance to natural or moderate-high ecological value habitats.	To minimise disturbance to natural habitats	Whole site	Construction phase	EIAO-TM	Implemented
7.6	Visual screen, contaminant/ liaison with nursery, protection of existing trees with works area and construction light are used or practiced to mitigate the impacts during construction phase	To mitigate the landscape and visual impacts during the Construction phase	Whole site	Construction phase	EIAO-TM	Implemented
7.7	Viewing area formation, architectural design for pump house, landscape design for pump hose, enhancement planting along Tung Tsz Road, sufficient soil depth for enhancement planting, transplanting of trees to adjacent locations preparation for transplanting and reinstatement of affected area are practiced to mitigate the impacts during operational phase.	To mitigate the landscape and visual impacts during the operational phase	Whole site	Detail Design / Operational Phase	EIAO-TM	Not Applicable

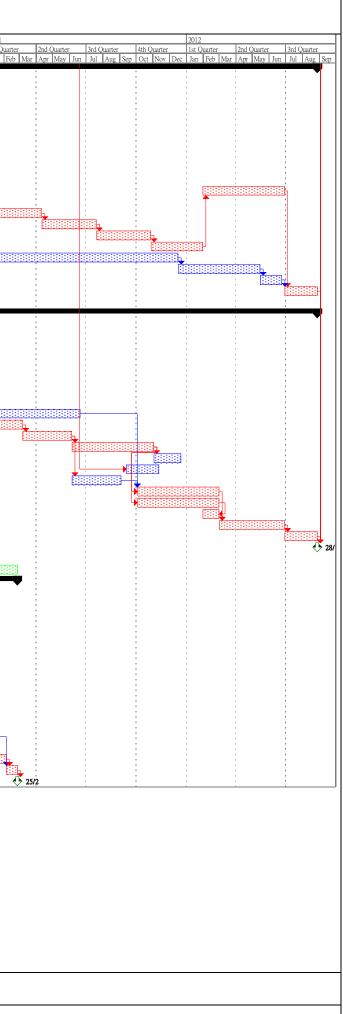
**Appendix I: Construction programme** 

								ster Programme ( Rev. 6)		
ID no. ir 5	Rev. ID no. in Rev 4	ID no. in Rev. 3	ID no. in Re 2	v. Task Name	Duration	Start	Finish	Predecessors	Successors	2010 1st Quarter 2nd Quarter 3rd Quarter 4th
	1	1	1	Preliminary Works (Area I - Pak Shek Kok)	175 days	Fri 26/2/10	Thu 19/8/10			Jan Feb Mar Apr May Jun Jul Aug Sep O
	2	2 2	2	Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		3,83,88,105	5
		3 3	3	Design & Construction of Site Hoarding	30 days	Fri 26/2/10	Sat 27/3/10	2	4FS-5 days	
	4	4 4	4	Site Clearance	10 days	Tue 23/3/10	Thu 1/4/10	3FS-5 days	8FS+10 days,5	
	5	5 5	5	Design of Engineer's Site Office	30 days	Fri 2/4/10	Sat 1/5/10	4	6	
	6	5 6	6	Construction of Engineer's Site Office	60 days	Sun 2/5/10	Wed 30/6/10	5	7	
	7	7 7	7	Engineer's Site Office - Setup the Internal Finishing / Furniture/ Equipment	15 days	Thu 1/7/10	Thu 15/7/10	6		1
		8 8	8	Construction of Contractor's Accommodation	70 days	Mon 12/4/10	Sun 20/6/10	4FS+10 days	9	
	9	-		Installation of Sewerage Storage Tank	5 days	Mon 21/6/10	Fri 25/6/10	8	10	1 : 💺 :
	10 10			Contractor Accommodation - Setup the Internal Finishing / Furniture / Equipment	20 days	Sat 26/6/10	Thu 15/7/10	9	11	
	11 1 12 1			Establishment of Vehicular Gate, Storage Area Establishment of Welfare Facilities for Workers	15 days	Fri 16/7/10 Sat 31/7/10	Fri 30/7/10 Thu 19/8/10	10	12,13	
	12 1.			Temporary Drainage System	20 days 20 days	Sat 31/7/10	Thu 19/8/10	11		
	15 1.	15		remporary brankge of sen	20 utys	Bat Shirito	1110 15/0/10	11		
	15 1	5 15	15	Time for Completion of Section I	915 days	Fri 26/2/10	Tue 28/8/12			
	16 16	i 16	16	Section I (Area A, B - Shuen Wan)	915 days	Fri 26/2/10	Tue 28/8/12			
	17 1	1 17	17	Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		19FS+30 days,35,111,22,20,28	3 <b>• 26/2</b>
	18 18	18	18	Preliminary Works	240 days	Fri 26/2/10	Sat 23/10/10			
	19 1			Seek clarification regarding Environmental Permit	30 days	Sun 28/3/10	Mon 26/4/10	17FS+30 days	30	• • • • • • • • • • • • • • • • •
	20 2			Design of TTA Scheme for Site Access	40 days	Fri 26/2/10	Tue 6/4/10	17	21	
	21 2		21	Submission of TTA to TMLG for Approval	60 days	Wed 7/4/10	Sat 5/6/10	20	25	
	22 2 23 2			Site Clearance Project Signboard	50 days 5 days	Fri 26/2/10 Sat 17/4/10	Fri 16/4/10 Wed 21/4/10	22	23,26	
	23 2.			Hoarding Erection	5 days 40 days	Sat 1//4/10 Thu 22/4/10	Mon 31/5/10	22	24	
	24 25			Establish Site Access	30 days	Sun 6/6/10	Mon 5/7/10	24,21	30	
	26 2			Ground Investigation	75 days	Sat 17/4/10	Wed 30/6/10	24,21	30	· · · · · · · · · · · · · · · · · · ·
							+ +			1
	28 2	3 28	28	Tree Survey	75 days	Fri 26/2/10	Tue 11/5/10	17	29	
	29 2			Submission of Tree Survey Record	60 days	Wed 12/5/10	Sat 10/7/10	28	30,31	
	30 3		30	Tree Felling	20 days	Mon 26/7/10	Sat 14/8/10	29,139,25,26,19	94,99,37	
	31 3	31	31	Tree Transplanting	90 days	Mon 26/7/10	Sat 23/10/10	29,139	94FS-30 days,99FS-30 days,40FS-30 days	
		10	22	Downlos Okation	015 1	E-: 06/0/10	True 00/0/10			
	33 33 34 34		33	Pumping Station Piling Works	915 days 485 days	Fri 26/2/10 Fri 26/2/10	Tue 28/8/12 Sat 25/6/11			
	35 3			Submission of Method Statement	100 days	Fri 26/2/10	Sat 5/6/10	17	46,54,36	
	36 3			Material Ordering & Delivery to Site	60 days	Sun 6/6/10	Wed 4/8/10	35	38	
	37 3	37	36	Ground Preparation for Piling	10 days	Sun 15/8/10	Tue 24/8/10	139,30	38	
	38 3	3 38	37	Preliminary Pile	35 days	Wed 25/8/10	Tue 28/9/10	37,36	39,40	
	39 3	39	39	Loading Test	30 days	Wed 29/9/10	Thu 28/10/10	38		
	40 4	40	38	Working Piles	110 days	Wed 29/9/10	Sun 16/1/11	38,31FS-30 days	41	
	41 4			Loading Test for working piles	30 days	Mon 17/1/11	Tue 15/2/11	40	42	
	42 4			Sheetpiling	30 days	Wed 16/2/11	Thu 17/3/11	41	43	
	43 43	3 42	41	Excavation to Pile Cut Off Level / Shoring	100 days	Fri 18/3/11	Sat 25/6/11	42	47	
	45 43		43	Main Observations of Description Obstitute	91 <i>E</i> Jama	Sun 6/6/10	Tue 28/8/12			-
	45 43 46 44			Main Structure of Pumping Station Temporary Works Submission	815 days 120 days	Sun 6/6/10 Sun 6/6/10	Sun 3/10/10	35	47	
	47 4		45	Reinforced Concrete Works	210 days	Sun 26/6/11	Sat 21/1/12	46,43	118SS+80 days,75,48,68,62,74,57	, I <del>s</del>
	48 4			Roofing	50 days	Sun 22/1/12	Sun 11/3/12	47	49,50	
	49 49			Manmade Slope	50 days	Mon 12/3/12	Mon 30/4/12	48	51	
	50 5		48	Internal Finishing Works	70 days	Mon 12/3/12	Sun 20/5/12	48	51	1  :  :  !
	51 5	50	49	External Finishing Works	100 days	Mon 21/5/12	Tue 28/8/12	50,49	125	
	53 53			E&M	815 days	Sun 6/6/10	Tue 28/8/12			
	54 5			Submission of E & M Design	120 days	Sun 6/6/10	Sun 3/10/10	35 54ES 20 damp	55FS-30 days	
	55 5			Approval of E & M Design Fabrication & Delivery of Plant & Material	90 days	Sat 4/9/10	Thu 2/12/10	54FS-30 days	56	
	56 50 57 51			Fabrication & Delivery of Plant & Material Plumbing & E&M works	415 days 150 days	Fri 3/12/10 Sun 22/1/12	Sat 21/1/12 Tue 19/6/12	55 56,47	57 58FS-30 days	
	58 5			Final Testing Works	100 days	Mon 21/5/12	Tue 28/8/12	57FS-30 days	125	
		51			200 04/5			5715 50 days	123	1 1 1 1 1
	60 60	59	58	External Structure	220 days	Sun 22/1/12	Tue 28/8/12			1
	61 6			Pumping Station to Outfall Structure	220 days	Sun 22/1/12	Tue 28/8/12			1  :
	62 6		60	Installation of Cofferdam & Site Hoarding Phase 2	30 days	Sun 22/1/12	Mon 20/2/12	47	63	
	63 6.	8 62	61	Excavation	30 days	Tue 21/2/12	Wed 21/3/12	62	64	
	64 6			Constrcution of 2nos. of 1500mm dia. Drainage Pipes	50 days	Thu 22/3/12	Thu 10/5/12	63	65	
	65 6.	5 64	63	2 nos. of Outfall Structures	110 days	Fri 11/5/12	Tue 28/8/12	64	125	
	<i>(</i> <b>)</b>		10	mide Level Markey's Cl. 1		0	The 00/0/10			
	67 6			Tide Level Monitoring Chamber	220 days	Sun 22/1/12	Tue 28/8/12			
	68 6		66 67	Installation of Cofferdam & Site Hoarding Phase 2	30 days 30 days	Sun 22/1/12 Tue 21/2/12	Mon 20/2/12 Wed 21/3/12	47	69 70	
	69 6 <sup>1</sup> 70 7			Excavation Construction of Pipe & Tide Level Monitoring Chambers	30 days 50 days	Tue 21/2/12 Thu 22/3/12	Thu 10/5/12	68	70	
	70 71 7			Outfall Structure	110 days	Fri 11/5/12	Tue 28/8/12	70	125	
		10			110 44.95			10	123	
	73 73	72	71	External Misc. Works	220 days	Sun 22/1/12	Tue 28/8/12			1 1:
	74 74			Boundary Wall & Fencing	160 days	Sun 22/1/12	Fri 29/6/12	47	78	
	75 7		73	3nos. of Flow Measurement chambers and Pipes	60 days	Sun 22/1/12	Wed 21/3/12	47	76,79	
	76 7		74	Surface Drainage System & Catchpits	60 days	Thu 22/3/12	Sun 20/5/12	75	77	
	77 7			Concrete Pavement	20 days	Mon 21/5/12	Sat 9/6/12	76	78	
	78 7		77	Landscaping Works	60 days	Sat 30/6/12	Tue 28/8/12	77,74	125	
	79 7			225mm dia. Sewer Across Ting Kok Road and Connection to Existing Manholes	120 days	Thu 22/3/12	Thu 19/7/12	75	80	
	80 8	)		Sewer Manhole SM1	40 days	Fri 20/7/12	Tue 28/8/12	79	125	



Bit Ub         No.the         No.the<									Ma	aster Programme (Rev. 6)				
No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No.     No.     No.     No.     No.       No.     No.     No.     No.     No. <t< th=""><th>ID</th><th></th><th>Rev. ID</th><th>no. in Rev. 3</th><th></th><th>v. Task Name</th><th>Duration</th><th>Start</th><th>Finish</th><th>Predecessors</th><th>Successors</th><th>1st Quarter 2nd Quarter</th><th>3rd Quarter</th><th>4th Quarter</th></t<>	ID		Rev. ID	no. in Rev. 3		v. Task Name	Duration	Start	Finish	Predecessors	Successors	1st Quarter 2nd Quarter	3rd Quarter	4th Quarter
Image: Section of the section of t	-	82	82	80	70	Twin Cell Box Culvert	915 dave	Eri 26/2/10	Tue 28/8/12			Jan Feb Mar Apr May Jun	Jul Aug Sep	Oct Nov
Image         Image <th< td=""><td>-</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>2</td><td>84</td><td></td><td></td><td></td></th<>	-									2	84			
Image         Image <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>														
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No.         No. <td>1</td> <td>86</td> <td>86</td> <td>84</td> <td>83</td> <td>Condition Survey of Existing Structure</td> <td>15 days</td> <td>Wed 12/5/10</td> <td>Wed 26/5/10</td> <td>85</td> <td>87</td> <td></td> <td></td> <td></td>	1	86	86	84	83	Condition Survey of Existing Structure	15 days	Wed 12/5/10	Wed 26/5/10	85	87			
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Master Programme - Rev. 6 Data Date: 2010-2-26	Task Critical Task	Progress Milestone	•	Summary Rolled Up Task	Rolled Up Critical Task	 Rolled Up Progress Split		External Tasks Project Summary	 Group By Summary Deadline	<b>↓</b>
						Page	2			

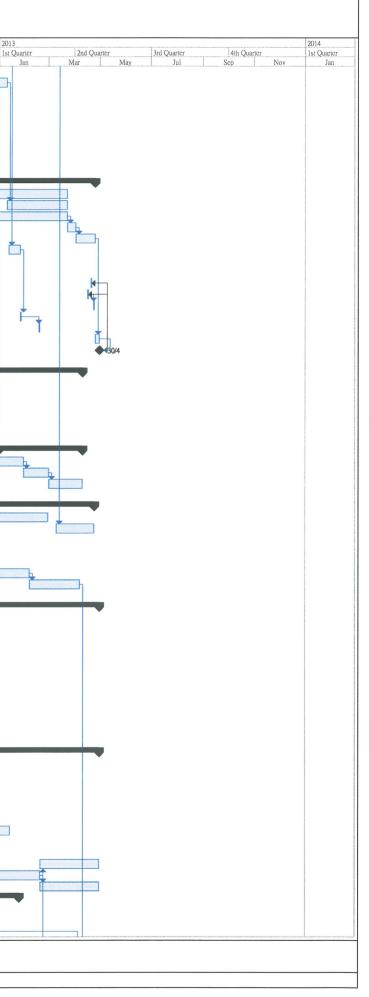


Appendix J: Three month rolling programme

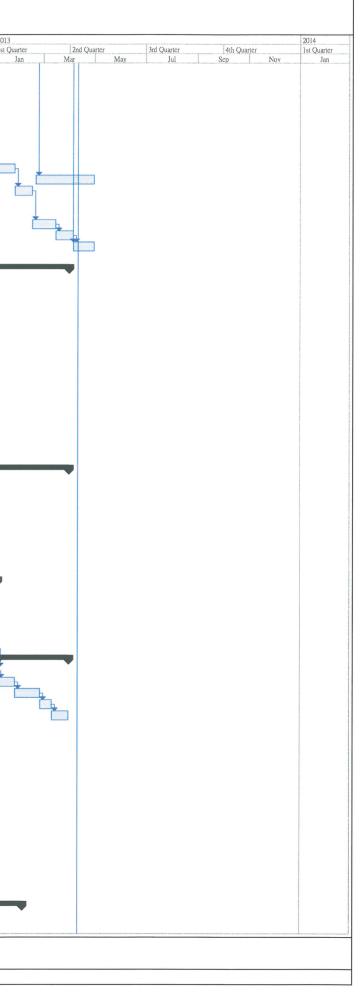
# Contract No.: DC/2009/22

	ask Name		Duration	Start	Finish	Predecessors	Successors	e (October 20'	2012		-		2013			2014
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Linear to Xierri Bio       No.       Vertical       No.       Vertical       No.       Vertical       No.       Vertical       No.       Vertical       No.       <	Cons	struction for Store Room/Toilet				· · · · · · · · · · · · · · · · · · ·	5 55,02									TT FALLEN
Observed     Description     Description     Description       Marcia     Note     Note     Note     Note						5:	5 57			4						
Name         No.         No.         No.         No.           No.         No.			55 days	Thu 16/8/12	Tue 9/10/12	5	6 148,150									
Intro         Intro <th< td=""><td></td><td></td><td>339 days</td><td>Sun 13/5/12</td><td>Tue 16/4/13</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			339 days	Sun 13/5/12	Tue 16/4/13											
Intel Result Mode Scott Mode Sco										, i i i i i i i i i i i i i i i i i i i						
International biological biologi						59	9									
Bunch Robits         Bunch Robits<						11111-111-111-11-1-1-1-1-1-1-1-1-1-1-1	63									
Deer directing value         Offen         Notion         Status																
Nome         Norm         Norm <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																
Apple A	EXIC	hai rhiishing works	100 days	Mon //1/13	Tue 16/4/13	6.	3									
Apple A	E&M Works		1066 days	Mon 31/5/10	Tue 30/4/13								1			
Hill Register (Horsek) Register (Ho		mission & Approval														
Lit. Rescuence Resource Responses       120 gr.       March 1000       The International Section Responses         Prescuence Responses       110 and 1000       The International Section Responses       110 and 1000       The International Section Responses         Prescuence Responses       240 data       Marcolina Sectional Section Responses       110 and 1000       The International Section Responses       110 and 1000       110 and 10000       110 and 1000<																
Makeby, Presint, Mannar, Apport         10 and         Sample for the first state of the first state state of the first state	Civil Requirem	ent for Stormwater Pumping Station		Mon 6/6/11												
Makeby, Presint, Mannar, Apport         10 and         Sample for the first state of the first state state of the first state																
Neuroski Adomitand Shadid         Advag         Wei Bloid         72         7           Monti Ser Vesse Sandis         164 yr         88.1920         72         7           Monti Ser Vesse Sandis         164 yr         88.1920         82.2911         80           Monti Ser Vesse Sandis         164 yr         88.1921         8         8           Prescere A Honor Mark Education State         23 yr         8         86.191         11.192           Monti Ser Vesse Sandis         34 yr         8         16.191         11.192         1           Monti Ser Vesse Sandis         16.04 yr         8         16.191         1         11.192           Monti Ser Vesse Sandis         16.04 yr         8         16.191         1         11.192           Monti Ser Vesse Sandis         16.04 yr         8         10.191         1         1           Monti Ser Vesse Sandis         16.04 yr         8         10.191         1         1           Monti Ser Vesse Sandis         16.04 yr         8         10.191         1         1           Monti Ser Vesse Sandis         16.04 yr         16.04 yr         1         1         1           Monti Ser Vesse Sandis         16.04 yr         10.191			452 days	Sun 6/6/10	Wed 31/8/11											
Maddace fix Name       26 deg       Mar 2020							73									
Matchen Wood (Housd) Madi       Mate 2010       Man 1991       Man 1991         Preventer & Matchen Stephen vie       Stephen vie       Stephen Vie       Stephen Vie         Marchen Krossen       Stephen Vie       Stephen Vie       Stephen Vie         Stephen Vie       Stephen Vie       Stephen Vie <td></td>																
Progenite & Stomaterier Multicity::: Project         Projection & Stomaterier Multicity:: Projection & Stam         Stop         Statutity: Projection & Stam						7	3 76									
Persisting Dilayer VMure Pagingen VSIP         Side of Net 4011         No. 101/101           Macriard Pratexids         Side of Net 4011         Pri 10/102           Stratige         Side of Net 4011         Pri 10/102           Macriard Pratexids         Side of Net 40011         Pri 10/102           Jun Water Macriard Pratexids         Side of Net 40011         Pri 10/102           Values         Side of Net 40011         Pri 10/102         Side 10/102           Values         Side of Net 40011         Pri 10/102         Side 10/102           Values         Side of Net 40011         Pri 10/102         Side 10/102           Descriter Wate 9C Ta's Trainforms Kon         Side of Net 10/102         Bid 10/102           Side of Side A002         Side 10/102         Bid 10/102           Ibandiane of Macriard Pratexit Box         Side of Net 10/102         Side 0/102           Bid 10/102         Side 0/101 <td></td> <td></td> <td></td> <td></td> <td></td> <td>7</td> <td></td>						7										
Maximum Marcadi Bursbacenis       91.09 <t< td=""><td>Tieparatie</td><td></td><td>10 uays</td><td>WI011 22/0/11</td><td>weu 51/6/11</td><td>14</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Tieparatie		10 uays	WI011 22/0/11	weu 51/6/11	14	•									
Maximum Marcadi Bursbacenis       91.09 <t< td=""><td>Fabrication &amp; I</td><td>Delivery of Major Equipment to Site</td><td>528 days</td><td>Sat 4/6/11</td><td>Mon 12/11/12</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Fabrication & I	Delivery of Major Equipment to Site	528 days	Sat 4/6/11	Mon 12/11/12											
Solopia       35 dops       Sel dops       Net of 101       Sel 10702         Morevard Fings       37 dops       Net of 901       Sel 20702         Sovervard Fings       37 dops       Net of 901       Sel 20702         Porevard Fings       37 dops       Net of 901       Sel 20702         Porevard Fings       37 dops       Net of 901       Sel 20702         Porevard Fings       26 dops       Tet 10702       Sel 20702         Otio A Elost Accounces       10 dops       Net of 101       Tet 10702         Direction Construction Constructin Constructin Construction Constructin Construction Cons									1							
Matura Bus Scoms       104 day.       8::19/07       5::29/072         Serroware Props       77 day.       Mei 1991       5::29/072         Lew Ware Preps       77 day.       Mei 1991       5::29/072         Reversite Preps       12: day.       Wold Preps       10: day.       10: day.         New Ware Preps       12: day.       Wold Preps       10: day.       10: day.         Value       12: day.       Wold Preps       5: day.       10: day.       10: day.         Value       12: day.       Sen: 15: 002       Sen: 15: 002       10: day.       10: day.       10: day.       10: day.         Oblic A Else: Accesseria       12: day.       Sen: 15: 002       Sen: 15: 002       10: day.	Stoplogs						107									
Low Yaor Pungo.       37 dow       Mon 1990 11       Sar 2001 2         Piperodic       162 dow       The 21/01 2       Sar 15/01 2         Vora       162 dow       Vail Moli 10       The 31/01 2         U. Y. Svitabard       162 dow       Non 15/01 2       Sar 15/01 2         Cohie & Elici Accessories       100 dow       Non 15/01 2       Non 15/01 2         Jandalica of Sin CD Transform Rom       55 dow       The 12/01 2       Acc         Electral Work by CLP in Transforms Rom       42 dow       Fin 29/01 2       Acc         Issalation of Drans Fort 1       42 dow       Sar 20/01 2       Sar 20/01 2         Issalation of Drans Fort 1       42 dow       Sar 20/01 2       Sar 20/01 2         Issalation of Drans Fort 1       42 dow       Sar 20/01 2       Sar 20/01 2         Issalation of Drans Fort 1       42 dow       Sar 20/01 2       Sar 20/01 2         Issalation of Son Son Concert Drans Fort 1       52 dow       Sar 20/01 2       Sar 20/01 2         Issalation of Son Son Concert Drans Fort 1       Sar 20/01 2       Sar 20/01 2       Sar 20/01 2         Issalation of Son Son Concert Drans Fort 1       Sar 20/01 2       Sar 20/01 2       Sar 20/01 2         Issalation of Low Son Fort 2       Sar 20/01 2       Sar 20/01 2																
Procession       26 dogs       Tur 201/11       Tur 101/02         Varies       120 dogs       Weil 100/12       Tur 101/02         Calse A Blan Accessories       120 dogs       Sen 100/12       Sen 100/12         Calse A Blan Accessories       120 dogs       Sen 201/12       Sen 201/12         Instatistic of 3.5 in CLP Tunsformer Room       25 dogs       Tur 101/12       Sen 201/12         Instatistic of 3.5 in CLP Tunsformer Room       26 dogs       Sen 201/12       Tur 101/12         Instatistic of 3.5 in CLP Tunsformer Room       26 dogs       Sen 201/12       Tur 101/12         Instatistic of 3.5 in CLP Tunsformer Room       26 dogs       Sen 201/12       Tur 101/12         Instatistic of 3.5 in CLP Tunsformer Room       26 dogs       Sen 201/12       Tur 101/12         Instatistic of 3.5 in CLP Tunsformer Room       26 dogs       Sen 201/12       Tur 101/12         Instatistic of Accessories       26 dogs       Sen 201/12       Sen 201/12         Instatistic of Accessories       26 dogs       Sen 201/12       Sen 201/12         Instatistic of Accessories       26 dogs       Sen 201/12       Sen 201/12         Instatistic of Accessories       26 dogs       Sen 201/12       Sen 201/12         Instatistic of Accessories       26 dogs									L							
Vars       132 days       Wei 140/11       Te 130/2         L.V. Swichard       204 sy       Mei 157/12       Se 130/2         Oble & Exci Accessoris       204 sy       Mei 157/12       Wei 121/12         Switzer Periods Ratio       25 days       Te 137/12       Wei 121/12         Junalitotio of Dirans Kini I fansforme Rom       24 days       Fin 201/12       Wei 171/12         Insulation of Dirans Kini I fansforme Rom       24 days       Fin 201/12       Se 31/1/12         Insulation of Dirans Kini I fansforme Rom       24 days       Sen 201/12       Te 171/12         Insulation of Dirans Kini I fansforme Rom       24 days       Sen 201/12       Te 171/12         Insulation of Dirans Kini I fansforme Rom       24 days       Sen 201/12       Te 171/12         Insulation of Storma Kini I fansforme Rom       24 days       Sen 201/12       Te 171/12         Insulation of Storma Kini I fansforme Rom       24 days       Sen 201/12       Te 171/12         Insulation of Storma Kini I fansforme Rom       24 days       Sen 201/12       Te 171/12         Insulation of Storma Kini I fansforme Rom       24 days       Sen 201/12       Sen 201/12         Insulation of Storma Kini I fansforme Rom       24 days       Sen 201/12       Sen 201/12         Insulation of No																
LV. Switchaud       132 days       Smi 19/02       Smi 19/02       Smi 19/02         Chie & Elect Accessionis       120 days       Mmi 10/11/2       Mmi 10/11/2         Strawer Proping Suin       55 days       Thai 12/12       Wed 59/02       62         Bescheid Werk by C.P in Instruent Room       42 days       Smi 10/12       Sei 11/12         Insultation of 257 Crame Elor:       42 days       Smi 10/12       Sei 11/12         Insultation of String Scillo       42 days       Smi 10/12       Sei 11/12         Insultation of String Scillo       52 days       Smi 10/12       Sei 11/12         Insultation of String Scillo       52 days       Smi 10/12       Sei 11/11/12         Insultation of String Scillo       52 days       Smi 10/12       Sei 11/11/12         Insultation of String Scillo       52 days       Smi 10/12       Sei 11/11/12         Insultation of String Scillo       52 days       Smi 10/12       Sei 10/11/12         Insultation of String Scillo       52 days       Smi 10/12       Sei 10/12       Sei 10/12         Insultation of String Scillo String Accessicies       12 days       Smi 10/12       Sei 10/13       Sei 10/13         Insultation of String Scienes/Stri La String Scillo String Accessicies       12 days       Smi 10/12       <										2						
Cables & Elerit Accessories       120 days       Mon 16/712       Mon 12/11/2         Semware Punyla Station       25 days       The 12/712       Set 23/913         Installation of B.S. in CLP instafemen Room       5 days       The 12/712       Set 23/913         BeberGil WMS (CLP in Transform Room       5 days       The 12/712       Set 23/913         Installation of DC Canse B271- in Screen Room;       4 days       Sau 25/712       Sin 31/71/72         Installation of Motorized Pranet Mail       7 days       Sin 23/712       Sin 31/71/72         Installation of Motorized Pranet Mail       2 days       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       2 days       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       2 days       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       Sin 23/712       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       Sin 23/712       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       Sin 23/712       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       The 17/712       Sin 23/712       Sin 23/712         Installation of Motorized Pranet Mail       Sin 23/712       Sin 23/712		bboard							1							
Stornwart Pumping Station         25 day         The 13/17/2         Set 24/97           Installation of B S. in C F Traisforme Room         56 days         The 13/17/2         Set 24/97         62           Exercial Work y CLI in Transforme Room         42 days         Fra 20/17/2         The 8/11/2         62           Installation of EDT Crass EDT-1 in Scene House;         42 days         San 17/1/2         San 17/1/2         San 17/1/2           Installation of EDT Crass EDT-2 in Fumpi Hall;         42 days         San 17/1/2         San 17/1/2         San 17/1/2           Installation of EDT Crass EDT-2 in Fumpi Hall;         42 days         San 17/1/2         San 17/1/2         San 17/1/2           Installation of EDT Crass EDT-2 in Fumpi Hall;         42 days         San 4/1/1/2         San 29/1/2         San 17/1/2           Installation of Storige Storids Coll In SCIO;         12 days         San 4/1/1/2         San 29/1/2         San 9/1/3           Installation of Low Water Hungs A Elevenk         12 days         San 9/1/1         San 9/1/3         Set 9/1/3         Set 9/1/3         Set 9/1/3           Installation of Low Water Hungs A Elevenk         12 days         San 9/1/1/2         San 9/1/1/2         Set 9/1/3																
Installation of US. S. Inc. LP Transformer. Room       42 days       Sun 23/1/2       The W1/1/2         Electical Web, VC, PL in Transformer. Room       42 days       Sun 23/1/2       The W1/1/2         Installation of EOT Cranse EOT-1 in Screen House;       42 days       Sun 23/1/2       Sun 21/1/2         Installation of EOT Cranse EOT-2 in Pump Halt;       42 days       Sun 41/1/2       Sun 41/1/2         Installation of EOT Cranse EOT-2 in Pump Halt;       42 days       Sun 41/1/2       Thu 17/1/3         Installation of Modroired Enscisation V3 00 Sept 2012       Thu 17/1/3       Veb 30/1/2       Thu 17/1/3         Installation of Stooples ED10 In SLD2;       Case 90/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 19/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 19/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 19/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 93/1/2       Sun 93/1/2       S	Capies (c)		120 0ays	191011-10/7/12	WOII 12/11/12											
Installation of US. S. Inc. LP Transformer. Room       42 days       Sun 23/1/2       The W1/1/2         Electical Web, VC, PL in Transformer. Room       42 days       Sun 23/1/2       The W1/1/2         Installation of EOT Cranse EOT-1 in Screen House;       42 days       Sun 23/1/2       Sun 21/1/2         Installation of EOT Cranse EOT-2 in Pump Halt;       42 days       Sun 41/1/2       Sun 41/1/2         Installation of EOT Cranse EOT-2 in Pump Halt;       42 days       Sun 41/1/2       Thu 17/1/3         Installation of Modroired Enscisation V3 00 Sept 2012       Thu 17/1/3       Veb 30/1/2       Thu 17/1/3         Installation of Stooples ED10 In SLD2;       Case 90/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 19/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 19/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 19/1/2       Sun 93/1/2       Sun 93/1/2       Sun 93/1/2         Installation of C.V. Switchbord       Todays       Sun 93/1/2       Sun 93/1/2       S	Stormwater Pur	nping Station	255 days	Thu 12/7/12	Sat 23/3/13											
Electrical Work by CLP in Transformer Room       42 days       Fin 28/1/12       The 8/1/12         Installation of EOT Canes EOT-1 in Scroen Hauser,       42 days       Sun 23/1/12       Sun 23/1/12         Installation of EOT Canes EOT-2 in Scroen Hauser,       42 days       Sun 23/1/12       Sun 23/1/12         Installation of EOT Canes EOT-1 in Scroen Hauser,       42 days       Sun 23/1/12       Sun 23/1/12         Installation of Motorized Punstock, SC01 DS COS.       75 days       Sun 41/1/12       Thu 17/1/13         Installation of Motorized Bar Screens BS01 & BS02;       56 days       Sun 41/1/12       Sun 23/1/12       98         Installation of Low Water Pungs & Pipevork       112 days       Sun 14/1/12       Sun 93/1/3       96         Installation of Low Water Pungs & Pipevork       70 days       Thu 1/1/12       Wed 9/1/3       96         Installation of Low Water Pungs & Pipevork       104 says       Sun 14/0/12       Sun 14/0/12       Sun 14/0/12         Installation of Low Water Pungs & Pipevork       105 days       Sun 14/0/12       Sun 14/0/12       Sun 14/0/12       Sun 14/0/12       Sun 14/0/12         Installation of Low Water Pungs & Pipevork       105 days       Thu 1/1/12       Wed 9/1/3       124       179         Installation of Low Water Pungs & Pipevork       105 days       Thu 10/1						62	1									
Installation of EOT Canese EOT - in Scene House;       42 days       Sun 3/0/12       Ture 23/0/12       Sun 3/0/12       Ture 23/0/12       Sun 3/0/12											2//		regization by 30 Sent 2012			
Installation of SUDT-2 in Jump Hall;       42 days       Sun 7/10/2       Sun 7/10/2         Installation of Morried Purscelss SOD to SCDS.       75 days       Sun 4/11/2       Thu 17/11/3         Installation of Morried Purscelss SDD to SCDS.       51 days       Sun 4/11/2       Sun 2/10/2         Installation of Morried Purscelss SDD to SCDS.       56 days       Sun 4/11/2       Sun 2/10/2       98         Installation of Morried Purscelss SDD to SCDS.       56 days       Sun 4/11/2       Sun 2/10/2       98         Installation of Norried Purscels SDD to SCDS.       70 days       Sun 9/11/2       Sun 9/11/2       98         Installation of Low Water Purss & Pipework.       70 days       Sun 9/11/2       Sun 9/11/3       96         Installation of Cabling Services Squipment.       182 days       Sun 14/10/2       Sun 16/0/13       170         Installation of Morried Purscessories.       185 days       Thu 12/1/2       Sun 12/1/2       Sun 12/1/2       Sun 12/1/2         Installation of Mark Services System       180 days       Thu 12/1/2       Sun 12/1/2       Sun 12/1/2       Sun 12/1/2         Installation of Mark Services System       180 days       Thu 12/1/2       Sun 12/1/2       Sun 12/1/2       Sun 12/1/2         Installation of MArCS & PLC       100 days       Wed 3/0/12       <			42 days		Sat 3/11/12								101 07 50 30pt 2012			
Installation of Moorized Pensocks S001 to S005,       75 days       Sun 4/1/12       The 17/1/13         Installation of Stoplogs SL01 to SL03;       26 days       Wed 3/10/12       Su 23/21/12       98         Installation of Stoplogs SL01 to SL03;       112 days       Sun 49/11/2       Su 99/13       98         Installation of Moorized Pensocks S001 to SL03;       112 days       Sun 99/13       98         Installation of Moorized Pensocks S01 to SL03;       70 days       Sun 99/13       96         Installation of L/V. Switchboard       70 days       Sun 14/10/12       Sat 99/13       96         Installation of Cabling & Accessories       154 days       Sun 14/10/12       Sat 99/13       96         Installation of Moorized Pensocks System       182 days       Thu 12/1/12       Sat 99/13       96         Installation of MACS & PLC       193 days       Sun 14/10/12       Sat 12/1/13       122         Installation of MACS & PLC       193 days       Thu 12/1/12       Sat 12/1/13       122         Wai Ha Rive Cubet       10 days       Wed 3/1/12       Sat 23/3/13       124         Wai Ha Rive Cubet       10 days       Wed 3/1/12       Sat 23/3/13       124																
Installation of Motorized Bar Screens BS01 & BS02;       56 days       Sun 4/11/2       Sat 29/12/2       98         Installation of Sormwater Pumps & Pipework       112 days       Sun 19/11/2       Sat 99/13         Installation of LV. Switchboard       70 days       Sun 14/11/2       Wed 99/13         Installation of Cabling & Accessories       154 days       Sun 14/10/12       Sat 16/3/3         Installation of MCS & PLC       185 days       Thu 12/71/2       Sat 13/3         Installation of MACS & PLC       139 days       Thu 12/71/2       Sat 23/3/3         Wai Ha River Outlet       100 days       Wed 30/01/2       Thu 10/1/3																
Installation of Stormwater Pumps & Pipework       112 days       Sun 18/11/12       Sat 9/3/13         Installation of Low Water Pumps & Pipework       70 days       Sun 30/12/12       Sat 9/3/13       96         Installation of Low Water Pumps & Pipework       70 days       Thu 1/1/12       Wed 9/1/13       100 days       Thu 1/1/12       Wed 9/1/13         Installation of Cabling & Accessories       154 days       Sun 14/10/12       Sat 16/3/13       112         Installation of Builing Services Equipment       182 days       Thu 12/1/12       Sat 12/1/13       112         Installation of MACS & PLC       139 days       Mon 5/11/12       Sat 23/3/13       122         Wai Ha River Culet       100 days       Wed 3/10/12       Thu 10/1/13       122																
Installation of Low Water Pumps & Pipework       70 days       Sun 30/12/12       Sat 9/3/13       96         Installation of L.V. Switchboard       70 days       Thu 1/1/12       Wed 9/1/13       100         Installation of Cabling & Accessories       156 days       Sun 14/10/12       Sat 16/3/13       179         Installation of Cabling & Accessories       156 days       Thu 12/1/12       Sat 16/3/13       120         Installation of Feervices System       185 days       Thu 12/1/12       Sat 12/1/13       122         Installation of MACS & PLC       139 days       Mon 5/11/12       Sat 23/3/13       122         Wai Ha River Outlet       100 days       Wed 3/10/12       Thu 10/1/13       122							98									
Installation of L.V. Switchboard       70 days       Thu 1/11/2       Wed 9/1/13         Installation of Cabling & Accessories       154 days       Sun 14/10/12       Sat 16/3/13         Installation of Building Services Equipment       182 days       Thu 1/2/12       Wed 9/1/13         Installation of Fire Services System       185 days       Thu 12/7/12       Sat 12/1/13       122         Installation of MACS & PLC       139 days       Mon 57/1/12       Sat 23/3/13       122         Wai Ha River Oulet       100 days       Wed 37/0/12       Thu 10/1/13       124							· · · · · · · · · · · · · · · · · · ·									
Installation of Cabling & Accessories 154 days Sun 14/10/12 Sat 16/3/13   Installation of Building Services Equipment 182 days Thu 12/7/12 Wed 9/1/13   Installation of Fire Services System 185 days Thu 12/7/12 Sat 12/1/13   Installation of MACS & PLC 139 days Mon 5/11/12 Sat 23/3/13						96										
Installation of Building Services Equipment       182 days       Thu 12/7/12       Wed 9/1/13         Installation of Fire Services System       185 days       Thu 12/7/12       Sat 12/1/13       122         Installation of MACS & PLC       139 days       Mon 5/11/12       Sat 23/3/13       120         Wai Ha River Outlet       100 days       Wed 3/10/12       Thu 10/1/13       120													17/9			
Installation of Fire Services System       185 days       Thu 12/1/2       Sat 12/1/3       122         Installation of MACS & PLC       139 days       Mon 5/11/12       Sat 23/3/3       Image: Service Ser																
Installation of MACS & PLC       139 days       Mon 5/11/12       Sat 23/3/13         Wai Ha River Outlet       100 days       Wed 3/10/12       Thu 10/1/13							122									
Wai Ha River Outlet 100 days Wed 3/10/12 Thu 10/1/13																
	Wai Ha River C	utlet	100 days	Wed 3/10/12	Thu 10/1/13											
																ere heroren

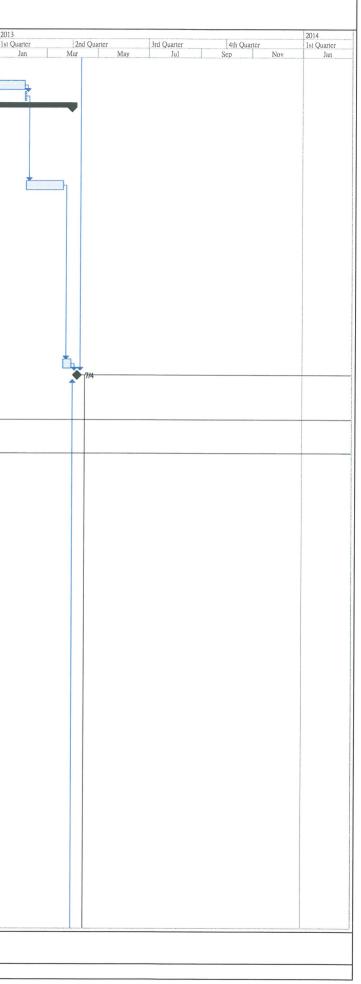
106           107           108           109           110           111           112           113           114           115           116           117           118           119           120           121           122           123           124	Installation of Motorized Penstock, SG07A, SG07B, SG07C, SG07D Installation of Stoplogs, SL06A, SL06B, SL06C & SL06D Drain Intake at Ting Kok Road Installation of Stoplogs, SL07A, SL07B, SL07C & SL07D Box Culvert	Duration 50 days 50 days <b>50 days</b>	Start Wed 3/10/12 Thu 22/11/12	Finish Wed 21/11/12 Thu 10/1/13	Predecessors 80,106	Successors 107,117 118	4th Quarter   1st Quarter   Scp   Nov   Jar		3rd Quarter 4 Jul Ser	4th Quarter p Nov	201 1st
107           108           109           111           112           113           114           115           116           117           118           119           120           121           122           123           124	Installation of Stoplogs, SL06A, SL06B, SL06C & SL06D Drain Intake at Ting Kok Road Installation of Stoplogs, SL07A, SL07B, SL07C & SL07D	50 days 50 days			80,106						
107           108           109           111           112           113           114           115           116           117           118           119           120           121           122           123           124	Installation of Stoplogs, SL06A, SL06B, SL06C & SL06D Drain Intake at Ting Kok Road Installation of Stoplogs, SL07A, SL07B, SL07C & SL07D	50 days 50 days			80,106				E.		
108           109           110           111           112           113           114           115           116           117           118           119           120           121           122           123           124	Drain Intake at Ting Kok Road Installation of Stoplogs, SL07A, SL07B, SL07C & SL07D	50 days	1110 22/11/12	1 nu 10/1/15	80,100	110				5	
109           110           111           112           113           114           115           116           117           118           119           120           121           122           123           124	Installation of Stoplogs, SL07A, SL07B, SL07C & SL07D										
111           112           113           114           115           116           117           118           119           120           121           122           123           124			Wed 3/10/12	Wed 21/11/12							
112         113         114         115         116         117         118         119         120         121         122         123         124	Box Culvert	50 days	Wed 3/10/12	Wed 21/11/12					Ĩ		
113         114         115         116         117         118         119         120         121         122         123         124	Box Culvert										
114         115         116         117         118         119         120         121         122         123         124		70 days	Wed 3/10/12	Tue 11/12/12							1
115         116         117         118         119         120         121         122         123         124	Installation of Manual Penstock, SG06	30 days	Wed 3/10/12	Thu 1/11/12							
116           117           118           119           120           121           122           123           124	Installation of Stoplogs, SL05A & SL05B	40 days	Fri 2/11/12	Tue 11/12/12							
117 118 119 120 121 122 123 124	Testing & Commissioning	070	10.007/10	m 05/4/12							
118 119 120 121 122 123 124	Leakage Test of Penstocks	270 days 122 days	Mon 30/7/12 Thu 22/11/12	Thu 25/4/13 Sat 23/3/13	106					*	1
119 120 121 122 123 124	Leakage Test of Telstocks	72 days	Fri 11/1/13	Sat 23/3/13	100						
120 121 122 123 124	Functional Test of Equipment/System	237 days	Mon 30/7/12	Sat 23/3/13	107	120					
122 123 124	Wet Commissioning Test of Pumps	10 days	Sun 24/3/13	Tue 2/4/13	119	121			L		_
123 124	System Commissioning	23 days	Wed 3/4/13	Thu 25/4/13	120	130					
124	Functional Test of FSI	14 days	Sun 13/1/13	Sat 26/1/13	102	128					
											-
	Submission of Draft O&M Manual	l day	Mon 26/9/11	Mon 26/9/11							
125	Submission of Final Draft O&M Manual	l day	Sun 21/4/13	Sun 21/4/13	131FF-9 days						
126 127	1st Session of Training	1 day	Wed 17/4/13	Wed 17/4/13	131FF-13 days	127FS+6 days					
127	2nd Session of Training Submission of FSD 501 for completion	l day l day	Wed 24/4/13 Sun 27/1/13	Wed 24/4/13 Sun 27/1/13	126FS+6 days 122	129FS+21 days					
120	FSI Inspection	l day	Mon 18/2/13	Mon 18/2/13	122 128FS+21 days	129F3+21 uays					
130	Plant Handover to Client	5 days	Fri 26/4/13	Tue 30/4/13	1201 0121 0133	131FF					
131	Anticipated Completion Date	0 days	Tue 30/4/13	Tue 30/4/13		5FF-9 days,126FF-13 days					
132											
133	External Structure	458 days	Mon 9/1/12	Wed 10/4/13							
134	Pumping Station to Outfall Structure	316 days	Mon 9/1/12	Mon 19/11/12							
135	Construcction of 2 nos. of 1500mm dia. Drainage Pipes	30 days	Mon 9/1/12	Tue 7/2/12		136		]			
136	Set up the Temporary Shoring	20 days	Wed 22/8/12	Mon 10/9/12	135	137					
137 138	Excavation	30 days	Tue 11/9/12	Wed 10/10/12	136	138				<u> </u>	
138	Constrcution of 2nos. Of Outfall Structures	40 days	Thu 11/10/12	Mon 19/11/12	137						
139	Tide Level Monitoring Chamber	100 days	Tue 1/1/13	Wed 10/4/13							
141	Excavation	30 days	Tue 1/1/13	Wed 30/1/13		142					
142	Construction of Pipe & Tide Level Monitoring Chambers	30 days	Thu 31/1/13	Fri 1/3/13	141	143					
143	Outfall Structure	40 days	Sat 2/3/13	Wed 10/4/13	142						
144											
145	External Misc. Works	241 days	Mon 27/8/12	Wed 24/4/13							And the second second
146	Plumbing Works	90 days	Sat 1/12/12	Thu 28/2/13							
147	Boundary Wall & Fencing	45 days	Mon 11/3/13	Wed 24/4/13	59					-	
148 149	3nos. of Flow Measurement chambers and Pipes Sewer Manhole SM1	60 days	Wed 10/10/12	Sat 8/12/12	57						
149	Sewer Mannole SM1 Surface Drainage System & Catchpits	60 days 60 days	Mon 27/8/12 Wed 10/10/12	Thu 25/10/12 Sat 8/12/12	57	151				<u></u>	
151	Concrete Pavement	60 days	Sun 9/12/12	Wed 6/2/13	150	151				<u> </u>	
152	Landscaping Works	60 days	Thu 7/2/13	Sun 7/4/13	151	308					
153											
154	Box Culvert	1160 days	Fri 26/2/10	Tue 30/4/13							-
155	Liaison with LCSD	15 days	Fri 26/2/10	Fri 12/3/10	2	156					
156	Determination of Box Culvert Alignment	30 days	Sat 13/3/10	Sun 11/4/10	155	157					
157	Record Survey	30 days	Mon 12/4/10	Tue 11/5/10	156	158					
158	Condition Survey of Existing Structure	15 days	Wed 12/5/10	Wed 26/5/10	157	159					
159 160	Submission of Method Statement to LCSD	60 days	Thu 27/5/10	Sun 25/7/10	158	163					
161	Design of Temporary Traffic Arrangement Submission of TTA to TMLG for Approval	60 days 90 days	Fri 26/2/10 Tue 27/4/10	Mon 26/4/10 Sun 25/7/10	2	161,162 162FF					
162	Excavation Permit	120 days	Tue 27/4/10	Tue 24/8/10	160,161FF	102FF					
163	Temporary Removal of Structure and Facilities / Reprovision	15 days	Mon 26/7/10	Mon 9/8/10	159	164					
164	Provision of Temporary Irrigation Pipes	20 days	Tue 10/8/10	Sun 29/8/10	163						
165	V.O. issued - Change of Box Culvert	0 days	Fri 4/3/11	Fri 4/3/11		166					
166	Preparation and Hoarding Erection	99 days	Fri 4/3/11	Fri 10/6/11	165	168					
167	Single Cell Box Culvert	723 days	Mon 9/5/11	Tue 30/4/13							
168	Box Culvert at Chainage 115 - 128 (completed)	76 days	Sat 11/6/11	Thu 25/8/11	166	169	7				
169	Box Culvert at Chainage 100 - 115 (completed)	76 days	Wed 14/9/11	Mon 28/11/11	168	170	<b>h</b>				
170	Box Culvert at Chainage 85 - 100 (completed)	71 days	Tue 29/11/11	Tue 7/2/12	169	171					
171	Box Culvert at Chainage 55 - 85 (completed)	130 days	Wed 8/2/12	Sat 16/6/12	170						
172	Box Culvert at Chainage 156 - 214	260 days	Thu 1/9/11	Thu 17/5/12							
177	Box Culvert at Chainage 0 to 12.5	60 days	Sat 15/9/12	Tue 13/11/12	107	178				<b>}</b>	
178 179	Box Culvert at Chainage 12.5 to 25.3 Box Culvert at Chainage 25.3 to 55	62 days	Wed 14/11/12	Mon 14/1/13	177	102					
179	Box Culvert at Chainage 25.5 to 55 Box Culvert at Chainage 141.5 to 156	60 days 68 days	Thu 18/10/12 Mon 24/9/12	Sun 16/12/12 Fri 30/11/12		182			(100000		1
180	Box Culvert at Chainage 141.5 to 156 Box Culvert at Chainage 214 to 228	70 days	Wed 20/2/13	Tue 30/4/13	182				1		
181	Box Culvert at Chainage 228 to 250	65 days	Mon 17/12/12	Tue 19/2/13	182	181,183,198				i	+
183	Box Culvert at Chainage 250 - 274	70 days	Wed 20/2/13	Tue 30/4/13	182	101,105,170				l.	
184	Pipes Laying by Trenchless Method from Chainage 285 to 305	304 days	Wed 28/3/12	Fri 25/1/13							
185	Confirmation of Pipe Jacking Works	0 days	Wed 28/3/12	Wed 28/3/12		186,187		28/3			
186	Material & Method Statement Submission/Approval	21 days	Wed 28/3/12	Tue 17/4/12	185						
187	Preparation Works for Jack Pipe Production	90 days	Wed 28/3/12	Mon 25/6/12	185	204,188			J		
Master Progr	amme II ( - ) Task Progress				colled Up Critical Task	Della J II- P	Enter 100 1		n Pu Cummon		
Data Date: 20	011-3-8	Summa				Rolled Up Progra		performance in the second state of the second	ip By Summary	•	
	Critical Task Milestone	Rolled	Up Task	R	tolled Up Milestone	Split	Project Sumn	nary Dead	lline 🗘		
Based on M	aster Programme II						Page 2				



Box i Box i				0 1010		rogramme	
Box i Box i		Duration	Start	Finish	Predecessors	Successors	2012           4th Quarter         1st Quarter           2nd Quarter         3rd Quarter
Box i Box i							4th Quarter         1st Quarter         2nd Quarter         3rd Quarter         4th Quarter           Sep         Nov         Jan         Mar         May         Jul         Sep
Box Box Box Box Box Box Box Box Box Box	Pipe Production	28 days	Tue 26/6/12	Mon 23/7/12	187	189,190	
Box Box Box Box Box Box Box Box Box Box	Pipe Delivery	60 days	Tue 24/7/12	Fri 21/9/12	188		
Box i Box i	Joint Test	21 days	Tue 24/7/12	Mon 13/8/12	188		
Box Box Box Box Box Box Box Box Box Box	Construction of Jacking Pit	45 days	Fri 18/5/12	Sun 1/7/12	173		
Box 1 Box 1 Box 2 Box 1 Box 1	Grouting Works	42 days	Thu 13/9/12	Wed 24/10/12		193	
Box Box Box Box Box Box Box Box Box Box	Thrust Wall	5 days	Thu 25/10/12	Mon 29/10/12	192	194	
Box Box Box Box Box Box Box Box	Pipe Jacking Establishment for 1st Pipeline	14 days	Tue 30/10/12	Mon 12/11/12	193	195	
Box i Box i	Pipe Instation (1st Pipeline)	30 days	Tue 13/11/12	Wed 12/12/12	194	196	
Box Box Box Box Box Box Box Box	Pipe Jacking Establishment for 2nd Pipeline	14 days	Thu 13/12/12	Wed 26/12/12	195	197	
Box   Box	Pipe Instation (2nd Pipeline)	30 days	Thu 27/12/12	Fri 25/1/13	196	199	
Box 1 Box 2 Box 2	Box Culvert at Chainage 274 to 285	70 days	Wed 20/2/13	Tue 30/4/13	182		
Box   Box   Box   Box   Box   Coult Rein: Design of Submissio Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Construction 1st Se 2 and S 3rd S 3rd S 3rd S 3rd S 5 5 6 6 7 8 7 8 8 9 7 8 9 8 8 8 8	Box Culvert at Chainage 305 to 310	21 days	Sat 26/1/13	Fri 15/2/13	197	202	
Box   Box   Box   Box   Construction Reins Design of Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Construction 1st Se 2 and S 3rd S 3rd S 3rd S 3rd S 3rd S 5 5 6 6 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8	Box Culvert at Chainage 310 to330	155 days	Mon 9/5/11	Mon 10/10/11	42		
Box I Outři Rein: Dia 2100mm I Record Su Site Inves Design of Excavation Excavation Excavation V.O for D Trial Pit E Liaison wi CLPS Cab PCCW & C Excavation Construction 1st Sa 2nd S 3rd S 3rd S 3rd S 3rd S 3rd S 5 5 6 6 5 5 5 5 6 6 6 5 5 5 6 6 6 5 5 5 5 5 6 6 6 5	Box Culvert at Chainage 330 to343	50 days	Sun 7/8/11	Sun 25/9/11	42FS+90 days		
Outfa Reins Dia. 2100mm I Record Su Site Invest Design of Submissio Excavation E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction Construction Construction Ist Sc 2nd S 3rd	Box Culvert at Chainage 343 to 356	28 days	Sat 16/2/13	Fri 15/3/13	199	203	
Reins Dia. 2100mm I Record Su Site Invest Design of Submissio Excavation Eacavation V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction Ist Sa 2nd S 3rd S 3rd S 1 4 4 4 5 5 5 5 5 5 6 6 5 8 1 1 1 1 1 1 1 1 1 1 1 1 1	Outfall Structure	21 days	Sat 16/3/13	Fri 5/4/13	202	204	
Dia. 2100mm I Record Su Site Invess Design of Submissio Excavation E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction 1st Sk 2nd S 3rd S 3rd S 3rd S 3rd S 5 1 0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Reinstatement of Planters					204	
Record Su Site Invest Design of Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Construction Ist Sa 2 and S 3 rd S 3 rd S 3 rd S 4 ft 5 ft 5 ft 5 ft 5 ft 6 fth Sa 5 ft 5 ft 5 ft 5 ft 5 ft 5 ft 5 ft 5 ft	Reinstatement of Flainers	25 days	Sat 6/4/13	Tue 30/4/13	203,187		
Record Su Site Invest Design of Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Construction Int Sas 2 and S 3 rd S 3 rd S 3 rd S 4 ft 5 ft 5 ft 5 ft 6 fth Sas 6 fth Sas 8 ft 5 ft 5 ft 5 ft 5 ft 5 ft 5 ft 5 ft 5							
Site Invest Design of Submissio Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi Class Cab PCCW's ( Excavation Construction Construction Construction Construction S 3rd S 3rd S 3rd S 3rd S 3rd S 3rd S 5 1 1 0 0 0 1 1 1 1 1 1 2 1 1 1 1 1 1 1 1		1130 days	Fri 26/2/10	Sun 31/3/13	and the second		
Design of Submissio Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLPs Cab PCCW 's ( Excavation Construction Ist Se 2nd S 3rd S 3rd S 3rd S 3rd S 3rd S 5 5 6 6 7 8 8 7 8 7 8 7 8 7 8 7 8 7 8 7 8 7		15 days	Fri 26/2/10	Fri 12/3/10	2	208	
Submissio Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction 1st Sk 2nd S 3rd S 3rd S 3rd S 3rd S 5 1 4 4th Sk 5 5th Sk 6 6th Sk 5 6 1 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Investigation (Trial Pit)	50 days	Sat 13/3/10	Sat 1/5/10	207	209,220	
Excavation Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Construction 1st Se 2 and S 3rd S 3rd S 3rd S 3rd S 5 1 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	gn of Temporary Traffic Arrangement	40 days	Sun 2/5/10	Thu 10/6/10	208	210,211	
Liaison wi E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Construction Ist Se 2 nd S 3 rd S 3 rd S 3 rd S 3 rd S 4 h 0 f 5 h 5 h 5 h 5 h 5 h 5 h 5 h 5 h 5 h 5 h	nission of TTA to TMLG for Approval	60 days	Fri 11/6/10	Mon 9/8/10	209	212,211FF	
E&M Des Submissio Fabrication V.O for Th Trial Pit E Liaison wi Class Cab PCCW's ( Excavation Construction 1st Sc 2nd S 3rd S 5rd S	avation Permit	90 days	Fri 11/6/10	Wed 8/9/10	209,210FF		
Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Constructi 1st Se 2nd S 3rd S 3rd S 3rd S 3rd S 3rd S 5 1 0 0 1 1 1 1 1 5 1 5 1 1 0 0 1 1 1 1	on with HyD / LCSD for Planter Removal	25 days	Tue 10/8/10	Fri 3/9/10	210		
Submissio Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW 's O Excavation Constructi 1st Se 2nd S 3rd S 3rd S 3rd S 3rd S 3rd S 5 1 0 0 1 1 4 th Se 5 th Se 5 1 1 0 0 1 1 1 5 1 5 1 1 0 0 1 1 1 1 5 1 5	1 Design of Penstocks	180 days	Fri 26/2/10	Tue 24/8/10	15	214	
Fabrication V.O for Th Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction Ist Sk 2nd S 3rd S 3rd S 3rd S 3rd S 3rd S 3rd S 3rd S 6 1 1 0 1 1 4 th Sk 5 th Sk 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	nission for Approval	60 days	Wed 25/8/10	Sat 23/10/10	213	215	
V.O for The Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction 1st Se 2 and S 3rd S 3rd S 3rd S 3rd S 3rd S 6 4 4 4 th Se 5 5 th Se 6 5 th Se 6 5 th Se 6 5 th Se 6 5 th Se 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	ication & Delivery of Penstocks	240 days	Sun 24/10/10	Mon 20/6/11	213	21J	
Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction Ist Sc 2nd S 3rd S		2-10 duys	044 2710/10		214		
Trial Pit E Liaison wi CLP's Cab PCCW's ( Excavation Construction Ist Sc 2nd S 3rd S	for Trial Pits	0 days	Fri 9/4/10	Fri 9/4/10		218FS+80 days	
Liaison wi CLPs Cab PCCW's C Excavation Construction 1st Sec 2nd S 3rd S 5 5 1 4 4 4 5 5 4 5 5 4 5 5 4 5 5 5 5 5				Tue 27/7/10	21700.00 1		
CLP's Cab PCCW's C Excavation Construction Ist Sk 2 and S 3 rd S 3 rd S 3 rd S 4 rd 4 rd 5 rd 5 rd 5 rd 5 rd 5 rd 5 rd 5 rd 5	TH ENGLAGIOUS	30 days	Mon 28/6/10	1 ue 2////10	217FS+80 days	221	
CLP's Cab PCCW's ( Excavation Construction In the Second State In		a particular to the termined perturbation of the	0.000	D L DO DU -	en la secondaria de la la deservación como de la parte de la		
PCCW % C Excavation Construction Ist S& 2nd S 3rd S 5 5 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	on with CLP, PCCW	90 days	Sun 2/5/10	Fri 30/7/10	208	221	
Excavation Construction Inst Sc 2nd S 3rd S 3rd S 1 1 1 1 1 4th Sc 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	's Cables Diversion Works	326 days	Sat 31/7/10	Tue 21/6/11	220,218	222FS-170 days	
Construction 1st Sec 2nd S 3rd S 5 1 4 1 4 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5	W 's Cables Diversion Works	414 days	Mon 3/1/11	Mon 20/2/12	221FS-170 days		
1 st Se 2nd S 3rd S 5 1 1 4th Se 5 5th Se 6 1 5 5th Se 6 6 1 5 5 1 5 5 1 5 1 5 1 5 1 5 1 5 1 5	vation Permit	13 days	Thu 1/9/11	Tue 13/9/11			
2nd S 3rd S 3rd S 1 4th Se 4th Se 5th Se 6th Se 6th Se 5th	struction of 2100mm Pipe & Existing Stormwater Drain along Ting Kok Road	565 days	Wed 14/9/11	Sun 31/3/13			
3rd S 3rd S 3 4th S 4th S 5 4 5 5 5 5 5 6 5 5 6 5 5 5 5 5 5 5 5 5	1st Section (20m from CH160 to CH180)	93 days	Wed 14/9/11	Thu 15/12/11			
4th Sc 4th Sc 1 3 4th Sc 1 3 5 4 4th Sc 1 3 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5 4 5	2nd Section (40m from CH120 to CH160)	122 days	Mon 30/1/12	Wed 30/5/12	232		
5th Sc 6 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	3rd Section (50m from CH70 to CH120)	125 days	Thu 31/5/12	Tue 2/10/12			
1 4th So 5 5 5 5 6 6 6 7 8 8 8 8 8 8 8 8 8 8 8 9 6 1 8 9 8 9 8 9 8 9 9 9 9 9 9 9 9 9 9 9 9	TTA Implementation	1 day	Thu 31/5/12	Thu 31/5/12	240	243	h
1 4th So 5 5 5 6 6 6 7 8 8 8 8 8 8 8 8 8 8 9 8 9 8 9 8 9 8 9	Sheetpile driving	10 days	Fri 1/6/12	Sun 10/6/12	242	244	<b>Ť.</b>
600 SS 600 SS	Excavation & Temporary Diversion of Existing Storm Drain	30 days	Mon 11/6/12	Tue 10/7/12	243	245	
1 1 4th Sc 5 1 2 5 1 3 5 1 3 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	Concrete Pipe Installation	15 days	Wed 11/7/12	Wed 25/7/12	244	246	
1 4th Se 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1	Reconstructed Existing Storm Drains and Manhole Construction	30 days	Thu 26/7/12	Fri 24/8/12	245	240	
4th Sc 5 6 7 7 8 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	Backfill, Gully Construction and Reinstatement	39 days	Sat 25/8/12	Tue 2/10/12	245	247	
1 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	4th Section (50m from CH20 to CH70)	95 days	Wed 3/10/12	Sat 5/1/13	240	249	
5th Sc 7 5th Sc 8 6th Sc 6th Sc 8 6th Sc 8 5 8 8 6 1 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	TTA Implementation	l day	Wed 3/10/12 Wed 3/10/12	Wed 3/10/12	247	250	
H 5th Sc 5th Sc 6th Sc 6th Sc 5 6th Sc 5 7 8 8 8 8 8 9 8 9 10 10 10 10 10 10 10 10 10 10 10 10 10							
600 F	Sheetpile driving	20 days	Thu 4/10/12	Tue 23/10/12	249	251	
F 5th Sc 5th Sc 5th Sc 5th Sc 6th Sc 5th Sc	Excavation & Temporary Diversion of Existing Storm Drain	30 days	Wed 24/10/12	Thu 22/11/12	250	252	
F 5th Se 5 6 6 6 7 8 8 8 8 6 7 8 8 9 7 8 7 8 7 8 8 8 8 8 8 9 8 8 8 8	Concrete Pipe Installation	10 days	Fri 23/11/12	Sun 2/12/12	251	253	
5th Sc 5th Sc 6th Sc 6th Sc 6th Sc 6th Sc 75 75 75 75 75 75 75 75 75 75 75 75 75	Reconstructed Existing Storm Drains and Manhole Construction	14 days	Mon 3/12/12	Sun 16/12/12	252	254	
1 5 6 6 6 1 8 6 1 8 6 1 8 5 8 7 8 7 8 7 8 7 8 8 7 8 7 8 8 7 8 8 7 8	Backfill, Gully Construction and Reinstatement	20 days	Mon 17/12/12	Sat 5/1/13	253	256	
S E 6th Se E DN12 S S	5th Section (40m from CH180 to CH220)	85 days	Sun 6/1/13	Sun 31/3/13			
E 6th Se 5 5 5 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	TTA Implementation	l day	Sun 6/1/13	Sun 6/1/13	254	257	
6th Se 6th Se 5 6th Se 5 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	Sheetpile driving	20 days	Mon 7/1/13	Sat 26/1/13	256	258	
6th Se 6th Se E C E DN12 S	Excavation & Temporary Diversion of Existing Storm Drain	30 days	Sun 27/1/13	Mon 25/2/13	257	259	
6th Se S C E DN12 S	Concrete Pipe Installation and Manhole Construction	14 days	Tue 26/2/13	Mon 11/3/13	258	260	
6th Se S C E DN12 S	Backfill, Gully Construction and Reinstatement	20 days	Tue 12/3/13	Sun 31/3/13	259		
S E C E DN12 S	6th Section (20m from CH220 to CH240)	131 days	Tue 3/7/12	Sat 10/11/12			
E C E DN12 S	Sheetpile driving	30 days	Tue 3/7/12	Wed 1/8/12		263	
C E DN12 S	Excavation & Temporary Diversion of Existing Storm Drain	60 days	Thu 2/8/12	Sun 30/9/12	262	263	
E DN12 S	Concrete Pipe Installation and Manhole Construction	21 days	Mon 1/10/12	Sun 21/10/12	262	265	
DN12 S	Backfill, Gully Construction and Reinstatement	21 days 20 days	Mon 22/10/12	Sun 21/10/12 Sat 10/11/12	263	203	
S					204		
	DN1200 (from MH06 to Box Culvert)	121 days	Mon 25/6/12	Tue 23/10/12			
	Sheetpile driving	20 days	Mon 25/6/12	Sat 14/7/12		268	
	Excavation & Temporary Diversion of Existing Storm Drain	60 days	Sun 15/7/12	Wed 12/9/12	267	269	
	Concrete Pipe Installation	21 days	Thu 13/9/12	Wed 3/10/12	268	270	
	Backfill and Reinstatement	20 days	Thu 4/10/12	Tue 23/10/12	269		
	DN225 Sewer Pipe across Ting Kok Road	51 days	Wed 15/8/12	Thu 4/10/12			
P	Preparation for Heading Works	7 days	Wed 15/8/12	Tue 21/8/12		273	The second se
E	Excavation for Heading Works	30 days	Wed 22/8/12	Thu 20/9/12	272	274	
C	Clay Pipe Installation	3 days	Fri 21/9/12	Sun 23/9/12	273	275	
	Laying CLP Cable Ducts	3 days	Mon 24/9/12	Wed 26/9/12	274	276	
	Backfill and Reinstatement	8 days	Thu 27/9/12	Thu 4/10/12	275		
	ruction of DN1800 Pipes by Trenchless Method	273 days	Tue 8/5/12	Mon 4/2/13			
	Irial Trench	20 days	Tue 8/5/12	Sun 27/5/12			
	Sheetpile Driving	20 days 5 days	Sun 21/10/12	Thu 25/10/12		280	
Sheet	100-1910 0111116	Juays	Juli 21/10/12	1110 23/10/12		200	



	1				0	5	(**************************************	
ID	Task Name	Duration	Start	Finish	Predecessors	Successors		013
							Sep Nov Jan Mar May Jul Sep Nov	st Q
280 281	Excavation and Launching Pit Construction	30 days	Fri 26/10/12	Sat 24/11/12	279	281		
281 282	Pre-Grouting Concrete Pipe Laying	30 days	Sun 25/11/12	Mon 24/12/12	280	282		
283	Grouting	40 days 2 days	Tue 25/12/12 Sun 3/2/13	Sat 2/2/13 Mon 4/2/13	281 282	283 291		
284	Intake (As required in Dry Season) - Section 1	525 days	Mon 24/10/11	Sun 31/3/13	202	291		
285	Hoarding Erection	15 days	Mon 24/10/11	Mon 7/11/11		286		
286	Implement TDMP	60 days	Tuc 8/11/11	Fri 6/1/12	285	287		
287	Surround by concrete mass and backfill the works area	30 days	Sat 7/1/12	Sun 5/2/12	286	288		
288	Shoring Installation and Excavation	20 days	Mon 6/2/12	Sat 25/2/12	287	289		
289	Construction of Instake	40 days	Sun 26/2/12	Thu 5/4/12	288	290		
290 291	Reinstatement Intake - Section 2	12 days	Fri 6/4/12	Tue 17/4/12	289			
291	Modification of Existing Outlet Structure of Wai Ha River	45 days 406 days	Tue 5/2/13 Tue 1/11/11	Thu 21/3/13 Mon 10/12/12	283	307		
293	Implement TDMP (1st stage)	35 days	Tue 1/11/11 Tue 1/11/11	Mon 5/12/11		294		
294	Demolish Existing Bar Screen	5 days	Tue 6/12/11	Sat 10/12/11	293	294		
295	Drilling for Connection	5 days	Sun 11/12/11	Thu 15/12/11	294	296		
296	Steel Fixing and Formwork	20 days	Fri 16/12/11	Wed 4/1/12	295	297		
297	Concreting	5 days	Thu 5/1/12	Mon 9/1/12	296	298		
298	Implement TDMP (2nd stage)	20 days	Tue 10/1/12	Sun 29/1/12	297	299		
299	Demolish Existing Bar Screen	5 days	Mon 30/1/12	Fri 3/2/12	298	300		
300 301	Drilling for Connection Steel Fixing and Formwork	5 days	Sat 4/2/12	Wed 8/2/12	299	301	<u>L</u>	
302	Concreting	5 days 1 day	Thu 9/2/12 Tue 14/2/12	Mon 13/2/12 Tue 14/2/12	300 301	302		
303	Provide Temporary Bar Screen	5 days	Wed 15/2/12	Sun 19/2/12	301	303,304	<b>b</b>	
304	Installation of 3 nos of Mechanical Penstocks and Stoplog	14 days	Wed 15/2/12	Tue 28/2/12	302	305		
305	Implement TDMP (3rd stage)	10 days	Thu 1/11/12	Sat 10/11/12	304	306		
306	Installation of 1 nos of Mechanical Penstocks and Stoplog	30 days	Sun 11/11/12	Mon 10/12/12	305			
307	Misc. Works & Reinstatement	10 days	Fri 22/3/13	Sun 31/3/13	291	308		
308	Completion of Section I	0 days	Sun 7/4/13	Sun 7/4/13	307,527,152	507,526		
309 310	Contine II (Area C. Factoria) Composition Area of Characteria							
320	Section II (Area C - Ecological Compensation Area at Shuen Wan)	562 days	Fri 26/2/10	Sat 10/9/11		514,512,513,515		
	Completion of Section II	0 days	Sat 10/9/11	Sat 10/9/11	328	526	♦ 109	
330		0 00,0	04 10 711	Gut IO//II	520	520		-
331	Section III (Area D - To Lo Wan Shan)	651 days	Fri 26/2/10	Thu 8/12/11				
	Completion of Section III	0 days	Thu 8/12/11	Thu 8/12/11	386	526	8/12	
388							¥ •••	
389	Section IV (Area E, F, G - Siu Lek Yuen)	934 days	Fri 26/2/10	Sun 16/9/12		520		
390 391	Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		440		
392	Area E- Siu Lek Yuen Road Playground Implement TTA for Site Access	916 days	Fri 26/2/10	Wed 29/8/12				
393	Erection of Gate	l day l day	Mon 5/9/11 Tue 6/9/11	Mon 5/9/11 Tue 6/9/11	202	393 394	<b>b</b>	
394	Transplant 61 Nos. Of Chrysalidocarpus	9 days	Wed 7/9/11	Thu 15/9/11	392 393	394 395		
395	Formation of temporary pedestrian walkway	25 days	Fri 16/9/11	Mon 10/10/11	393	395		
396	Construction of Ramp	10 days	Sat 29/10/11	Mon 7/11/11	397	401		
397	Erection of hoarding with lighting	18 days	Tue 11/10/11	Fri 28/10/11	395	396		
398	Transplant 3 Nos. of small trees to temporary nursery(<95mm in trunk dia.)	9 days	Mon 26/9/11	Tue 4/10/11				
399	Transplant of 6 Nos. of trees to temporary nursery (>95mm in trunk dia.)	84 days	Thu 22/9/11	Wed 14/12/11				
400	(Stage 1A)- Pipeline 1606.1 (5m) and outfall structure	747 days	Fri 26/2/10	Tue 13/3/12				
414 415	(Stage 1B)- pipeline 1606.1 (2m), manhole (J) (Stage 2)- Pipeline 1605.1 (6m) and manhole (Type J)	47 days	Wed 14/3/12	Sun 29/4/12	413	415		
415	(Stage 2)- Pipeline 1603.1 (0m) and mannole (1 ype 3) (Stage 3)- pipeline 1603.1 (19m)	45 days 40 days	Mon 30/4/12 Thu 14/6/12	Wed 13/6/12 Mon 23/7/12	414	416		
417	(Stage 4)- pipeline 1604.1 (13m) and manhole (Type J)	31 days	Tue 24/7/12	Thu 23/8/12	415	418,426		
418	Excavation	5 days	Tue 24/7/12	Sat 28/7/12	416	419		
419	Install temporary trench shoring for pipeline (1604.1)	5 days	Sun 29/7/12	Thu 2/8/12	418	419		
420	Blinding	1 day	Fri 3/8/12	Fri 3/8/12	419	421		
421	Pipe Laying (1604.1)	3 days	Sat 4/8/12	Mon 6/8/12	420	422		
422	Stage 1 downstream concreting for manhole(Base Slab)	7 days	Tue 7/8/12	Mon 13/8/12	421	423		
423	Stage 2 downstream concreting for manhole (Wall and Roof)	7 days	Tue 14/8/12	Mon 20/8/12	422	424		
424 425	Backfill	3 days	Tue 21/8/12	Thu 23/8/12	423			
425	(Stage 4)- pipeline 1603.1 (4m), 1602.1, 1602.2, 1602.3 and manhole (Type J) Excavation	37 days	Tue 24/7/12	Wed 29/8/12	117			
420	Excavation Install temporary trench shoring	5 days 6 days	Tue 24/7/12 Sun 29/7/12	Sat 28/7/12 Fri 3/8/12	416 426	427		
428	Blinding	l days	Sun 29/1/12 Sat 4/8/12	Sat 4/8/12	420	428		
429	Pipe Laying	2 days	Sun 5/8/12	Mon 6/8/12	427	429	<b>₽</b>	
430	Break existing 300mm. Drainage pipe and divert water to downsstream	l day	Tue 7/8/12	Tue 7/8/12	429	430		
431	Stage 1 concreting for manhole(formwork erection, formwork dismantle)	5 days	Wed 8/8/12	Sun 12/8/12	430	432		
432	Stage 2 concreting for manhole (formwork erection, steel fixing, formwork dismantle)	3 days	Mon 13/8/12	Wed 15/8/12	431	433		
433	Make good connection with existing drainage	3 days	Thu 16/8/12	Sat 18/8/12	432	434,437		
434	Laying of type A and B materials for 900mm dia. Pipe	3 days	Sun 19/8/12	Tue 21/8/12	433	435		
435 436	Backfilling of soil	3 days	Wed 22/8/12	Fri 24/8/12	434	436		
436	Remove sheetpiles Reinstatement	5 days	Sat 25/8/12	Wed 29/8/12	435			
437	remetatement	10 days	Sun 19/8/12	Tue 28/8/12	433	458		
439	Area F - Lek Yuen Street Rest Garden & Sha Tin Rural Committee Road	764 days	Fri 26/2/10	Fri 30/3/12				
455		70, uujo	averag 10	11.505.12				
456	Area G - Ngan Shing Streeet	934 days	Fri 26/2/10	Sun 16/9/12				
457	Maintain Existing Drains and Manholes	915 days	Fri 26/2/10	Tue 28/8/12				
actor P		~	_					
ata Date	rogramme II ( - ) Task Progress	Summ			olled Up Critical Task	Rolled Up Progre		
	Critical Task Milestone	Rolled	Up Task	Rc	olled Up Milestone	Split	Project Summary Deadline	
ased o	n Master Programme II					opin	Page 4	



ID Task Name	Duration	Start	Finish	Predecessors	Successors	2012 201					
						4th Quarter				4th Quarter	
458 Implementation of TTA (Stage 1) for Remove of Temporary Plug		W 1000/2				Sep Nov	Jan	Mar May	Jul		Nov
	3 days	Wed 29/8/12	Fri 31/8/12	437	459					E.	
	3 days	Sat 1/9/12	Mon 3/9/12	458	460						
	3 days	Tue 4/9/12	Thu 6/9/12	459	461					<b>F</b>	
461 Implementation of TTA (Stage 4) for Remove of Temporary Plug	3 days	Fri 7/9/12	Sun 9/9/12	460	462					E.	
462 Fill up of Existing 750mm dia. drainage pipes	7 days	Mon 10/9/12	Sun 16/9/12	461	464						
463											
464 Completion of Section IV	0 days	Sun 16/9/12	Sun 16/9/12	462						16/9	
465											
466 Section V (Area H - Sai Sha Road)	677 days	Fri 26/2/10	Tue 3/1/12		-						
494 Completion of Section V	0 days	Tue 3/1/12	Tue 3/1/12	493	526		♦ 3/1				
495											
496 Section VI (Area J - Pak Shing Street)	0 days	Fri 26/2/10	Fri 26/2/10		497						
497 Completion of Section VI	0 days	Thu 28/4/11	Thu 28/4/11	496	526						
498											
499 Section VII (Area K - Ting Kok Road near Chung Nga Road)	0 days	Fri 26/2/10	Fri 26/2/10		500						
500 Completion of Section VII	0 days	Thu 30/12/10	Thu 30/12/10	499	526						
501											
502 Section VIII (Area L - Wai Ha Village)	0 days	Fri 26/2/10	Fri 26/2/10		503						
503 Completion of Section VIII	0 days	Fri 29/4/11	Fri 29/4/11	502	526						
504					520						-
505 Section IX (Area A, B, - Shuen Wan)	1502 days	Fri 26/2/10	Mon 7/4/14								
506 Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		507						
507 Landscape Establishment Works in Area A & B	365 days	Mon 8/4/13	Mon 7/4/14	506,308	508						
508 Completion of Section IX	0 days	Mon 7/4/14	Mon 7/4/14	507	526						
509	0 days	MOII //4/14	WI011 774/14	507	520					1	
510 Section X (Area C - Ecological Compensation Area at Shuen Wan)	1280 days	Fri 26/2/10	Wed 28/8/13								
510 Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		610 610 614 616						
512 Monitoring of Water Level				210 511	512,513,514,515	-					
513 Monitoring of Water Quality	365 days	Sun 11/9/11	Sun 9/9/12	310,511	516						
515 Montoring of water Quanty 514 Landscape Extablishment Works in Area C	365 days	Sun 11/9/11	Sun 9/9/12	310,511	516	-					
514 Landscape Extablishment Works in Area C 515 Maintenance of Ecological Compensation Area	365 days	Sun 11/9/11	Sun 9/9/12	310,511	516						
	718 days	Sun 11/9/11	Wed 28/8/13	310,511	516						
516 Completion of Section X	0 days	Wed 28/8/13	Wed 28/8/13	514,512,513,515	526						
517											
518 Section XI	1299 days	Fri 26/2/10	Mon 16/9/13								
519 Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		520						
520 Landscape Establishment works in Area E, F, G	365 days	Mon 17/9/12	Mon 16/9/13	389,519	521						
521 Completion of Section XI	0 days	Mon 16/9/13	Mon 16/9/13	520	526						
522											
523 Section XII	1717 days	Fri 26/2/10	Sat 8/11/14								and the second second second
524 Commencement of Works	0 days	Fri 26/2/10	Fri 26/2/10		525						
525 Preservation and Protection of Existing Trees within the Site and all remaining of the Works	1717 days	Fri 26/2/10	Sat 8/11/14	524	526						
526 Completion of Section XII	0 days	Sat 8/11/14	Sat 8/11/14	8,503,500,497,494,387,329,308							
527	1 day?	Fri 26/2/10	Fri 26/2/10		308						

Master Programme II(-) Data Date: 2011-3-8	Task Critical Task	Progress Milestone	<b>*</b>	Summary Rolled Up Task	Rolled Up Critical Task Rolled Up Milestone	Rolled Up Progress Split		External Tasks Project Summary	Group By Summary Deadline	Ŷ	
Based on Master Programme II						P	age 5				

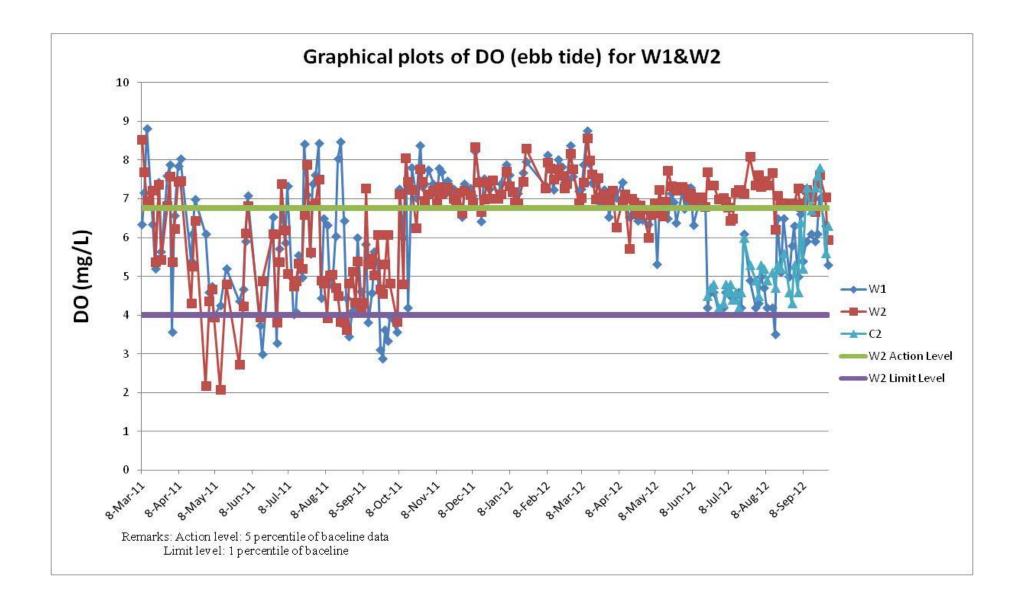
13						2014
Quarter	2nd Quart	ler	3rd Quarter	4th Quart	Pr	2014 1st Quarter
Jan	Mar	May	Jul	Sep	Nov	Jan
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				▲ 16/9		
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Appendix K. Graphical plots of trends of monitored parameter

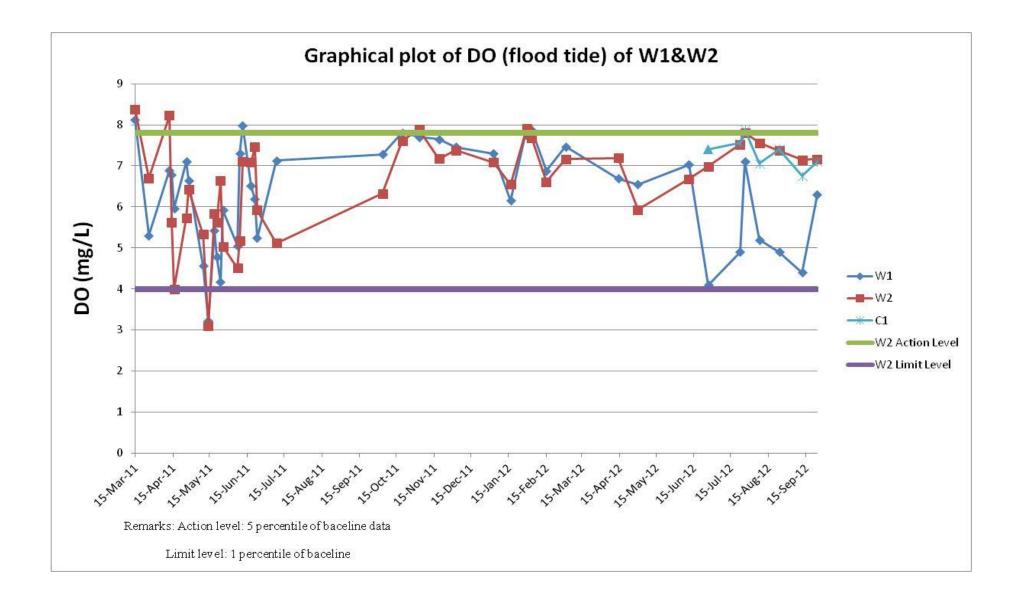
10.00 9.00 8.00 7.00 6.00 -**◆**- ₩1 5.00 **—**— W2 4.00 Reference Point Lower limit 3.00 2.00 1.00 0.00 

#### Graphical plots of pH values W1&W2

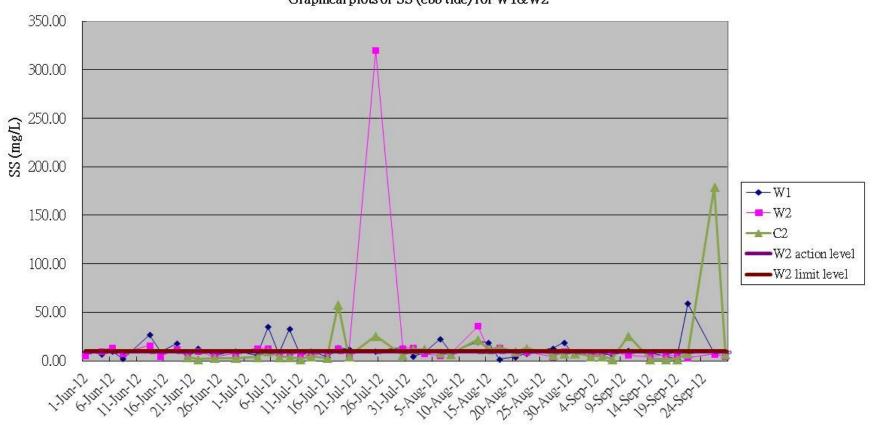
pH values



**Environmental Pioneers and Solutions Limited** 



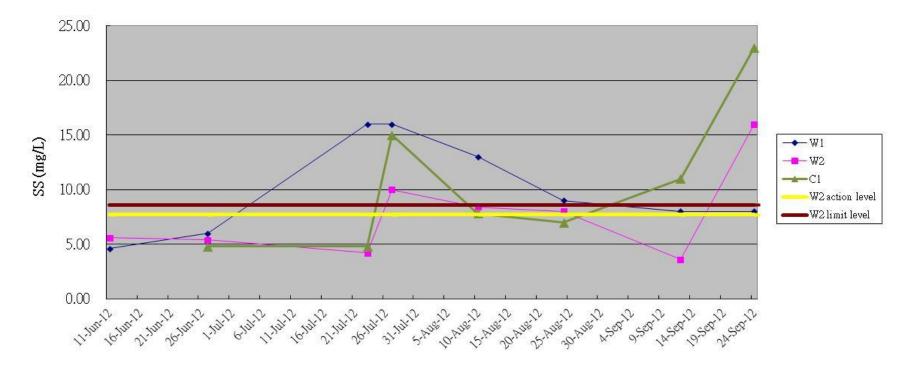
**Environmental Pioneers and Solutions Limited** 



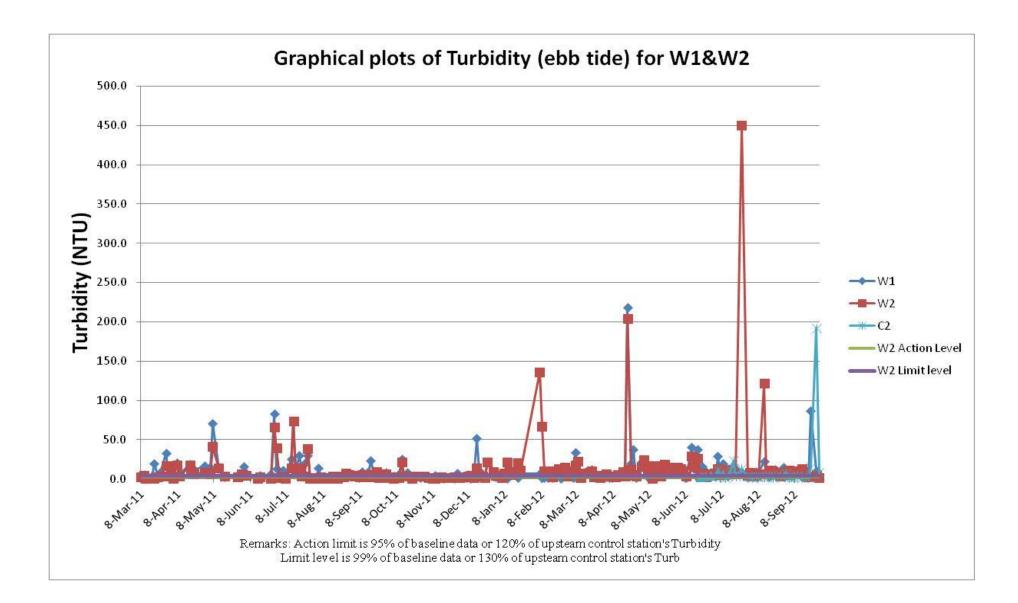
Graphical plots of SS (ebb tide) for W1&W2

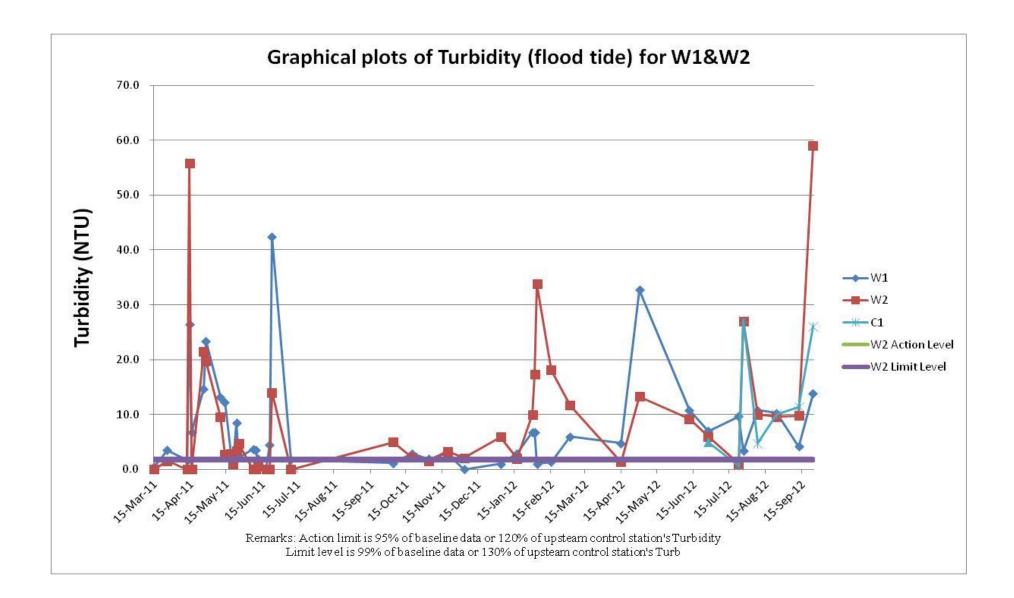
Remarks: Action limit is 95% of baseline data or 120% of upsteam control station's SS Limit level is 99% of baseline data or 130% of upsteam control station's SS

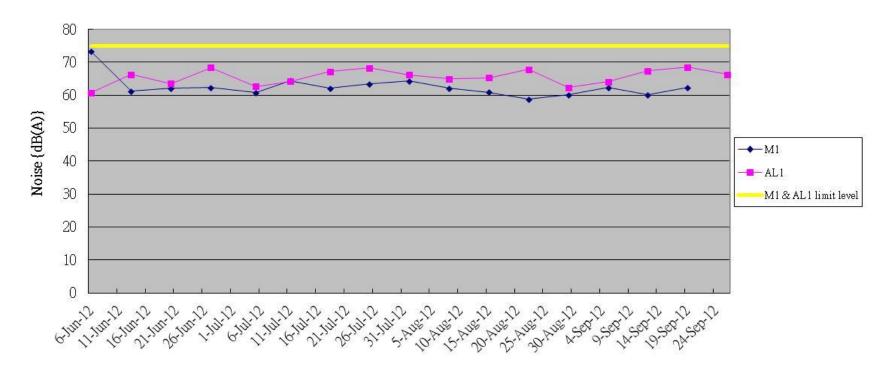
Graphical plots of SS (flood tide) for W1&W2



Remarks: Action limit is 95% of baseline data or 120% of upsteam control station's SS Limit level is 99% of baseline data or 130% of upsteam control station's SS

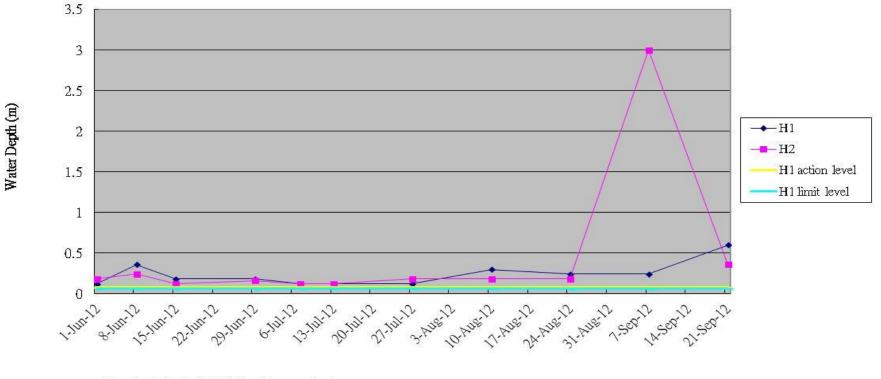






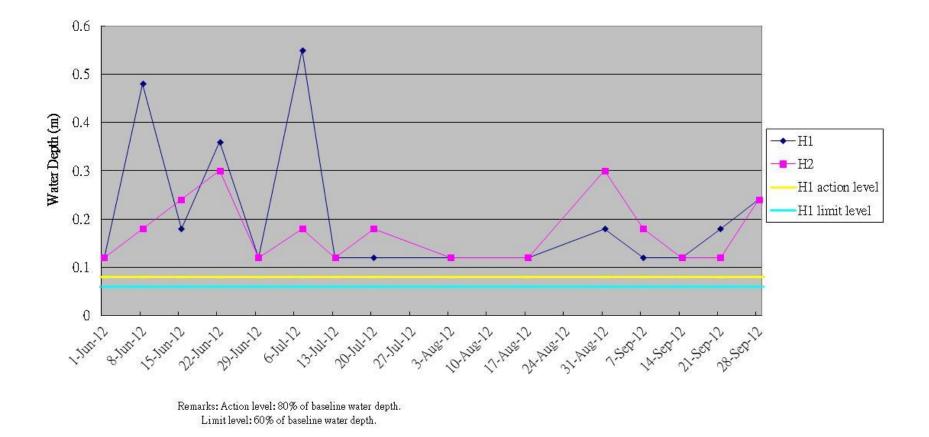
## Graphical plots of Noise for M1 & AL1

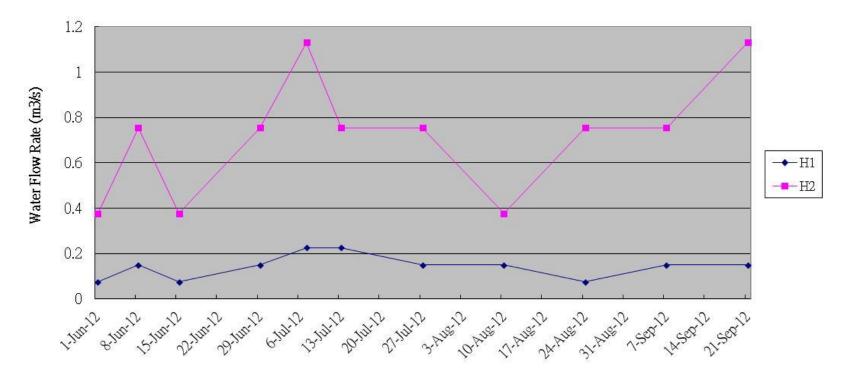
Remarks: Action limit is when one documented complaint is received



## Graphical plots of Hydrological Monitoring (water depth at flood tide) for H1 & H2

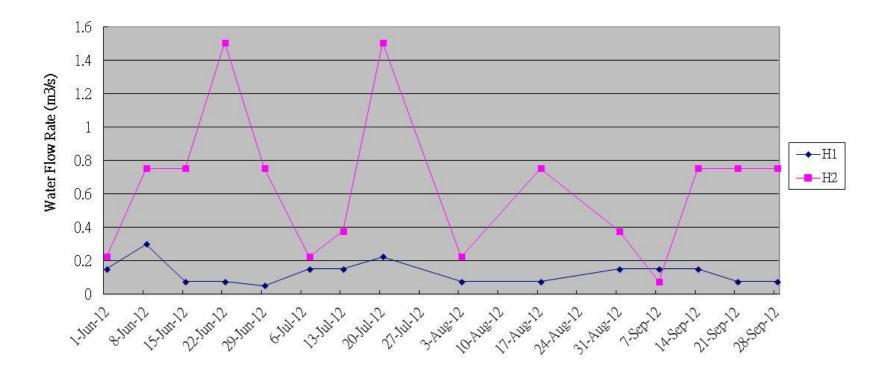
Remarks: Action level: 80% of baseline water depth. Limit level: 60% of baseline water depth. Graphical plots of Hydrological Monitoring (water depth at ebb tide) for H1 & H2





## Graphical plots of Hydrological Monitoring (water flow rate at flood tide) for H1 & H2

Remarks: Action level: 120% of control station's water flow rate on the same day of measurement. Limit level: 140% of control station's water flow rate on the same day of measurement. Graphical plots of Hydrological Monitoring (water flow rate at ebb tide) for H1 & H2



Remarks: Action level: 120% of control station's water flow rate on the same day of measurement. Limit level: 140% of control station's water flow rate on the same day of measurement. Appendix L.

A). List of recorded vegetation and relative abundance in the Ecological Compensatory Area (ECA) during construction phase in Sep 2012.

B). List of transplanted trees in the Ecological Compensatory Area (ECA) during construction phase in Sep 2012.

C). Condition of transplanted species Pavetta hongkongensis in ECA since 20<sup>th</sup> Dec 2011

Species	*Status in Hong Kong	Growth form	<sup>1</sup> Status in ECA	<sup>2</sup> Relative abundance	Condition
Bidens bipinnata	E	Herbs	S	+	Fair
Panicum maximum	Е	Herbs	S	+	Fair
Celtis sinensis	N	Trees	S	+	Fair
Terminalia catappa	Е	Trees	R	+	Fair
Cocculus orbiculatus	N	Climbers	R	+	Fair
Mangifera indica	Е	Trees	R	+	Fair
Dimocarpus longan	Е	Trees	R	+	Fair
Michelia x alba	Е	Trees	R	+	Fair
Oxalis corniculata	N	Herbs	S	+	Fair
Stephania longa	N	Climbers	S	+	Fair
Leucaena leucocephala	Е	Shrubs	S	+	Fair
Amaranthus viridis	N	Herbs	S	+	Fair
Solanum nigrum	N	Herbs	S	+	Fair
Paspalum dialatum	Е	Perennial Herb	S	+	Fair
Mikania micrantha	Е	Climbing Herb	S	+	Fair
Macaranga tanarius	N	Tree	R	+	Fair
Cassia surattensis	Е	Shrub or Small Tree	S	+	Fair
Conyza sumatrensis	Е	Herb	S	+	Fair

**Appendix L (A).** List of recorded vegetations and relative abundance in the ECA during establishment phase in Sep 2012.

Sansevieria trifasciata Prain	Е	Perennial Herb	S	+	Fair
Alocasia odora	N	Perennial Herb	S	+	Fair
Livistona chinensis	Е	Tree Palm	S	+	Fair
<i>c.f. Ulothrix</i> sp.	N	Algae	S	+	Fair
Enteromorpha sp.	N	Algae	S	+	Fair
Total number of species	23				

Key:

\*Status in Hong Kong

E = Exotic

N = Native

<sup>1</sup>Status in ECA:

<sup>2</sup>Relative abundance:

R = retained + = Present S = naturally colonized ++ = Common

+++ = Abundant

Tree No.	Species Name	*Status in Hong Kong	Growth form	Date of transplantation	Condition	Remarks
T150	Bombax ceiba	Е	Tree	22/6/2011	Fair	
T151	Bombax ceiba	Е	Tree	22/6/2011	Fair	
T152	Bombax ceiba	Е	Tree	22/6/2011	Fair	
T153	Bombax ceiba	Е	Tree	22/6/2011	Fair	
T154	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T155	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T156	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T157	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T158	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T159	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T160	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T161	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T162	Bombax ceiba	Е	Tree	14/6/2011	Fair	
T250	Celtis sinensis	N	Tree	22/6/2011	Dead	Dead
T165	Melaleuca quinquenervia	Е	Tree	22/6/2011	Dead	Dead
T168	Melaleuca quinquenervia	Е	Tree	Nov 2011	Fair	

**Appendix L (B).** List of trees transplanted from Work Areas of Contract 1 & 2 to ECA during establishment phase in Sep 2012.

Specimen No.	Species Name	Growth	Height (m)	Date of transplantation	Condition	Remarks
		Form				
PH01	Pavetta hongkongensis	Tree /	2.2	20 <sup>th</sup> Dec 2011	Fair	
		Shrub				
PH02	Pavetta hongkongensis	Tree /	2	20 <sup>th</sup> Dec 2011	Fair	
		Shrub				
PH03	Pavetta hongkongensis	Tree /	1.5	20 <sup>th</sup> Dec 2011	Fair	
		Shrub				

**Appendix L (C).** Condition of transplanted species *Pavetta hongkongensis* in ECA since 20<sup>th</sup> Dec 2011.

Date of weekly monitoring: 4 Jan, 13 Jan, 17 Jan, 28 Jan, 3 Feb, 6 Feb, 15 Feb, 22 Feb, 1 Mar, 6 Mar, 12 Mar, 18 Mar, 29 Mar, 27 Apr, 31 May, 26 Jun, 31 July, 30 Aug, 26 Sep 2012.

Appendix M: Ecological monitoring report

Agreement No. DP/01/2010 Drainage Improvement Works in Shatin and Tai Po: Ecological Monitoring in area under Contract 1 (Report 10a for Sept 2012)

> Prepared for: Drainage Services Department

Prepared by: ENVIRON Hong Kong Limited

> Date: Oct 2012

Reference Number: R2773\_V1.0 Agreement No. DP/01/2010 Drainage Improvement Works in Shatin and Tai Po: Ecological Monitoring in area under Contract 1 (Report 10a for Sept 2012)

> Prepared for: Drainage Services Department

Prepared by: ENVIRON Hong Kong Limited

> Date: Oct 2011

Reference Number: R2773\_V1.0 Agreement No. DP/01/2010 Drainage Improvement Works in Shatin and Tai Po: Ecological Monitoring in area under Contract 1 (Report 10a for Sept 2012)

Prepared by:

Max Lee Assistant Environmental Consultant

637

Approved by:

Tony Cheng Project Manager

ENVIRON Hong Kong Limited Room 2310, China Resources Building 26 Harbour Road, Wan Chai, Hong Kong Tel: (852) 3743 0788

Fax: (852) 3548 6988

Email: hkinfo@environcorp.com

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# 1. Introduction

## 1.1. Project description

The Drainage Improvement Works in Shuen Wan was undertaken to minimize the potential flooding impacts in Sha Tin and Tai Po area. Although the Ecological Impact Assessment in the EIA Report identified that ecological impacts resulting from the proposed drainage improvement works at Shuen Wan were anticipated to be very minor in scale, ecological mitigation and ecological monitoring were recommended in the EM&A Manual (http://env-shuenwan.com/pdf/review\_note\_em&a\_rev.3.pdf) as stipulated under Environment Permit No. EP-303/2008.

- 1.2. Scope of ecological impact monitoring was described in the Particular Specifications and EM & A Manual of the projects. In brief, the monitoring tasks include regular check on the retained and transplanted trees and shrubs, monitoring on fauna groups and aquatic fauna within the works area and any ecologically sensitive area within 100 m of the works boundary.
- 1.3. China-Hong Kong Ecology Consultants Co. was commissioned by ENVIRON Hong Kong Limited to perform the ecological impact monitoring survey for areas under Contract 1 starting from March 2011.
- 1.4. The outline of this ecological monitoring report was as follow:
  - Highlights of this report
  - Summary of construction activities for the month
  - Monitoring methodology
  - Monitoring data
  - Remedial measures adopted to the adverse condition
  - Record of complains and remedial measures
  - Review of monitoring results
  - Forecast of works programme and monitoring requirements
  - Comments and brief summary
- 1.5. This is the report No. 10 ecological monitoring conducted on 26<sup>th</sup> September 2012 within the works boundary under Contract 1 and area within 100 m from the works boundary.

# 2. Highlights of this report

- Field survey was conducted on 26<sup>th</sup> September 2012
- Construction activities of Contract 1 was continued since March 2011
- Lower number of species was observed within the works area under Contract 1, in particular stream ecological monitoring point 2 (SEMP 2) due to recent river diversion for Ecological Compensatory Area (ECA) construction.
- Habitats in the 100 m buffer area retain its natural condition.

# 3. Summary of construction activities for the month

Major construction activities carried out in Contract 1 by the contractor during the present monitoring period (September 2012) includes:

## Area A (Pumping Station)

- Construction of superstructure of pumping station
- Construction of 2100 mm dia. Drainage pipe along Ting Kok Road
- Construction of 2100 mm dia. Drainage pipe near pumping station

## Area B (Tung Tsz Nursery)

- Construction of box culvert in Tung Tsz Nursery
- Ground treatment works for Pipe Jacking

## Area C (ECA)

• In Maintenance Period

# 4. Monitoring Methodology

- 4.1 Ecological monitoring methods were generally followed those described in the baseline ecological surveys (DC/2009/22). However, sampling area maybe reduced because of habitat change, for instance, deforestation and channel modification due to drainage works, where sampling was not applicable. Survey data and evaluation are detailed in the following sections.
- 4.2 Vegetation survey

Vegetation survey was performed along the designated transects (**Figure 1**) for ecological monitoring as described in the project specifications to monitor the vegetation health which could be adversely influenced by any bad site practice. Qualitative data of plants within the works boundary and wetland vegetation in the 100 m buffer area of Contract 1 adjacent to construction site and wetland was recorded. Riparian vegetation including aquatic and emergent at 4 stream ecological monitoring points (hereinafter referred to as "SEMP") under Contract 1 ( i.e. SEPM 1 &2; **Figure 2 & 3**) along the affected stream channel and riparian habitat was recorded in terms of species, relative abundance and average heights. Any signs of damages and adverse health problems directly caused the works were recorded and reported. Nomenclature and protection status of the species followed those documented in the AFCD website (www.hkbiodiversity.net) and Hong Kong Herbarium (2004).

## 4.3 Avifauna

Bird survey was conducted by following the proposed transects which cover the major ecologically sensitive areas of the Project (**Figure 1**). All bird species were recorded with special attention paid on the species of conservation importance and wetland-

dependent species. List of bird species recorded and the relative abundance was provided.

## 4.4 Herpetofauna

Hepetofauna survey was conducted via direct observation and active searching along the survey transects with a focus in the work areas (**Figure 1**). All reptiles and amphibians encountered or heard were recorded. Nomenclature and conservation status of herpetofauna species follows AFCD website (www.hkbiodiversity.net).

## 4.5 Butterflies and Odonata

Odonates and butterfly survey of different habitats within the Study Area was conducted along the proposed transect (**Figure 1**). All butterflies and odonata were identified and relative abundance was recorded. Nomenclauture and status of conservation of butterflies follows Lo & Hui (2005) while that of odonata follows AFCD websites (www.hkbiodiversity.net).

## 4.6 Mammals

As the monitoring site was situated near traffics, plant nursery and residential buildings, mammals were unlikely inhabited at the site except rodents, domestic dogs and cats. Detailed mammal monitoring was not conducted. However, any sighting, tracks and signs of mammals encountered during survey of other faunal groups was recorded. Bat was surveyed by search for potential colony habitat, such as palm trees, which are often used by fruit bats as nesting sites.

## 4.7 Aquatic fauna

Monitoring of aquatic fauna was carried out mainly by bank-side observation, sometimes with the aid of binoculars, at two stream ecological monitoring points under Contract 1 (i.e. SEMP 1 & 2). These points are selected for covering representative sections of Wai Ha River and are shown in **Figure 1**. Netting and fish traps were also deployed at these points to collect supplementary data. Aquatic fauna seen/collected was identified *in situ* to the lowest possible taxon and relative abundance was presented.

## 5. Monitoring data

## 5.1 Vegetation survey

The habitats identified in area under Contract 1 are marine, recreational fish pond, river course, wooded area, mangrove, marsh and developed area (including village). Vegetation were found in wooded area, mangrove, marsh, develop area and river bank. During the current monitoring period, some riparian climbers (*Cocculus orbiculatus*) at SEMP 2 was removed due to direct conflict with the construction of ECA. The riparian vegetations were dominated by *Leucaena leucocephala* and *Plantago major* with average coverage ranged from 15% to 40% (**Table 1**). A list of plant species recorded

from different habitats within the assessment area under Contract 1 is presented on **Table 2**. A total of 130 species were recorded within the assessment boundary of Contract 1 in which 121 species were recorded within the buffer area, while 52 species recorded within the work areas under Contract 1. No protected species were recorded.

## 5.2 Avifauna

A total of 18 bird species were recorded in the current survey under Contract 1(**Table 3**). In the work area under Contract 1, 6 bird species were recorded in which one wetland dependent species *Ardeola bacchus* is recognized as being regional conservation conern. A total of 18 bird species were recorded in the 100m buffer area in which three species, *Ardeola bacchus, Corvus torquatus* and *Nycticorax nycticorax*, are recognized as being regional or local conservation concern. (Viney et al., 2005).

## 5.3 Herpetofauna

No reptile was recorded within the assessment area. Mating call of Gunter's Frog, was heard from the water of pools, ditches and river bank within the 100m buffer zone. Common Toad was found on both work area and buffer zone of the site. The species recorded belongs to common species in Hong Kong. (**Table 4**)

## 5.4 Butterflies

A total of 10 butterfly species were recorded during surveys (**Table 5**). However, none of the species are of the conservation concern..

## 5.5 Odonata

3 odonata species were recorded during the surveys (**Table 6**). The species Wandering glider (*Pantala flavescens*) was found within the work boundaries under Contract 2 & along the river bank in the 100m buffer area, while the species Common Flangetail (*Ictinogomphus pertinax*) & Yellow Featherlegs (*Copera marginipes*) were only found along the river bank in the 100m buffer area.

## 5.6 Mammal

No mammals or trace of mammals was observed within the assessment area.

## 5.7 Aquatic fauna

Under Contract 1 (i.e. SEMP 1 & 2), a total of 9 fish species, 2 crustaceans, 1 bivalve and 1 snail were recorded and most of them were residing in brackish environments (**Table 7**). Some river works were carried out in SEMP 1 as showed in **Figure 2**. Overall, no protected or rare species were recorded.

## 6. Remedial measures adopted to the adverse condition

There was no non-compliance event recorded within this reporting month.

# 7. Record of complains and remedial measures

There was no complaint in relation to environmental issue recorded in this reporting month.

# 8. Review of the monitoring results

During the present survey period, construction activities were carried out at works area under Contract 1, while 100 m buffer area remains natural. Much of the construction activities are carried out at Tung Tsz Nursery and pumping station under Contract 1. In general, lower numbers of species were recorded within the works area under Contract 1 than that of 100 m buffer area because of the associated constructions and urbanized in nature. It is noted that the diversity of aquatic fauna in SEMP 2 under Contract 1 is relatively lower because of the recent river works at SEMP 1 where has been regarded as the corridor for aquatic fauna to move between Wai Ha River and the marine area outside the assessment area. However, most of the construction activities are restricted in the developed area with low ecological significance. As mitigation measures recommended in the EM&A Manual were properly implemented during the current survey, and hence the residual environmental impacts would be minimized.

# 9. Forecast of works programme and monitoring requirements

The tentative construction activities undertaken by the contractor in the coming months are as follows:

## Area A (Pumping Station)

- External finishing works for main structure of pumping station
- Final testing works of E&M
- External Misc. Works & Landscaping Works

## Area B (Tung Tsz Nursery)

- Excavation for the construction of box culvert in Tung Tsz Nursery
- Reinstallation and Reinstatement of Existing Structure, Facilities and Trees.

## Area C (ECA)

In Maintenance Period

The monitoring programme described in EM&A will strictly follow to verify compliance of environmental requirements and the proper implementation of all necessary mitigation measures.

# **10.** Comments and summary

The bi-monthly ecological impact monitoring under Contracts 1 (excluding the ECA) was conducted in September 2012 and relevant flora and fauna data were collected according to project specification and EM & A Manual. As indicated by the low diversity and abundance of species recorded within the work areas, habitats within the work boundary under Contracts 1 offer few ecological opportunities for inhabitation of fauna and flora. Given that the construction activities are restricted in the developed area with proper mitigation measures being implemented, disturbances associated with the current construction activities are largely affecting area with low ecological significance. On the other hand, the natural habitats in the 100 m buffer area are retained at acceptable condition, and hence the 100 m buffer area has not been significantly affected by the construction works.

## 11. References

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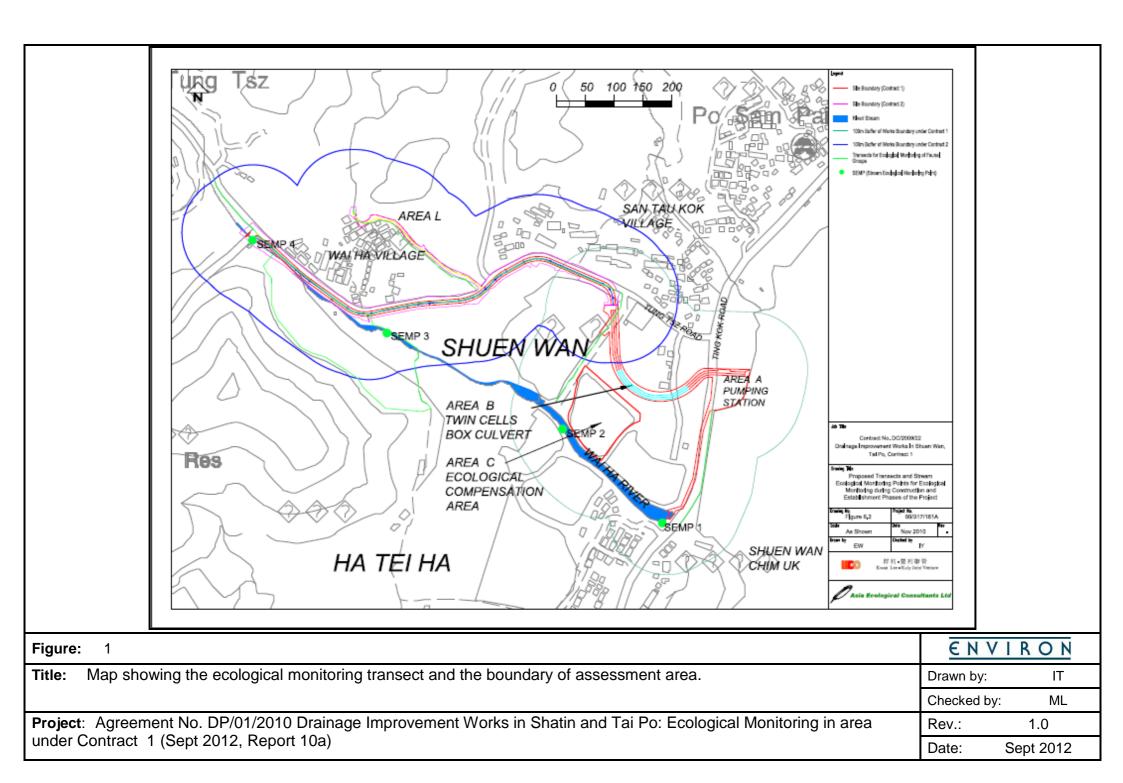
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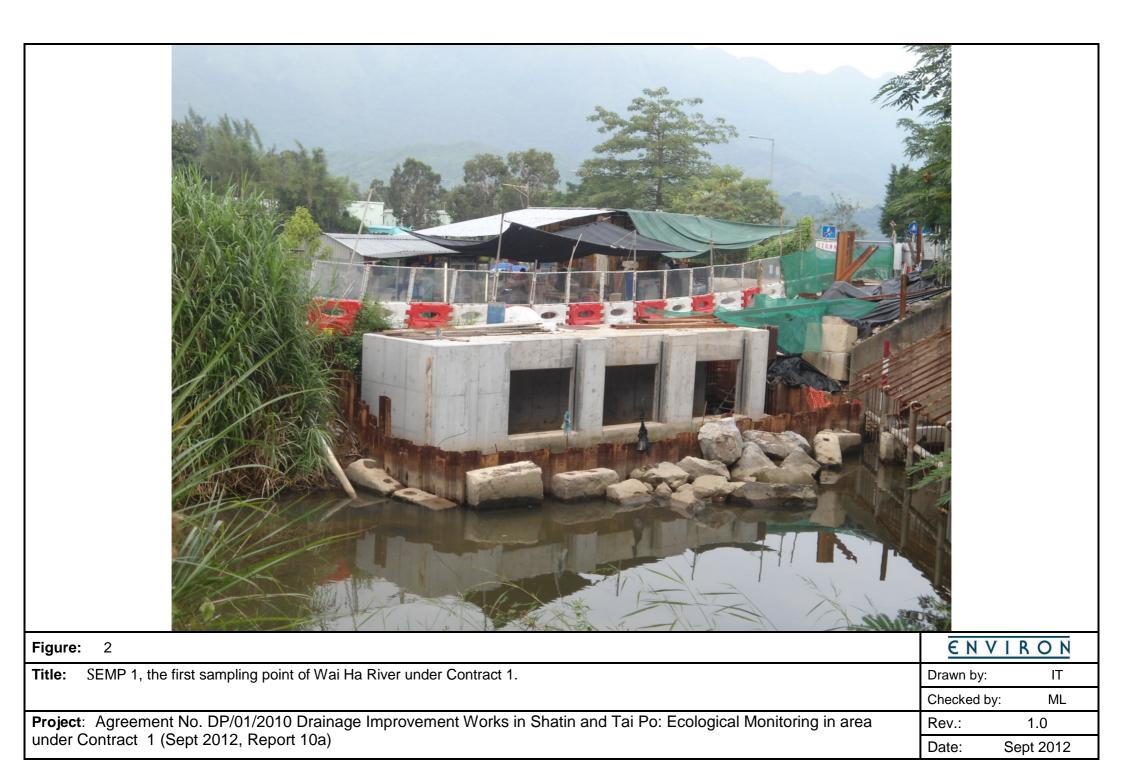
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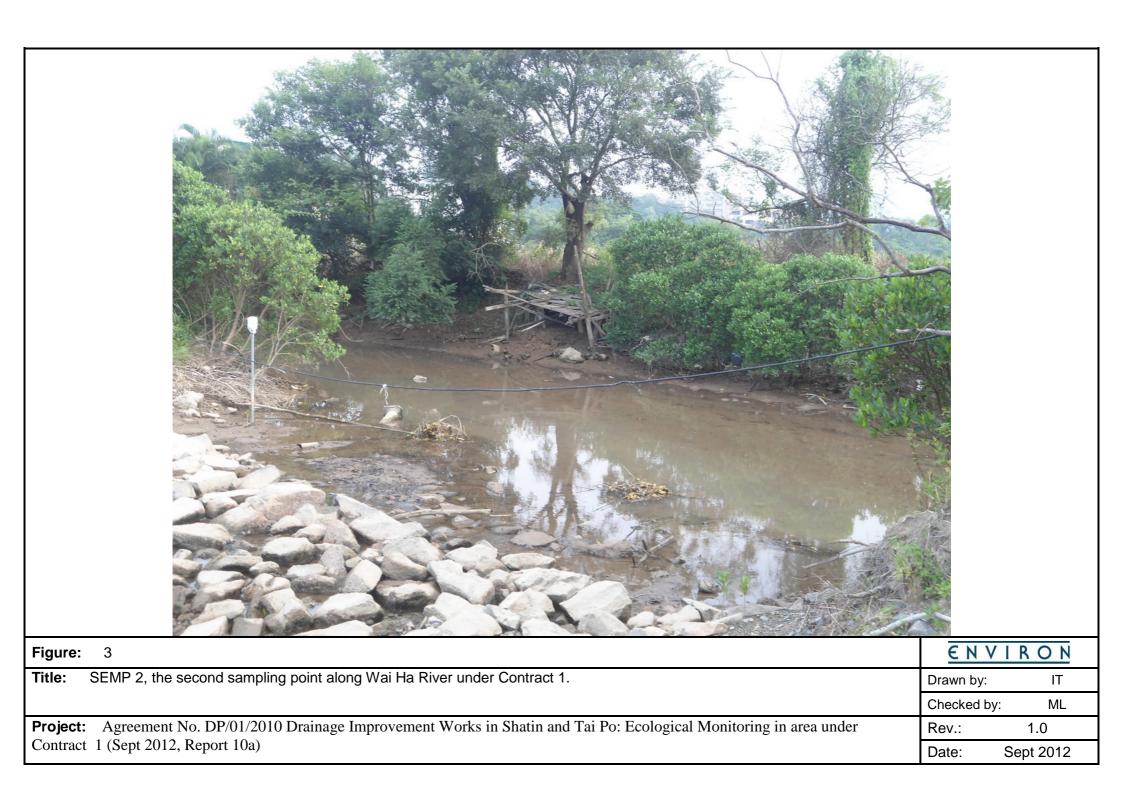
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Figure







Table

			Sampling point	SEMP 1		SEMP 2	
Species	Family	Growth form	Status in Hong Kong	Height (cm)	%	Height (cm)	%
Albizia lebbeck	MIMOSACEAE	Tree	Е			400	10
Amaranthus viridis	AMARANTHACEAE	Herb	N	30	1		
Arundinella nepalensis	POACEAE	Perennial Herb	N			150	2
Bidens alba	ASTERACEAE	Herb	Е	30	10		
Celtis sinensis	ULMACEAE	Tree	N			500	10
Digitaria ciliaris	POACEAE	Herb	N	20	1		
Eclipta prostrata	ASTERACEAE	Perennial herb	N	30	1		
Ficus virens	MORACEAE	Tree	N	100	1		
Kandelia obovata	RHIZOPHORACEAE	Shrub or Small Tree	N			150	4
Leucaena leucocephala	MIMOSACEAE	Small Tree	Е			600	40
Macaranga tanarius	EUPHORBIACEAE	Tree	N			100	1
Mikania micrantha	ASTERACEAE	Climbing Herb	Е	10	1		
Pennisetum alopecuroides	POACEAE	Perennial Herb	N	250	10		
Plantago major	PLANTAGINACEAE	Perennial herb	N	30	15		
Bare	n/a	n/a	n/a	n/a	60	n/a	33

**Table 1.** List of riparian vegetation and coverage (%) recorded from two stream sampling points under Contract 1 (i.e. SEMP 1, 2).

\*Key:

E = Exotic

N = Native

n/a = not available

**Table 2**. List of vegetation recorded from works area under Contracts 1 and 100 m buffer area in the impact monitoring survey conducted in July 2012. Vegetation species presents in the identified location was indicated by "V".

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
Stream	Chrysalidocarpus lutescens	ARECACEAE	Shrub Palm	Е		V
	Melia azedarach	MELIACEAE	Tree	Е		V
	Murraya paniculata	RUTACEAE	Small Tree	Е		V
	Lantana camara	VERBENACEAE	Shrub	Е		V
	Ficus hispida	MORACEAE	Tree	Ν		V
	Ficus virens	MORACEAE	Tree	Ν		V
	Chrysopogon aciculatus	POACEAE	Perennial Herb	N		V
	Microstegium ciliatum	POACEAE	Perennial Procumbent Herb	N		V
	Mucuna birdwoodiana	FABACEAE (PAPILIONACEAE)	Climber: Vine	N		V
	Pistia stratiotes	ARACEAE	Floating Aquatic Herb	N		V
	Cyperus flabelliformis	CYPERACEAE	Herb	Е		V
	Acanthopanax gracilistylus	ARALIACEAE	Shrub	Е		V
	Ficus triangularis	MORACEAE	Tree	Е		V
	Spirodela polyrrhiza	LEMNACEAE	Floating Small Herb	N		V
	Glochidion zeylanicum	EUPHORBIACEAE	Shrub or Small Tree	N		V
	Sterculia lanceolata	STERCULIACEAE	Semi-deciduous Tree	N		V

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
	Albizia lebbeck	MIMOSACEAE	Tree	Е		V
	Arundinella nepalensis	POACEAE	Perennial Herb	Ν		V
	Bidens alba	ASTERACEAE	Herb	E		V
	Clerodendrum inerme	VERBENACEAE	Shrub	Ν		V
	Coculus orbiculatus	MENISPERMACEAE	Climber: Vine	Ν		V
	Hibiscus tiliaceus	MALVACEAE	Tree or Shrub	Ν		V
	Leucaena leucocephala	MIMOSACEAE	Small Tree	Е		V
	Manilkara zapota	SAPOTACEAE	Tree	Е		V
	Sapium discolor	EUPHORBIACEAE	Tree	N		V
Developed area	Pericampylus glaucus	MENISPERMACEAE	Woody Vine	N		V
	Ficus variegata var. chlorocarpa	MORACEAE	Tree or Shrub	N	V	V
	Citrus reticulata Blanco	RUTACEAE	Small Tree	Е		V
	Salvia japonica	LAMIACEAE (LABIATAE)	Herb	N		V
	Morus alba	MORACEAE	Tree or Shrub	N		V
	Emilia sonchifolia	ASTERACEAE	Herb	N		V
	Clausena lansium	RUTACEAE	Small Tree	Е		V
	Pyrostegia venusta	BIGNONIACEAE	Climber: Vine	Е		V
	Psidium guajava	MYRTACEAE	Tree	Е		V
	Catharanthus roseus	APOCYNACEAE	Subshrub	N		V
	Archontophoenix alexandrae	ARECACEAE	Tree Palm	Е		V
	Desmodium heterocarpon	FABACEAE (PAPILIONACEAE)	Shrub	N		V
	Rhinacanthus nasutus	ACANTHACEAE	Herb	Е		V
	Acacia confusa	MIMOSACEAE	Tree	Е	V	V
	Artocarpus macrocarpon	MORACEAE	Tree	Е	V	V

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
	Averrhoa carambola	OXALIDACEAE	Small Tree	Е	V	V
	Bauhinia blakeana	CAESALPINIACEAE	Tree or Shrub	N	V	V
	Bauhinia variegata	CAESALPINIACEAE	Tree	Е	V	V
	Bridelia tomentosa	EUPHORBIACEAE	Shrub or Small Tree	N	V	V
	Calliandra haematocephala	MIMOSACEAE	Shrub	Е	V	V
	Caryota ochlandra	ARECACEAE	Tree palm	Е	V	V
	Cassia spectabilis	CAESALPINIACEAE	Small Tree	Е	V	V
	Casuarina equisetifolia	CASUARINACEAE	Tree	Е	V	V
	Citrus grandis	CASUARINACEAE	Tree	Е	V	V
	Cordyline fruticosa	AGAVACEAE	Shrub	Е	V	V
	Cynodon dactylon	POACEAE	Perennial Herb	Ν	V	V
	Dracaena draco	AGAVACEAE	Tree	Е	V	V
	Elaeocapus haminanensis	ELAEOCARPACEAE	Small Tree	Е	V	V
	Eleusine indica	POACEAE	Herb	Ν	V	V
	Eriobotrya japonica	ROSACEAE	Small Tree	Е	V	V
	Ficus benjamina	MORACEAE	Tree	Е	V	V
	Ficus elastica	MORACEAE	Tree	Е	V	V
	Ficus simplicissima	MORACEAE	Shrub	Ν	V	V
	Hibiscus rosa-sinensis	MALVACEAE	Shrub	Е	V	V
	Lantana camara	VERBENACEAE	Shrub	Е	V	V
	Litchi chinensis	SAPINDACEAE	Tree	Е	V	V
	Lumnitzera racemosa	COMBRETACEAE	Shrub or Small Tree	Ν	V	V
	Lygodium japonicum	LYGODIACEAE	Climbing Herb	N	V	V
	Melaleuca quinquenervia	MYRTACEAE	Tree	Е	V	V
	Oxalis corniculata	OXALIDACEAE	Perennial Herb	N	V	V

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
	Phoenix roebelenii	ARECACEAE	Small Tree Palm	Е	V	V
	Polygonum hydropiper	POLYGONACEAE	Herb	Ν	V	V
	Psychotria serpens	RUBIACEAE	Climber: Vine	Ν	V	
	Pterocypsela indica	ASTERACEAE	Herb	Ν	V	V
	Rhapis excelsa	ARECACEAE	Shrub Palm	Ν	V	V
	Sansevieria trifasciata	AGAVACEAE	Perennial Herb	Е	V	V
	Schefflera actinophylla	ARALIACEAE	Climbing Shrub	Е	V	V
	Schefflera heptaphylla	ARALIACEAE	Tree	Ν	V	V
	Sesbania cannabina	FABACEAE	Herb	Е	V	V
	Terminalia catappa	COMBRETACEAE	Large Tree	Е	V	V
	Thuja orientalis	CUPRESSACEAE	Tree	Е	V	V
	Tradescantia spathacea	COMMELINACEAE	Herb	Е	V	V
	Youngia japonica	ASTERACEAE	Herb	Ν	V	V
	Acanthus ilicifolius	ACANTHACEAE	Shrub	Ν		V
	Acrostichum aureum	ACROSTICHACEAE	Herb	Ν		V
	Aegiceras corniculatum	MYRSINACEAE	Shrub	Ν		V
	Alocasia odora	ARACEAE	Perennial Herb	Ν		V
	Avicennia marina	VERBENACEAE	Shrub	Ν		V
	Digitaria ciliaris	POACEAE	Herb	Ν		V
	Panicum repens L.	POACEAE	Perennial Herb	Ν		V
	Pennisetum alopecuroides	POACEAE	Perennial Herb	Ν		V
	Phragmites anstralis	POACEAE	Perennial Herb	N		V
	Plantago major	PLANTAGINACEAE	Perennial herb	N		V
	Solanum nigrum	SOLANACEAE	Herb	N		V
	Bombax ceiba	BOMBACACEAE	Tree	Е	V	
	Bidens alba	ASTERACEAE	Herb	Е	V	
	Panicum maximum	GRAMINEAE	Herb	Е	V	

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
	Microstegium ciliatum	POACEAE	Perennial Procumbent Herb	N	V	
	Leucaena leucocephala	MIMOSACEAE	Small Tree	Е	V	
Plantation	Bischofia javanica	EUPHORBIACEAE	Tree	N		V
	Scolopia chinensis	FLACOURTIACEAE	Tree or Large Shrub	N		V
	Piper hancei	PIPERACEAE	Climber: Vine	N		V
	Dimocarpus longan	SAPINDACEAE	Tree	Е		V
	Paederia scandens	RUBIACEAE	Climber: Vine	Ν		V
	Cleistocalyx operculatus	MYRTACEAE	Tree	Ν		V
	Antidesma bunius	EUPHORBIACEAE	Tree	N		V
	Litsea monopetala	LAURACEAE	Small Tree	N		V
	Microcos paniculata	TILIACEAE	Shrub or Small Tree	N		V
	Maesa perlarius	MYRSINACEAE	Shrub	N		V
	Boehmeria nivea (L.) Gaudich.	URTICACEAE	Subshrub or shrub	Е		V
	Mallotus apelta	EUPHORBIACEAE	Shrub or Small Tree	N		V
	Sapindus saponaria	SAPINDACEAE	Tree	Ν		V
	Aporusa dioica	EUPHORBIACEAE	Tree	N		V
	Wedelia chinensis	ASTERACEAE	Perennial Herb	N		V
	Carica papaya	CARICACEAE	Tree	Е		V
	Rubus reflexus	ROSACEAE	Climbing Shrub	N		V
	Brassica rapa	BRASSICACEAE (CRUCIFERAE)	Biennial Herb	E		V

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
	Mucuna championii Benth.	FABACEAE	Climbing Vine	N		V
	Pinus massoniana	PINACEAE	Tree	N		V
Ting Kok Nursery Community Garden	Bauhinia purpurea	CAESALPINIACEAE	Tree	Е	V	
	Callistemon viminalis	MYRTACEAE	Tree	Е	V	
	Dillenia indica	DILLENIACEAE	Tree	Е	V	
	Lonicera japonica	CAPRIFOLIACEAE	Climber: Vine	Ν	V	
	Tabebuia chrysantha	BIGNONIACEAE	Small Tree	Е	V	
	Wisteria sinensis	FABACEAE	Climber: Vine	Е	V	
Wooded area	Celtis sinensis	ULMACEAE	Tree	Ν		V
	Ligustrum sinensis	OLEACEAE	Tree or Shrub	Ν		V
	Macaranga tanarius	EUPHORBIACEAE	Tree	Ν		V
	Pandanus tectorius	PANDANACEAE	Shrub or Small Tree	N		V
	Excoecaria agallocha	EUPHORBIACEAE	Tree	Ν		V
	Kandelia obovata	RHIZOPHORACEAE	Shrub or Small Tree	N		V
	Thespesia populnea	MALVACEAE	Tree or Shrub	Ν		V
	Zoysia sinica	POACEAE	Perennial Herb	Ν		V
Marsh	Acanthus ilicifolius	ACANTHACEAE	Shrub	Ν		V
	Acrostichum aureum	ACROSTICHACEAE	Herb	N		V
	Aegiceras corniculatum	MYRSINACEAE	Shrub	N		V
	Alocasia odora	ARACEAE	Perennial Herb	N		V
	Avicennia marina	VERBENACEAE	Shrub	N		V
	Digitaria ciliaris	POACEAE	Herb	N		V
	Ficus hispida	MORACEAE	Tree	N		V

Habitat	Species name	Family	Growth form	*Status in Hong Kong	Work Area under Contract 1	100 m buffer area under Contract 1
	Hibiscus tiliaceus	MALVACEAE	Tree or Shrub	Ν		V
	Ipomea cairica	CONVOLVULACEAE	Climber: Twining Herb	E		V
	Kandelia obovata	RHIZOPHORACEAE	Shrub or Small Tree	N		V
	Macaranga tanarius	EUPHORBIACEAE	Tree	Ν		V
	Mikania micrantha	ASTERACEAE	<b>Climbing Herb</b>	Е		V
	Panicum repens L.	POACEAE	Perennial Herb	Ν		V
	Pennisetum alopecuroides	POACEAE	Perennial Herb	Ν		V
	Phragmites anstralis	POACEAE	Perennial Herb	N		V
	Plantago major	PLANTAGINACEAE	Perennial herb	Ν		V
	Polygonum lapathifolium	POLYGONACEAE	Herb	N		V
	Pueraria lobata	FABACEAE	Climber: Vine	N		V
	Schefflera heptaphylla	ARALIACEAE	Tree	N		V
	Solanum nigrum	SOLANACEAE	Herb	N		V
	Solanum torvum	SOLANACEAE	Shrub	Е		V

\*Key:

E = Exotic

N = Native

**Table 3.** List of avifauna species and maximum counts recorded from the impact monitoring survey in July 2012 at work area under Contracts 1 and 100 m buffer area.

Species	Common name	Habitat	Conservation status in Hong Kong	Work area: Contract 2	100m buffer area
Acridotheres cristatellus	Crested Myna			2	3
Ardea cinerea	Grey Heron	W			1
Ardeola bacchus	Chinese Pond Heron	W	RC		1
Casmerodius alba	Great Egret	W			1
Copsychus saularis	Oriental Magpie Robin			1	2
Egretta garzetta	Little Egret	W			2
Garrulax perspicillatus	Masked Laughing thrush				2
Motacilla alba	White Wagtail				1
Orthotomus sutorius	Common Tailorbird				1
Passer montanus	Eurasian Tree Sparrow			2	5
Prinia flaviventris	Yellow-bellied Prinia				1
Pycnonotus jocosus	Red-whiskered Bulbul				2
Pycnonotus sinensis	Chinese Bulbul				1
Streptopelia chinensis	Spotted Dove			2	2
Sturnus nigricollis	Black-collared Starling				2
Total num	ber of species:			4	15

\* Key:

**W** = Wetland dependent spices ; RC = Regional Concern

**Table 4.** List of herpetofauna and maximum counts recorded from the impact monitoring survey in July 2012 at work area under Contracts 1 and 100 m buffer area..

Species	Common name	Conservation status in Hong Kong	Work area: Contract 1	100m Buffer area of Contract 1
Rana guentheri	Gunther's Frog	Common		1@
Kaloula pulchra pulchra	Asiatic Painted Frog	Common		2@
Fejervarya limnocharis	Paddy Frog	Common		1@
Polypedates megacephalus	Brown Tree Frog	Common		2*
Bufo melanostictus	Common Toad	Common	1	1

Key:

@-Calling heard,

\*-Egg founded

**Table 5.** Relative abundance of butterfly species recorded under Contracts 1 in impact monitoring survey during July 2012.

Species	Common name	Conservation status in Hong Kong	Work area: Contract 1	100m Buffer area of Contract 1
Abisara echerius	Plum judy	Very Common		+
Eurema hecabe	Common Grass Yellow	Very Common	+	++
Mycalesis mineus	Dark-brand Bush Brown	Very Common	+	++
Papilio bianor	Chinese Peacock	Common		+
Papilio memnon agenor	Great Mormon	Very Common		+
Papilio polytes	Common mormon	Very Common	+	+
Papilio protenor	Spangle	Very Common		+
Parantica aglea	Glassy Tiger	Common		+
Pieris canidia canidia	Indian Cabbage White	Very Common		+
Ypthima baldus	Common Five-ring	Very Common		+
Zizeeria maha	Pale Grass Blue	Very Common		+

Key:

+ : Species exists in the survey area

++ : Species common in the survey area

+++ : Species abundant in the survey area

**Table 6.** Relative abundance of odonata species recorded under Contracts 1 in impact monitoring survey during July 2012.

Species	Common name	Conservation status in Hong Kong	Work area: Contract 1	100m Buffer area of Contract 1
Pantala flavescens	Wandering Glider	Common	+	+
Ictinogomphus pertinax	Common Flangetail	Common		+

Key:

+ : Species exists in the survey area

++ : Species common in the survey area

+++ : Species abundant in the survey area

**Table 7.** Relative abundance of aquatic species recorded in Wai Ha River within the 100 m buffer of works boundary under Contracts 1 in the impact monitoring survey during July 2012.

Species	Common name	<sup>1</sup> Life-cycle characteristics	<sup>2</sup> Origin	SEMP 1	SEMP 2
Ambassis gymnocephalus	Glassperch	М	N	+	
Cyprinus carpio	Common Carp	F	Ι		+
Gerres macracanthus	Longspine Silverbiddy	М	N	+	
Mugil cephalus	Flatehead Grey Mullet	М	Ν	+	
Opsariichthys evolans	Minnow	F	N	+	
Oreochromis mossambicus	Mozambique Tilapa	F	Ι	++	+
Oreochromis niloticus	Nile Tilapa	F	Ι	++	+
Poecilia reticulata	Guppy	F	Ι		+
Tilapia zillii	Redbelly Tilapa	F	Ι	+	
Sesarma (Perisesarma) bidens	Sesarmine crab	М	Ν		+
Uca arcuata	Fiddler Crab	М	N		+
Saccostrea cucullata	Rock Oyster	М	N	++	+
Cerithidea cingulata	Mud snail	М	N	+	
Total number of species:	13			9	7

#### Key:

Relative abundance:

+ : Species exists in the survey area

++ : Species common in the survey area

+++ : Species abundant in the survey area

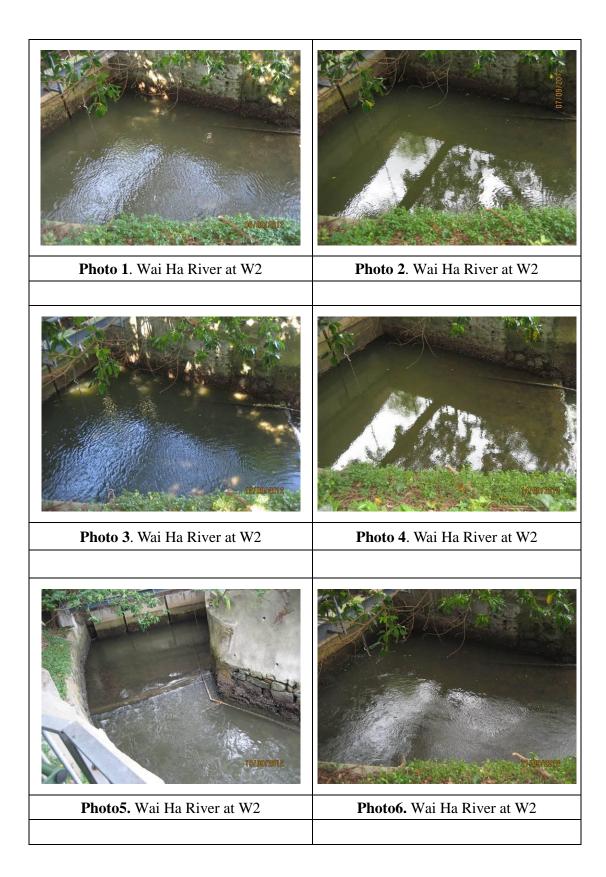
<sup>1</sup>Life-cycle characteristics:

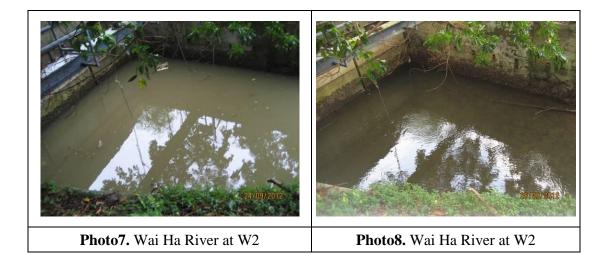
M = Marine vagrant

F = Freshwater species

<sup>2</sup>Origin:

N = Native I = Introduced; / = not available Appendix N. Photo of Wai Ha River in September 2012





Appendix O Approved Proposal of Revision for Action/Limit Level Criteria of Water Quality Monitoring 28th Floor, Southorn Centre,

130 Hennessy Road,

Wan Chai, Hong Kong.

環境保護署分處

香港層仔 軒尼苛扭 百二十党 修照中心廿八桜

(2) in Ax (1) to EP2/G/I/117 Pt.4 本著檔號 OUR REF: 来雨槽皱 YOUR REF: 2835 1581 絬 2802 4511 TEL. NÔ.: 國文傳真 FAX NO.: 双子鲸件 E-MAIL: 航 1 HOMEPAGE: http://www.epd.gov.hk

#### By Post & Fax : 2827 8700

31 May 2012

Drainage Projects Division. Drainage Services Department, 40/F, 44/F & 45/F. Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong (Attn: Mr. SO Chi Ho)

Dear Mr. So,

### Drainage Improvement Works in Sha Tin and Tai Po Environmental Permit No. EP-303/2008 **Revised Water Quality Monitoring**

I refer to the letter from Environmental Pioncers & Solution Ltd (ET Leader) of 17 May 2012 proposing changes to water quality monitoring under the EM&A Programme for the captioned project.

Based on the justifications provided and pursuant to Condition 5.1 of the Environmental Permit No. EP-303/2008, I hereby approve the proposed changes to water quality monitoring.

Yours faithfully.

Principal Environmental Protection Officer for Director of Environmental Protection

97%

c.c.

Internal (w/cncl. proposal enclosed in the letter from Environmental Pioneers & Solutions Ltd. of 17.5.2012)

S(RN)1 EIAO Register Office

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# EP-303/2008

# Enquiry of Revision for Action/Limit Level Criteria of Water Quality Monitoring

	Prepared By:	Verified By:	Submitted By:
Parties:	Environmental Team Leader (Environmental Pioneers & Solutions Limited)	IEC (Environ Hong Kong Limited)	Contractor (Kwan Lee – Kuly Joint Venture)
Name:	Ms. Goldie Fung	Mr. Tony Cheng	Mr. C.L. Wong
Signature:		G.	$\overline{\mathcal{D}}$
Date:	16-5-2012	16 May 2012	16/5/2012

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### 1. Introduction

Environmental Pioneers and Solutions Limited (EPSL) has been appointed to work as the Environmental Team (ET) for the Contract No. DC/2009/22 Drainage Improvement Works in Shuen Wan, Tai Po (Contract no. 1) to implement the Environmental Monitoring and Audit (EM&A) programme.

The scope of the Project includes the following works:-

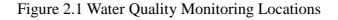
- Construction of a 1000m long, 3m x 2.5m twin-cell box culvert along Tung Tsz Road;
- (2) Replacement of existing gates by automatic mechanical gates at the mouth of Wai Ha River;
- (3) Construction of a 280m long, 1200 dia. Drainage pipe near Wai Ha Village;
- (4) Construction of a 260m long, 2100 dia. Flood relief drain along Ting Kok Road; and
- (5) Construction of a floodwater pumping station at Shuen Wan.

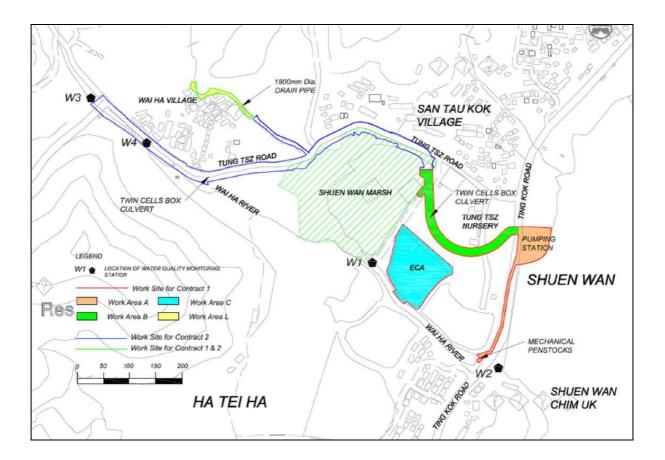
The construction period of the project was commenced on February 26<sup>th</sup>, 2010 and anticipated to complete in August 2013.

### 2. Water Quality Monitoring

### 2.1 Monitoring Locations

There are two separate contracts covered by the Environmental Permit EP-303/2008, including contract no. DC/2009/22 (contract no. 1) and contract no. DC/2010/02 (contract no. 2). There are totally 4 monitoring stations (W1, W2 and W4 for impact monitoring station and W3 for control station) selected for the water quality monitoring. With reference to the Clause 4.25 of EM&A Manual (Rev. 3), the water samples are collected at mid-depth of each proposed monitoring stations for measuring due to the water depth is less than 3m. The Location Plan is shown in Figure 2.1 for reference.





#### 2.2 Reference Points for Contract No. 1

The construction activities of contract no. 1 were commenced on 9 March 2011 and anticipated to be completed in February 2013 and those of contract no. 2 were commenced on 29 April 2011 and anticipated to be completed on 27 October 2013. According to the current site situation of the project, there are construction activities carrying out for contract no. 1 and no. 2. The water quality of control station W1 may be affected by the construction activities of contract no. 2. Under this circumstance, 2 additional reference points (C1 and C2) are proposed for the water quality monitoring of contract no. 1. The water quality of both C1 and C2 will not be affected by any construction activities of this project. The location of C1 and C2 can refer to the Fig. 2.2. Reference point C1 is located at 20m apart from the estuary of Wai Ha River. The water quality of C1 will not be affected by the construction activities at flood tide and is free from contamination. The water quality parameter of C1; W1 and W2 are listed in Appendix A for reference. Reference point C2 is the same monitoring location of W3 which is approximate 70m apart from the site boundary and will not be affected by the construction activities.

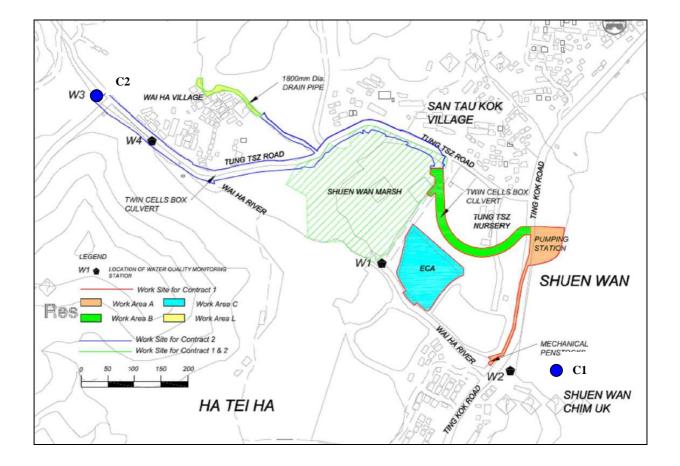


Figure 2.2 Reference Points C1 and C2 Locations

The monitoring parameters of C1 and C2 are same as those of W1, and the monitoring data of C1 and C2 will be reported as the supplementary information. When the water quality of W2 exceed the Action/Limit levels criteria, the monitoring data of C1 will be used for comparison when the monitoring of W2 is taken at flood tide; and the monitoring data of C2 will be used for comparison when the monitoring of W2 is taken at ebb tide. The comparison of water quality between W2 and C1 at flood tide and between W2 and C2 at ebb tide can help to prove whether influence of water quality is caused by the construction activities. The water quality monitoring of W1 will continuously be carried out and the collected data will be submitted for reference as well.

### 2.3 Data Analysis

With reference to the Location Plan shown in Figure 2.1, control station W3 is at the upstream location of the Wai Ha River for this project. According to the location, the water quality of W3 can be considered to be not affected by any construction activities of the project. Besides, the level of W3 should be +5.08mPD and its water quality can be considered to be not undergone any tidal influence. Based on these criteria, the Dissolved Oxygen (DO) of control station W3 were used for the analysis in the following sections. In order to indicate the current situation of DO level of the river, the DO level of W3 measured from August 2011 to January 2012 were selected to compare with baseline data.

### a. Baseline Monitoring Data

The baseline data of DO of W3 are shown in Appendix B. The baseline monitoring data were collected before the commencement of any construction activities in dry season from 7<sup>th</sup> January, 2011 to 2<sup>nd</sup> February 2011. According to the submitted Baseline Environmental Monitoring Report, the Action/Limit level for monitoring station W3 are indicated in Table 2.1.

Parameters	Monitoring Statio	ons (Flood Tide)	Monitoring Stations (Ebb Tide)		
	Action	Limit	Action	Limit	
	Level	Level	Level	Level	
DO (mg/L)	8.66	8.00	8.71	8.61	

Table 2.1 Action and Limit Levels for	Water Quality at Monitoring Stations W3
	water Quanty at Montoring Stations we

### b. Impact Monitoring Data

Water quality monitoring (WQM) for control station W3 was carried out 13 times in August 2011; 14 times in September 2011; 12 times in October 2011; 13 times in November 2011; 13 times in December 2011; 12 times in January 2012. The collected DO data of W3 in these 77 times monitoring are shown in Appendix C. Average DO monitoring result of each month at W3 are summarized in Table 2.2.

Month	Average Dissolved Oxygen (DO) in mg/L (Range)
August 2011	6.44 (7.31 – 4.44)
September 2011	6.08 (7.32 – 4.49)
October 2011	5.91 (6.86 – 5.09)
November 2011	5.79 (6.72 – 4.62)
December 2011	6.50 (7.91 – 5.09)
January 2012	7.14 (8.89 – 5.10)

Table 2.2 Water quality monitoring results of Dissolved Oxygen at W3

By comparing the WQM results from August 2011 to January 2012 and Action/Limit level (Ebb Tide) of W3 in Table 2.1, it is observed that only one WQM result has not exceeded the Action/Limit level and all other WQM results have exceeded the Limit Level. The result is highlighted in Appendix D for reference. As mentioned before, the water quality of W3 will not be affected by any construction activities of the project, so that the cause of exceedance may due to the natural fluctuation such as temperature and seasonal change.

### c. Variation between Dry and Wet Seasons

As the cause of exceedance may due to the seasonal change, the variation between dry and wet season is calculated as below for the compensation of seasonal change. As the water quality in the Wai Ha River (also referred to as Tung Tze Stream) is monitored under the Environmental Protection Department (EPD) routine river water quality monitoring programme. Ten years (Year 2001 to 2010) of river water quality data at station TR6 Tung Tze Stream are extracted from EPD database for the calculation of DO variation between Dry and Wet seasons. TR6 is located near the estuary of Tung Tze Stream and the location can refer to the map in Appendix E. The raw data are listed in Appendix F for reference. After analyzed the distribution of the ten years data (refer to Appendix G), median of DO for dry and wet seasons are used to calculated the DO variation to eliminate the effect of the lowest and the highest values. The DO variation between Dry and Wet seasons variation is calculated by equation (eqt. 2-1).

Variation = (Dry Season  $_{median}$  – Wet Season  $_{median}$ ) / Dry Season  $_{median}$  (eqt. 2-1)

According to the condition 3.7 of the Environmental Permit EP-303/2008, dry season should be defined from October to April; and the wet season should be defined from May to September. The data from October to April are used for the calculation of Dry Season; the data from April to October are used for the calculation of Wet Season. Total 6 sets of result for 3 different time period are calculated for comparison. Both median and mean of the DO have been calculated for time periods including 1) Recent year - Year 2010; 2) Four years data – from Year 2007 to 2010; and 3) Ten years data – from Year 2001 to 2010. The results can refer to Table 2.3.

Table 2.3 DO variation between dry and wet season from 2007 to 2010 at station TR6, Tung TzeStream

Collected Data	DO(mg/l)	Wet season	Dry season	Variation
Year 2010	Median	6.50	6.50	0%
Year 2007-2010	Median	5.65	6.55	13.74%
Year 2001-2010	Median	5.80	6.40	9.37%
Year 2010	Mean	6.16	6.36	3.14%
Year 2007-2010	Mean	5.81	6.28	7.48%
Year 2001-2010	Mean	5.85	6.38	8.31%

From the results in Table 2.3, the highest variation value 13.74% is used to enhance the effect of applying the variation. By applying the variation (13.74%) to the baseline data, a new set of Action/Limit level is calculated by equation (eqt. 2-2) and the result are shown in Table 2.4.

Revised Level = Original Level x (1-13.74%) (eqt. 2-2)

Parameters		Monitoring S Tio		C	Stations (Ebb ide)
		Action Level	Limit Level	Action Level	Limit Level
Original Level	DO (mg/L)	8.66	8.00	8.71	8.61
Revised level	DO (mg/L)	7.47	6.90	7.51	7.43

Table 2.4 New set of Action/Limit Level, using the calculated variation (13.74%)

With reference to the new set of Action/Limit level in Table 2.4, the higher DO level (Ebb tide) were used to compare with the WQM results from August 2011 to January 2012, it is observed that there were only five times of WQM results have not exceeded the Action/Limit level and all other 72 times of WQM results have exceeded the Limit Level. The result is highlighted in Appendix H for reference. Since W3 functions as the control station of this project, its water quality should not be affected by the construction works of this project. From the comparison results with the original and revised Action/Limit level, it was observed that both sets of Action/Limit level cannot reflect the actual river condition.

#### 3. Conclusion

After the consideration of seasonal change which may affect the DO of W3 in section 2.3, the DO of W3 will also exceed the Limit level in almost all the measurement day in both dry and wet seasons. After the consideration of seasonal change and applied the DO variation between wet and dry season to amend the Action/Limit level, the DO of W3 will also exceed the Limit level in both dry and wet seasons. Both the original and revised Action/Limit level could not reflect the actual condition of Wai Ha River. The Action/Limit level criteria should be revised so as to reflect the actual condition of Wai Ha River.

With reference to other EM&A projects of river work in Hong Kong (refer to Appendix I), the limit level for DO is 4 mg/L and without the comparison of the percentile of baseline data. Suggest that the Action Level criteria remain unchanged which is DO exceedance occur when impact monitoring data is lower than 5

percentile of baseline data; and the Limit Level criteria should be revised to DO exceedance occur when impact monitoring data is lower than 4 mg/L.

Parameter	Original Limit Level	<b>Revised Limit Level</b>
DO in mg/L 4 mg/L or 1%-ile of baseline		4 mg/L
	data	

# EP-303/2008 Water Quality Baseline Monitoring of Reference Point C1 - Flood

Position	Tide	Weather	Date	Time	Location	pH value	Salinity (ppt)	Temperature (°C)	Turbidity (NTU)	DO (mg/L)
				8:45	C1	8.5	28.1	18	0.1	9.21
Mid	Flood	Cloudy	2/3/2012	8:57	W2	7.16	4	18.1	11.7	7.16
				9:23	W1	7.12	0.1	19.3	6	7.47
	Mid Flood Cloudy			15:35	C1	8.59	28.3	20.8	0.1	9.5
Mid		Cloudy	5/3/2012	15:18	W2	7.14	6.6	21	7.2	6.97
				15:00	W1	7.1	0.4	21.4	3.4	6.91
			loudy 7/3/2012	16:45	C1	8.51	29	20.5	0.1	9.32
Mid	Flood	Cloudy		16:30	W2	7.78	16.4	20.8	14.4	7.51
				16:00	W1	7.3	3.8	20.4	27.3	7.39
				9:40	C1	8.55	28.2	16.7	0.1	9.53
Mid	Mid Flood	d Rainy	12/3/2012	9:55	W2	8.18	26.3	16.9	1.2	7.86
					10:25	W1	7.94	21.5	16.9	5.3

EP-303/2008
Water Quality Baseline Monitoring of Control Point W3 - Flood

Location	Position	Tide	Date	Time	Weather	DO (	mg/L)	Average	DO	(%)	Average
Location	FUSILION	Tide	Dale	Time	weather	Data 1	Data 2	Average	Data 1	Data 2	Average
W3	Mid	Flood	7/1/2011	9:20	Cloudy	9.55	9.46	9.51	88	89	89
W3	Mid	Flood	10/1/2011	12:00	Cloudy	10.12	10.13	10.13	113	110	112
W3	Mid	Flood	12/1/2011	12:50	Cloudy	7.83	7.86	7.85	95	96	96
W3	Mid	Flood	14/1/2011	13:00	Cloudy	9.67	9.52	9.60	98	96	97
W3	Mid	Flood	17/1/2011	15:40	Cloudy	9.92	9.81	9.87	105	104	105
W3	Mid	Flood	19/1/2011	17:45	Sunny	9.25	9.41	9.33	98	101	100
W3	Mid	Flood	21/1/2011	7:40	Sunny	10.86	10.52	10.69	103	104	104
W3	Mid	Flood	24/1/2011	9:15	Cloudy	9.56	9.71	9.64	101	106	104
W3	Mid	Flood	26/1/2011	11:00	Sunny	11.10	10.69	10.90	111	108	110
W3	Mid	Flood	28/1/2011	13:05	Sunny	10.21	9.89	10.05	103	99	101
W3	Mid	Flood	31/1/2011	16:10	Sunny	10.54	10.72	10.63	116	112	114
W3	Mid	Flood	2/2/2011	7:00	Cloudy	10.78	10.66	10.72	109	103	106
5 percentile		DO Acti	on			8.	07	8.66			
1 percentile		DO Lim	nit			7.8	84	8.00			

EP-303/2008
Water Quality Baseline Monitoring of Control Point W3 - Ebb

Location	Desition	Position Tide Date		Time	Weather	DO (mg/L)		ng/L)		DO (%)	
Location	Position	nde	Dale	Time	weather	Data 1	Data 2	Average	Data 1	Data 2	Average
W3	Mid	Ebb	7/1/2011	14:10	Cloudy	8.91	9.00	8.96	97	99	98
W3	Mid	Ebb	10/1/2011	17:10	Cloudy	9.00	8.85	8.93	94	91	93
W3	Mid	Ebb	12/1/2011	18:40	Cloudy	9.84	9.61	9.73	96	95	96
W3	Mid	Ebb	14/1/2011	7:50	Cloudy	9.98	9.77	9.88	101	95	98
W3	Mid	Ebb	17/1/2011	10:30	Cloudy	10.92	10.63	10.78	104	104	104
W3	Mid	Ebb	19/1/2011	11:25	Sunny	8.77	8.41	8.59	96	97	97
W3	Mid	Ebb	21/1/2011	13:10	Sunny	10.08	9.97	10.03	106	101	104
W3	Mid	Ebb	24/1/2011	15:30	Cloudy	8.93	8.67	8.80	96	94	95
W3	Mid	Ebb	26/1/2011	17:35	Sunny	10.71	10.24	10.48	109	103	106
W3	Mid	Ebb	28/1/2011	7:50	Sunny	9.58	9.55	9.57	97	84	91
W3	Mid	Ebb	31/1/2011	10:45	Sunny	11.33	10.76	11.05	113	106	110
W3	Mid	Ebb	2/2/2011	12:15	Cloudy	9.96	9.59	9.78	102	96	99
5 percentile	DO Action					8.	69	8.71			
1 percentile		DO Lin	nit			8.4	47	8.61			

Monitoring Date	DO mg/L	Monitoring Date	DO mg/L	<b>Monitoring Date</b>	DO mg/L		
1-Aug-2011	6.93	30-Sep-2011	5.52	1-Dec-2011	5.68		
3-Aug-2011	7.31	4-Oct-2011	5.09	3-Dec-2011	5.09		
6-Aug-2011	6.89	6-Oct-2011	5.12	6-Dec-2011	6.17		
8-Aug-2011	7.26	8-Oct-2011	5.89	8-Dec-2011	5.59		
11-Aug-2011	6.01	11-Oct-2011	6.09	10-Dec-2011	6.58		
13-Aug-2011	6.76	13-Oct-2011	6.53	13-Dec-2011	6.44		
15-Aug-2011	7.03	15-Oct-2011	5.19	15-Dec-2011	7.15		
17-Aug-2011	6.40	18-Oct-2011	5.21	17-Dec-2011	6.60		
19-Aug-2011	6.74	20-Oct-2011	6.04	20-Dec-2011	6.68		
23-Aug-2011	6.21	22-Oct-2011	6.86	22-Dec-2011	7.14		
25-Aug-2011	5.07	25-Oct-2011	6.58	24-Dec-2011	7.91		
27-Aug-2011	4.44	27-Oct-2011	6.39	29-Dec-2011	6.90		
30-Aug-2011	6.71	29-Oct-2011	5.92	31-Dec-2011	6.63		
1-Sep-2011	7.18	1-Nov-2011	5.66	3-Jan-2012	6.22		
3-Sep-2011	7.32	3-Nov-2011	6.64	5-Jan-2012	6.90		
6-Sep-2011	5.86	5-Nov-2011	6.58	7-Jan-2012	5.10		
8-Sep-2011	5.66	8-Nov-2011	5.47	10-Jan-2012	7.10		
10-Sep-2011	6.88	10-Nov-2011	6.72	12-Jan-2012	7.25		
12-Sep-2011	6.44	12-Nov-2011	6.53	14-Jan-2012	6.90		
15-Sep-2011	6.09	15-Nov-2011	6.51	17-Jan-2012	7.60		
17-Sep-2011	5.73	17-Nov-2011	4.74	19-Jan-2012	6.50		
20-Sep-2011	6.26	19-Nov-2011	4.62	21-Jan-2012	8.41		
22-Sep-2011	4.49	22-Nov-2011	5.09	26-Jan-2012	8.89		
24-Sep-2011	6.43	24-Nov-2011	5.70	28-Jan-2012	7.62		
26-Sep-2011	5.36	26-Nov-2011	5.69	31-Jan-2012	7.18		
28-Sep-2011	5.91	29-Nov-2011	5.38				

Appendix C – W3 Monitoring data of dissolved oxygen from August 2011 to January 2012

Monitoring Date	DO	Monitoring Date	DO	Monitoring Date	DO
1 4 2011	mg/L	20.0 2011	mg/L	1.D. 2011	mg/L
1-Aug-2011	6.93	30-Sep-2011	5.52	1-Dec-2011	5.68
3-Aug-2011	7.31	4-Oct-2011	5.09	3-Dec-2011	5.09
6-Aug-2011	6.89	6-Oct-2011	5.12	6-Dec-2011	6.17
8-Aug-2011	7.26	8-Oct-2011	5.89	8-Dec-2011	5.59
11-Aug-2011	6.01	11-Oct-2011	6.09	10-Dec-2011	6.58
13-Aug-2011	6.76	13-Oct-2011	6.53	13-Dec-2011	6.44
15-Aug-2011	7.03	15-Oct-2011	5.19	15-Dec-2011	7.15
17-Aug-2011	6.40	18-Oct-2011	5.21	17-Dec-2011	6.60
19-Aug-2011	6.74	20-Oct-2011	6.04	20-Dec-2011	6.68
23-Aug-2011	6.21	22-Oct-2011	6.86	22-Dec-2011	7.14
25-Aug-2011	5.07	25-Oct-2011	6.58	24-Dec-2011	7.91
27-Aug-2011	4.44	27-Oct-2011	6.39	29-Dec-2011	6.90
30-Aug-2011	6.71	29-Oct-2011	5.92	31-Dec-2011	6.63
1-Sep-2011	7.18	1-Nov-2011	5.66	3-Jan-2012	6.22
3-Sep-2011	7.32	3-Nov-2011	6.64	5-Jan-2012	6.90
6-Sep-2011	5.86	5-Nov-2011	6.58	7-Jan-2012	5.10
8-Sep-2011	5.66	8-Nov-2011	5.47	10-Jan-2012	7.10
10-Sep-2011	6.88	10-Nov-2011	6.72	12-Jan-2012	7.25
12-Sep-2011	6.44	12-Nov-2011	6.53	14-Jan-2012	6.90
15-Sep-2011	6.09	15-Nov-2011	6.51	17-Jan-2012	7.60
17-Sep-2011	5.73	17-Nov-2011	4.74	19-Jan-2012	6.50
20-Sep-2011	6.26	19-Nov-2011	4.62	21-Jan-2012	8.41
22-Sep-2011	4.49	22-Nov-2011	5.09	26-Jan-2012	8.89
24-Sep-2011	6.43	24-Nov-2011	5.70	28-Jan-2012	7.62
26-Sep-2011	5.36	26-Nov-2011	5.69	31-Jan-2012	7.18
28-Sep-2011	5.91	29-Nov-2011	5.38		

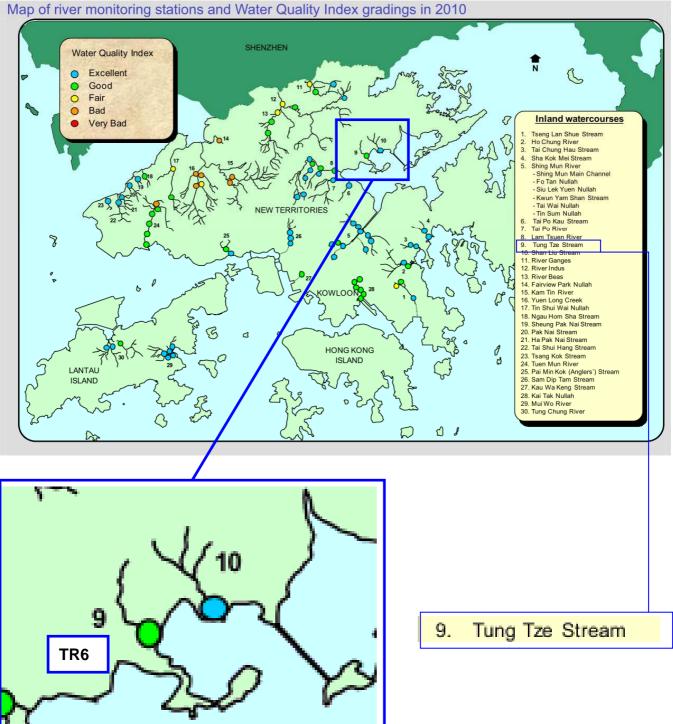
Appendix D - Exceedance records from August 2011 to January 2012 for Existing Criteria

**Remarks:** 

Red highlight: The value is exceeded Limit Level (<8.61)

Yellow highlight: The value is exceeded Action Level (<**8.71**)

# Appendix E – Location of TR6 at Tung Tze Stream



# Appendix F

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Dry Season

				DO (mg/l)
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/1/2001	8.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	12/2/2001	10.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/3/2001	5
Tolo Harbour And Channel	Tung Tze Stream	TR6	19/4/2001	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	12/10/2001	6.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/11/2001	7.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	17/12/2001	6.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/1/2002	6.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	20/2/2002	7.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/3/2002	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/4/2002	6.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/10/2002	4.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/11/2002	6.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/12/2002	5.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/1/2003	7.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/2/2003	7.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/3/2003	6.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	10/4/2003	7.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/10/2003	4.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/11/2003	5.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/12/2003	7.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	9/1/2004	6.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/2/2004	8.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/3/2004	6
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/4/2004	7.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/10/2004	4.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/11/2004	5.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/12/2004	5.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/1/2005	7.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	1/2/2005	5.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/3/2005	8.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/4/2005	5.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/10/2005	5.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/11/2005	5.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/12/2005	5.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/1/2006	5.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/2/2006	6
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/3/2006	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/4/2006	8.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/10/2006	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/11/2006	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/12/2006	7.4

# Appendix F

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Dry Season

				DO (mg/l)
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/1/2007	5.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/2/2007	7.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/3/2007	5.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	13/4/2007	5.3
Tolo Harbour And Channel	Tung Tze Stream	TR7	4/10/2007	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/11/2007	5
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/12/2007	7.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/1/2008	6.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	13/2/2008	6.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/3/2008	6.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	10/4/2008	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	20/10/2008	5.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	13/11/2008	6.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/12/2008	7
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/1/2009	7.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/2/2009	6.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/3/2009	6.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	20/4/2009	5.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/10/2009	4.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/11/2009	6.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/12/2009	7
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/1/2010	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/2/2010	7.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/3/2010	5.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/4/2010	6.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	20/10/2010	6.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	17/11/2010	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	15/12/2010	5.6

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Wet Season

				DO (mg/l)
Tolo Harbour And Channel	Tung Tze Stream	TR6	24/5/2001	6.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	15/6/2001	5.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	11/7/2001	7.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/8/2001	6.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	19/9/2001	5.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	22/5/2002	4.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/6/2002	5
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/7/2002	5.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/8/2002	5.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/9/2002	5.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	14/5/2003	5.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	9/6/2003	4.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	11/7/2003	6.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/8/2003	5.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/9/2003	5.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/5/2004	6.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	4/6/2004	5.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/7/2004	5.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	9/8/2004	6.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/9/2004	6.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/5/2005	6
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/6/2005	5.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	8/7/2005	6.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/8/2005	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/9/2005	6.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	11/5/2006	5.2
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/6/2006	7
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/7/2006	5.6
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/8/2006	6.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	6/9/2006	5

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Wet Season

				DO (mg/l)
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/5/2007	6.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	1/6/2007	5.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	5/7/2007	7.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	2/8/2007	6.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	10/9/2007	6.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	16/5/2008	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/6/2008	5.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/7/2008	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	25/8/2008	6.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	18/9/2008	4.1
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/5/2009	6
Tolo Harbour And Channel	Tung Tze Stream	TR6	3/6/2009	5.4
Tolo Harbour And Channel	Tung Tze Stream	TR6	17/7/2009	5.5
Tolo Harbour And Channel	Tung Tze Stream	TR6	7/8/2009	4.9
Tolo Harbour And Channel	Tung Tze Stream	TR6	17/9/2009	5.3
Tolo Harbour And Channel	Tung Tze Stream	TR6	27/5/2010	5.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	30/6/2010	6.8
Tolo Harbour And Channel	Tung Tze Stream	TR6	19/7/2010	5
Tolo Harbour And Channel	Tung Tze Stream	TR6	13/8/2010	6.7
Tolo Harbour And Channel	Tung Tze Stream	TR6	9/9/2010	6.5

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Median of Dry Season

Date	DO(mg/l)
3/1/2001	8.1
12/2/2001	10.2
16/3/2001	5
19/4/2001	6.6
12/10/2001	6.1
16/11/2001	7.2
17/12/2001	6.2
18/1/2002	6.2
20/2/2002	7.3
18/3/2002	6.6
18/4/2002	6.8
3/10/2002	4.9
4/11/2002	6.9
5/12/2002	5.4
3/1/2003	7.3
7/2/2003	7.4
6/3/2003	6.4
10/4/2003	7.1
8/10/2003	4.8
6/11/2003	5.9
4/12/2003	7.5
9/1/2004	6.1
4/2/2004	8.3
3/3/2004	6
2/4/2004	7.2
8/10/2004	4.9
4/11/2004	5.9
2/12/2004	5.1
7/1/2005	7.8
1/2/2005	5.2
4/3/2005	8.2
8/4/2005	5.1
7/10/2005	5.4
3/11/2005	5.7
5/12/2005	5.1

For 2001 to 2010					
Minimum	4.7				
Median	6.40				
Maximum	10.2				
Mean	6.38				

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Median of Dry Season

Date	DO(mg/l)
5/1/2006	5.3
3/2/2006	6
8/3/2006	5.5
3/4/2006	8.4
5/10/2006	6.6
3/11/2006	5.5
5/12/2006	7.4
5/1/2007	5.9
2/2/2007	7.3
2/3/2007	5.2
13/4/2007	5.3
4/10/2007	5.5
2/11/2007	5
4/12/2007	7.3
7/1/2008	6.7
13/2/2008	6.9
6/3/2008	6.1
10/4/2008	6.6
20/10/2008	5.6
13/11/2008	6.3
2/12/2008	7
7/1/2009	7.3
6/2/2009	6.9
5/3/2009	6.7
20/4/2009	5.2
16/10/2009	4.7
16/11/2009 16/12/2009	6.9 7
6/1/2010	7 6.6
18/2/2010	7.4
3/3/2010	5.4
8/4/2010	6.5
20/10/2010	6.4
17/11/2010	6.6
15/12/2010	5.6

For 2007 to 2010					
Minimum	4.7				
Median	6.55				
Maximum	7.4				
Mean	6.28				

For 2010					
Minimum	5.4				
Median	6.50				
Maximum	7.4				
Mean	6.36				

## EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Median of Wet Season

Date	DO(mg/l)
24/5/2001	6.1
15/6/2001	5.7
11/7/2001	7.9
3/8/2001	6.6
19/9/2001	5.2
22/5/2002	4.1
7/6/2002	5
4/7/2002	5.4
2/8/2002	5.7
4/9/2002	5.8
14/5/2003	5.7
9/6/2003	4.9
11/7/2003	6.2
8/8/2003	5.8
5/9/2003	5.6
7/5/2004	6.5
4/6/2004	5.8
7/7/2004	5.2
9/8/2004	6.5
2/9/2004	6.7
6/5/2005	6
3/6/2005	5.8
8/7/2005	6.4
3/8/2005	5.5
2/9/2005	6.5
11/5/2006	5.2
16/6/2006	7
5/7/2006	5.6
2/8/2006	6.7
6/9/2006	5
3/5/2007	6.3
1/6/2007	5.1
5/7/2007	7.3
2/8/2007	6.9
10/9/2007	6.1
16/5/2008	5.5
18/6/2008	5.4 5.5
18/7/2008 25/8/2008	5.5 6.1
18/9/2008	4.1
10/0/2000	7.1

For 2001 to 2010					
Minimum	4.1				
Median	5.80				
Maximum	7.9				
Mean	5.85				

For 2007 to 2010					
Minimum	4.1				
Median	5.65				
Maximum	7.3				
Mean	5.81				

# Appendix G

# EP-303/2008 Dissolved Oxygen Level at Tung Tze Stream Median of Wet Season

Date	DO(mg/l)
7/5/2009	6
3/6/2009	5.4
17/7/2009	5.5
7/8/2009	4.9
17/9/2009	5.3
27/5/2010	5.8
30/6/2010	6.8
19/7/2010	5
13/8/2010	6.7
9/9/2010	6.5

For 2010					
Minimum	5.0				
Median	6.50				
Maximum	6.8				
Mean	6.16				

••		-			-		
<b>Monitoring Date</b>	DO mg/L	Monitoring Date	DO mg/L	<b>Monitoring Date</b>	DO mg/L		
1-Aug-2011	6.93	30-Sep-2011	5.52	1-Dec-2011	5.68		
3-Aug-2011	7.31	4-Oct-2011	5.09	3-Dec-2011	5.09		
6-Aug-2011	6.89	6-Oct-2011	5.12	6-Dec-2011	6.17		
8-Aug-2011	7.26	8-Oct-2011	5.89	8-Dec-2011	5.59		
11-Aug-2011	6.01	11-Oct-2011	6.09	10-Dec-2011	6.58		
13-Aug-2011	6.76	13-Oct-2011	6.53	13-Dec-2011	6.44		
15-Aug-2011	7.03	15-Oct-2011	5.19	15-Dec-2011	7.15		
17-Aug-2011	6.40	18-Oct-2011	5.21	17-Dec-2011	6.60		
19-Aug-2011	6.74	20-Oct-2011	6.04	20-Dec-2011	6.68		
23-Aug-2011	6.21	22-Oct-2011	6.86	22-Dec-2011	7.14		
25-Aug-2011	5.07	25-Oct-2011	6.58	24-Dec-2011	7.91		
27-Aug-2011	4.44	27-Oct-2011	6.39	29-Dec-2011	6.90		
30-Aug-2011	6.71	29-Oct-2011	5.92	31-Dec-2011	6.63		
1-Sep-2011	7.18	1-Nov-2011	5.66	3-Jan-2012	6.22		
3-Sep-2011	7.32	3-Nov-2011	6.64	5-Jan-2012	6.90		
6-Sep-2011	5.86	5-Nov-2011	6.58	7-Jan-2012	5.10		
8-Sep-2011	5.66	8-Nov-2011	5.47	10-Jan-2012	7.10	<b>Remarks:</b>	
10-Sep-2011	6.88	10-Nov-2011	6.72	12-Jan-2012	7.25		
12-Sep-2011	6.44	12-Nov-2011	6.53	14-Jan-2012	6.90	Red highligh	ht: The value is exceed
15-Sep-2011	6.09	15-Nov-2011	6.51	17-Jan-2012	7.60	Limit Level	(<7.43)
17-Sep-2011	5.73	17-Nov-2011	4.74	19-Jan-2012	6.50		
20-Sep-2011	6.26	19-Nov-2011	4.62	21-Jan-2012	8.41	Yellow high	llight: The value is
22-Sep-2011	4.49	22-Nov-2011	5.09	26-Jan-2012	8.89	exceeded A	Action Level (<7.51)
24-Sep-2011	6.43	24-Nov-2011	5.70	28-Jan-2012	7.62		
26-Sep-2011	5.36	26-Nov-2011	5.69	31-Jan-2012	7.18		
28-Sep-2011	5.91	29-Nov-2011	5.38				

Appendix H – W3 Monitoring data of dissolved oxygen from August 2011 to January 2012 with applying 13.74% variation

# Appendix I

## EP-303/2008 Enquiry of Revision for Action/Limit Level Criteria of Water Quality Monitoring

### **Reference Cases**

Case	Environmental Permit No.	Propject Title	EM&A Manual	EIA Report	Limit Level for Water Quality - DO
1.	EP-434/2012	Drainage Improvements in Southern Lantau	Section 4.8.1, Table 4.1		4mg/L
2.	EP-429/2012	Development of the Integrated Waste Management Facilities Phase 1	Section 4a.7.12, Table 4a.4		4mg/L
3.	EP-413/2011	Integration of Siu Ho Wan and Silver Mine Bay Water Treatment Works	Section 4.7.8, Table 4.2		4mg/L
4.	EP-334/2009	Sludge Treatment Facilities	Section 5.8.1.1, Table 5.3		4mg/L
5.	EP-224/2005	Proposed Extension of Public Golf Course at Kau Sai Chau, Sai Kung	Section 3.9.1, Table 3.8		4mg/L
6.	EP-217/2005	Drainage Improvements in Sai Kung		Section 4.7.3, Table 4.2	4mg/L
7.	EP-190/2004	Improvements to San Tin Interchange	Section 4.25, Table 4.1		4mg/L

Appendix P Site Diary

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:

Fine

Typhoon / Warning Signal:

Nil

<u>AM</u> <u>PM</u>

Rainfall (mm)

ST 0, TP 0

Fine

(Hong Kong Observatory's record)

Lineares         Jack Screet         Jack Screet         Jack Screet         Screek									
JORGIN VIEW JUNCED         1         Ausbach (Color Cognication)         CDU         Nume         Constraint         CDU         Nume         COUNTS         CDU         CDU <thc< td=""><td></td><td>Contractor's Site Staff</td><td>No.</td><td>Labour</td><td>Code</td><td>No.</td><td>Labour</td><td>Code</td><td>N</td></thc<>		Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	N
Numm         T         Numm         Construction         Constructi	(Record verbal instructions given)					:			
Formulation Office         1         animole solubility         Constraint         Constraint <thc< td=""><td></td><td></td><td>1</td><td></td><td></td><td>·</td><td></td><td>C401</td><td></td></thc<>			1			·		C401	
Commands by Judgers's Contraste's Processing         Contraste         For         For         Contraste         Co			3					C402	
Comments for Existence / Contractor's Resourcested with the formation of the field of			1				Diver's Linesman / Dredger Crew / Barge Crew	C403	
Commative backets // Centractur's Contracture interview // Versite int			1			4	Excavator	C404	
Obtaining to again of 1.1. Set of the finance of the finan					C305		Heavy Load Labourer	C405	
Protects         Protects         Control         Contro         Control         Control         <	Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306	<u> </u>	Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406	2
Numerical section         Construction         Construc		Environmental Officer	1	Carpenter (Formwork)	C307	3	Sewerman	C407	
Bound Forman         1         Contents         Contents <thcontents< th=""> <thcontents< th=""> <thc< td=""><td></td><td>Foreman/Assistant Foreman</td><td>2</td><td>Concrete Repairer</td><td></td><td></td><td></td><td></td><td></td></thc<></thcontents<></thcontents<>		Foreman/Assistant Foreman	2	Concrete Repairer					
Labburger         1         Control Marking         C130         Chick Johner (Powen)         E30           Utilitien         Project Marking         Carter Marking         C11         Decision (Decision)         E30           (Record herdion A nature of works)         Project Marking         1         Decision (Decision)         C11         Decision (Decision)         E30           (Record herdion A nature of works)         Project Marking         1         Decision (Marking)         C11         Decision (Decision)         E30           Marking Markery Marking         1         Decision (Marking)         C11         Decision (Decision)         E30           Marking Markery Marking         1         Decision (Marker)         C13         Life Decision         E30           Marking Markery Markery         1         Decision (Marker)         C13         Life Decision         E30           Marking Markery Markery         1         Decision (Marker)         C131         Decision (Marker)         E30           Marking Markery         1         Decision (Marker)         C132         Project A3         Decision (Marker)         E30           Marking Markery         1         Decision (Marker)         C132         Nation (Marker)         E30           Marking Markery		General Foreman	1	Concretor					
Luttice         Luttice         Carlos         Carlos <thcarlos< th=""> <thcarlos< th=""> <thcarlos< <="" td=""><td></td><td>Labour Officer</td><td>1</td><td>Construction Plant Mechanic</td><td></td><td></td><td></td><td></td><td></td></thcarlos<></thcarlos<></thcarlos<>		Labour Officer	1	Construction Plant Mechanic					
Latines         Point Display         1         Percenting Votage         C112         Percenting (Control Filter 1997)			1						
Data         Pairs         Clinitian         Protect Manager         2           Protect Manager of Survey         Pairs         Clinitian         Pairs         Clinitian         Pairs									
Intervent of works)         Printed Control Sciences         Distributer         Clinity         Distributer         Clinity         Distributer         Distribut	Utilities		2						
Duartity Surveyor Managart         1         Flore Creating Managart         C31         Eff Execution         500           Shef Or Office         1         Process         C31         Eff Execution         C31         Eff Execution<	(Record location & nature of works)		4						
bithy Officer         1         Flor Laver         C316         Lik Mechanic         1000           bithy Merine         1         General Widder         C317         Mechanic Finter         5319         1           Surveyor         1         General Widder         C318         1         Dechand Lineran         531           Surveyor         1         General Widder         C318         1         Dechand Lineran         531           Image: Surveyor         1         General Widder         C33         1         Dechand Lineran         531           Image: Surveyor         1         General Widder         C33         1         Dechand A: Visation Mechanic         531           Image: Surveyor         1         Main: Constancin Plan Operator         C33         1         Dechand A: Visation Mechanic         531           Image: Surveyor         1         Main: Constancin Plan Operator         C33         1         Demain Insidial Micro Marce         531           Image: Surveyor         1         Main: Constancin Plan Operator         C33         1         Demain Insidial Micro Marce         531           Image: Surveyor         1         Main: Constancin Plan Operator         C33         1         Demain Insidial Micro Marce         5301 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>E307</td> <td></td>								E307	
Site Arent         1         Ru Pambe         C13         Jup         Member         C13         Jup         Jup <thj< td=""><td></td><td></td><td>1</td><td></td><td></td><td>ļ.</td><td>Lift Electrician</td><td>E308</td><td></td></thj<>			1			ļ.	Lift Electrician	E308	
Survoya         1         General Worker         C319         1         Protection         Protectio			<b>I</b>	Floor Layer	C316		Lift Mechanic	E309	
Barreyar         1         Barreyar         1 </td <td></td> <td>Site Agent</td> <td>1</td> <td>Gas Plumber</td> <td>C317</td> <td></td> <td>Mechanical Fitter</td> <td>E310</td> <td></td>		Site Agent	1	Gas Plumber	C317		Mechanical Fitter	E310	
Progress         District         Cluster		Surveyor	1	General Welder	C318	1	Overhead Linesman		
Progress         Cround Investigion Operator/Drifter/Borer         C320         Refuence and Pipe Filter         End           Progress         Constitut, Worker         C321         Refuence and Pipe Filter         End           More Worker         C321         Refuence and Pipe Filter         End           Constitut, Worker         C322         Since Mealy Worker         End           More Worker         C324         Since Mealy Worker         End           (Meal Worker         C324         Since Mealy Worker         End           (Meal Worker         C324         Since Mealy Worker         End           (Meal Worker         C326         Since Mealy Worker         End           (Meal Worker         C328         Since Mealy Worker         End           (Meal Worker         C338         4         Fehnet Engineer         Engineer           (Meal Worker         Engineer         C338         4         Fehnet				Glazier					
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Near         Conc         Conc <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>									
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(Mention briefly any matter delaying or obstructing progress)       Mail Schfölder       C.37       Ministri (Construction)       ED1         (Mention briefly any matter delaying or obstructing progress)       Mail Worker       C.33       Ministri (Construction)       ED1         (Mention briefly any matter delaying or obstructing progress)       Mail Worker       C.33       Ministri (Construction)       ED1         (Mention briefly any matter delaying or obstructing for the delaying of the delay	риссиссии солосоние с							E318	
Mittor         Cost         Souther         Edu           Wittor         Cost         Souther         Edu           Wittor         Cost         Cost         Souther         Edu           Wittor         Cost         Cost         Souther         Edu           Wittor         Plant & Explored Cost         Cost         Souther         Edu           (Record names of visitors and time of visit)         Plant ad Explored Operator (Binkler)         Cost         Souther         Souther         Souther         Edu           Plant ad Explored Operator (Pinkler)         Cost         2         Plant ad Explored Operator (Pinkler)         Cost         2         Souther		<b>-  </b>	4		C326		Welder	E319	
Wetal Worker         C228         Semi-skilled Worker         E402           Painter & Decontor         C229         Fechnicain         T           Piling Operative         C330         T         T           Piling Operative         C330         T         T           Piling Operative         C330         T         T           Piling Operative         C331         4           Plant and Equipment Operator (Faitdhowing Methinery)         C333         4           Plant and Equipment Operator (Filtdhowing Methinery)         C333         4           Plant and Equipment Operator (Filtdhowing Methinery)         C334         2           Plant and Equipment Operator (Filtdhowing Methinery)         C335         4           Plant and Equipment Operator (Filtdhowing Methinery)         C336         2           Plant and Equipment Operator (Filtdh	(Mention briefly any matter delaying or obstructing progress)		1	Metal Scaffolder	C327		Labourer	E401	
Nition         Chinic & Decontor.         Class         Connician         T           Mittor         Plant & Decontor.         Class         -			1	Metal Worker	C328		Semi-skilled Worker		
Visitor     Pling Operative     C330       Weistor     Plant and Enginnent Operator (Buile's Lin and Other Machinery)     C332       (Record names of visitors and time of visit)     Plant and Enginnent Operator (Filing)     C333       Plant and Enginnent Operator (Filing)     C334     2       Plant and Enginnent Operator (Filing)     C335     2       Plant and Enginnent Operator (Filing)     C336     2       Plant and Enginnent Operator (Filing)     C346     2				Painter & Decorator				· · · · •	
Wittor         Pipelayer         G33								· · · · · · · · · · · · · · · · · · ·	
Visitor     Plant and Equipment Operator (Buildry Machinery)     C132							THE CONTRACTOR CO		
Visitor       Plant & Equipment Operator (Planthoving Machinery)       C333       4         (Record names of visitors and time of visit)       Plant and Equipment Operator (Planthoving Machinery)       C335       2         Accidents       Plant and Equipment Operator (Pling)       C336       2         Plant and Equipment Operator (Pling)       C336       2         Plant and Equipment Operator (Pling)       C336       2         Plant and Equipment Operator (Pling)       C337       2         Plant A Equipment Operator (Pling)       C337       2         Plant A Equipment Operator (Pling)       C34       2       2         Statement Plant A Equipment Advector       C344       2       2         State to Eng							- and an analysis of the second		
Accidents       Plant and Equipment Operator (Hoist and Crane)       C334       2         Accidents       Plant and Equipment Operator (Flink)       C336       -         Image: Control of the second of							· · · · · · · · · · · · · · · · · · ·		
Accidents     Plant and Equipment Operator (Flost and Equipment Operator (Tunnelling)     C33 2       Describe any occurance of accident)     Plant and Equipment Operator (Tunnelling)     C33 2       Plant and Equipment Operator (Tunnelling)     C33 3       Plant and Equipment Operator (Tunnelling)     C33 4       Plant and Equipment Operator (Tunnelling)     C33 7       Plant and Equipment Operator (Tunnelling)     C34 7       Prestressing Operative     C34 7       Total     22       Stope Maintenance Worker     C34 7       Track Driver (Coswar) Brigg Engineer / Working Gaager*     C34 7       Tack Driver (Coswar) Brigg Engineer / Working Gaager*     C35 7       Pried Assistant     1       Office Assistant     1 <t< td=""><td>(Record names of visitors and time of visit)</td><td></td><td></td><td></td><td></td><td></td><td></td><td>. Į</td><td></td></t<>	(Record names of visitors and time of visit)							. Į	
Accidents     Plant and Equipment Operator (Tunnelling)     C336       Model     Plant and Equipment Operator (Tunnelling)     C337       Plaster     C338     Plant and Equipment Operator (Tunnelling)     C336       Obscribe anv occurance of accident)     Plaster     C338       Note     Plaster     C340       Remarks     Shotetefor     C342       Shotetefor     C342       Shotetefor     C343       Shotetefor     C343       Shotetefor     C343       Shotetefor     C343       Shotetefor     C346       Tackworker     C348       Tackworker     C348       Mindow Frame Installer     C350       Total     22       Assistant     1       Onfice Assistant     2       Vindow Frame Installer     C350						2			
Accidents     Plasterer     C37       (Describe any occurance of accident)     Pretressing Operative     C338       Pestressing Operative     C340       Rigger/Metal Formwork Erector     C341       Shotretor     C342       Shotretor     C343       Shotretor     C343       Shotretor     C343       Shotretor     C344       Shotretor     C343       Shotretor     C344       Shotretor     C346       Viriler     C347       Tackovicer     C346       Tial     22       Assistant     1       Darting Assistant     1       Darting Assistant     1       Darting Assistant     1       Darting Assistant     1       Office Assistant     3       Office Assistant     1					C335				
Accidents     Plumber     C338       (Describe any occurance of accident)     Prestnessing Operative     C340       Remarks     Remarks     Storetor     C341       A - Backhoe EX08 off site     Storetor     C343       Total     22       Assistant     1       Drating Assistant     1       Drating Assistant     1       Drating Assistant     1       Drating Assistant     3       Office Assistant     3       Office Assistant     3				Plant and Equipment Operator (Tunnelling)	C336				
Arcidents     Plumber     C338       (Describe any occurance of accident)     Prestressing Operative     C340       Rigger/Metal Formwork Erector     C341       Shottread     Shottread       Shottread     C343       Shottread     C344       Structural Steel Erector     C344       Structural Steel Veider     C346       Tiler     C347       Track Driver / Cossman / Barge Engineer / Working Ganger*     C349       Window Frame Installer     C350       Total     22       Assistance to Engineer     No       Arah     1       Drafting Assistant     1       Drafting Assistant     1       Watchman     1       Office Assistant     3				Plasterer	C337			i	
Accidents     Pneumatic Driller     C.339       (Describe any occurance of accident)     Preumatic Driller     C.340       (Describe any occurance of accident)     Risper/Metal Fonnwork Erector     C.341       Shotretfor     C.342       Shotretfor     C.343       Shotretfor     C.342       Shotretfor     C.343       Shotretfor     C.343       Shotretfor     C.342       Shotretfor     C.343       Shotretfor     C.344       Shotretfor     C.345       Structural Steel Prection     C.345       Structural Steel Prection     C.346       Tiler     C.347       Trackworker     C.348       Tiler     C.348       Tiler     C.348       Tiler     C.348       Minok frame     No       Aranh     1       Drafting Assistant     1       Drafting Assistant     1       Drafting Assistant     3       Office Assistant     3       Office Assistant     3       Office Assistant     1       Matchman     1				Plumber					
(Describe anv occurance of accident)       Prestressing Operative       C340         Rigger/Metal Formwork Erector       C341         Shottretor       C342         Shottretor       C343         Stope Maintenance Worker       C344         Structural Steel Prector       C344         Structural Steel Welder       C345         Structural Steel Welder       C346         Trackworker       C347         Trackworker       C348         Window Frame Installer       C346         Window Frame Installer       C349         Window Frame Installer       C340         Dorting Assistant       1         Drating Assistant       1         Drating Assistant       1         Office Assistant       1         Mandon       1	atrabio d	-		Pneumatic Driller		1	and the second sec		
Remarks       Shottreior       C342         A - Backhoe EX08 off site       Shottreior       C342         Total       Slower       C344         Vindow Frame Installer       C344         Vindow Frame Installer       C344         Vindow Frame Installer       C346         Total       C350         Arnah       1         Coordinate Engineer       1         Driver       2         Field Assistant       3         Officiant       3         Officiant       3         Officiant       3         Officiant       1         Driver       2         Field Assistant       3         Officiant       1         Ordinate       3         Officiant       1         Ordinate       1				and a second					
Remarks     Shoterefor     C342       A - Backhoe EX08 off site     Shoterefor     C344       Total     Structural Steel Velder     C346       Vindow Frame Installer     C349       Window Frame Installer     C350	(Describe any occurance of accident)								
Remarks     Shotfirer     C343       A - Backhoe EX08 off site     Shotfirer     C344       Trackworker     C345       Trackworker     C346       Trackworker     C348       Trackworker     C348       Window Frame Installer     C349       Window Frame Installer     C340       Window Frame Installer     C340       Drahing Assistant     1       Driver     2       Field Assistant     3       Office Assistant     3       Office Assistant     1       Watchman     1									
Remarks       Slope Maintenance Worker       C344         Structural Steel Frector       C345         Structural Steel Welder       C347         Tiler       C347         Trackworker       C348         Total       22         Assistance to Engineer       No.         Annah       1         Coordinate Engineer       1         Driver       2         Field Assistant       3         Office Assistant       3         Office Assistant       3         Watchman       1		··· · · · · · · · · · · · · · · · · ·					· · · · · · · · · · · · · ·		
Remarks       Structural Steel Erector       C:345         A - Backhoe EX08 off site       Structural Steel Welder       C:346         Tiler       C:347       Tiackworker       C:348         Total       22       Assistance to Engineer       No.       Arnah       1         Coordinate Engineer       1       Drafting Assistant       1									
Remarks       A - Backhoe EX08 off site       Structural Steel Welder       C346         Tiler       C348       Track Driver / Coxswain / Barge Engineer / Working Ganger*       C349         Window Frame Installer       C350         Arnah       1         Coordinate Engineer       No.         Arnah       1         Cordinate Engineer       1         Driver       2         Field Assistant       1         Driver       2         Field Assistant       3         Office Assistant       4					C344			1	
A - Backhoe EX08 off site       A - Backhoe EX08 off site     Subtraction Sect Protect     C340       Tiler     C347       Trackworker     C349       Window Frame Installer     C350       Amah     1       Coordinate Engineer     1       Drafting Assistant     1       Driver     2       Field Assistant     3       Office Assistant     1       Watchman     1		<b>-  </b>		and the second	C345				
A - Backhoe EX08 off site       A - Backhoe EX08 off site     Tiler     C347       Trackworker     C348       Truck Driver / Cosswain / Barge Engineer / Working Ganger*     C349       Window Frame Installer     C350       Amah     1       Coordinate Engineer     1       Drafting Assistant     1       Driver     2       Field Assistant     3       Office Assistant     1       Watchman     1				Structural Steel Welder	C346				
Trackworker     C348       Truck Driver / Coxswain / Barge Engineer / Working Ganger*     C349       Window Frame Installer     C350	A - Backhoe EX08 off site			Tiler					
Total     22       Assistance to Engineer     No.       Amah     1       Coordinate Engineer     1       Drafting Assistant     1       Driver     2       Field Assistant     3       Office Assistant     1       Watchman     1								+	
Total22Assistance to EngineerNo.Amah1Coordinate Engineer1Drafting Assistant1Driver2Field Assistant3Office Assistant1Window Frame Installer1Office Assistant3Office Assistant1No.1						· · ·			
Total22Assistance to EngineerNo.Amah1Coordinate Engineer1Drafting Assistant1Driver2Field Assistant3Office Assistant1Watchman1						··· ···			
Assistance to EngineerNo.Amah1Coordinate Engineer1Drafting Assistant1Driver2Field Assistant3Office Assistant1Watchman1		Total	22		0.550				
Amah1Coordinate Engineer1Drafting Assistant1Drafting Assistant2Field Assistant3Office Assistant3Office Assistant1						· · ·		÷.	
Coordinate Engineer1Drafting Assistant1Driver2Field Assistant3Office Assistant4Watchman1		Assistance to Engineer	No.	· · · · · · · · · · · · · · · · · · ·			i i i i i i i i i i i i i i i i i i i		
Coordinate Engineer1Drafting Assistant1Driver2Field Assistant3Office Assistant4Watchman1						~			
Drafting Assistant     1       Driver     2       Field Assistant     3       Office Assistant       Watchman     1			1	······································			· · · · · · · · · · · · · · · · · · ·		
Driver     2       Field Assistant     3       Office Assistant       Watchman       1			1						
Field Assistant     3       Office Assistant       Watchman       1		Drafting Assistant	1		T	1			
Field Assistant     3       Office Assistant       Watchman       1		11	2					-	
Office Assistant Watchman 1							the second se	•	
Watchman 1									-
			1						
Liotal 9 KLo be continued) Total Labour		Total	9	(To be continued)			Total Labour		3

he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Date:

17.9.12

Engineer's Representative

 $\langle$ Contractor's Representative

Wong Ching Lung / Site Agent

17/19/2012

Original - ER's File

#### Contract No.: DC/2009/22 Date: 14/09/2012

Day: Friday

Plant		*****
Туре	No. Working	No. Idle
ir Compressor	. 1	-
ackhoe	4	2
ackhoe with Vibrating Hammer	1	
lower rawler Drill	41	
lectric Breaker	2	
enerator	2	t
rout Machine	. –	1
lini Backhoe		1
xy-Acetylene	4	1
aw Cut Machine	1	
eel Bending Machine	2	÷
ibrating Prob /ater Pump 50mm	8	
ater Pump 75mm	° 6	
/elding Set	3	1
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Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

17-9-2012

Sheet 1 of 3

C

X ....

Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

			<b>1</b>						-					
Time	Location Activity Labour						Pla	nt				Material Delivered		
						Туре	We	orking	Τ	Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code			
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement							1	1				
					+			+	+	+				
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.11.0~11.4 and installing shoring frames Cutting & bending reinforcement bars for discharge chamber at bending yard Fixing tie bolts and walings for wall formwork & rebar fixing for top slab of discharge chamber Excavating for Ø2100 & Ø1200 pipe trench between manhole MH05~ receiving pit and fabricating second layer 1-beam walings & struts Saw cutting and breaking up of floor screed at transformer room	Bar Bender & Fixer	C304	4	Backhoe	1	EX50						
			Carpenter (Formwork)	C307	2	Blower	2		1	1				
			General Welder	C318	1	Electric Breaker	2		1					
			Labourer (female)	C406	1	Oxy-Acetylene	1	1	1	1				
			Labourer (male)	C406	6	Saw Cut Machine	1	1	1	1				
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Steel Bending Machine	2	†						
						Water Pump 50mm	2	1		1			~	
						Water Pump 75mm	1	1		1			*	
						Welding Set	1	1	İ	1		******	1	
								1		1		ann a canadana a shaqoo a canadan ana foodo canada ana a		
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating to -1.7 mPD	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX36						
07:00 - 18:00	Area A Ting Kak Boad					L		<u> </u>	ĺ	ļ				
18:00 - 20:00	Alea A - Thig Kok Koau	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1F/Lab.)	Labourer (female)	C406	3		_							
08:00 - 18:00	Area A Ting Kok Pond	Stripping off formwork from manhole MH03						ļ		<b>_</b>				
00.00 - 10.00	(CH70-125)	Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.92~100 Excavating for Ø375 pipe trench between SMH02 & SMH03	Labourer (female)	C406	2	Backhoe	1	EX42						
			Labourer (male)	C406	3	Backhoe	+	1	1	EX54	h	999919200000000000000000000000000000000	<u> </u>	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe with Vibrating Hammer	1	EX40						
-			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1							
						Water Pump 50mm	2							
							1					049-044		
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement												
							1							
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Dismantling upper layer of I-beam walings and struts from shoring Bay 10~13 - Backfilling for box culvert trench	Labourer (male)	C406	3	Backhoe	1	EX11						
			Plant & Equipment Operator (Earthmoving Machiners)	C333	1	Generator	1						1	

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Signed:

Contractor's Representative

Signed:

Engineer's Representative

Name/Post:

Stephen Poon / RE

Date: 17.9.12

Date:

17/1/2012

Wong Ching Lung / Site Agent

Date:

Contract No.: DC/2009/22

Day: Friday

IOW

Tso Sai Kuen / Inspector of Works

17-9-2012

L'Alexander

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location									Plant					
		T					Wa	rking	Idling			Description	elivered Quantity		
			Trade	Code	No.	1	No.	ID	No.	ID	Code	e			
					†	Oxy-Acetylene	1	+	<u> </u>		<u> </u>	Mint MR.	-		
					1	Water Pump 50mm	1	1	1	1					
						Water Pump 75mm	2	1	1	1	<u> </u> †				
					1	Welding Set	1	1	1	1		energi (1999) en de la contra de			
No water of the second s					Ι				1			an da ka			
	Area B - Tung Tsz Nursery (CH40-CH130)	No activity as per KLKJV arrangement				Water Pump 50mm	1	-	1	1					
					<u> </u>	Water Pump 75mm	1		<u> </u>			an a			
								1		1		******			
8:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. grout holes (2-7 & 2-8) and inserting grout tube	Labourer (male)	C406	4	Air Compressor	1	AC05		1		annan an a			
****			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	<u> </u>	†		na na na mana ana ao amin'ny fanana amin'ny fanana amin'ny fanana amin'ny fanana amin'ny fanana amin'ny fanana	+		
						Grout Machine	T	1	1		h	2013-12-2013-2013-2013-2013-2013-2013-20	+		
						Mini Backhoe		1	1	EX53	h		+		
						Oxy-Acetylene	1	1		1					
				1		Water Pump 50mm	1	1		1					
9500 Andrew warman and a large starter						Water Pump 75mm	1	1					+		
						Welding Set	1						-		
:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	Manhole S6 - Re-bar fixing and concreting for wall stems and top slab	Carpenter (Formwork)	C307	1	Backhoe			1	EX21	h	na na na mana na 2007 ka da ka			
MOTION IN A DOLLAR MANAGEMENT OF			Labourer (male)	C406	3	Blower	2						-		
						Generator	1			1					
101012310010-01-01-01-00-00-00-00-00-00-00-00-0					Child Contracts and an and	Oxy-Acetylene		1	1		h				
						Vibrating Prob	1		enter de la constante de la const						
					*******	Water Pump 50mm	1								
						Water Pump 75mm	1					annon an an ann an ann an ann an ann an an a	1		
el Walka in the second seco						Welding Set			1		h				
**************************************											Τ				
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement													
	Area I - Contractor Office	No activity as per KLKJV arrangement													

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor



Engineer's Representative

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

17/8/2012

Name/Post: Stephen Poon / RE

Date: 17.51

Date:

Date:

17. 5.12

Contract No.: DC/2009/22 Date

Day: Friday

IOW

Tso Sai Kuen / Inspector of Works

17-9-2012

Sheet 3 of 3

ed Jacks

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:
----------

Fine

#### Typhoon / Warning Signal:

PM <u>AM</u>

<u>Rainfall (mm)</u> ST 5, TP 0

Very Hot Weather Warning - 00:00~15:00 Thunderstorm Warning - 12:30~15:30

(Hong Kong Observatory's record)

Shower

				C . 1	N-	Ichaus	Codo	No.
Instructions to Contractor	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	INO.
(Record verbal instructions given)	A		Asphalter (Other Construction)	C301	1	Chainman	C401	•
	Assistant Surveyor			C302		Concreting Labourer	C402	÷
	Chainman	3	Asphalter (Roadworks)		1		C402	
	Community Liaison Officer	1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew		÷
	CEG	1	Bar Bender & Fixer	C304		Excavator	C404	÷
	Contract Manager	1	Bricklayer	C305		Heavy Load Labourer	C405	+
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office attendan	+	24
	Environmental Officer	1	Carpenter (Fornwork)	C307	4	Sewerman	C407	
	Foreman/Assistant Foreman	2	Concrete Repairer	C308		Automation Equipment Mechanic	E301	-
	General Foreman	1	Concretor	C309	1	Building Services Mechanic	E302	
	Labour Officer	1	Construction Plant Mechanic	C310	. 1	Cable Jointer (Power)	E303	
			Curtain Wall Installer	C311		Carpenter	E304	1
	Land Surveyor	1 1.1		C312	1	Electrician/Electrical Fitter	E305	1
Utilities	Project Director		Demolition Worker		· · · ·		E305	4 Å -
(Record location & nature of works)	Project Manager	2	Diver	C313		Fire Services Mechanic		
(Record location & nature of works)	Project Quantity Surveyor	1	Drainlayer	C314		Instrument Mechanic	E307	1
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315	1	Lift Electrician	E308	•
	Safety Officer	1	Floor Layer	C316		Lift Mechanic	E309	
	Site Agent	1	Gas Plumber	C317	]	Mechanical Fitter	E310	
	Surveyor	1	General Welder	C318	1	Overhead Linesman	E311	
			Glazier	C319		Painter	E312	
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	
		· • • • • • • • • • • • • • • • • • • •		C320	1	Refrigeration/AC/Ventilation Mechanic	E314	•
	· ·-		Grouting Worker					
		-+'	Joiner	C322		Sheet Metal Worker	E315	
			Leveller	C323		Sign Fabricator	E316	÷
		4	Marble Worker	C324	. 1	Sign Installer	E317	-
			Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318	
Progress			Mason	C326	!	Welder	E319	1
(Mention briefly any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E401	
			Metal Worker	C328		Semi-skilled Worker	E402	
			Painter & Decorator	C329		Technician	Т	
		· • · · · · · · · · · · · · · · · · · ·	Piling Operative	C330			1. 7	3
							÷ ·	1
			Pipelayer	C331	1	and the second sec		
Visitor			Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332			÷	
		1. 	Plant & Equipment Operator (Earthmoving Machinery)	C333	5	l la	1	-
(Record names of visitors and time of visit)			Plant and Equipment Operator (Hoist and Crane)	C334	3			
			Plant and Equipment Operator (Piling)	C335				
		1	Plant and Equipment Operator (Tunnelling)	C336			1	
		+ - +	Plasterer	C337				
			Plumber	C338				-
	· · · · ·				. 1	· · · · · · · ·		÷ · · · ·
Accidents		. i	Pneumatic Driller	C339				•
(Describe any occurance of accident)			Prestressing Operative	C340			-	÷
			Rigger/Metal Formwork Erector	C341	]			÷
			Shotcretor	C342	1		1	1
			Shotfirer	C343				
			Slope Maintenance Worker	C344				
			Structural Steel Erector	C345				
Remarks		-	Structural Steel Welder	C346				
eekly Safety and Environmental Coordination Meeting #130 was held at 11:30 A.M.		+ - 4	Tiler	C347	1			
	· ••• ••							<u>.</u>
rea A - Backhoe on site at noon		4 /	Trackworker	C348		and the second	1 2	-
r. Choi of Kam Shing (Representative of CLP) preform the Schmidt Hammer Test to			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2		4	
inths at Transformer Room at 12:30 hr.			Window Frame Installer	C350				
	Total	22					-	
	1. · · ·	i NI-						
	Assistance to Engineer	No.			. 1		-	1
	Amah	1						
	Amah		and a second					• • • • • • • • •
	Coordinate Engineer						*	
	Drafting Assistant	1.1	a a a a a	-			1	-
	Driver	2	and a second		<b> </b>	· · · ·	1	
	Field Assistant	3						
	Office Assistant				. 1			÷
	Watchman	1		1			1	1
	Total	9	(To be continued)	1	1	Total Labour		41

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed. truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Name/Post: Stephen Poon / RE

Signed:

Date:

Original - ER's File

14.9.12

Date:

14/19/2012

### Contract No.: DC/2009/22 Date: 13/09/2012

Day: Thursday

Plant		
Туре		No. Idle
Air Compressor Backhoe	1 5	2
ackhoe with Vibrating Hammer	1	2
Blower	4	
rawler Drill	1	
Dump Truck	2	•-
ienerator irab Lorry	2 1	÷.
Brout Machine	1	1
1ini Backhoe		1
Dxy-Acetylene	4	1
Vater Pump 50mm Vater Pump 75mm	8	•
Velding Set	3	1
		-
		1
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otal	38	6

Signed:

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Tso Sai Kuen / Inspector of Works

Date:

14/9/2012 Sheet 1 of 3

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.10.7~11.0 and installing shoring frames Fornwork shuttering for box out of stoplogs (SL-01~03) & access openigns at top slab of discharge chamber Excavating for Ø2100 & Ø1200 pipe trench between manhole MH05~ receiving Pit and fabricating second layer I-beam waling and struts Installing earthing to steel door at transformer room General housekeeping & cleaning up sediments from wheel washing bay Disposal of construction bebris to WENT (2 Truckloads)	Carpenter (Formwork)	C307	2	Backhoe	1	EX50					
			Electrician/Electrical Fitter	E305	1	Blower	2	+		+			
			General Welder	C318		Grab Lorry	$\frac{1}{1}$			+	<u> </u>		
			Labourer (female)	C406		Oxy-Acetylene	$\frac{1}{1}$	+	+	+			
			Labourer (male)	C406		Water Pump 50mm	2	<u> </u>	<u> </u>	1			
			Plant & Equipment Operator (Earthmoving Machinery)	C333		Water Pump 75mm	1		<u> </u>	1			
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Welding Set	1		+	+			
	an a						+		<u> </u>	1	<u> </u>		
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating to -1.7 mPD & cart away excavated material to Area B (9 Truckloads)	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX36					
			Truck Driver	C349	2	Dump Truck	2						
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of 'stop & go' sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1F/Lab.)	Labourer (female)	C406	3								
22.00 10.00								[		ļ			
08:00 - 18:00	(CH70-125)	Stripping off formwork from manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.100~114 along footpath side Backfilling sand material to Ø2100 pipe trench at Ch. 78~90 and compacting	Labourer (female)	C406	1	Backhoe	1	EX42					
COLORIS CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONT			Labourer (male)	C406	3	Backhoe	Τ		1	EX54	h		
senand, BECODEWINDOWENDCOM			Plant & Equipment Operator (Earthmoving Machinery)	C333		Backhoe with Vibrating Hammer	1	EX40				an a	
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1						
						Water Pump 50mm	2						
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 11 - Dismantling upper layer of I-beam walings and struts from shoring Bay 10 - Backfilling to box culvert trench	Labourer (male)	C406	3	Backhoe	I	EX08				n an	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Backhoe	1	EX11					

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

14/8/2012

Signed:

14.9.12

Stephen Poon / RE

Name/Post: Date:

Signed:

Date:

Date:

Contract No.: DC/2009/22

Date: 13/09/2012

Day: Thursday

0 IOW

Tso Sai Kuen / Inspector of Works

14/9/2012

XY AND 1

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Location Activity Labour								1.1 1 <u>9 - 19 - 19 - 19 - 19 - 19 - 19 - 19</u>		Material Delivered		
							Wo	orking	Τ	Idling		Description	Quantity	
			Trade	Code	No.	1	No.	ID	No.	ID	Code			
						Generator	1		1					
						Oxy-Acetylene	1			1				
						Water Pump 50mm	1	1		1		алан талан балан байтан талан талар бай	**************************************	
						Water Pump 75mm	2	1	1		11			
						Welding Set	1							
08:00 - 18:00 Are Nur	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1							
						Water Pump 75mm	1			1				
8 18:00														
08 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 3 nos. grout hole (2-1, 2-2 & 2-3) and inserting grout tube	Labourer (male)	C406	3	Air Compressor	1	AC05						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	1	1				
						Grout Machine		ĺ	1	1	h			
						Mini Backhoe			1	EX53	h	na n		
						Oxy-Acetylene	1	1		1	1			
						Water Pump 50mm	1	1		1	1			
						Water Pump 75mm	1	1		1				
						Welding Set	1							
08:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.2 &.3 - Laying 450Ø PC cut length pipes (PL1602.2 -0.42m) & PL1602.3-0.65m) PL 1602.1 - Making good wall face of Ø1650 pipe entry of existing manhole Manhole S6 - Formwork shuttering for top slab	Carpenter (Formwork)	C307	2	Backhoe			1	EX21	h			
			Labourer (male)	C406	2	Blower	2	+	<u> </u>	1	<u> </u>			
			Pipelayer	C331	1	Generator	1	1	<u> </u>		<u> </u>			
						Oxy-Acetylene		†	1		h		1	
						Water Pump 50mm	1	1		1			-	
107910450100046201042454104441020000000011794420						Water Pump 75mm	1	1	İ	1				
						Welding Set			1		h			
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
	Area H - Contractor	No activity as per KLKJV arrangement								1				
	Office													

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

~ Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

14/9/2012

Signed:

Name/Post:

Stephen Poon / RE

Date: 14.5.12

Date:

Date:

Contract No.: DC/2009/22

Date: 13/09/2012

Day: Thursday

La IOW

Tso Sai Kuen / Inspector of Works

14/9/2012

Vertim

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u>	<u>PM</u>	Rainfall (mm)
Shower	Fine	ST 0, TP 2

Very Hot Weather Warning - 00:00~24:00 Thunderstorm Warning - 15:00~16:00

(Hong Kong Observatory's record)

Contractor's Site Staff Assistant Surveyor Chainman Community Liaison Officer CEG Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager	No. 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1	Labour Asphalter (Other Construction) Asphalter (Roadworks) Bamboo Scaffolder Bar Bender & Fixer Bricklayer Carpenter (Fender) Carpenter (Fender) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer Demolition Worker	Code C301 C302 C303 C304 C305 C306 C307 C308 C309 C310 C311	No.	Labour Chainman Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew Excavator Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewernan Automation Equipment Mechanic Building Services Mechanic	Code C401 C402 C403 C404 C405 C406 C407 E301 E302	No.
Chainman Community Liaison Officer CEG Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager		Asphalter (Roadworks) Bamboo Scaffolder Bar Bender & Fixer Bricklayer Carpenter (Fender) Carpenter (Fornwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C301 C302 C303 C304 C305 C306 C307 C308 C309 C310	4	Chainman Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew Excavator Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewerman Automation Equipment Mechanic	C401 C402 C403 C404 C405 C406 C407 E301	
Chainman Community Liaison Officer CEG Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager		Asphalter (Roadworks) Bamboo Scaffolder Bar Bender & Fixer Bricklayer Carpenter (Fender) Carpenter (Fornwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C302 C303 C304 C305 C306 C307 C308 C309 C310	4	Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew Excavator Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewernan Automation Equipment Mechanic	C402 C403 C404 C405 C406 C407 E301	22
Community Liaison Officer CEG Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager		Bamboo Scaffolder Bar Bender & Fixer Bricklayer Carpenter (Fender) Carpenter (Fonnwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C303 C304 C305 C306 C307 C308 C309 C310	4	Diver's Linesman / Dredger Crew / Barge Crew Excavator Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewernan Automation Equipment Mechanic	C402 C403 C404 C405 C406 C407 E301	22
CEG Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Ouentity Surveyor Quantity Surveyor Manager	1 1 1 2 1 1 1 1 1 1 2 1 2 1 1 2 1 1 2 1	Bar Bender & Fixer Bricklayer Carpenter (Fender) Carpenter (Fornwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C303 C304 C305 C306 C307 C308 C309 C310	4	Diver's Linesman / Dredger Crew / Barge Crew Excavator Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewernan Automation Equipment Mechanic	C403 C404 C405 C406 C407 E301	22
Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager	1 1 2 1 1 1 1 1 1 2	Bar Bender & Fixer Bricklayer Carpenter (Fender) Carpenter (Fornwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C304 C305 C306 C307 C308 C309 C310	4	Excavator Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewerman Automation Equipment Mechanic	C404 C405 C406 C407 E301	22
Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager		Bricklayer Carpenter (Fender) Carpenter (Fonnwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C305 C306 C307 C308 C309 C310	4	Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewerman Automation Equipment Mechanic	C405 C406 C407 E301	22
Engineer Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager		Carpenter (Fender) Carpenter (Fornwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C306 C307 C308 C309 C310	4	Labourer (male / female) / Lorry checker / Watchman/Office attendan Sewerinan Autoination Equipment Mechanic	C406 C407 E301	22
Environmental Officer Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager	1 2 1 1 1 1 2 2	Carpenter (Fornwork) Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C307 C308 C309 C310	4	Sewennan Automation Equipment Mechanic	C407 E301	22
Foreman/Assistant Foreman General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager	1 2 1 1 1 2 2	Concrete Repairer Concretor Construction Plant Mechanic Curtain Wall Installer	C308 C309 C310	4	Automation Equipment Mechanic	E301	
General Foreman Labour Officer Land Surveyor Project Director Project Manager Project Quantity Surveyor Quantity Surveyor Manager	2 1 1 1 2	Concretor Construction Plant Mechanic Curtain Wall Installer	C308 C309 C310		Automation Equipment Mechanic	E301	
Labour Officer Land Surveyor Project Director <u>Project Manager</u> Project Quantity Surveyor Quantity Surveyor Manager	1 1 1 2	Concretor Construction Plant Mechanic Curtain Wall Installer	C309 C310				
Labour Officer Land Surveyor Project Director <u>Project Manager</u> Project Quantity Surveyor Quantity Surveyor Manager	1 1 1	Construction Plant Mechanic Curtain Wall Installer	C310		Dunung Scivices Mechanic	E-507	
Land Surveyor Project Director <u>Project Manager</u> <u>Project Quantity Surveyor</u> Quantity Surveyor Manager	1	Curtain Wall Installer					
Project Director <u>Project Manager</u> <u>Project Quantity Surveyor</u> Quantity Surveyor Manager	1				Cable Jointer (Power)	E303	
Project Manager Project Quantity Surveyor Quantity Surveyor Manager	2	Demolition Worker	C311		Carpenter	E304	
Project Quantity Surveyor Quantity Surveyor Manager	2	pollonion worker	C312		Electrician/Electrical Fitter	E305	
Quantity Surveyor Manager		Diver	C313		Fire Services Mechanic	E306	
Quantity Surveyor Manager		Drainlayer	C314	1	Instrument Mechanic		
	1 1	Electrician (Main Contractor's)				E307	
			C315	1	Lift Electrician	F308	
Safety Officer		Floor Layer	C316		Lift Mechanic	E309	
Site Agent		Gas Plumber	C317	1	Mechanical Fitter	E310	
Surveyor	1	General Welder	C318	1 1	Overhead Linesman	E311	
	1						
- ···	I					E313	
			C321		Refrigeration/AC/Ventilation Mechanic	E314	
		Joiner		1			
		Leveller					
				-			
۹ <u> </u>					Thermal Insulation Craftsman	E318	
4		Mason	C326		Welder	E319	
		Metal Scaffolder	C327		abourer		
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				· · · · · ·	The second s		
					Technician	T	
		Piling Operative	C330				1
		Pipelayer	C331				
41					and the second sec		
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11		Plant and Equipment Operator (Hoist and Crane)		3			
		Plant and Equipment Operator (Piling)	C335				
		Plant and Equipment Operator (Tunnelling)	C336				
	1				and the second sec		
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			C339				
		Prestressing Operative	C340	1			
11							
10 1 · · · · · · ·				· · ·	and a second a second s		
· · · · · · · · · · · · · · · · · · ·		Slope Maintenance Worker	C344	1			
11		Structural Steel Erector		1	· · · · · · · · · · · · · · · · · · ·		
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11	1		• •		-		
	· · · · · · · · · · · · · · · · · · ·						
	1		C348				
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2			
		Window Frame Installer	C350	-	and the second sec		
Total	22		0350				
	22					-	
LLVIBI				1	1	-	
	No	· · · · · · · · · · · · ·					
Assistance to Engineer	No.	· · · · · · · · · · · · · · · · · · ·		· • •		-	
Assistance to Engineer				· · · · · · · · ·			
Assistance to Engineer	No.		· · · · · · · · · · · · · · · · · · ·				
Assistance to Engineer Amah Coordinate Engineer	1						
Assistance to Engineer				· · · · · · · · · · ·		·	
Assistance to Engineer Amah Coordinate Engineer Drafting Assistant	1						
Assistance to Engineer Amah <u>Coordinate Engineer</u> Drafting Assistant Driver	1						
Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver Field Assistant	1 1 1 2						
Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver Field Assistant Office Assistant	1 1 1 2			· · · · · · · · · · · · · · · · · · ·			
Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver Field Assistant	1 1 1 2						
· · · · · · · · · · · · · · · · · · ·			Leveller         Marble Worker         Marine Construction Plant Operator         Mason         Metal Scaffolder         Metal Worker         Painter & Decorator         Piling Operative         Pipelayer         Plant and Equipment Operator (Builder's Lift and Other Machinery)         Plant and Equipment Operator (Hoist and Crane)         Plant and Equipment Operator (Hoist and Crane)         Plant and Equipment Operator (Tunnelling)         Plant and Equipment Operator (Tunnelling)         Plasterer         Plumber         Prestressing Operative         Rigger/Metal Fornwork Erector         Shotcretor         Shotfirer         Slope Maintenance Worker         Structural Steel Erector         Structural Steel Welder         Tiler         Trackworker	Ground Investigation Operator/Driller/Borer C320 Grouting Worker C321 Joiner C322 Leveller C323 Marble Worker C324 Marine Construction Plant Operator C325 Mason C326 Metal Scaffolder C327 Metal Scaffolder C327 Metal Worker C328 Painter & Decorator C329 Piling Operative C330 Pipelayer C331 Plant and Equipment Operator (Builder's Lift and Other Machinery) C332 Plant & Equipment Operator (Builder's Lift and Other Machinery) C332 Plant and Equipment Operator (Hoist and Crane) C334 Plant and Equipment Operator (Hoist and Crane) C334 Plant and Equipment Operator (Hoist and Crane) C335 Plant and Equipment Operator (Filing) C335 Plant and Equipment Operator (Tunnelling) C336 Plasterer C338 Pneumatic Driller C338 Pneumatic Driller C338 Slope Maintenance Worker C341 Shotfirer C343 Slope Maintenance Worker C344 Structural Steel Erector C344 Structural Steel Erector C346 Tiler C346 Tiler C347 Trackworker C348	Ground Investigation Operator/Driller/BorerC320Grouting WorkerC321JoinerC322LevellerC323Marble WorkerC324Marble WorkerC324Marbne Construction Plant OperatorC325MasonC326Metal ScaffolderC327Metal ScaffolderC328Painter & DecoratorC329Piling OperativeC331PipelayerC331Plant and Equipment Operator (Builder's Lift and Other Machinery)C332Plant & Equipment Operator (Builder's Lift and Other Machinery)C333Plant and Equipment Operator (Builder's Lift and Other Machinery)C333Plant and Equipment Operator (Builder's Lift and Other Machinery)C336Plant and Equipment Operator (Priling)C336Plant and Equipment Operator (Tunnelling)C336Plant and Equipment Operator (Tunnelling)C336Plast and Equipment Operator (Tunnelling)C336Plast ererC339Prestressing OperativeC340Rigger/Metal Fornwork ErectorC342ShotfirerC343Slope Maintenance WorkerC344Structural Steel ErectorC345Structural Steel ErectorC347TirackworkerC347TrackworkerC347	Ground Investigation Operator/Driller/Borer       C320       Flumber and Pipe Filter         Grouting Worker       C321       Refrigeration/AC/Ventilation Mechanic         Joiner       C322       Sheet Metal Worker         Marble Worker       C323       Sign Installer         Marble Worker       C326       Welder         Marble Worker       C326       Welder         Marble Worker       C326       Welder         Mason       C326       Welder         Metal Scaffolder       C327       Labourer         Metal Scaffolder       C327       Labourer         Metal Scaffolder       C329       Semi-skilled Worker         Painter & Decorator       C330       Pipelayer         Pining Operative       C330       Pipelayer         Plant ad Equipment Operator (Builder's Lift and Other Machinery)       C333       S         Plant and Equipment Operator (Pointor)       C334       3         Plant and Equipment Operator (Filing)       C335       Plant and Equipment Operator (Pointor)         Plant and Equipment Operator (Tunnelling)       C336       Plant and Equipment Operator (C336         Plant and Equipment Operator (C339       Pneumatic Driller       C340         Rigger/Metal Fornwork Erector       C341	Glazier       C319       Painter       E312         Groud Investigation Operator/Driller/Borer       C320       Plumber and Pipe Fitter       E313         Groud Investigation Operator/Driller/Borer       C321       Refrigeration/AC/Ventilation Mechanic       E314         Joiner       C322       Sheet Metal Worker       E315         Levellet       C323       Sign Fabricator       E316         Marine Construction Plant Operator       C324       Sign Fabricator       E317         Marine Construction Plant Operator       C325       Thermal Insulation Craftsman       F318         Mason       C326       Welder       E319         Metal Scaffolder       C328       Semi-skilled Worker       E402         Painter & Decorator       C329       Technician       T         Piling Operative       C330       Plent and Equipment Operator (Builder's Lift and Other Machinery)       C331       S         Plant & Equipment Operator (Builder's Lift and Other Machinery)       C333       S       Plant and Equipment Operator (Plantan Craftsman       T         Plant & Equipment Operator (Builder's Lift and Other Machinery)       C333       S       Plant and Equipment Operator (Builder's Lift and Other Machinery)       C334       3         Plant and Equipment Operator (Builder's Lift and Other Machi

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Signed:

Date:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Duplicate - Contractor

Name/Post: Stephen Poon / RE Date:

Signed:

13 9.12

13/8/2012

### Contract No.: DC/2009/22 Date: 12/09/2012

Day: Wednesday

Plant		
Туре	No. Working	No. Idl
Air Compressor	1	1
Backhoe	5	1
Backhoe with Vibrating Hammer	!	
llower Trawler Drill	4	+
Dump Truck	2	
enerator	2	
irab Lorry	. <u>ī</u>	•
rout Machine		1
Ini Backhoe	1 1	1
xy-Acetylene	. 4	1
/ater Pump 50mm	8	
/ater Pump 75mm /elding Set	6	
relaing Set	3	-
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	i	

Signed:

6 IOW

Tso Sai Kuen / Inspector of Works

Date:

13/9/2012

Sheet I of 3

j.

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour		Méreo é renover a mar		Pla	nt				Material De	livered
						Туре	Wo	rking	1	Idling	3	Description	Quantity
			Trade	Code	No.	]	No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.10.5~10.7 and installing shoring frames Shuttering soffit of top slab for discharge chamber Excavating for Ø2100 pipe trench between manhole MH05 & MH06 and fabricating top layer I-beam walings and struts Cart away 3 truckloads of excavted materials to Area B General housekeeping & cleaning up sediments from wheel washing bay	Carpenter (Formwork)	C307	2	Backhoe	1	EX50					
			General Welder	C318	1	Blower	2						
			Labourer (female)	C406	2	Oxy-Acetylene	1						
			Labourer (male)	C406	5	Water Pump 50mm	2						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1						
						Welding Set	1		1				
00.00.10.00			Plant & Equipment Operator (Earthmoving Machinery)							ļ			
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to -1.7 mPD and cart away excavated material to Area B (9 Truckloads)	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	I	EX36					
			Truck Driver	C349	2	Dump Truck	2						
07:00 - 18:00	Area A - Ting Kok Road		Labourer (female)	C406	3								
18:00 - 20:00	na an an an an an an an an an an an an a	Manual control of temporary traffic light for traffic flow regulation (1F/Lab.)						ļ					
08:00 - 18:00	Area A - Ting Kok Road	Stripping off formwork from manhole MH03	Labourer (male)	C406	4	Backhoe	1	EX42					
00.00 - 10.00	(CH70-125)	Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.100~125 along carriageway Backfilling for Ø2100 pipe trench at Ch. 78~90		0.400	Ŧ	Dackhoe		LA42					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe with Vibrating Hammer	1	EX40					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1		1	Ι	1		
						Water Pump 50mm	2		[				
isone were were and a second					1. Arrowski ar ar ar ar ar ar ar ar ar ar ar ar ar				L				
:	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
00.00 10.00						D 11			ļ	ļ			
08:00 - 18:00		Bay 12 - Dismantling upper layer of I-beam walings and struts from shoring Bay 10~11 - Backfilling to box culvert trench	Labourer (female)	C406		Backhoe	1	EX08					
			Labourer (male)	C406	1	Backhoe	1	EX11					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1						
						Oxy-Acetylene	1						
						Water Pump 50mm	1						

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Signed:

Name/Post:

Signed:

Stephen Poon / RE

13.9.12 Date:

Date:

Date:

13/8/2012

Contract No.: DC/2009/22 Date: 12/09/2012

Day: Wednesday

626 IOW

Tso Sai Kuen / Inspector of Works

13/9/2012

X

### Idling Code:

a Breakdown b Standby c Awaiting Instruction

d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt			Ι	Material De	livered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
						Water Pump 75mm	2		1				1
						Welding Set	1						
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay Disposal of construction debris to WENT (1 Truck load)	Labourer (male)	C406	1	Grab Lorry	1						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Water Pump 50mm	1	Ι		1			
Photosophic and a second second second second second second second second second second second second second s						Water Pump 75mm	1						
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. grout holes (2-5 & 2-6) and inserting grout tube	Labourer (male)	C406	2	Air Compressor	1	AC05					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05					
						Grout Machine			1		h		
						Mini Backhoe			1	EX53	h		
						Oxy-Acetylene	1						
					L	Water Pump 50mm	1						
					ļ	Water Pump 75mm	1						
						Welding Set	1			4	ļļ		
08:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	Manhole S6 - Formwork shuttering for wall stems PL 1602.1 - Cement grouting to fill up the cavity between heading tunnel and Ø1650 drain pipe	Carpenter (Formwork)	C307	2	Backhoe			1	EX21	h		
		12 roozh Coment grouting to hir up the cavity between neading tanner and 5 roos dram pipe	Labourer (male)	C406	3	Blower	2			+	+	ан та сайрайнийн тоглан алсанаан алсан алс	
						Generator	1			+	+		
						Oxy-Acetylene			1		h		
						Water Pump 50mm	1			1			
ојн у на орој на орој на орој на орој на орој на орој на орој на орој на орој на орој на орој на орој на орој Орој на орој на						Water Pump 75mm	1			$\uparrow$		98822449404944449407847847847848948464444444444444444444444	
										1			+
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement								1			
NG MANANANANANANANANANANANANANANANANANANAN	Area I - Contractor Office	No activity as per kLKJV arrangement										webscondigenetwankowany o katalo ujezaji dogo zajili zajili zajili zajili zajili zajili zajili zajili zajili za	Jacobard Section And Annual Se

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

1318 /2012

Signed:

Name/Post:

Date:

Date:

Date:

13.9.12

Stephen Poon / RE

Contract No.: DC/2009/22 Dat

te:	12/09/2012	2

Day: Wednesday

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Tso Sai Kuen / Inspector of Works

13/9/2012

yest.

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) ST 0, TP 0

Very Hot Weather Warning - 10:45~24:00

Fine Fine

(Hong Kong Observatory's record)

(Record verbal instructions given)	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.	Plant		
	Assistant Surveyor	1	Asphalter (Other Construction)	C301		Chainman	C401	-	Туре	No. Wester	
	Chainman	3	Asphalter (Roadworks)	C302		Concreting Labourer	C402		Air Compressor	No. Workin	ng 180. I
	Community Liaison Officer	1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403	1	Backhoe	1	
	CEG	1	Bar Bender & Fixer	C304		Excavator				4	2
	Contract Manager	1	Bricklayer	C305			C404	-	Backhoe with Vibrating Hammer	1	
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C305		Heavy Load Labourer Labourer (male / female) / Lorry checker / Watchman/Office attendan	C405		Blower	4	
	Environmental Officer	1	Carpenter (Fornwork)					26	Crawler Drill	1	
	Foreman/Assistant Foreman	2		<u>C307</u>	4	Sewerman	C407		Dump Truck	2	
		4	Concrete Repairer	C308		Automation Equipment Mechanic	E301		Generator	2	:
	General Foreman	1	Concretor	C309		Building Services Mechanic	E302		Grout Machine	1	
	Labour Officer	1	Construction Plant Mechanic	C310		Cable Jointer (Power)	E303		Mini Backhoe		· · · · · · · · · · · · · · · · · · ·
	Land Surveyor	1	Curtain Wall Installer	C311		Carpenter	E304		Oxy-Acetylene	1	1
Utilities	Project Director	1	Demolition Worker	C312		Electrician/Electrical Fitter	E305	1	Water Pump 50mm		. 1
(Record location & nature of works)	Project Manager	2	Diver	C313		Fire Services Mechanic	E306	-	Water Pump 75mm	8	1
(Record location & nature of works)	Project Quantity Surveyor	1	Drainlayer	C314		Instrument Mechanic				6	
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315	-		E307		Welding Set	3	1
	Safety Officer	1	Floor Layer			Lift Electrician	E308				
	Site Agent			C316		Lift Mechanic	E309				
		1	Gas Plumber	C317		Mechanical Fitter	E310			1	
	Surveyor	1	General Welder	C318	1	Overhead Linesman	E311		· · · ·	-	
			Glazier	C319		Painter	E312				
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313			•	
			Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E313			··· •	÷
			Joiner	C322		Sheet Metal Worker			and the second second second second second second second second second second second second second second second		
			Leveller				E315		warman and the second sec		
			Marble Worker	C323		Sign Fabricator	E316				
				C324		Sign Installer	E317				
Progress	۹ I		Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318				
(Mention briefly any matter delaying or obstructing progress)	d		Mason	C326		Welder	E319				
(Wrention brienty any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E401		· · ·		
			Metal Worker	C328		Semi-skilled Worker	E402			4	
			Painter & Decorator	C329		Technician	L402	··· ····			
			Piling Operative	C330			. I				
			Pipelayer			we are and and and and and a manual second and					<u>(</u>
	· · · · · · · · · · · · · · · · · · ·		Plant and Emigrant Oreganize (Buildedt 1 9 - 1 Orly M. 1)	C331							
Visitor			Plant and Equipment Operator (Builder's Lift and Other Machinery)								
(Record names of visitors and time of visit)			Plant & Equipment Operator (Earthmoving Machinery)	C333	4						
			Plant and Equipment Operator (Hoist and Crane)	C334	2			]	· · ·	÷	
			Plant and Equipment Operator (Piling)	C335						· · · · · · · · · · · · · · · · · · ·	
			Plant and Equipment Operator (Tunnelling)	C336		1			Sec. 1	-	
			Plasterer	C337						1	
			Plumber							1	
	· · · · · ·	-		C338							
Accidents	· · · · · · · · · · · · · · · · · · ·		Pneumatic Driller	C339							
(Describe any occurance of accident)			Prestressing Operative	C340							· • • · · · · · ·
			Rigger/Metal Formwork Erector	C341					a de anti-anti-a de la defensa de la companya de la defensa de la companya de la defensa de la companya de la d	en en el la construcción de la construcción de la construcción de la construcción de la construcción de la const	
			Shotcretor	C342							
			Shotfirer	C343					· · · · · · · · · · · · · · · · · · ·		
			Slope Maintenance Worker	C344							
			Structural Steel Erector	C345						+	
Remarks	-		Structural Steel Welder		-		1				
andover inspection of Transformer Room was held at 10:30 A.M. amongst Mr.				C346							
of Kam Shing (represebtative of CLP), Mr. Jeff Chan of KLKJV and Mr. Poon			Tiler	C347				1			
COM			Trackworker	C348						•	
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2						t t
ly Safety and Environmental Coordaination Meeting #130 was held at 11:30			Window Frame Installer	C350			<del>-</del>				
	Total	22		0550							
			1	+					and a second second second second second second second second second second second second second second second		
	Assistance to Engineer	No.	and the second second second second second second second second second second second second second second second		·				L		
	41		the second	· · · · · · ·					the second second second second second second second second second second second second second second second se		
	Amah	1		÷							
	Coordinate Engineer							1			1
	Drafting Assistant	1					í		and the second sec		- <u>+</u> -
	Driver	2			~~~~			· · ·	· · · · · · · · · · · · · · · · · · ·		
	Field Assistant	3 1					ŧ		and the second sec	- · · ·	
	Office Assistant										
		, 1		1	1		1				
	Watchman			4 . 4							
	Total	9	(To be continued)			Total Labour		40	Total	37	

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or. if the trade is not listed. truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Signed:

Engineer's Representative

~

Signed:

Contractor's Representative

Name/Post: Stephen Poon / RE

Date:

Original - ER's File

Duplicate - Contractor

12.9.12

12/8/2012

Wong Ching Lung / Site Agent

### Contract No.: DC/2009/22 Date: 11/09/2012 Day: Tuesday

Signed:

Gat IOW

Tso Sai Kuen / Inspector of Works

Date:

12-9-2012

Sheet 1 of 3

Xel

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	*******			Pla	int				Material De	livered
						Туре	W	orking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.10.0~10.5 and installing shoring frames Erecting falsework, shuttering for soffit of top slab for discharge chamber & installing Ø150 uPVC downpipe Formwork shuttering for U-channel at manmade slope Excavating for Ø2100 pipe trench between manhole MH05 & MH06 and fabricating top layer of I- beam walings and struts Fixing cable trays on walls & installing earthing to connect metal fixtures at transformer room General housekeeping & cleaning up sediments from wheel washing bay	Carpenter (Formwork)	C307	2	Backhoe	1	EX50					
	50000000000000000000000000000000000000		Electrician/Electrical Fitter	E305	1	Blower	2						
an sille contact and contracted and a state of the contract of the			General Welder	C318	1	Oxy-Acetylene	1	T			Ι	na na na na na na na na na na na na na n	
			Labourer (female)	C406	2	Water Pump 50mm	2	1		1	1	n	
			Labourer (male)	C406	8	Water Pump 75mm	1	1	1		1		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1			1		10. 10. 10. 10. 10. 10. 10. 10. 10. 10.	
								1				an 1946 - an 1947 - Alfred California an ann an  997	
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to -1.7 mPD and cart away excavated material to Area B (20 Truckloads)	Labourer (male)	C406	1	Backhoe	1	EX36					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Dump Truck	2		1				
			Truck Driver	C349	2			+	1	1	<u>†</u>		
								1	1				1
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3								
00.00 10.00				_									
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Stripping off formwork for manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.110~125 along carriageway	Labourer (male)	C406		Backhoe			]	EX42	h		
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Backhoe with Vibrating Hammer	1	EX40				NS248041000mm100mb2in100pr0004008000094806000000000000000000000000	
						Oxy-Acetylene	1						
90000				_		Water Pump 50mm	2			ļ			
								ļ	L				
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement		_									
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 13 - Dismantling upper layer I-beam walings and struts from shoring Bay 11 - Backfilling to box culvert trench	Labourer (female)	C406	1	Backhoe	1	EX08				малиналия — — — — — — — — — — — — — — — — — — —	
			Labourer (male)	C406	1	Backhoe	1	EX11		<b> </b>		***************************************	
kan na kana kana kana kana kana kana ka			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1	1					1
and and the second second second second second second second second second second second second second second s						Oxy-Acetylene	1	<u>†</u>			<u>├</u>		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed: <

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

12/8/2012

Date:

Name/Post:

Stephen Poon / RE

12.9.12

Date:

Date:

Contract No.: DC/2009/22 Date: 11/09/2012

Day: Tuesday

Q 6 IOW

Tso Sai Kuen / Inspector of Works

12-9-2012

History

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered		
						Туре	Wa	rking	Τ	Idling		Description	Quantity	
			Trade	Code	No.	1	No.	ID	No.	ID	Code			
					1	Water Pump 50mm	1		1	1		1975-2017-1971-2017-2017-2017-2017-2017-2017-2017-20	1	
					1	Water Pump 75mm	2	1	1		11			
					1	Welding Set	1	1					***	
								1		1				
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1							
	and and and an adversion of the contract of the second statement of the					Water Pump 75mm	1							
					L									
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 1 no. hole (2-4) at layer 2 and inserting grout tube Cement grouting to 1 no. drill hole (2-4) at layer 2	Labourer (male)	C406	3	Air Compressor	1	AC05						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05						
						Grout Machine	1							
						Mini Backhoe			1	EX53	h			
						Oxy-Acetylene	1							
						Water Pump 50mm	1							
						Water Pump 75mm	1					1919 - January Martine Martine State of the St		
					ļ	Welding Set	1	ļ	ļ	_			-	
08:00 - 18:00	Area E - Siu Lek Yuen	Manhole S6 - Rendering for benching and shuttering for wall stem				5.44		<u> </u>					-	
08:00 - 18:00	Rd.Playground	PL 1602.1 - Preparation works for cement grouting the cavity between heading tunnel and drain pipe1650Ø	Carpenter (Formwork)	C307	2	Backhoe			1	EX21	h			
			Labourer (male)	C406	3	Blower	2	1		1	<u> </u>		100	
						Generator	1		1	1	+	0=411100#2040#2040#00#00#00#00#00#00#00#00#00#0#0#0#		
						Oxy-Acetylene		1	1	1	h	ana ang ang ang ang ang ang ang ang ang		
						Water Pump 50mm	1			1				
						Water Pump 75mm	1	1	1	1		warnen er senne interfallen interfelsen in den etter man state besammen gege		
						Welding Set		1	1	1	h			
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	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
AND STREET AND AND AND AND AND AND AND AND AND AND	Area I - Contractor Office	No activity as per KLKJV arrangement											a na	

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Signed:

Stephen Poon / RE Name/Post:

1 8. 9.12 Date:

Date:

Date:

Wong Ching Lung / Site Agent 12/8/2012

Contractor's Representative

Contract No.: DC/2009/22 Dat

e:	1	1	/0	9	/2	0	1	2
			. 0	-		v		-

Day: Tuesday

16 (5 IOW

Tso Sai Kuen / Inspector of Works

12-9-2012

Sheet 3 of 3

X

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Fine Fine ST 0, TP 0

Very Hot Weather Warning - 07:45~18:15

(Hong Kong Observatory's record)

Instructions to Contractor	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Codo	No.
(Record verbal instructions given)				·		Labour	Code	190.
	Assistant Surveyor	1	Asphalter (Other Construction)	C301		Chainman	C401	
	Chainman	3	Asphalter (Roadworks)	C302		Concreting Labourer	C402	1
	Community Liaison Officer	1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403	
	CEG	1	Bar Bender & Fixer	C304		Excavator	C404	
	Contract Manager	1	Bricklayer	C305		Heavy Load Labourer		:
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306		Labourer (male / female) / Lony checker / Watchman/Office attendan	C405	0.7
	Environmental Officer	1	Carpenter (Fornwork)	C307	4		0100	27
	Foreman/Assistant Foreman	2	Concrete Repairer		4	Sewerman	C407	
	General Foreman	+ + +		C308	-	Automation Equipment Mechanic	E301	
			Concretor	C309		Building Services Mechanic	E302	
	Labour Officer		Construction Plant Mechanic	C310		Cable Jointer (Power)	E303	
	Land Surveyor	11	Curtain Wall Installer	C311		Carpenter	E304	1
Utilities	Project Director	1	Demolition Worker	C312		Electrician/Electrical Fitter	E305	1
(Record location & nature of works)	Project Manager	2	Diver	<u>C313</u>		Fire Services Mechanic	E306	
(Accord location & nature of works)	Project Quantity Surveyor	1	Drainlayer	C314		Instrument Mechanic	E307	
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315		Lift Electrician	E308	
	Safety Officer	11	Floor Layer	C316		Lift Mechanic		
	Site Agent	1	Gas Plumber	C317		Mechanical Fitter	E309	
	Surveyor	1	General Welder				E310	
		· · · · ·	Glazier	C318	1 - 1	Overhead Linesman	E311	
				C319		Painter	E312	
			Ground Investigation Operator/Driller Borer	C320		Plumber and Pipe Fitter	E313	
			Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314	
			Joiner	C322		Sheet Metal Worker	E315	
			Leveller	C323		Sign Fabricator	E316	
			Marble Worker	C324		Sign Installer	E317	
			Marine Construction Plant Operator	C325	1	Thermal Insulation Craftsman	E318	· · · •
Progress			Mason	C326		Welder		
(Mention briefly any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E319	· · ·
			Metal Worker	C328	···· · ·	Semi-skilled Worker	E401	
		· • • · · · · · · · · · · · · · · · · ·	Painter & Decorator		· · ·- ·- · · ·		E402	
	a second a second second second second second second second second second second second second second second se			C329		Technician	Т	1
	and and an an arrangement of a second	4	Piling Operative	C330		The second s		
			Pipelayer	C331				
Visitor	┥┝┈──		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332				
(Record names of visitors and time of visit)	- · · · · · · · ·		Plant & Equipment Operator (Earthmoving Machinery)	C333	4			
incerting mannes of visitors and time of visit			Plant and Equipment Operator (Hoist and Crane)	C334	2			. 1
			Plant and Equipment Operator (Piling)	C335	1			
			Plant and Equipment Operator (Tunnelling)	C336			· · · ·	
			Plasterer	C337			· · · · · · · · · · · ·	· · · · · ·
			Plumber	C338			+	
		+ 1	and the second sec			e en en en en en en en en en en en en en		
Accidents			Pneumatic Driller	C339		the second second second second second second second second second second second second second second second se	1	
(Describe any occurance of accident)			Prestressing Operative	C340				
			Rigger/Metal Formwork Erector	C341				
	11		Shotcretor	C342	1			
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			Shotfirer	C343	1			
				C343				
			Shotfirer Slope Maintenance Worker	C343 C344				
Remarks			Shotfirer Slope Maintenance Worker Structural Steel Erector	C343 C344 C345				
Remarks			Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder	C343 C344 C345 C346	· · · · · ·		-	·····
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Remarks			Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker	C343 C344 C345 C346 C347 C348				· · · · · ·
Remarks			Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			· · · · · ·
Remarks			Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker	C343 C344 C345 C346 C347 C348	2			· · · · · · · · · · · · · · · · · · ·
Remarks	Total	22	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			· · · · · · · · · · · · · · · · · · ·
Remarks			Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			· · · · · · · · · · · · · · · · · · ·
Remarks	Total Assistance to Engineer	22 No.	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			
Remarks	Assistance to Engineer	No.	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			· · · · · · · · · · · · · · · · · · ·
Remarks	Assistance to Engineer Amah		Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			
Remarks	Assistance to Engineer Amah Coordinate Engineer	No.	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			
Remarks	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant	No.	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349				
Remarks	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver	No. 1 1 1 2	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			
Remarks	Assistance to Engineer Amah <u>Coordinate Engineer</u> Drafting Assistant Driver Field Assistant	No.	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			
Remarks	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver	No. 1 1 1 2	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349				
Remarks	Assistance to Engineer Amah <u>Coordinate Engineer</u> Drafting Assistant Driver Field Assistant	No. 1 1 1 2	Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C343 C344 C345 C346 C347 C348 C349	2			

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Signed:

Engineer's Representative

Signed: Contractor's Representative

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Original - ER's File

Date:

11. 9.12

Date:

11/8/2012

Wong Ching Lung / Site Agent

Duplicate - Contractor

### Contract No.: DC/2009/22 Date: 10/09/2012

Day: Monday

Туре	No. Working	No. Idl
ir Compressor	1	
ackhoe	4	2
ackhoe with Vibrating Hammer	4	
awler Drill	1	
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enerator	2	
out Machine		1
ini Backhoe xy-Acetylene		
brating Prob	4	1
ater Pump 50mm	8	1
ater Pump 75mm	6	
elding Set	3	
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al	38	5

IOW

Tso Sai Kuen / Inspector of Works

Date:

11-9-2012

Sheet 1 of 3

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
	Area A - DN1800	No activity as per KLKJV arrangement								1	1		
	Stormwater Drain				<b> </b>					<u> </u>	<u> </u>		
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.9.4~10.0 and installing shoring frames	Carpenter (Formwork)	C307	2	Backhoe	1	EX50					
		Formwork shuttering for wall W12 at discharge chamber Fabricating upper layer of I-beams walings for shoring of Ø2100 pipe trench between manhole MH05 & MH06 Laying cable trays on walls & installing earthing to connect the metal fixtures at transformer room	2										
		General cleaning and forming level studs for floor screeds at switchroom General housekeeping & cleaning up sediments from wheel washing bay											
			Electrician/Electrical Fitter	E305	1	Blower	2						
andread and an and an and an an an an an an an an an an an an an			General Welder	C318	1	Oxy-Acetylene	1						
			Labourer (female)	C406	3	Water Pump 50mm	2						
			Labourer (male)	C406	9	Water Pump 75mm	1						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						
			Plasterer	C337	1							an an an an an an an an an an an an an a	
									ļ				
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to -1.7 mPD & cart away excavated material to Area B (6 Truckloads)	Labourer (male)	C406	1	Backhoe	111	EX36					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Dump Truck	2						
			Truck Driver	C349	2			1					
07.00 10.00				0406						ļ		500005-2	
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 L/Lab.)	Labourer (female)	C406	3				ļ			New York Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Standard Sta	
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Formwork shuttering and concreting to access shaft of manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.120~125 along footpath	Carpenter	E304	1	Backhoe			1	EX42	h	nga yana maning diga shifti da Shifti da Shifti da Shifti da shifti na sa na ya na yana nga manga nga nga nga n	
			Labourer (male)	C406	2	Backhoe with Vibrating Hammer	1	EX40					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1	1	1				
						Vibrating Prob	1						
						Water Pump 50mm	2						
	l <u> </u>			-				<u> </u>		Ļ		ana ana ana amin'ny desira amin'ny amin'ny amin'ny amin'ny desira	
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement						<u> </u>					
00.00 10.00	A	Bay 10 - Fabricating struts to stop end sheetpile shoring at junction with bay 9 to facilitate backfill	Labourer (female)	C406	1	Dealihaa	1	EVOC	<u> </u>	<u> </u>			
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Fabricating struts to stop end sheetpile shoring at junction with bay 9 to facilitate backfill works Bay 11 - Backfilling to box culvert trench	LAUUUIET (IEIIIAIE)	1.400	1	Backhoe		EX08					
ACCURATE AND A CONTRACT OF A C			Labourer (male)	C406	1	Backhoe	1	EX11	1	İ		nan onan 1961 to warne the Marine to Konna Binning and an and a second source and a second source and a second	

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Engineer's Representative

Stephen Poon / RE

Signed:

Contractor's Representative

11 18 /2012

Signed:

Wong Ching Lung / Site Agent

Name/Post:

Signed:

11.9.12 Date:

Date:

Date:

Contract No.: DC/2009/22

Date: 10/09/2012

Day: Monday

IOW

Tso Sai Kuen / Inspector of Works

11-9-2012

Al chan

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	We	rking	Τ	Idling		Description	Quantity
			Trade	Code	No.	-	No.	ID	No.	ID	Code		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1		<u> </u>	1			
						Oxy-Acetylene	1	1	1				
						Water Pump 50mm	1	1		11-			
						Water Pump 75mm	2	1	1				1
						Welding Set	1						
Catalian							1	1		1 1			
3:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1					NEXTRA CONSTRUCTION CONTRACTOR CONTRACTOR OF THE CONTRACTOR OF THE CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR	
	······································					Water Pump 75inm	1		1				1
ar a constant and a constant of the block in a													
8 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. holes (1-2 & 1-3) at layer 1 and inserting grout tube	Labourer (male)	C406	3	Air Compressor	1	AC05				nn seann thread an ann an suite an an an an ann an ann an ann an ann an a	
www.anananananananananananananananananan			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	1				
						Grout Machine		1	1		h		
						Mini Backhoe		1	1	EX53	h		
						Oxy-Acetylene	1		1				
						Water Pump 50mm	1	1				1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	
						Water Pump 75mm	1	1		1 1			
						Welding Set	1						
:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Formwork shuttering and concreting to seal up Ø1650 pipe entry at existing manhole wall Manhole S6 - Concreting to benching	Carpenter (Formwork)	C307		Backhoe			1	EX21	h		
			Labourer (male)	C406	3	Blower	2						
						Generator	1						
2027-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	an an an an an an an an an an an an an a			_		Oxy-Acetylene			1		h		
						Vibrating Prob	1						
						Water Pump 50mm	1						
						Water Pump 75mm	1						
*****************	Area G - Ngan Shing St.	No activity as per KLKJV arrangement											
	0 0 0 0 0 0									╂		STATISTICS CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR CONTRACTOR C	+
entrationitie-memoralis-memoralis-	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Stephen Poon / RE

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

11/8/2012

Name/Post:

Date: 11 4.12

Date:

Date:

Contract No.: DC/2009/22 Date

e:	10/09/2012	2

Day: Monday

IOW

Tso Sai Kuen / Inspector of Works

11-9-2012

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

### Typhoon / Warning Signal:

			• •
<u>AM</u>	<u>PM</u>	Rainfall (mm)	Thu
Fine	Fine	ST 0, TP 0	

hunderstorm Warning - 12:50~14:00

(Hong Kong Observatory's record)

Weather:

Instructions to Contractor	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.
(Record verbal instructions given)								
			Asphalter (Other Construction)	C301		Chainman	C401	
			Asphalter (Roadworks)	C302	-	Concreting Labourer	C402	
		i.	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403	:
		÷	Bar Bender & Fixer	C304		Excavator	C404	
Comments by Engineer's / Contractor's Representative			Bricklayer	C305		Heavy Load Labourer	C405	
Comments by Engineer's / Contractor's Representative			Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406	4
			Carpenter (Fornwork)	<u>C307</u>		Sewennan	C407	
			Concrete Repairer	C308		Automation Equipment Mechanic	E301	
		:	Concretor	C309		Building Services Mechanic	E302	.
			Construction Plant Mechanic	C310		Cable Jointer (Power)	E303	
			Curtain Wall Installer	C311		Carpenter	E304	
Utilities			Demolition Worker	C312		Electrician/Electrical Fitter	E305	
(Record location & nature of works)			Diver	C313		Fire Services Mechanic	E306	
			Drainlayer	C314		Instrument Mechanic	E307	
			Electrician (Main Contractor's)	. C315		Lift Electrician	E308	
			Floor Layer	C316		Lift Mechanic	E309	
		.	Gas Plumber	C317		Mechanical Fitter	E310	
			General Welder	C318	i	Overhead Linesman	E311	
			Glazier	C319		Painter	E312	
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	
		1	Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314	
			Joiner	C322		Sheet Metal Worker	E315	
			l eveller	C323		Sign Fabricator	E316	
			Marble Worker	C324		Sign Installer	E317	
			Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318	
Progress	]		Mason	C326		Welder	E319	
(Mention briefly any matter delaying or obstructing progress)	[ ] .		Metal Scaffolder	C327	.	Labourer	E401	
			Metal Worker	C328		Semi-skilled Worker	E402	
			Painter & Decorator	C329		Technician	Т	
			Piling Operative	C330				1
			Pipelayer	C331				
Visitor			Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332				
(Record names of visitors and time of visit)			Plant & Equipment Operator (Earthmoving Machinery)	C333				
(ACCOLUTATING OF VISIOUS AND TIME OF VISIO)			Plant and Equipment Operator (Hoist and Crane)	C334				
			Plant and Equipment Operator (Piling)	C335				
			Plant and Equipment Operator (Tunnelling)	C336				
			Plasterer	C337				
			Plumber	C338				
Accidents			Pneumatic Driller	C339				1
(Describe any occurance of accident)			Prestressing Operative	C340				
			Rigger/Metal Fornwork Erector	C341				
			Shotcretor	C342				
			Shotfirer	C343				
			Slope Maintenance Worker	C344	1			
		1	Structural Steel Erector	C345				1
Remarks			Structural Steel Welder	C346				
			Tiler	C347				1
			Trackworker	C348				1
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349				
			Window Frame Installer	C350				
	Total				1			
	Assistance to Engineer	No.			1			1
		110.						1
	Driver	1						· · · · · · · · · · · · · · · · · · ·
	Watchman	1			1			
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\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Signed:

Name/Post: Stephen Poon / RE

Date:

Engineer's Representative

Contractor's Representative

Wong Ching Lung / Site Agent

10.1.12

Original - ER's File Duplicate - Contractor

Date:

Signed:

10/8/1002

### Contract No.: DC/2009/22 Date: 09/09/2012

Day: Sunday

Plant		
Type Air Compressor Peokhoo	No. Working	No. Idle
Backhoe Crawler Drill Generator	·	7 1 1
Mini Backhoe Steel Bending Machine Water Pump 50mm	. 4	1 3 1
Water Pump 75mm	: I	1
	- - - -	•
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	• • • • •	
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otal	5	16

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10 - 9 - 2012 Sheet 1 of 3

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt	and a second second second second			Material De	livered
						Туре	Wo	rking	Τ	Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stornwater Drain	No activity as per KLKJV arrangement											
					ļ		_						
	Area A - Pump Station	No activity as per KLKJV arrangement			ļ	Backhoe			1	EX50	i		
					ļ	Steel Bending Machine		ļ	3		i		
					ļ	Water Pump 50mm	2	ļ		ļ			
particular and a second s						Water Pump 75mm	1		-		ļ	and and a state of the state of	
						D. 11			<u> </u>				
	Area A - Pump Station - Box Culvert	No activity as per KLKJV arrangement				Backhoe	_		1	EX36	I		
07 18:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.)	Labourer (female)	C406	3	Backhoe			<u> </u>	EX40	i		5150 or 1 1011 1011 1010 1010 1010 1010 101
18:00 - 20:00	indu in ing non roud	Manual control of temporary traffic light for traffic flow regulation (1 M/Lab. from Area I)											
						Backhoe			1	EX42	I		
									ļ	ļ			
	Area A - Ting Kok Road (Intake Structure)	No activity as per KLKJV arrangement				Water Pump 50mm	1						
	Area B - Tung Tsz Nursery (CH130-CH280)	No activity as per KLKJV arrangement				Backhoe			1	EX08	i		
						Backhoe			1	EX11	i		
	Area B - Tung Tsz	No activity as per KLKJV arrangement				Water Pump 50mm			1		i	₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩₩	
	Nursery (CH40-CH130)					Water Pump 75mm			1	+	i		
								+	<u> </u>	+			1
	Area B - Tung Tsz Nursery (Jacking Pit)	No activity as per KLKJV arrangement				Air Compressor			1	AC05	i		
	<u> </u>					Crawler Drill	-	1	1	DR05	i		
						Mini Backhoe		1	1	EX53	i	aa oo dhala dharada aa ah na sharada da dharada dharada dharada qaa ah na sayaa ah na sayaa ah na sayaa ah na s	
anopanaparen vormuna erik bilakilen (kolisie bilandari dala polatika zeläkileksia suure parameteri						Water Pump 50mm	1						
	Area C - Shallow								<b> </b>				<u> </u>
	Area C - Shallow Marshy Area	No activity as per KLKJV arrangement											
	Area E - Siu Lek Yuen Rd.Playground	No activity as per KLKJV arrangement				Backhoe			1	EX21	i	n de Nacional de Martine anno est e parte parte parte a parte de la compañía de la compañía de la compañía de l	
						Generator	1		1		i		
							1	1		1			
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement					1	1	1	1			

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Stephen Poon / RE

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

10/8/2012

Name/Post:

Date: 10.9.12 Date:

Date:

Contract No.: DC/2009/22 Date: 09/09/2012

Day: Sunday

E;X@ IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Xind

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Deli	ivered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
								1	1	1			1
08:00 - 18:00	Area I - Contractor Office	Office cleaning and site patrol	Labourer (male)	C406	1					1			

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:	Rent
	Fnginger's Represente

Engineer's Representative

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

10/9/2012

Stephen Poon / RE Name/Post:

Date: 10.5.12 Date:

Date:

Contract No.: DC/2009/22 Date: 09/09/2012

Day: Sunday

 $\mathcal{O}$ G IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Sheet 3 of 3

Aster

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u>	<u>PM</u>	Rainfall (mm)	
Fine	Shower	ST 2, TP 0	

Thunderstorm Warning - 12:35~15:45

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.	Plant	2011-1911-1911-1911-191-191-1911-1911-19	
record (croin not dettoin gren)	Assistant Surveyor	1	Asphalter (Other Construction)	C301		Chainman	C401		Туре	No. Working	No
	Chainman	3	Asphalter (Roadworks)	C302		Concreting Labourer	C402		Air Compressor	1	
	Community Liaison Officer	1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403		Backhoe	5	
	CEG	1	Bar Bender & Fixer	C304	2	Excavator	C404		Backhoe with Vibrating Hammer	5	1
	Contract Manager	1	Bricklayer	C305	~	Heavy Load Labourer			Blower	A	
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C305		Labourer (male / female) / Lorry checker / Watchman/Office attendan	C405	07		4	
Source and a subject of constructor s representative	Environmental Officer							27	Crawler Drill		
		- <u>-</u>	Carpenter (Formwork)	C307	2	Sewerman	C407		Dump Truck	5	1
	Foreman/Assistant Foreman	2	Concrete Repairer	C308		Automation Equipment Mechanic	E301		Generator	. 2	
	General Foreman	. 1	Concretor	C309		Building Services Mechanic	E302		Grout Machine	1	
	Labour Officer	; 1	Construction Plant Mechanic	C310		Cable Jointer (Power)	E303		Mini Backhoe		1
	Land Surveyor	1	Curtain Wall Installer	C311		Carpenter	E304	1	Oxy-Acetylene	5	
Utilities	Project Director	. 1	Demolition Worker	C312		Electrician/Electrical Fitter	E305		Water Pump 50mm		
	Project Manager	2	Diver	C313		Fire Services Mechanic	E306		Water Pump 75inm	6	-
(Record location & nature of works)	Project Quantity Surveyor	1	Drainlayer	C314		Instrument Mechanic	E307		Welding Set	. 4	
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315		Lift Electrician	E308		Weiding Set		
	Safety Officer		Floor Layer	C316		Lift Mechanic					
	Site Agent		Gas Plumber				E309			••••••	
		1		C317		Mechanical Fitter	E310	-		i .	
	Surveyor	1 1	General Welder	C318	_ 1	Overhead Linesman	E311				
	· · · · · · · · · · · · · · · · · · ·		Glazier	C319		Painter	E312				1
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313				
			Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314			• • • • • • •	
			Joiner	C322		Sheet Metal Worker	E315				1
			Leveller	C323		Sign Fabricator	E316				
			Marble Worker	C324		Sign Installer	E317				
			Marine Construction Plant Operator	C325		Thermal Insulation Craftsman			1 - 1 <sup>10</sup>		4
Progress		-	Mason	C326		Welder	E318		-		
(Mention briefly any matter delaying or obstructing progress)			Metal Scaffolder				E319				÷
(intention briefly any matter delaying of obstructing progress)		- · · · ·		C327		Labourer	E401			· · · · · · ·	
	· · · ·	÷	Metal Worker	C328	1	Semi-skilled Worker	E402				
			Painter & Decorator	C329		Technician	T				
			Piling Operative	C330			L . 1				
			Pipelayer	C331							1
			Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332			•				
Visitor	_		Plant & Equipment Operator (Earthmoving Machinery)	C333	5		1				
(Record names of visitors and time of visit)		1	Plant and Equipment Operator (Hoist and Crane)	C334			1				ł
			Plant and Equipment Operator (Piling)	C335		····					
		1	Plant and Equipment Operator (Tunnelling)	C336		and the second second second second second second second second second second second second second second second					- ÷
		· · ····				and the second second second second second second second second second second second second second second second	• • • •		· · · · · · · · · · · · · · · · · · ·		-
		·	Plasterer	C337					and the second and a second second second second second second second second second second second second second	÷	
			Plumber	C338		and the second sec					
Accidents			Pneumatic Driller	C339			1				
(Describe any occurance of accident)			Prestressing Operative	C340							
		1	Rigger/Metal Fornwork Erector	C341							· · · •
			Shotcretor	C342							
		1	Shotfirer	C343	1		• •		· · · · · · · · · · · · · · · · · · ·		
			Slope Maintenance Worker	C344					and a second second second second second second second second second second second second second second second		
			Structural Steel Erector		.				and the second second second second second second second second second second second second second second second		i.
Remarks		+ ·· ··-		C345		· · · · · · · · · · · · · · · · · · ·					
<b>KEIII AI KS</b>	mad la su su su su su su su su su su su su su		Structural Steel Welder	C346	.						
			Tiler	C347		and the second second second second second second second second second second second second second second second					
			Trackworker	C348							
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	5						
			Window Frame Installer	C350	1			1	····		3
	Total	22									
				1 1		and the second sec		1	· · · · ·	1	÷
	Assistance to Engineer	No.	100			the second second second second second second second second second second second second second second second se					
			and the second second second second second second second second second second second second second second second	+ · · · +		the contract of the second second second second second second second second second second second second second				1	. į.
	Amah	1		1						4	4
											4
	Drafting Assistant	1	a second s	1							
	Driver	2			1			1			1
	Field Assistant	3									1
	Office Assistant	1									
	Watchman	; 1			1			-	· · · · · ·	a series and a series of the	4.
	Total	9	(To be continued)		·	Total Labour	i	1.1		· · · · · · · · · · · · · · · · · · ·	
			RIUDE CONTINUEUT			LI OTAL L'ADOR"		44	liotal	41	

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

25 Signed:

Engineer's Representative

Signed:

Date:

Contractor's Representative

Wong Ching Lung / Site Agent

Name/Post: Stephen Poon / RE

Date:

Original - ER's File

Duplicate - Contractor

10. 7.12

10/8/2017

### Contract No.: DC/2009/22 Date: 08/09/2012

Day: Saturday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10-9-2012

Sheet 1 of 3

NE

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt			ann den en almei et hat mit det dit de	Material De	livered
						Туре	W	orking	Ι	Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800	No activity as per KLKJV arrangement						1			1		
	Stormwater Drain				<u> </u>								
00.00.10.00					<u> </u>	D 11	<u> </u>						
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.9.1~9.4 and installing shoring frames Formwork shuttering for wall W12 of discharge chamber Fixing cable trays on walls at transformer room Excavating for Ø2100 pipe trench between manhole MH05 & MH06 to 2nd layer of walings and cart away 14 truckloads of excavated materials to Contract 2's stockpile area at Tai Wah St. General housekeeping	Carpenter (Formwork)	C307	2	Backhoe	I	EX50					
			Labourer (female)	C406	2	Blower	2						
			Labourer (male)	C406	6	Oxy-Acetylene	1						
			Metal Worker	C328	1	Water Pump 50mm	2	1	1	1			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1			1			
						Welding Set	1				1		
							1			1			
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer of l-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36					
			Labourer (male)	C406	1	Oxy-Acetylene	1	1	1				
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						1
							1			1	1		1
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3								
									-	ļ		anna ann an ann ann ann ann ann ann ann	
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Backfilling sand to Ø2100 pipe trench at Ch. 78~90 and compacting Formwork shuttering and rebar fixing for access shaft of manhole MH03	Bar Bender & Fixer	C304	2	Backhoe	1	EX42					
			Carpenter	E304	1	Backhoe with Vibrating Hammer			1	EX40	h	a gan darang digingan sa kabatan Andra Parang kabanan karana karang darang kabanan karang kabanan karang kabana	
			Labourer (male)	C406	2	Oxy-Acetylene	1						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2						
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Fabricating sheetpile stop end shoring at bay 9 junction to facilitate backfill works Bay 12 ~ 13 - Delivery of 50 truckloads of sand from Contract 2's stockpile area at Tai Wah St. and backfilling between sheetpile shoring and box culvert	Labourer (female)	C406	1	Backhoe	1	EX08					
12010-1556-2010-2010-2010-2010-2010-2010-2010-201			Labourer (male)	C406	1	Backhoe	1	EX11				21CAN000 (100 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Dump Truck	5						
			Truck Driver	C349	5	Generator	1						

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Stephen Poon / RE

Signed:

Contractor's Representative

Signed: <

Date:

Wong Ching Lung / Site Agent

10/19/2012

Name/Post: Date:

e: 10.1.12

Date:

Contract No.: DC/2009/22

Date: 08/09/2012

Day: Saturday

6 6 IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

A service

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labou		Pla	nt				Material Delivered				
					Туре	Wo	rking	1	Idling		Description	Quantit		
			Trade	Code	No.	1	No.	ID	No.	ID	Code			
						Oxy-Acetylene	1							
						Water Pump 50mm	1	1					1	
	-					Water Pump 75mm	2	1						
						Welding Set	1			ļ				
08:00 - 18:00	Area B - Tung Tsz	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1			<u> </u>		a a construction of general state of the second state of the second state of the second state of the second state		
and the second data and the second data	Nursery (CH40-CH130)							ļ				**************************************		
						Water Pump 75mm	1	<u> </u>	ļ					
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Cement grouting to 4 nos. holes (1-5, 1-6, 1-7 & 1-8) at layer 1 General housekeeping	Labourer (male)	C406	6	Air Compressor	1	AC05					•••	
an markini ki Makana aya aya aya aya aya aya aya aya aya						Crawler Drill	**************************************	1	1	DR05	h		1	
						Grout Machine	1	1		1				
						Mini Backhoe			1	EX53	h		1	
*****					740	Oxy-Acetylene	1							
****						Water Pump 50mm	1						T	
						Water Pump 75mm	1							
						Welding Set	1	L						
08:00 -18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Shuttering for plug end walls to seal up downstrem opening of heading tunnel for grouting	Labourer (male)	C406	4	Backhoe			1	EX21	h			
						Blower	2						+	
					6. maarin 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 199	Generator	1						-	
						Oxy-Acetylene			1		h		Constitution of Constitution o	
- CAN IN THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER O						Water Pump 50mm	1				1			
an an an an an an an an an an an an an a	· · · · · · · · · · · · · · · · · · ·					Water Pump 75inm	1							
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
													+	
	Area I - Contractor Office	No activity as per KLKJV arrangement										NAME OF SECTION OF THE OTHER OF THE OTHER OF THE OTHER OF THE OTHER OF THE OTHER OF THE OTHER OF THE OTHER OF		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:	



Stephen Poon / RE

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

10/1/7012

Name/Post: Date:

10.9.12

Date:

Date:

Contract No.: DC/2009/22 Date: 08/09/2012

Day: Saturday

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

J. Karl

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u>	<u>PM</u>	<u>Rainfall (mm)</u>	Thunc
Shower	Fine	ST 10, TP 5	

nderstorm Warning - 09:35~11:00

(Hong Kong Observatory's record)

Instructions to Contractor	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.	Plant	li Britali a da antici da antica da antica da antica da antica da antica da antica da antica da antica da antic	****
(Record verbal instructions given)					;						·····
	Assistant Surveyor		Asphalter (Other Construction)	C301		Chainman	C401		Туре	No. Working	z No. Idl
	Chainman	3	Asphalter (Roadworks)	C302	i	Concreting Labourer	C402		Air Compressor	1	
	Community Liaison Officer	: 1	Bamboo Scaffolder	C303	ł	Diver's Linesman / Dredger Crew / Barge Crew	C403		Backhoe	4	. 2
	CEG	, 1	Bar Bender & Fixer	C304	-	Excavator	C404		Backhoe with Vibrating Hammer	1	<u>.</u>
	Contract Manager		Bricklayer	C305	÷	Heavy Load Labourer	C405		Blower	4	
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306	-	Labourer (male / female) / Lorry checker / Watchman/Office atten	idan <u>C406</u>	31	Crawler Drill	1	
	Environmental Officer	1	Carpenter (Formwork)	C307	1	Sewennan	C407		Generator	2	
	Foreman/Assistant Foreman	2	Concrete Repairer	C308		Automation Equipment Mechanic	E301		Grout Machine	1	
	General Foreman	1	Concretor	C309		Building Services Mechanic	E302		Mini Backhoe		1
	Labour Officer	1	Construction Plant Mechanic	C310		Cable Jointer (Power)	E303		Mobile Crane	1	
	Land Surveyor	1	Curtain Wall Installer	C311		Carpenter	E304	1	Oxy-Acetylene	5	1
	Project Director	1	Demolition Worker	C312		Electrician/Electrical Fitter	E305	-	Water Pump 50mm	8	
Utilities	Project Manager	2	Diver	C313		Fire Services Mechanic	E306		Water Pump 75mm	6	
(Record location & nature of works)	Project Quantity Surveyor	1	Drainlayer	C314	1	Instrument Mechanic	E307		Welding Set		
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315		Lift Electrician	E308		Welding Set		
	Safety Officer	1	Floor Layer	C316		Lift Mechanic	E308 E309				i.
		1									
	Site Agent		Gas Plumber	C317	·	Mechanical Fitter	E310				î.
	Surveyor	; I .	General Welder	C318	1	Overhead Linesman	E311		4 1	÷	
		<del>.</del>	Glazier	<u>C319</u>		Painter	E312			•	
		•	Ground Investigation Operator/Driller/Borer	C320	i .	Plumber and Pipe Fitter	E313		4	-	
			Grouting Worker	C321	,	Refrigeration/AC/Ventilation Mechanic	E314				
			Joiner	C322		Sheet Metal Worker	E315				
			Leveller	C323		Sign Fabricator	E316				
			Marble Worker	C324		Sign Installer	E317			:	
			Marine Construction Plant Operator	C325		Thennal Insulation Craftsman	E318				
Progress			Mason	C326		Welder	E319				
(Mention briefly any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E401				
			Metal Worker	C328	1	Semi-skilled Worker	E402			•	
			Painter & Decorator	C329		Technician	Т		·····		
			Piling Operative	C330						+	• ·
	· · · · · · · · · · · · · · · · · · ·		Pipelayer	C331		· · · · · · · · · · · · · · · · · · ·			al la maria de la construcción d		
		÷	Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332		100 1 1 10000 11 1 1 1 1 100 01 1 10 1 10 10			1		
Visitor			Plant & Equipment Operator (Earthmoving Machinery)	C333	4		····÷		1		
(Record names of visitors and time of visit)		-	Plant and Equipment Operator (Earthhoening Machinery)		3					•	
				C334	3						
			Plant and Equipment Operator (Piling)	C335							
			Plant and Equipment Operator (Tunnelling)	C336			i. i				i
			Plasterer	C337						• • • • • • •	
		÷	Plumber	C338		and the second second second second second second second second second second second second second second second					
Accidents			Pneumatic Driller	C339							
(Describe any occurance of accident)			Prestressing Operative	C340							
	╡└		Rigger/Metal Formwork Erector	C341							
			Shotcretor	C342						i i	
		:	Shotfirer	C343							
			Slope Maintenance Worker	C344							•
			Structural Steel Erector	C345						•	
Remarks			Structural Steel Welder	C346							
Site Meeting amongst Ms. Lau of LCSD, Mr. Ricky Yeung of KLKJV and Mr. YF Fu	71		Tiler	C347							
of AECOM at 10:30 A.M. for handover inspection of area F			Trackworker	C348		- tetus -				•	
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349		·			· · · · · · · · · · · · · · · · · · ·		÷ ·
		1	Window Frame Installer	C350		· · · · · · · · · · · · · · · ·					
				0.550							
	llotal			-					an a state a		1.
	Assistance to Engineer	No.			-						
					.						â
	Amah	1	· · · · · · · · · · · · · · · · · · ·			1.18.11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	and and the				÷.
	Coordinate Engineer								41		1
	Drafting Assistant	1		1							
	Driver	2									
	Field Assistant	3			1						
	Office Assistant	1									4
	Watchman	4 <b>1</b>									
		1		•	-	Total Laboration				37	
	Total	9	(To be continued)			Total Labour		43	Total		4

* Working ganger is equivalent to ordinary worker in he is employed or, if the trade is not listed, truck drive (refer to GS Table 1.1)	
Day's record and instructions checked and agreed	

Engineer's Representative

Name/Post: Stephen Poon / RE

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Duplicate - Contractor

Date:

Signed:

10. 9.12

Date:

10/1/2012

### Contract No.: DC/2009/22 Date: 07/09/2012

#### Day: Friday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10-9-2012

Sheet 1 of 3

bi

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	orking	Ι	Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
NORDINAL CONTRACTOR OF A										ļ			
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.8.8~9.1 and installing shoring frames Formwork shuttering for wall W12 at discharge chamber Fixing GMS hangers for air trunk of exhaust fans at transformer room and painting General housekeeping & cleaning up sediments from wheel washing bay	Carpenter (Formwork)	C.307	1	Backhoe			1	EX50	h		
			Labourer (female)	C406	2	Blower	2						
			Labourer (male)	C406	6	Oxy-Acetylene	1						
			Metal Worker	C328	1	Water Pump 50mm	2	1	1	Τ			
						Water Pump 75mm	1		1				
						Welding Set	1	A CONTRACTOR OF CONTRACTOR					
B	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer of l-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36					
			Labourer (male)	C406	1	Oxy-Acetylene	1			1			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1			1			
							1	1					
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3					ļ			
08:00 - 18:00	(CH70-125)	Backfilling with sand to Ø2100 pipe trench at Ch. 78~90 and compacting Formwork shuttering for axccess shaft of manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.114~120 along footpath	Carpenter	E304	1	Backhoe	1	EX42					
			Labourer (male)	C406	2	Backhoe with Vibrating Hammer	1	EX40					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Water Pump 50mm	2		ļ				
									<u></u>				
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement						<u> </u>				ad en um de la Prise de Donne en programme a particular de la se	
08:00 - 18:00	Nursery (CH130-CH280)	Bay 10 - Stripping off soffit formwork from top slab and dismantling falsework Bay 12 - Delivery of 33 truckloads of sand from Contract 2's stockpile area at Tai Wah St. and backfilling the gap between box culvert and trench shoring	Labourer (female)	C406	1	Backhoe	1	EX08					
			Labourer (male)	C406	7	Backhoe	1	EX11					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1						
						Oxy-Acetylene	1						
						Water Pump 50mm	1						

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor



Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Signed:

Stephen Poon / RE

10.9.n

Signed:

Name/Post:

Date:

10/19/ 2012 Date:

Date:

Contract No.: DC/2009/22 Date: 07/09/2012

Day: Friday

ĽÇ (-) IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

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#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered	
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
					1	Water Pump 75mm	2		1	1			
						Welding Set	1			1		Mahari Terena ana ana ana ana ana ang katang ka	
·											1		
	Area B - Tung Tsz Nursery (CH40-CH130)	No activity as per KLKJV arrangement				Water Pump 50mm	1						
						Water Pump 75mm	1	ļ	<u> </u>	1			
8:00 - 18:00 Area E Nurser	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. holes (1-5 & 1-8) at layer 1 and inserting grout tube Cement grouting to 1 no. grout hole at Layer 1 (1-4)	Labourer (male)	C406	5	Air Compressor	1	AC05				nne y sy tro t-analogie an and Raide Pair (de Raid Malananananana) y a yaw	
		Cement grouting to 1 no. grout note at Layer 1 (1-4)	Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill		DR05			+	1999-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	+
1921						Grout Machine	1		<u> </u>				_
· · · · · · · · · · · · · · · · · · ·						Mini Backhoe		+	1	EX53	h		
						Oxy-Acetylene	1	1		1	<u> </u>		
						Water Pump 50mm	1		<u> </u>				
						Water Pump 75mm	1						
8:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Laying 1650Ø PC pipes at Ch.0~7.2	Drainlayer	C314	1	Backhoe			1	EX21	h		
			Labourer (male)	C406	4	Blower	2						
00100000000000000000000000000000000000			Plant and Equipment Operator (Hoist and Crane)	C334	1	Generator	1						
11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1						Mobile Crane	1						
						Oxy-Acetylene			1	L	h		
						Water Pump 50mm	1	ļ			ļļ		Get State Collection Contractions and provide and and a second state of the second sta
an bran of the first of the second second second second second second second second second second second second					and a subscription	Water Pump 75mm	1	<u> </u>	ļ	ļ			
89 A 2012 M 2012	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement											
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement											
101							-						
. Werthittickowww.enaco.nov	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

10/9/2017

Signed:

Wong Ching Lung / Site Agent

Name/Post: Stephen Poon / RE

Date: 10, 9, 12

Date:

Date:

Contract No.: DC/2009/22 Da

te: 07/09/201	2
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Day: Friday

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Sheet 3 of 3

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

### Typhoon / Warning Signal:

<u>AM</u>	<u>PM</u>	Rainfall (mm)	
Fine	Cloudy	ST 0.5, TP 0.5	

Thunderstorm Warning - 03:50~05:30 & 18:05~20:00

(Hong Kong Observatory's record)

Weather:

Instructions to Contractor					characterization of the second second			
(Percent worked instructions	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.
(Record verbal instructions given)	Assistant Surveyor		A am hadtam (Others Construction)	;	1			
	Chainman		Asphalter (Other Construction)	C301	+	Chainman	C401	÷
		3	Asphalter (Roadworks)	C302	i - 1	Concreting Labourer	C402	•
	Community Liaison Officer	1	Bamboo Scaffolder	C303	· /	Diver's Linesman / Dredger Crew / Barge Crew	C403	
	CEG	. 1	Bar Bender & Fixer	C304	4	Excavator	C404	
Comments by Engineer's / Contractor's Representative	Contract Manager		Bricklayer	C305		Heavy Load Labourer	C405	
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306	-	Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406	28
	Environmental Officer	1	Carpenter (Formwork)	C307	2	Sewerman	C407	
	Foreman/Assistant Foreman	. 2	Concrete Repairer	C308	1 /	Automation Equipment Mechanic	E301	;
	General Foreman	. 1	Concretor	C309	- I	Building Services Mechanic	E302	
	Labour Officer	1	Construction Plant Mechanic	C310	1	Cable Jointer (Power)	E303	
	Land Surveyor	1	Curtain Wall Installer	C311	1	Carpenter	E304	
Utilities	Project Director	. 1	Demolition Worker	C312	1	Electrician/Electrical Fitter	E305	•
	Project Manager	2	Diver	C313	1 1	Fire Services Mechanic	E306	
(Record location & nature of works)	Project Quantity Surveyor	1	Drainlayer	C314		Instrument Mechanic	E300 E307	
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315		Lift Electrician		
	Safety Officer	1	Floor Layer	C316		Lift Mechanic	E308	
	Site Agent	1	Gas Plumber	C317	1	Mechanical Fitter	E309	
	Surveyor	1	General Welder				E310	
	Surveyor	4		C318	2	Overhead Linesman	E311	
			Glazier	C319		Painter	E312	
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	
			Grouting Worker	C321	;l	Refrigeration/AC/Ventilation Mechanic	E314	
			loiner	C322	·	Sheet Metal Worker	E315	
			Leveller	C323		Sign Fabricator	E316	
			Marble Worker	C324	1	Sign Installer	E317	
			Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318	
Progress			Mason	C326		Welder	E319	
(Mention briefly any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E401	
			Metal Worker	C328	1	Semi-skilled Worker	E402	
			Painter & Decorator	C329		Technician	T	
			Piling Operative	C330	1			
			Pipelayer	C331			· · · · · · · · · · · · · · · · · · ·	
			Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332				
Visitor			Plant & Equipment Operator (Earthmoving Machinery)	C333	4			
(Record names of visitors and time of visit)			Plant and Equipment Operator (Hoist and Crane)	C334	2		•	
			Plant and Equipment Operator (Piling)	C335	4			-
			Plant and Equipment Operator (Tunnelling)	C336	<b></b>	A second se		
			Plasterer					
				C337				
	-	· • • • • •	Plumber	C338	: <b> </b>	and the second second second second second second second second second second second second second second second		
Accidents			Pneumatic Driller	C339				
Accidents (Describe any occurance of accident)	· · ·	· · · · · · · · · · · · ·	Pneumatic Driller Prestressing Operative	C339 C340				
			Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector	C339 C340 C341				
			Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor	C339 C340 C341 C342				
			Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer	C339 C340 C341 C342 C343				
			Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor	C339 C340 C341 C342				
(Describe any occurance of accident)			Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer	C339 C340 C341 C342 C343				
(Describe any occurance of accident) Remarks			Pneumatic Driller Prestressing Operative <u>Rigger/Metal Formwork Erector</u> Shotcretor Shotfirer Slope Maintenance Worker	C339 C340 C341 C342 C343 C344				
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site			Pneumatic Driller Prestressing Operative <u>Rigger/Metal Formwork Erector</u> Shotcretor <u>Shotfirer</u> Slope Maintenance Worker Structural Steel Erector	C339 C340 C341 C342 C343 C344 C344 C345 C346				
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site			Pneumatic Driller Prestressing Operative <u>Rigger/Metal Formwork Erector</u> Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder	C339 C340 C341 C342 C343 C344 C345 C346 C347				
(Describe any occurance of accident)          Remarks         Area A - Backhoe EX40 & EX42 on site         Area B - Backhoe EX11 & EX53 on site			Pneumatic Driller Prestressing Operative <u>Rigger/Metal Formwork Erector</u> Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348				
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site			Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349				
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site	Total	22	Pneumatic Driller Prestressing Operative <u>Rigger/Metal Formwork Erector</u> Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348	1			
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site		water and a second second second second second second second second second second second second second second s	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site	Total Assistance to Engineer	22 No.	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer	water and a second second second second second second second second second second second second second second s	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer Amah	water and a second second second second second second second second second second second second second second s	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident)          Remarks         Area A - Backhoe EX40 & EX42 on site         Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer Amah Coordinate Engineer	No.	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident)          Remarks         Area A - Backhoe EX40 & EX42 on site         Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant	No.	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident)          Remarks         Area A - Backhoe EX40 & EX42 on site         Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver	No. 1 1 2	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident)	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver Field Assistant	No.	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver	No. 1 1 2	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349				
(Describe any occurance of accident) Remarks Area A - Backhoe EX40 & EX42 on site Area B - Backhoe EX11 & EX53 on site	Assistance to Engineer Amah Coordinate Engineer Drafting Assistant Driver Field Assistant	No. 1 1 2	Pneumatic Driller Prestressing Operative Rigger/Metal Formwork Erector Shotcretor Shotfirer Slope Maintenance Worker Structural Steel Erector Structural Steel Welder Tiler Trackworker Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C339 C340 C341 C342 C343 C344 C345 C346 C347 C348 C349	1			

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Engineer's Representative

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Signed:

Date:

Signed:

Date:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

10.9.12

101P/2012

### Contract No.: DC/2009/22 Date: 06/09/2012 Day: Thursday

Plant		
Туре	No. Working	No. Idle
Air Compressor	1	
Backhoe Backhoe with Vibrating Hammer	4	2
Blower	4	+
rawler Drill	1	
Lutting Machine	1	1
Dump Truck	, 1	
enerator prout Machine	2	-
fini Backhoe		1
Dxy-Acetylene	4	2
teel Bending Machine	2	-
/ibrating Prob Vater Pump 50mm	8	•
Vater Pump 75mm	6	•
/elding Set	4	1
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Signed:

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Tso Sai Kuen / Inspector of Works

Date:

10-9-2012

Sheet 1 of 4

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### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt	
						Туре	Wo	rking	Ţ
			Trade	Code	No.		No.	ID	No.
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement							
08:00 - 18:00 Are	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.8.6~8.8 and installing shoring frames Formwork shuttering for wall W12 at discharge chamber Cutting cheque plate for cable trench covers at transformer room and painting Installing hangers for air trunk of exhaust fans at transformer room General housekeeping & cleaning up sediments from wheel washing bay	Carpenter (Formwork)	C307	1	Backhoe			1
			Labourer (female)	C406	2	Blower	2		
			Labourer (male)	C406	7	Oxy-Acetylene	1		
			Metal Worker	C328	1	Water Pump 50mm	2		
						Water Pump 75mm	1		
						Welding Set	1		
I	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer I-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36	
			Labourer (male)	C406	1	Oxy-Acetylene	1	1	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1		ļ
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3	-			
08:00 - 18:00	Arrea A. Tirre Kale David							ļ	ļ
08.00 - 18.00	(CH70-125)	Backfilling sand material to Ø2100 pipe trench at Ch. 78~90 and compacting Cutting & bending reinforcement bars for manhole MH03 at bending yard Fornwork shuttering and rebar fixing for top slab of manhole MH03 and then concreting for upper walls & top slab Extracting sheetpiles from Ø2100 pipe trench shoring at Ch.106~114 along footpath	Bar Bender & Fixer	C304	4	Backhoe	1	EX42	
			Carpenter (Formwork)	C307	1	Backhoe with Vibrating Hammer	1	EX40	
			Labourer (female)	C406	1	Oxy-Acetylene			1
			Labourer (male)	C406	3	Steel Bending Machine	2		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Vibrating Prob	1		
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Water Pump 50mm	2		
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement							
L		1							

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:



Signed:

Date:

Contractor's Representative

Signed: 🤇

Engineer's Representative

10. 9.12

Name/Post:

Stephen Poon / RE

Wong Ching Lung / Site Agent

10/1/2012

Date:

Date:

Contract No.: DC/2009/22 Date: 06/09/2012

Day: Thursday

Material Delivered Idling Description Quantity No. ID Code 1 EX50 h h

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

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### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour			1	Pla		
						Туре		rking	T
			Trade	Code	No.	- iype	No.	ID	No.
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280	Bay 10 - Stripping off wall formwork Bay 12 - Backfilling the box culvert trench with soil from stockpile near jacking pit Bay 13 - Stripping off formwork from access shaft and fabricating sheetpile stop end shoring to facilitate backfilling work	General Welder	C318	1	Backhoe	1	EX11	
			Labourer (male)	C406	3	Dump Truck	1	1	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Generator	1		
			Truck Driver	C349	1	Oxy-Acetylene	1	1	
						Water Pump 50mm	1	1	
						Water Pump 75mm	2	1	
						Welding Set	1		
NORMAL I WARRANT COMPANY OF THE OWNER									
08 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1		
					Water Pump 75mm	1			
08:00 - 18:00 Area B - Tung Tsz Nursery (Jacking Pit)		Drilling 1 nos. grout hole (1-7) and inserting grout tube Cement grouting to hole (1-1)	Labourer (male)	C406	4	Air Compressor	1	AC05	
C			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX08	
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	
						Grout Machine	1		
						Mini Backhoe			1
						Oxy-Acetylene	1		
						Water Pump 50mm	1		
						Water Pump 75mm	1		
						Welding Set	1		L
									i
	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Preparation works for laying 1650Ø PC pipe Cutting 1650Ø PC end pipe at contract 2's stockpile area at Tai Wah St.	Labourer (male)	C406	3	Backhoe			1
						Blower	2		
				_	-	Cutting Machine	1		
						Generator	1		
				_		Oxy-Acetylene			1
						Water Pump 50mm	1		
				_		Water Pump 75mm	1		
						Welding Set			1
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement							
	I								

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:	Q.
~- <u>-</u>	

Engineer's Representative

Signed:

Contractor's Representative

Signed:

Name/Post:

Date:

Stephen Poon / RE

10 4.12

Date:

Wong Ching Lung / Site Agent 10/8/2012

Date:

Contract No.: DC/2009/22 Date: 06/09/2012

Day: Thursday

Material Delivered Idling Description Quantity ID Code No. EX53 h -----EX21 h ...... h h

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Harris

### Idling Code:

a Breakdown b Standby c Awaiting Instruction

d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	22 oc del data d'anticonge			Plai	nt				Material Deli	ivered
						Туре	Wo	rking	1	Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement		1	1		1		1				1
							1	1	1	1			
	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor



Engineer's Representative

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

10/1/2012

Stephen Poon / RE Name/Post:

Date: 10.9.12 Date:

Date:

Contract No.: DC/2009/22 Date: 06/09/2012

Day: Thursday

Le IOW

.

Tso Sai Kuen / Inspector of Works

10-9-2012

Sheet 4 of 4

Mi sub

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:

#### Typhoon / Warning Signal:

<u>AM</u>	<u>PM</u>	Rainfall (mm)	Nil
Cloudy	Fine	ST 0.5, TP 0	

(Hong Kong Observatory's record)

Instructions to Contractor								
(Record verbal instructions given)	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.
(Record verbal instructions given)	Assistant Surveyor	· , ]	A an halten (Other Construction)	0201	-		•	
			Asphalter (Other Construction)	C301		Chainman	C401	÷
	Chainman	3	Asphalter (Roadworks)	C302		Concreting Labourer	C402	
	Community Liaison Officer	1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403	1
	CEG	1	Bar Bender & Fixer	C304		Excavator	C404	
	Contract Manager	1	Bricklayer	C305		Heavy Load Labourer	C405	
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406	25
	Environmental Officer	1	Carpenter (Fornwork)	C307	1	Sewerman	C400	
	Foreman/Assistant Foreman	2	Concrete Repairer	C308	:	Automation Equipment Mechanic		
	General Foreman	ĩ	Concretor	C309	1	Building Services Mechanic	E301	
	Labour Officer	1 1	Construction Plant Mechanic				E302	
				C310	i	Cable Jointer (Power)	E303	: • •
	Land Surveyor	1	Curtain Wall Installer	C311	.	Carpenter	E304	1
Utilities	Project Director	: 1	Demolition Worker	C312		Electrician/Electrical Fitter	E305	
(Record location & nature of works)	Project Manager	2	Diver	C313		Fire Services Mechanic	E306	
According to Martin Construction of the Annual C	<ul> <li>Project Quantity Surveyor</li> </ul>	1	Drainlayer	C314		Instrument Mechanic	E307	
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315		Lift Electrician	E308	
	Safety Officer	1	Floor Layer	C316	1	Lift Mechanic	E309	
	Site Agent	1	Gas Plumber	C317	1	Mechanical Fitter		
	Surveyor		General Welder		• .		E310	
	Surveyor	. 1		C318	: 1	Overhead Linesman	E311	
			Glazier	<u>C319</u>		Painter	E312	
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	
			Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314	1
			Joiner	C322		Sheet Metal Worker	E314 E315	
			Leveller	C323		Sign Fabricator		
		1	Marble Worker	C324	2	Sign Installer	E316	
			Marine Construction Plant Operator		. 4		E317	
Progress	1			C325		Thennal Insulation Craftsman	E318	
(Mention briefly any matter delaying or obstructing progress)			Mason	C326		Welder	E319	
(Mention offenty any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E401	
			Metal Worker	C328		Semi-skilled Worker	E402	
			Painter & Decorator	C329		Technician	Т	
			Piling Operative	C330				· · · · · · · · · · · ·
			Pipelayer	C331		A MARKET A CONTRACT AND AND AND AND AND AND AND AND AND AND	<del>-</del>	
			Plant and Equipment Operator (Builder's Lift and Other Machinery)					
Visitor	] [			C332				
(Record names of visitors and time of visit)			Plant & Equipment Operator (Earthmoving Machinery)	C333	4	· · · · · · · · · · · · · · · · · · ·		1
	11		Plant and Equipment Operator (Hoist and Crane)	C334	1			]
		i	Plant and Equipment Operator (Piling)	C335				
			Plant and Equipment Operator (Tunnelling)	C336				1
			Plasterer	C337				
			Plumber	C338				
Accidents		1	Pneumatic Driller	C339		··· ·		.
(Describe any occurance of accident)			Prestressing Operative	C340			1	
			Rigger/Metal Formwork Erector	C341				
		1	Shotcretor	C342				
			Shotfirer	C343				
			Slope Maintenance Worker	C344				
			Structural Steel Erector	C345		10°0	•	
Remarks			Structural Steel Welder	C346			÷	
Area A - Backhoe EX17 off site at night								
Meeting was held at 15:30 hr amongst Ms. Leung of CLP, Mr. So of DSD, Mr.	-		Tiler	C347	·			
Dragon Wong of KLKJV and Mr. Poon of AECOM concerning the power supply to	- ··· ·		Trackworker	C348				
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2		-	
Pump Station and hand over procedures of Transformer Room			Window Frame Installer	C350				
	Total	22						
	Assistance to Engineer	N- 1					··	
	Assistance to Engineer	No.		1		and the second second second second second second second second second second second second second second second		
	Amah	1			· · · · · ·			
		1	····· · · · · · · · · · · · · · · · ·	• • • •	· · · · · ·	e contra	İ	
	Coordinate Engineer			÷			i.	]
	Drafting Assistant	1						1
	Driver	2						
	Field Assistant	3			~			
	Office Assistant	1						
	Watchman	1 1					2	
		9	(To be easily and be	-	{			
	Total	9	(To be continued)			Total Labour		37

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Engineer's Representative

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Signed:

Original - ER's File

Duplicate - Contractor

Date: 6. S. N.

Wong Ching Lung / Site Agent 618/2012

Contractor's Representative

Signed:

Date:

#### Contract No.: DC/2009/22 Date: 05/09/2012

Day: Wednesday

Plant		
Туре	No. Working	No. Idl
Air Compressor	1	
Backhoe	4	1
Blower	2	
Crawler Drill	<u>l</u>	
Dump Truck	2	
Generator	2	1
Grout Machine	1	1
Dxy-Acetylene	4	2
/ibrating Prob	1	+
Vater Pump 50mm	8	1
Vater Pump 75mm	, 6	
Velding Set	5	÷
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otal		4

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

6-9-2012

Sheet 1 of 3

Highler

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

08:00 - 18:00 Area A - Pump Station Box Culvert (Receiving Pit) 07:00 - 18:00 Area A - Ting Kok Road 18:00 - 20:00 08:00 - 18:00 Area A - Ting Kok Road (CH70-125) Area B - Tung Tsz Nursery (CH00-CH40) 08:00 - 18:00 Area B - Tung Tsz	Activity	Labour		Material Delivered									
						Туре	Wo	orking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
		No activity as per KLKJV arrangement			1				1	1	1		
	Stormwater Drain				<b> </b>				ļ	ļ	_		
08.00 - 18.00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.8.4~8.6 and			<u> </u>	2			<u> </u>	ļ		n an fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de f Near fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fan de fa	
Area A - DN1800 Stornwater Drain       No ac Excav         08:00 - 18:00       Area A - Pump Station       Excav away 5 Formwinstall Install         08:00 - 18:00       Area A - Pump Station - Box Culvert (Receiving Pit)       Fabric: Box Culvert (Receiving Pit)         07:00 - 18:00       Area A - Ting Kok Road (CH70-125)       Manua Manua         08:00 - 18:00       Area A - Ting Kok Road (CH70-125)       Manua         08:00 - 18:00       Area B - Tung Tsz Nursery (CH00-CH40)       No acti Nursery (CH00-CH40)	installing shoring frames Excavating for Meaning tunner of 0223 sewer pipe between MIST & PMPH023921at Ch.8.4~8.6 and installing shoring frames Excavating for Ø2100 pipe trench between manhole MH05 & MH06 to second layer of walings and cart away 8 truckloads of excavated materials to Contract 2's stockpile area at Tai Wah St. Formwork shuttering for U-channel on manmade slope Installing cat ladders, painting to cheque plate trench covers and angle frames at transformer room Installing GMS hangers for air trunk at transformer room		C307		Backhoe	1	EX50						
	*****		Labourer (male)	C406	7	Blower	2			Τ			
			Marble Worker	C324	2	Dump Truck	2	1		1		an da kan da kan da kan da kan da kan da kan da kan da kan da kan da kan da kan da kan da kan da kan da kan da	1
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1	1	1	1			
			Truck Driver	C349	2	Water Pump 50mm	2	1	1	1			1
					1	Water Pump 75mm	1	1	1	1	1	nan ann an ann an an an ann an ann an an	1
						Welding Set	1	<u>†</u>	1	<u> </u>	11		-
								1	+	1			
08:00 - 18:00	Box Culvert (Receiving	Fabricating second layer of I-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36					
			Labourer (male)	C406	1	Oxy-Acetylene	1	1	<u> </u>	1			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1	1	<u> </u>	<u> </u>	<del>   </del>		
								1	1	1			
	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	2							99999999999999999999999999999999999999	
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Backfilling to Ø2100 pipe trench at Ch. 78~125 and compacting Formwork shuttering for upper walls and top slab of manhole MH03	Carpenter	E304	1	Backhoe	1	EX17					
			Labourer (male)	C406	3	Oxy-Acetylene			1	1	h		1
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2	1		1			
								1	1	1	l l		
-		No activity as per KLKJV arrangement										n na sena na sena na sena sena na sena na sena na sena na sena na sena na sena se	1
													+
08:00 - 18:00		Bay 10 - Concreting for walls & top slab Bay 13 - Concreting for access shaft of box culvert (Total : 83.1 cu.m)	Labourer (female)	C406	1	Backhoe	1	EX08					
			Labourer (male)	C406	4	Generator	1						1
			Plant & Equipment Operator (Earthmoving Machinery)	C333		Oxy-Acetylene	1				<b> </b>		
				+	and the second se	Vibrating Prob	1					94994975979949949488880546752595899494905782694976586646769797999897947577	
and the second second second second second second second second second second second second second second second						Water Pump 50mm	1					an the second second second second second second second second second second second second second second second	+
an on and data and an and a subject of the	1					Water Pump 75mm	2				ļļ.		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Engineer's Representative

69.12

Stephen Poon / RE

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

Name/Post: Date:

Signed:

Date:

617/2012

Date:

Contract No.: DC/2009/22 Date: 05/09/2012

Day: Wednesday

IOW

Tso Sai Kuen / Inspector of Works

6-9-2012

Kiele

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour			1	Pla	nt	
						Туре	Wo	rking	
			Trade	Code	No.	4	No.	ID	N
						Welding Set	1	+	
								1	
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1		
1102201434040000000000000000000000000000						Water Pump 75mm	1		
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. grout holes (1-4 & 1-6) and inserting grout tubes	Labourer (male)	C406	4	Air Compressor	1	AC05	
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	
						Grout Machine			1
						Oxy-Acetylene	1	1	
						Water Pump 50mm	1		54503734046340
						Water Pump 75mm	1		
						Welding Set	1		
08:00 - 18:00	Area E - Siu Lek Yuen								
08.00 - 18:00	Rd.Playground	PL 1602.1 - Preparing 1650Ø cut length end pipe at contract 2's stockpile area at Tai Wah St.	Labourer (male)	C406	2	Backhoe			1
						Generator	1		
						Oxy-Acetylene			1
						Water Pump 50mm	1		
						Water Pump 75mm	1		
						Welding Set	1		
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement			-				160koratozarionar
1411 A Transformer and the second second second second second second second second second second second second	L				0000020-000506960600				
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement							
	Area I - Contractor Office	No activity as per KLKJV arrangement							

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Name/Post:

Stephen Poon / RE

Date:

Contractor's Representative

61//2012

Signed:

Wong Ching Lung / Site Agent

Date:

Signed:

Date:

6.9.N

Contract No.: DC/2009/22 Date: 05/09/2012

Day: Wednesday

Material Delivered Idling Description Quantity No. ID Code 1 h 1 EX21 h 1 h

68C IOW

Tso Sai Kuen / Inspector of Works

6-8-2012

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Cloudy Cloudy ST 5, TP 20

Thunderstorm Warning - 00:00~01:00

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff	No.	Labour	Code	No.	Labour	Code	No.	Plant		
(record cross mor denois pirch)	Assistant Surveyor	. 1	Asphalter (Other Construction)	C301		Chainman	C401		Туре	No. Working	n No
	Chainman	3	Asphalter (Roadworks)	C302		Concreting Labourer	C402		Air Compressor	i i i i i i i i i i i i i i i i i i i	ig 110.
	Community Liaison Officer	1	Bamboo Scaffolder	C303	1	Diver's Linesman / Dredger Crew / Barge Crew	C402		Backhoe	1	
	CEG	. 1	Bar Bender & Fixer	C304	2	Excavator	C403		Blower	4	k
	Contract Manager	1	Bricklayer	C305	2	Heavy Load Labourer			Crawler Drill		
Comments by Engineer's / Contractor's Representative	Engineer	1	Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office atte	C405	24		<u> </u>	
	Environmental Officer	1	Carpenter (Fornwork)	C307	4			26	Dump Truck	4	
	Foreman/Assistant Foreman	2	Concrete Repairer	<u>C307</u>		Sewerman	C407		Electric Breaker	; 1	
	General Foreman	2		C308		Automation Equipment Mechanic	E301		Generator	: 2	
		, 1	Concretor	C309		Building Services Mechanic	E302		Grout Machine		
	Labour Officer	1	Construction Plant Mechanic	C310		Cable Jointer (Power)	E303		Oxy-Acetylene	3	
	Land Surveyor	1	Curtain Wall Installer	C311		Carpenter	E304		Water Pump 50mm	8	
Utilities	Project Director	1	Demolition Worker	C312		Electrician/Electrical Fitter	E305		Water Pump 75mm	6	
(Record location & nature of works)	Project Manager	2	Diver	C313		Fire Services Mechanic	E306		Welding Set	. 4	•
(Accord location & hattire of works)	Project Quantity Surveyor	1	Drainlayer	C314		Instrument Mechanic	E307		11		1
	Quantity Surveyor Manager	1	Electrician (Main Contractor's)	C315		Lift Electrician	E308		1	······································	
	Safety Officer	1	Floor Layer	C316		Lift Mechanic	E309				-
	Site Agent	1	Gas Plumber	C317	1	Mechanical Fitter	E310				
	Surveyor	1	General Welder	C318	1	Overhead Linesman	E311		11 .	-	ţ
	· · · · ·		Glazier	C319		Painter			· · ·	•	
			Ground Investigation Operator/Driller/Borer	C320			E312		-		
		1	Grouting Worker		· ·	Plumber and Pipe Fitter	E313				
				C321	-	Refrigeration/AC/Ventilation Mechanic	E314		1	• • • •	
			Joiner	C322		Sheet Metal Worker	E315				
			Leveller	C323		Sign Fabricator	E316				
		•	Marble Worker	C324		Sign Installer	E317				
			Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318				
Progress			Mason	C326		Welder	E319				
Mention briefly any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer	E401				1
		4	Metal Worker	C328	1	Semi-skilled Worker	E402				2
			Painter & Decorator	C329		Technician	т				
			Piling Operative	C330	1						
			Pipelayer	C331	1						· · • • •
			Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332							
Visitor			Plant & Equipment Operator (Earthmoving Machinery)	C333	4						
(Record names of visitors and time of visit)			Plant and Equipment Operator (Hoist and Crane)	C334	7 1						÷
		1	Plant and Equipment Operator (Piling)		1						
				C335	-	and the second sec					
		4 .	Plant and Equipment Operator (Tunnelling)	C336							
			Plasterer	C337					×	*	
			Plumber	C338		· · · · · · · · · · · · · · · · · · ·					1
Accidents			Pneumatic Driller	C339		-					5
(Describe any occurance of accident)			Prestressing Operative	C340							
			Rigger/Metal Formwork Erector	C341							
			Shotcretor	C342							
			Shotfirer	C343	-1	1.00 or a series			and the second of the second second second second second second second second second second second second second		• •
			Slope Maintenance Worker	C344							
1949 / - Versenwood /			Structural Steel Erector	C345	- 1			·		1	
Remarks			Structural Steel Welder	C346	· · ·						
			Tiler								
				C347							
	· ·		Trackworker	C348							1
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	4						
			Window Frame Installer	C350							
	Total	22		1. 1							ş.
	Assistance to Engineer	No.						1		•	
		1101						1			
	Amah	1								4	÷
	Coordinate Engineer										1
	Drafting Assistant	: 1								1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
	Driver	2				· · · · · · · · · · · · · · · · · · ·	- i - i-	·		•	
		4	·· · ·						a second s		
	Field Assistant			÷							
	Office Assistant			1		1					
	Watchman	1	· · · · · · · · · · ·	ļ							
	Total	. 9	(To be continued)		1	Total Labour		44	Total	36	

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Q 5

Engineer's Representative

5 9.12

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Signed:

Date:

Signed:

0 Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Date:

518/2012

### Contract No.: DC/2009/22 Date: 04/09/2012

Day: Tuesday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

5-9-2012

Sheet 1 of 3

He and

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Image: state of the state		
						Туре			
			Trade	Code	No.	7	No.	ID	No.
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement							
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch. 8.0~8.4 and installing shoring frames Adjusting levels and alignment of 2 nos.Ø450 & 4 nos.Ø900 double flange pipe with puddle at wall between discharge chamber & valve chamber Excavating for Ø2100 pipe trench between manhole MH05 & MH06 and fabricating top layer I-beam walings & struts Installing push bar for stainless steel door (D2) and fixing detachable rat guard for louvres (L2) at transformer room Painting for chequer plate trench covers at transformer room General housekeeping	General Welder	C318	0.5	Backhoe	1	EX50	
			Labourer (female)	C406	2	Blower	2	+	
			Labourer (male)	C406	6	Oxy-Acetylene	+	1	
			Metal Worker	C328	1	Water Pump 50mm	2	+	
			Pipelayer	C331	1	Water Pump 75mm	1	1	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	2	1	
					<u> </u>			1	
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to 0.3 mPD & cart away excavated material to Contract 2's stockpile area at Tai Wah St. (16 Truckloads)	General Welder	C318	0.5	Backhoe	1	EX36	
			Labourer (male)	C406	1	Dump Truck	2	1	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1	1	
			Truck Driver	C349	2	Welding Set	1		
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3				
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Delivery of sand material from Contract 2's stockpile area at Tai Wah St. (8 truckloads) and backfilling to Ø2100 pipe trench at Ch.78~125 Formwork shuttering for upper walls and top slab of manhole MH03 Dismantling upper layer I-beam walings and struts from shoring of Ø2100 pipe trench at Ch. 80~90	Carpenter (Formwork)	C307	2	Backhoe	1	EX17	
			Labourer (female)	C406	1	Dump Truck	2		
winsen communication and communication of the			Labourer (male)	C406	4	Oxy-Acetylene	1		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2		
			Truck Driver	C349	2				
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement							

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Engineer's Representative

Signed:

Contractor's Representative

Signed:

Date:

Stephen Poon / RE

Name/Post:

Signed:

Date:

5.5.12

Date:

Wong Ching Lung / Site Agent

5/1/12012

Contract No.: DC/2009/22 Date: 04/09/2012

Day: Tuesday

Material Delivered Idling Description Quantity ID No. Code

Ð IOW

Tso Sai Kuen / Inspector of Works

5-9-2012

Kyster

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	- 18:00 Area B - Tung Tsz Bay Nursery (CH130-CH280) Bay 	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking	1	Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280	Bay 10 - Formwork shuttering for walls and top slab Bay 13 - Rebar fixing and formwork shuttering for access shaft	Bar Bender & Fixer	C304	2	Backhoe	1	EX08				an an anns anns an Aonaichtean anns an Aonaichtean anns an Aonaichtean anns an Aonaichtean anns an Aonaichtean	
			Carpenter (Formwork)	C307	2	Generator	1			1			
			Labourer (male)	C406	1	Oxy-Acetylene			1				
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	1			1			
						Water Pump 75mm	2	<u> </u>	<u> </u>				
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1						
						Water Pump 75mm	1	1					
08 18:00	Area D. Ture Ter							ļ	L			KANESIN MARANAN MANYA MANYA KANANA MANJANA MANJANA MANJANA MANJANA MANJANA MANJANA MANJANA MANJANA MANJANA MANJ	
00. ~ 10.00	Nursery (Jacking Pit)	Drilling holes at Layer land inserting grout tubes	Labourer (male)	C406	3	Air Compressor	1	AC05					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05				annan muni kuloni mini kin kin mini muni kulon (2002). 2014 2020 kulonika hisio annan muni kan punyesi	
			N-7			Grout Machine			1		h		
						Oxy-Acetylene			1				
						Water Pump 50mm	1						
						Water Pump 75mm	1						
08:00 - 18:00		PL 1602.1 - Installation of guide rail and laying blinding concrete inside heading tunnel	Labourer (male)	C406	4	Backhoe			1	EX21	h	an an an an an an an an an an an an an a	
						Electric Breaker	1			<u>†</u>		Conners and an annual and a second and a second and a second second second second second second second second s	
						Generator	1					······································	-
						Oxy-Acetylene			1	1	h		
						Water Pump 50mm	1			1			
						Water Pump 75mm	1						
Maryan and Maryan and Angeneration						Welding Set	1			1			
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement										n an an an an an an an an an an an an an	
	Area G - Ngan Shing St	No activity as per KLKJV arrangement										a a construit de la construit de la construit de la construit de la construit de la construit de la construit d	
													+
*****	Area I - Contractor Office	No activity as per KLKJV arrangement										n 1997 (1999) - Canton Control (1997) - Canton Control (19	

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:



Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

5/1/2012

Stephen Poon / RE Name/Post:

Date: 5. S. n.

Date:

Date:

Contract No.: DC/2009/22 Dat

ate:	04/09/2012

Day: Tuesday

La IOW

Tso Sai Kuen / Inspector of Works

5-9-2012

No and

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

Typhoon / Warning Signal:

Weather:			Typh
AM	<u>PM</u>	Rainfall (mm)	Thun
Fine	Fine	St 0, TP 0	

nderstorm Warning - 23:50~24:00

(Hong Kong Observatory's record)

	Detection 's the fault 's the faul										
		3		(202						No. Working	g
	1 1	1								1	
		1							Backhoe	. 4	
		1			3				Blower	2	
Comments by Engineer's / Contractor's Representative						Heavy Load Labourer			Crawler Drill	1	
comments of Engineer's / Contractor's Representative				C306		Labourer (male / female) / Lorry checker / Watchman Office attendan	C406	30	Dump Truck	1	-
		1		C307	2				Electric Breaker	1	
		2								2	
		1		C309		Building Services Mechanic					
		1	Construction Plant Mechanic	C310		Cable Jointer (Power)				5	
	structions given)       Assistant, Surveyor       1         Chainman       3         contractor's Representative       Image: 1         patractor's Representative       Environmental Officer       1         contractor's Representative       Environmental Officer       1         resemption       1       Environmental Officer       1         resemption       1       Labour Officer       1         nature of works)       Project Omentity Surveyor       1         Project Officer       1       Safety Officer       1         Safety Officer       1       Safety Officer       1         Safety Officer       1       Safety Officer       1         safety officer       1       Safety Officer       1         Safety Officer       1       Safety Officer       1         safety officer       1       Safety Officer       1         safety officer       1       Safety Officer       1         safety officer       1       Safety Officer       1         safety officer       1       Safety Officer       1         safety officer       1       Safety Officer       1         safety officer       1       1       1 <td>Curtain Wall Installer</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>_</td>	Curtain Wall Installer								_	
Utilities	Project Director	1	Demolition Worker		1					8	
	Project Manager	2			-					. 6	
(Record location & nature of works)		1		C314					Welding Set	6	
		1									
		1					E309				
						Mechanical Fitter	E310				
	Surveyor	1		C318	2	Overhead Linesman	E311				
			Glazier	C319		Painter		· · ·		1	
			Ground Investigation Operator/Driller/Borer				E212	1	and the second sec		
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		-					E316			No. Working 1 4 2 1 1 1 2 5 8 6 6 6	
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Progress	┫┟╌━━─────────						E318				
tion briefly any matter delaying or obstructing progress)	4			C326		Welder					
ion drienty any matter delaying or obstructing progress)			Metal Scaffolder	C327		Labourer		· 1		100 A	
			Metal Worker	C328	1	Semi-skilled Worker					
			Painter & Decorator				17102 T			·····	
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						and the second second second second second second second second second second second second second second second					
Visitor	]										
(Record names of visitors and time of visit)		+ - 4	Plant & Equipment Operator (Earthmoving Machinery)		4			.			
	1	4			. 1					•	
				C335						;	
		1	Plant and Equipment Operator (Tunnelling)						· · · ·	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de l	
			Plasterer					· · · · · · · · · · · · · · · · · · ·		14 A.	
			Plumber						· - ···· · · · · ·	en la sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a sue a su	
Accidents		1					-		· · · · · · · · · · · · · · · · · · ·	<u>-</u>	
						and the second second second second second second second second second second second second second second second					
(Describe any occurance of accident)	·			<u>C340</u>					manufacture is a construction of summary of		
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			Shotfirer	C343				· · · 1	· · · · · · · · · · · · · · · · · · ·	• • • • • •	
		1	Slope Maintenance Worker	C301ChainmanC302Concreting LabourerC303Diver's Linesman / Dredger Crew / BC305Heavy Load LabourerC306Labourer (male / female) / Lorry checker /C3072SewermanAutomation Equipment MechanicC309Building Services MechanicC310Cable Jointer (Power)C311CarpenterC312Electrician/Electrical FitterC313Lift BetricianC314Instrument MechanicC315Lift Mechanical FitterC316Lift MechanicC317Mechanical FitterC318Overhead LinesmanC320Plumber and Pipe FitterC321Sign FabricatorC322Sign FabricatorC324Sign InstallerC325Thermal Insulation CraftsmanC326Semi-skilled WorkerC327LabourerC3281C3334C3341C335C336C337C338C340C341C341C344C342C343C344C344C345C346C346C347C350I				the second second second second second second second second second second second second second second second s			
			Structural Steel Erector				. i				
Remarks		1			1	10 · · · · · · · ·	•		· · · · · · · · · · · · · · · · · · ·		
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			Window Frame Installer	C350						Type         No. Working           1         4           2         1           1         1           2         5           8         6           6         6	
	liotal	22					1				
	Assistance to Engineer	No					· · · ·		A r of loss		
	Chainana         3         Applahrer (Radworks)         CO2         Constraints           Community Liston Offleer         Barbook Sathokar         CO3         Sexvator           Chaine Maager         1         Barbook Sathokar         CO3         Sexvator           Dintert         Briedkover         CO3         Sexvator           Dintert         Briedkover         CO3         Sexvator           Dintert         Construct (Radworks)         CO3         Sexvator           Project Direct         Construct (Radworks)         CO3         Sexvator           Project Direct         Construct (Radworks)         CO3         Seventan           Construct         Construct (Radworks)         CO3         Seventan           Construct         Construct (Radworks)         CO3         CO3         Seventan           Labor Office         Construction Plant Mechanic         CO31         Easter Methodic         Coald Laborer           Project Director         Davaliser         Construction Plant Mechanic         CO31         Easter Methodic           Director         Construction Plant Mechanic         CO31         Easter Methodic         Coald Laborer           Director         Construction Plant Mechanic         CO31         Easter         Coal						_				
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		Outcode									
	CEG       1       Bar Bender & Firer         Ensinear       1       Earnetter (Frender)         Environmental Officer       1         Environmental Officer       1         Environmental Officer       1         Central Foreman       2         Construction Plant Mechanic       2         Construction Plant Mechanic       2         Construction Plant Mechanic       2         Diver       2         Project Director       1         Exception       1         Ounity Surveyor Manager       1         Site Agent       1			- 1	and a second sec						
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		3						1			
		1			. [				······································	1	
	Watchman	1			1						
	Total	0	(To be continued)			Total Labour		·			
	10(4)										

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Name/Post: Stephen Poon / RE

3.9.12 Date:

Date:

418/2012

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File Duplicate - Contractor

### Contract No.: DC/2009/22 Date: 03/09/2012

#### Day: Monday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

4/9/2012

Sheet 1 of 3

Xall

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt	********
						Туре	Wo	rking	Τ
			Trade	Code	No.		No.	ID	No
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement							
08:00 - 18:00	Area A Dump Station	Encounting for her line town of a COOC and a single town of the DMU1022001 and the O			<u> </u>				<b>_</b>
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.7.4~8.0 Dismantling tubular working platform outside store room Fabricating upper layer I-beam struts for Ø2100 pipe trench between manhole MH05 & MH06 General cleaning at roof and manade slope Installing push bar for stainless steel door (D1) and painting for chequer plate trench covers at transformer room Installing 2 nos. Ø450 & 4 nos .Ø900double flange pipes with puddle at wall between discharge chamber & valve chamber	General Welder	C318	0.5	Backhoe	1	EX50	
-			Labourer (female)	C406	2	Blower	2		
			Labourer (male)	C406	9	Oxy-Acetylene	1		
			Metal Worker	C328	1	Water Pump 50mm	2		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1		
NONTING CONTRACTOR (			Plumber and Pipe Fitter	E313	1	Welding Set	2		
*****									
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit and fabricating lower layer I-beam walings and struts for shoring	General Welder	C318	0.5	Backhoe	1	EX36	
			Labourer (male)	C406	2	Oxy-Acetylene	1	<u> </u>	<b></b>
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1		
07:00 - 18:00	Area A - Ting Kok Road	Manual antical of Vatar / and airs for the file flow and him (2 F/L L )						ļ	<b> </b>
18:00 - 20:00	Alea A - Ting Kok Koau	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation. (1 F/Lab)	Labourer (female)	C406	3				
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Delivery of sand material from Contract 2's stockpile area at Tai Wah St. (15 truckloads) and backfilling to Ø2100 pipe trench at Ch. 78~125 Rebar fixing for upper walls of manhole MH03 Dismantling upper layer of I-beam walings and struts from shoring of Ø2100 pipe trench at Ch. 85~100	Bar Bender & Fixer	C304	3	Backhoe	1	EX17	
			Labourer (female)	C406	1	Dump Truck	1		
			Labourer (male)	C406	3	Oxy-Acetylene	1		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2		
			Truck Driver	C349	1		1		[
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement							
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Fornwork shuttering for walls and top slab Bay 13 - Erecting sheetpile stop end shoring to facilitate backfilling works	Carpenter (Formwork)	C307	2	Backhoe	1	EX08	
			General Welder	C318	1	Generator	1		
			Labourer (male)	C406	2	Oxy-Acetylene	1		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Stephen Poon / RE

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

4/ 8/2012

Name/Post: Date:

\$ 9.12

Date:

Date:

Contract No.: DC/2009/22 Date: 03/09/2012

Day: Monday

Material Delivered Idling Description Quantity No. ID Code

IOW

Tso Sai Kuen / Inspector of Works

4/9/2012

A. S. S.

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	Τ	Pla	nt		1656- <sup>1</sup>	1	N#-4				
			Labour							• 13 Dager		Material Delivered		
						Туре	Wo	orking		Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	1	1	1		1		1	
- Sector de la companya de la companya de la companya de la companya de la companya de la companya de la compa						Water Pump 75mm	2			1				
						Welding Set	1		1	T		SECURE CONTRACTOR IN A CONTRACTOR OF THE SECURE OF THE SECURE OF THE SECURE OF THE SECURE OF THE SECURE OF THE S		
									1				*	
8:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1	1		T				
1990 (m					<b> </b>	NV - D - 75			ļ	<b>_</b>	<b> </b>			
					<u> </u>	Water Pump 75mm	1		<b>_</b>	ļ	<b>  </b>			
3:00 - 18:00	Area B - Tung Tsz	Dewatering from jacking pit and general housekeeping	Labourer (male)		<u> </u>				<b>_</b>	<b> </b>	<u> </u>			
10100	Nursery (Jacking Pit)	bowards ing nom jacking pit and general nousekeeping	Labourer (inale)	C406	3	Air Compressor	1	AC05						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill		DR05	<u> </u>		<u> </u>		+	
						Grout Machine			$\frac{1}{1}$		h			
						Oxy-Acetylene	1		<u> </u>	<u> </u>				
						Water Pump 50mm			<u> </u>		<u>├</u>			
						Water Pump 75mm	1			<u> </u>	├─── <u></u>		+	
						Welding Set	1	-	<u>†</u>			ananana wata kata kata kata kata kata kata kat		
								<del> </del>			+			
3:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Breaking up brick wall of exsiting manhole inside heading tunnel Excavating to formation level of 1650Ø pipe trench	Labourer (male)	C406	4	Backhoe		1	1	EX21	h		+	
	item huyground	Cart away excavated material to Aara A (1 truckload)												
						Electric Breaker	1	+	<u> </u>					
						Generator	1	<u> </u>						
				1		Oxy-Acetylene			1		h			
				1		Water Pump 50mm	1		-				+	
						Water Pump 75mm	1							
						Welding Set	1							
					and a second second second second second second second second second second second second second second second									
	Area F - Lek Yuen Street	No activity as per KLKJV arrangement			00. <u>0. 10. 10. 10. 10. 10. 10. 10. 10. 10. 1</u>							anna coireann airean airean an ann ann ann ann ann ann ann ann a		
	Rest Garden													
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
				++										
XXXXXX	Area I - Contractor Office	No activity as per KLKJV arrangement		+	912									
	Unice												1	

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

4/8/7012

Signed:

Stephen Poon / RE Name/Post:

Date:

Date:

Date:

4.5.12

Contract No.: DC/2009/22 Date: 03/09/2012

Day: Monday

(a)IOW

Tso Sai Kuen / Inspector of Works

4/9/2012

Sheet 3 of 3

X

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:			Typhoon / Warning Signal:
AM	<u>PM</u>	Rainfall (mm)	Thunderstorm Warning - 05:20
Fine	Fine	ST 5, TP 10	

m Warning - 05:20~06:30

(Hong Kong Observatory's record)

(Record verbal instructions given) Comments by Engineer's / Contractor's Representative			Asphalter (Other Construction) Asphalter (Roadworks) Bamboo Scaffolder	C301 C302 C303		Chainman Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew	C401 C402	;
Comments by Engineer's / Contractor's Representative	-		Asphalter (Roadworks) Bamboo Scaffolder	C302		Concreting Labourer		÷
Comments by Engineer's / Contractor's Representative	-	•	Bamboo Scaffolder		- -		C402	
Comments by Engineer's / Contractor's Representative		•		0.000			0.000	·
Comments by Engineer's / Contractor's Representative			Bar Bender & Fixer	C304	,		C403	
Comments by Engineer's / Contractor's Representative			1 (		(	Excavator	C404	÷.
Comments by Engineer's / Contractor's Representative	•{ }·		Bricklayer	C305		Heavy Load Labourer	C405	1
			Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406	1
			Carpenter (Fornwork)	C307		Sewerman	C407	ī.
		ì	Concrete Repairer	C308		Automation Equipment Mechanic	E301	-
			Concretor	C309		Building Services Mechanic	E302	•
			Construction Plant Mechanic	C310	· · · · · · · · · · · · · · · · · · ·	Cable Jointer (Power)		-
		· · ·	Curtain Wall Installer				E303	÷
		,		C311	: 1	Carpenter	E304	÷.
Utilities		÷	Demolition Worker	C312		Electrician/Electrical Fitter	E305	
(Record location & nature of works)	1		Diver	C313		Fire Services Mechanic	E306	
	┥╽		Drainlayer	C314	.	Instrument Mechanic	E307	1
			Electrician (Main Contractor's)	C315		Lift Electrician	E308	t
		i	Floor Layer	C316	1	Lift Mechanic		÷
			Gas Plumber		- 1		E309	ł
		1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	C317		Mechanical Fitter	E310	
		· · · · ·	General Welder	C318	· • • • • •	Overhead Linesman	E311	1
			Glazier	C319		Painter	E312	1
			Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	-
			Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314	
		1	Uoiner	C322	1	Sheet Metal Worker		
			Leveller	C323			E315	
			Marble Worker			Sign Fabricator	E316	į
				C324		Sign Installer	E317	:
	┩┟───────────────────────────────────		Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318	1
Progress	-		Mason	C326		Welder	E319	
Aention briefly any matter delaying or obstructing progress)	<b></b>		Metal Scaffolder	C327		Labourer	E401	
			Metal Worker	C328		Semi-skilled Worker		1
		1	Painter & Decorator	C329		Technician	E402	1
			Piling Operative			I COMUCIAII	. T	ł
				C330				
	· · · · · · · · · · · · · · · · · · ·		Pipelayer	C331				
Visitor	٩		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332			1	
(Record names of visitors and time of visit)			Plant & Equipment Operator (Earthmoving Machinery)	C333	1			
(Accord manes of visitors and time of visit)			Plant and Equipment Operator (Hoist and Crane)	C334			-	
			Plant and Equipment Operator (Piling)	C335				
		··· · ···	Plant and Equipment Operator (Tunnelling)	C336	· · · · ·		÷	
						termine to the second second second second second second second second second second second second second second		
			Plasterer	C337				
			Plumber	C338				
Accidents			Pneumatic Driller	C339				
(Describe any occurance of accident)			Prestressing Operative	C340				
			Rigger/Metal Formwork Erector	C341				_
			Shotcretor	C342				-
			Shotfirer	C343	· · · · · · · · · · · · · · · · · · ·	and the second sec		
			Slope Maintenance Worker					
				C344			1	
Remarks	11		Structural Steel Erector	C345				
<b>ACHIAIKS</b>	41	1	Structural Steel Welder	C346				
			Tiler	C347				
		1	Trackworker	C348	1		-	
			Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349		AND A CONTRACT OF A CONTRACT OF A		
			Window Frame Installer	C350		the second	··· ‡	
	Total			- 0350				
				4	1			
	Assistance to Engineer	No.		1				
	Driver	. 1	· · · · · · · · · · · · · · · · · · ·	1				
	Watchman	1						
				• •	· · ·	the state and state and state	-	
				4				
			· · · · · · · · · · · · · · · · · · ·					
	Total	2	(To be continued)			Total Labour		

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Signed:

Engineer's Representative

Name/Post: Stephen Poon / RE

Original - ER's File

Duplicate - Contractor

Date:

3. 1. 12

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/8/2012

Date:

### Contract No.: DC/2009/22 Date: 02/09/2012

Day: Sunday

Air Compressor         1           Backhoe         5           Crawler Drill         1           Generator         1           Steel Bending Machine         3	Plant		
Air Compressor       1         Backhoe       5         Crawler Dill       1         Steel Bending Machine       3         Water Pump 50mm       4         Water Pump 75mm       1         Image: Steel Bending Machine       3         Water Pump 50mm       4         Water Pump 75mm       1         Image: Steel Bending Machine       3         Water Pump 75mm       1         Image: Steel Bending Machine       3         Water Pump 75mm       1         Image: Steel Bending Machine       3         Image: Steel Bendine       3 <td< th=""><th>Туре</th><th>No. Working</th><th>No. Idle</th></td<>	Туре	No. Working	No. Idle
Crawler Drill Generator Stele Bending Machine Water Pump 50mm 4 Mater Pump 75mm 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
Generator       1         Steel Pending Machine       3         Water Pump 75mm       1         1       1			
Steel Bending Machine         3           Water Pump 50mm         4           I         1           I         1			
Water Pump 50mm         4         1           Nater Pump 75mm         1         1	Steel Bending Machine	<u> </u>	
	Water Pump 50mm	4	
	Water Pump 75mm	1	1
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			10

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

3-9-2012

Sheet 1 of 3

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

	i Sunday/Public Hol												
Time	Location	Activity	Labour				Plan	t			Ī	Material De	elivered
						Туре	Wo	rking	1	Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
					<u> </u>		1		<u> </u>				-
3:00 - 18:00	Area A - Pump Station	Stripping off soffit formwork from roof of store room and general cleaning	Labourer (male)	C406	2	Backhoe	1	1	1	EX36	I	ĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ	**************************************
						Backhoe			1	EX50	i	ана аланан талан талан талан талан талан талан талан талан талан талан талан талан талан талан талан талан тала	
						Steel Bending Machine			3		i		11.11.12.01.11.01.11.11.01.01.01.01.01.01.01.01.
						Water Pump 50mm	2						
						Water Pump 75mm	1						
:00 - 18:00	Arra A. Tina Kala David				ļ		_		ļ	ļ			
20:00	Area A - Ting Kok Koad	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 M/Lab. from area I)	Labourer (female)	C406	3	Backhoe			1	EX17		an ga ga ayaa ga ayaa ga ga ga ga ga ga ga ga ga ga ga ga g	
	Area A - Ting Kok Road	No activity as per KLKJV arrangement				Water Pump 50mm	1					ne) val canà a le contamini nel revej va como va nel conta se contacto contacto de la contacto de la contacto d	
	(Intake Structure)												
	Area B - Tung Tsz Nursery (CH130-CH280)	No activity as per KLKJV arrangement				Backhoe			1	EX08	i		
											1	an an ann an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an Anna an An	
	Area B - Tung Tsz Nursery (CH40-CH130)	No activity as per KLKJV arrangement				Water Pump 50mm			1		i	an an an an an an an an an an an an an a	
						Water Pump 75mm			1		i		
	Area B - Tung Tsz Nursery (Jacking Pit)	No activity as per KLKJV arrangement				Air Compressor			1	AC05	i		
	Nuisery (Jacking Pit)				an an an an an an an an an an an an an a	Crawler Drill			1	DR05	1		
*******						Water Pump 50mm			1	DR05	1		
M600						······································			1994 (1996 (1997 - 1997 - 1997 (1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 19			0.000ml/schookerobarrobarrobarrobarrobarrobarrobarroba	
xerworkii + or delayo + or ito a marga (a sur a ca	Area C - Shallow Marshy Area	No activity as per KLKJV arrangement											
00400000000000000000000000000000000000	Area E - Siu Lek Yuen Rd.Playground	No activity as per KLKJV arrangement				Backhoe			l	EX21	i		
						Generator			1	[[	i		
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement											
	Area G - Ngan Shing St	No activity as per KLKJV arrangement											
a		no activity as per KLKJ Y arrangement					<u> </u>						

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

4

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/1/ 2012

Signed:

Name/Post:

Signed:

Stephen Poon / RE

3.9.12 Date:

Date:

Date:

Contract No.: DC/2009/22 Da

ate:	02/09/201	2

Day: Sunday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

Sheet 2 of 3

M 1.1

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Plar	nt				Material Deli	vered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area I - Contractor Office	Office cleaning	Labourer (male)	C406	1				1		1		
		I			<u> </u>				<u> </u>				L

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:	R
	Engineer's Representat

ıtive epresenti igi

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/1/ 2012

Signed:

Name/Post: Stephen Poon / RE

3.1.12 Date:

Date:

Date:

Contract No.: DC/2009/22 Date: 02/09/2012

Day: Sunday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

Sheet 3 of 3

Alienter

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

#### Typhoon / Warning Signal:

Weather:			Т
AM	<u>PM</u>	Rainfall (mm)	Т
Shower	Cloudy	ST 5, TP 2	

Thunderstorm Warning - 01:05~03:00 & 15:05~16:45

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No	D. Labour	Code	No.	Labour	Code	No.	Plant	9999 (2007) (1999) (1999) (1999) (1999) (1999)	THY CLEWING CONTRACTOR
Internet in the second second second second second	Assistant Surveyor 1	Asphalter (Other Construction)	C301		Chainman	C401		Туре	No. Working	No Id
	Chainman 3	Asphalter (Roadworks)	C302		Concreting Labourer	C402		Air Compressor		( ) NO. 10
	Community Liaison Officer 1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403		Backhoe	5	
	CEG 1	Bar Bender & Fixer	C304	4	Excavator	C403	İ	Blower	2 3	
	Contract Manager 1	Bricklayer	C305		Heavy Load Labourer	C404 C405		Crawler Drill	<u>Z</u>	
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office atter					···· +
	Environmental Officer 1	Carpenter (Fornwork)	C307	4		and the second sec		Dump Truck	4	
	Foreman/Assistant Foreman 2	Concrete Repairer	C308		Sewerman Automation Equipment Mechanic	C407		Electric Breaker		4
	General Foreman 1	Concretor			Automation Equipment Mechanic	E301	-	Generator	. 2	i
	Labour Officer 1		C309		Building Services Mechanic	E302		Grout Machine	;	1
		Construction Plant Mechanic	C310	-	Cable Jointer (Power)	E303		Oxy-Acetylene	3	2
	Land Surveyor 1	Curtain Wall Installer	C311		Carpenter	E304		Water Pump 50mm	8	
Utilities	Project Director 1	Demolition Worker	C312		Electrician/Electrical Fitter	E305		Water Pump 75mm	6	
(Record location & nature of works)	Project Manager 2	Diver	C313		Fire Services Mechanic	E306		Welding Set	4	
	Project Quantity Surveyor 1	Drainlayer	C314		Instrument Mechanic	E307				
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315		Lift Electrician	E308				
	Safety Officer 1	Floor Layer	C316		Lift Mechanic	E309	1			
	Site Agent 1	Gas Plumber	C317		Mechanical Fitter	E310				
	Surveyor 1	General Welder	C318	2	Overhead Linesman	E311		11 A. A. A. A. A. A. A. A. A. A. A. A. A.		
		Glazier	C319		Painter			and the second sec	•	•
		Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E312			1	÷
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Grouting Worker	C320			E313		the second second second second second second second second second second second second second second second s	÷	
					Refrigeration/AC/Ventilation Mechanic	E314				
		Joiner	<u>C322</u>		Sheet Metal Worker	E315				
		Leveller	<u>C323</u>		Sign Fabricator	E316				
		Marble Worker	C324		Sign Installer	E317				
		Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318				
Progress		Mason	C326		Welder	E319				1
Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327		Labourer	E401				
		Metal Worker	C328	2	Semi-skilled Worker	E402			•	
		Painter & Decorator	C329		Technician	Т				
		Piling Operative	C330	1			1			•
		Pipelayer	C331	1	a second a second a second a second a second a second a second a second a second a second a second a second a s			the second second second second second second second second second second second second second second second se	1.	· · · · · · ·
		Plant and Equipment Operator (Builder's Lift and Other Machinery								
Visitor		Plant & Equipment Operator (Earthmoving Machinery)	C333	4						
(Record names of visitors and time of visit)		Plant and Equipment Operator (Larunnoving Machinery)	C334	2					- -	4.5
		Plant and Equipment Operator (Piling)		. 4 .		-				
			C335		and the second second second second second second second second second second second second second second second				-	4
		Plant and Equipment Operator (Tunnelling)	C336							
		Plasterer	C337							+
		Plumber	C338	-	and the second sec					
Accidents		Pneumatic Driller	C339		and the second sec					
(Describe any occurance of accident)	<b>—</b>	Prestressing Operative	C340				1			
		Rigger/Metal Formwork Erector	C341							
		Shotcretor	C342							
		Shotfirer	C343	· 1			1	· · · · · · · · · · · · · · · · · · ·		
		Slope Maintenance Worker	C344							
		Structural Steel Erector	C345			+ +	. 1			÷ -
Remarks		Structural Steel Welder	C346			-		· · · · · · · · · · · · · · · · · · ·	-	
		Tiler	C340		· · · · · · · · · · · · · · · · · · ·	-				
				·						1
		Trackworker	C348							
	· · · · · · · · · · · · · · · · · · ·	Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2	· · · · · · · · · · · · · · · · · ·					
		Window Frame Installer	C350							
	Total 22									
	Assistance to Engineer No.									
	Amah 1								÷ en la la	
	Coordinate Engineer							1 <sup>44</sup>		1
	Drafting Assistant 1							· · · · · · · · · · · · · · · · · · ·	· · · ·	
	Driver 2					1				
	Field Assistant 3	A A A A A A A A A A A A A A A A A A A			and the second sec					
	Office Assistant 1			-	and the second s					
	Watchman 1 Total 9				and the second					
	Total 9	(To be continued)			Total Labour		47	1	35	

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or. if the trade is not listed. truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Name/Post: Stephen Poon / RE

Original - ER's File

Duplicate - Contractor

35.12 Date:

Signed:

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Date:

3/8/2012

#### Contract No.: DC/2009/22 Date: 01/09/2012

#### Day: Saturday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

3-9-2012

Sheet 1 of 3

Al beach is

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking		Idling	ç	Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.6.7~7.4 and installing shoring frames Stripping off soffits formwork from roof of store room and dismantling the falsework Fabricating upper layer I-beam struts for shoring of Ø2100 pipe trench between manhole MH05~06 General cleaning at roof and manade slope Installing stainless steel doors (D4 & D9) at switchroom Painting for chequer plate trench covers at transformer room Installing 2 nos. Ø450 & 4 nos. Ø900 double flange pipe with puddle at wall between discharge chamber & valve chamber	General Welder	C318	I	Backhoe	1	EX50					
ento, escolutivorententen			Labourer (female)	C406	2	Blower	2		<u> </u>	1			
			Labourer (male)	C406	8	Oxy-Acetylene	1	1	1	1	1		-
			Metal Worker	C328	2	Water Pump 50mm	2	<u> </u>		1	+		+
			Pipelayer	C331	1	Water Pump 75mm	1	<u> </u>			+		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	2			<u> </u>	+		+
								<u> </u>		-	+		
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to 3.0 mPD & cart away excavated materials to Contract 2's stockpile area at Tai Wah Street. (16 Truckloads)	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX36					
			Truck Driver	C349	2	Dump Truck	2						
												1997	
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/lab.)	Labourer (female)	C406	3								
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Backfilling sand material to Ø2100 pipe trench at Ch.78~125 and compacting Formwork shuttering for walls of manhole MH03 Dismantling upper layer of I-beam walings and struts from shoring of Ø2100 pipe trench at Ch. 90~100	Carpenter (Formwork)	C307	2	Backhoe	1	EX17					
			General Welder	C318	1	Oxy-Acetylene	1				$\left\{ \begin{array}{c} \end{array} \right\}$		
			Labourer (female)	C406		Water Pump 50mm	2				┟───┼		
			Labourer (male)	C406	2			and the second second second second second second second second second second second second second second secon			╂╂		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1			- Parlance - Andrew			┟───┼		-
			C								{}		
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Nursery (CH130-CH280)	Bay 13 - Formwork shuttering for access shaft Bay 12 - Stripping off soffit formwork and dismantling the falsework Bay 11~12 - Patching up tie bolt holes at external face of wall prior to backfilling Bay 10 - Rebar fixing for walls and top slab	Bar Bender & Fixer	C304	4	Backhoe	1	EX08					
			Carpenter (Formwork)	C307	2	Generator					<u> </u>		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/8/7012

Signed:

Stephen Poon / RE

3.1.12 Date:

Name/Post:

Date:

Date:

Contract No.: DC/2009/22 Date: 01/09/2012

Day: Saturday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

Sheet 2 of 3

Wind in

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour		Pla	Material Delivered							
						Туре	We	orking	1	Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.		Code	1	
			Labourer (male)	C406	3	Oxy-Acetylene			1		h	an an an an an an an an an an an an an a	+
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	1			$\mathbf{I}$			_
						Water Pump 75mm	2	1	1	<u>†</u>			
08:00 - 18:00	Area B - Tung Tsz							1	1	1			
08.00 - 18.00	Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1						
*****						Water Pump 75mm	1	1				антан тана жайдагаа калан түзүн антан танат жайда калан түзүн <u></u>	
08:00 - 12:00	Area B - Tung Tsz							1	1				-
	Nursery (Jacking Pit)	Set up crawler drill and preparation works for grouting	Labourer (male)	C406	2	Air Compressor	1	AC05					••••
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05					
						Grout Machine		1	1		h		
NR6701-1						Oxy-Acetylene	1						1
						Water Pump 50mm	1	1					
						Water Pump 75mm	1	1					
						Welding Set	1						
08:00 - 18:00	Area E - Siu Lek Yuen							1			1		
	Rd.Playground	<ul> <li>PL 1602.1 - Excavating for heading tunnel at Ch.~5.0 and installation of shoring frames Breaking up brick wall of exsiting manhole for build in Ø1650 pipe</li> <li>PL 1604.1 - Driving sheet piles and fabricating top layer I-beam walings and struts for trench shoring</li> </ul>	Labourer (male)	C406	4	Backhoe	I	EX21				den Manhalan ar san an an an an an an an an an an an an a	
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Electric Breaker	1	<u> </u>					
an an an an an an an an an an an an an a						Generator	1						
						Oxy-Acetylene		<u> </u>	1		h	Managating and an and a state of the second state of the	
unan sanahata kuta sakata kangangan						Water Pump 50mm	1						+
						Water Pump 75mm	1						+
						Welding Set	1						
CAR	Arra E. Lab V Or											nen men en en en en en en en en en en en en e	1
	Rest Garden	No activity as per KLKJV arrangement							1				
	Area G - Ngan Shing St	No activity as per KLKJV arrangement											
				<b> </b>									
an an an an an an an an an an an an an a	Area I - Contractor Office	No activity as per KLKJV arrangement		+									

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

1

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/ 8/7012

Signed:

Stephen Poon / RE Name/Post:

3.9.12 Date:

Signed:

Date:

Date:

Contract No.: DC/2009/22 Date: 01/09/2012

Day: Saturday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

1 de

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:			Typhoon / Warning Signal:
<u>AM</u>	<u>PM</u>	Rainfall (mm)	Nil
Fine	Fine	ST 0, TP 0	

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code No.	Labour	Code No	. Plan	t	
(Accord verbut mist actions given)	Assistant Surveyor 1	Asphalter (Other Construction)	C301	Chainman	C401	Туре	No. Working	No. Idl
	Chainman 3	Asphalter (Roadworks)	C302	Concreting Labourer	C402	Air Compressor	NO. WOLKING	180. jui
	Community Liaison Officer	Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe		2
	CEG 1	Bar Bender & Fixer	C304 4	Excavator	C404	Backhoe with Vibrating Hammer		<u>, 4</u>
	Contract Manager 1	Bricklaver	C305	Heavy Load Labourer	C405	Blower		
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306	Labourer (male / female) / Lorry checker / Watchman/Office attende			4	
	Environmental Officer 1	Carpenter (Formwork)	C307 3	Sewerman		Electric Breaker		
	Foreman/Assistant Foreman 2	Concrete Repairer	C308	Automation Equipment Mechanic	C407 E301	Generator	2	
	General Foreman 1	Concretor	C309	Building Services Mechanic	E302	Grout Machine		ļ
	Labour Officer 1	Construction Plant Mechanic	C310	Cable Jointer (Power)	E302	Mini Backhoe	·····	1
	Land Surveyor 1	Curtain Wall Installer	C311	Carpenter	E304	Oxy-Acetylene		1
	Project Director	Demolition Worker	C312	Electrician/Electrical Fitter	E305	Saw Cut Machine	4	
Utilities	Project Manager 2	Diver	C312 C313	Fire Services Mechanic		Steel Bending Machine	J	
(Record location & nature of works)	Project Quantity Surveyor 1	Drainlayer	C314	Instrument Mechanic	E306	Vibrating Prob	2	
i l	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315	Lift Electrician	E307			
	Safety Officer 1	Floor Layer	C316	Lift Mechanic	E308 E309	Water Pump 50mm	8	• · · ·
	Site Agent 1	Gas Plumber	C317			Water Pump 75mm	0	
	Surveyor 1	General Welder	C318 1	Mechanical Fitter Overhead Linesman	E310	Welding Set	3	1
		Glazier		Painter	E311	· · · · · · · · · · · · · · · · · · ·		·
		Ground Investigation Operator/Driller/Borer	C319 C320		E312			
	100.00 Common Common Common Common Common Common Common Common Common Common Common Common Common Common Common	Ground investigation Operator Driller Borer	C320 C321	Plumber and Pipe Fitter Refrigeration/AC/Ventilation Mechanic	E313			
	· · · · · · · · · · · · · · · · · · ·	Joiner			E314			
			C322	Sheet Metal Worker	E315			
		Leveller Marble Worker	<u>C323</u>	Sign Fabricator	E316			
	· · · · · · · · · · · · · · · · · · ·		C324	Sign Installer	E317			
Progress		Marine Construction Plant Operator	C325	Thermal Insulation Craftsman	E318			
(Mention briefly any matter delaying or obstructing progress)		Mason Metal Scaffolder	C326	Welder	E319			
(And the second se			C327	Labourer	E401			
		Metal Worker	C328	Semi-skilled Worker	E402			
		Painter & Decorator	C329	Technician	T			
		Piling Operative	C330					
		Pipelayer	C331					
Visitor		Plant and Equipment Operator (Builder's Lift and Other Machinery)						
(Record names of visitors and time of visit)	······································	Plant & Equipment Operator (Earthmoving Machinery)	C333 4					
		Plant and Equipment Operator (Hoist and Crane)	C334 2					
	· · · · · · · · · · · · · · · · · · ·	Plant and Equipment Operator (Piling)	C335	· · · · · · · · · · · · · · · · · · ·				
		Plant and Equipment Operator (Tunnelling)	C336					
		Plasterer	C337					
		Plumber	C338				· · · · · · · · · · · · · · · · · · ·	
Accidents		Pneumatic Driller	C339					
(Describe any occurance of accident)		Prestressing Operative	<u>C340</u>					
		Rigger/Metal Formwork Erector	C341					
		Shotcretor	C342	1940 - Marco I. 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940 - 1940			· · · · · · · · · · · · · · · · · · ·	
l l l l l l l l l l l l l l l l l l l		Shotfirer	C343					
		Slope Maintenance Worker	C344					
Dementer		Structural Steel Erector	C345					
Remarks Area A - Backhoe EX08 off site		Structural Steel Welder	C346					
Alea A - Dacknoe EA08 off sile		Tiler	C347					
		Trackworker	C348					
í	······································	Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349			Marrie III III		
		Window Frame Installer	C350					
	Total 22							
	Assistance to Engineer No.	······································						
	1							
	Amah 1							
	Coordinate Engineer 1							
	A CONTRACT OF A CONTRACT.							
	Drafting Assistant 1	and the second s						
	Drafting Assistant 1 Driver 2							
	Drafting Assistant 1							
	Drafting Assistant 1 Driver 2							
	Drafting Assistant     1       Driver     2       Field Assistant     3							

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Signed: Engineer's Representative

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Signed:

Date:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Duplicate - Contractor

17.9.12

17/18/2012

Date:

### Contract No.: DC/2009/22 Date: 14/09/2012 Day: Friday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

17 - 9 - 2012 Sheet 1 of 3

Wine C

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered		
					_	Туре	Working			Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code			
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement						1						
	Storini water Drain								+				-	
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.11.0~11.4 and installing shoring frames Cutting & bending reinforcement bars for discharge chamber at bending yard Fixing tie bolts and walings for wall formwork & rebar fixing for top slab of discharge chamber Excavating for Ø2100 & Ø1200 pipe trench between manhole MH05~ receiving pit and fabricating second layer I-beam walings & struts Saw cutting and breaking up of floor screed at transformer room	Bar Bender & Fixer	C304	4	Backhoe	1	EX50						
			Carpenter (Formwork)	C307	2	Blower	2	1	+	+				
			General Welder	C318	1	Electric Breaker	2	1	1	1				
			Labourer (female)	C406	1	Oxy-Acetylene	1	1	1	1			+	
			Labourer (male)	C406	6	Saw Cut Machine	1	<u>†</u>						
			Plant & Equipment Operator (Earthmoving Machinery)	C333		Steel Bending Machine	2							
						Water Pump 50mm	2			1				
						Water Pump 75mm	1			1				
						Welding Set	1			1		• • · · · · · · · · · · · · · · · · · ·	-	
								1	1					
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating to -1.7 mPD	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX36						
07:00 - 18:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.)	Labourge (formala)	0406	2		_	<b>_</b>	<u> </u>	<u> </u>				
18:00 - 20:00	Thear Thing Rok Road	Manual control of temporary traffic light for traffic flow regulation (3F/Lab.)	Labourer (female)	C406	3									
08:00 - 18:00	Area A Ting Kak Daad	Stripping off formwork from manhole MH03					_							
08.00 - 18.00	(CH70-125)	Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.92~100 Excavating for Ø375 pipe trench between SMH02 & SMH03	Labourer (female)	C406	2	Backhoe	1	EX42						
			Labourer (male)	C406	3	Backhoe			1	EX54	h			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe with Vibrating Hammer	1	EX40						
<u> </u>	_		Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1			1				
						Water Pump 50mm	2							
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement												
08.00 18.00	Area B - Tung Tsz													
08:00 - 18:00	Nursery (CH130-CH280)	Bay 10 - Dismantling upper layer of I-beam walings and struts from shoring Bay 10~13 - Backfilling for box culvert trench	Labourer (male)	C406	3	Backhoe	1	EX11						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Generator	1							

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Signed:

Name/Post:

Stephen Poon / RE

17.9.12

Date:

Date:

17/1/2012

Wong Ching Lung / Site Agent

Date:

Contract No.: DC/2009/22 Date: 14/09/2012

Day: Friday

10 IOW

Tso Sai Kuen / Inspector of Works

17-9-2012

Y

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	Labour								Material Delivered		
						Туре	Wo	rking	Τ	Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code			
					1	Oxy-Acetylene	1						1	
						Water Pump 50mm	1						1	
						Water Pump 75mm	2				1 1		1	
						Welding Set	1			1				
												······································		
	Area B - Tung Tsz Nursery (CH40-CH130)	No activity as per KLKJV arrangement Water Pump 50mm		Water Pu		Water Pump 50mm	1					illinen en en en en en en en en en en en en		
						Water Pump 75mm	1	1	1					
		-										······································		
8:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. grout holes (2-7 & 2-8) and inserting grout tube	Labourer (male)	C406	4	Air Compressor	1	AC05						
: 			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05						
						Grout Machine			1		h			
						Mini Backhoe			1	EX53	h	······		
						Oxy-Acetylene	1						T	
						Water Pump 50mm	1						T	
						Water Pump 75mm	1							
						Welding Set	1							
8:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	Manhole S6 - Re-bar fixing and concreting for wall stems and top slab	Carpenter (Formwork)	C307		Backhoe			1	EX21	h			
			Labourer (male)	C406	3	Blower	2							
						Generator	1						T	
						Oxy-Acetylene			1		h			
						Vibrating Prob	1							
						Water Pump 50mm	1							
						Water Pump 75mm	1						1	
						Welding Set			1		h			
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
	Area I - Contractor Office	No activity as per KLKJV arrangement												

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

17/8/2012

Signed:

Stephen Poon / RE

Name/Post: 17.9.12

Date:

Date:

Date:

Contract No.: DC/2009/22 Date:

<b>:</b> :	14/09/2012	
	1.00000000	

Day: Friday

*IOW* 

Tso Sai Kuen / Inspector of Works

17-9-2012

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Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u>	<u>PM</u>	Rainfall (mm)
Fine	Shower	ST 5, TP 0

Very Hot Weather Warning - 00:00~15:00 Thunderstorm Warning - 12:30~15:30

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code N	io.	Labour	Code	No.	Plant		
(Record verbai instructions given)	Assistant Surveyor 1	Asphalter (Other Construction)	C301		'hainman	C401		Туре	No. Working	No. I
	Chainman 3	Asphalter (Roadworks)	C302		Concreting Labourer	C401		Air Compressor	INO. WORKING	190, 1
	Community Liaison Officer 1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C402		Backhoe		· · · · · · · · · · · · · · · · · · ·
	CEG 1	Bar Bender & Fixer	C304		Excavator	C403		Backhoe with Vibrating Hammer	J	4
	Contract Manager 1	Bricklayer	C304 C305		leavy Load Labourer					-
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306		abourer (male / female) / Lorry checker / Watchman/Office atte	C405	24	BlowerCrawler Drill	4	
comments by Engineer 57 contractor 5 Representative	Environmental Officer 1	Carpenter (Fornwork)	C207				24			
	Foreman/Assistant Foreman 2	Concrete Repairer			ewerman	C407		Dump Truck	2	
	General Foreman 1		C308		Automation Equipment Mechanic	E301		Generator	2	
		Concretor	C309		Building Services Mechanic	E302		Grab Lorry	1	
	Labour Officer 1	Construction Plant Mechanic	C310	11	able Jointer (Power)	E303		Grout Machine		1
	Land Surveyor 1	Curtain Wall Installer	C311		arpenter	E304		Mini Backhoe		1
Utilities	Project Director 1	Demolition Worker	C312		Electrician/Electrical Fitter	E305	1	Oxy-Acetylene	4	1
(Record location & nature of works)	Project Manager 2	Diver	C313		ire Services Mechanic	E306		Water Pump 50mm	8	
	Project Quantity Surveyor 1	Drainlayer	C314		nstrument Mechanic	E307		Water Pump 75mm	66	
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315		ift Electrician	E308		Welding Set	3	1
	Safety Officer 1	Floor Layer	C316		.ift Mechanic	E309				
	Site Agent 1	Gas Plumber	C317	M	Aechanical Fitter	E310				
	Surveyor 1	General Welder	C318 1	1 0	Verhead Linesman	E311				
		Glazier	C319		ainter	E312				
		Ground Investigation Operator/Driller/Borer	C320	P	lumber and Pipe Fitter	E313				
		Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314			e e 1 11 he fe e an t-a arbanes cambalanan e a	
		Joiner	C322		heet Metal Worker	E315				
		Leveller	C323		ign Fabricator	E316				
		Marble Worker	C324		ign Installer	E317		· · · · · · · · · · · · · · · · · · ·		
		Marine Construction Plant Operator	C325		hermal Insulation Craftsman	E318				1
Progress		Mason	C326		Velder	E319				
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327	1	abourer	E401			· · · · · · · · · · · · · · · · · · ·	
		Metal Worker	C328		emi-skilled Worker	E401 E402				
		Painter & Decorator	C329		echnician					
		Piling Operative		····    "	connician	T		·····		
			C330							
		Pipelayer Plant and Equipment Operator (Builder's Lift and Other Machinery)	C331 1	1						
Visitor			C332							
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333 5			-				
		Plant and Equipment Operator (Hoist and Crane)	C334 3	3						
		Plant and Equipment Operator (Piling)	C335							
	10.0 m	Plant and Equipment Operator (Tunnelling)	C336							
		Plasterer	<u>C337</u>							
		Plumber	C338							
Accidents		Pneumatic Driller	C339							
(Describe any occurance of accident)		Prestressing Operative	C340							
		Rigger/Metal Formwork Erector	C341							
		Shotcretor	C342							
		Shotfirer	C343							·····
		Slope Maintenance Worker	C344							
		Structural Steel Erector	C345					an ann a mhair an a' a an an a shear a shearan a san ann an shearanna a san		
Remarks	······································	Structural Steel Welder	C346						**************************************	
ekly Safety and Environmental Coordination Meeting #130 was held at 11:30 A.M.		Tiler	C347	11-						
a A - Backhoe on site at noon		Trackworker	C348							
. Choi of Kam Shing (Representative of CLP) preform the Schmidt Hammer Test to		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349 2							
ths at Transformer Room at 12:30 hr.		Window Frame Installer	C350 2	<u></u>						
	Total	window France fistance						· · · · · · · · · · · · · · · · · · ·		
	<u>11 otal</u> 22	J				+		199 - Carlon C.		
	Assistance to Engineer No.									
			-++		······································					
	Amah 1									
	Coordinate Engineer 1									
	Drafting Assistant 1							adamandologitata ana anananana andologitanana antonana a anananana		
	Driver 2									
	Field Assistant 3									
	Office Assistant									1
	Watchinan 1						-			
	Total 9	(To be continued)			otal Labour		41	Total	38	······

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

#### Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Duplicate - Contractor

Date:

Name/Post: Stephen Poon / RE

Signed:

14.9.12

Date:

14/9/2012

#### Contract No.: DC/2009/22 Date: 13/09/2012

#### Day: Thursday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

i Kuen / Inspector of Works

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	Material Delivered		
						Туре	Working		ng Idling			Description	Quantity		
			Trade	Code	No.	1	No.	ID	No.	ID	Code				
	Area A - DN1800	No activity as per KLKJV arrangement						1	1	1	1		1		
	Stormwater Drain				ļ			-	ļ	.					
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.10.7~11.0 and installing shoring frames Formwork shuttering for box out of stoplogs (SL-01~03) & access openigns at top slab of discharge chamber Excavating for Ø2100 & Ø1200 pipe trench between manhole MH05~ receiving Pit and fabricating second layer I-beam waling and struts Installing earthing to steel door at transformer room General housekeeping & cleaning up sediments from wheel washing bay Disposal of construction bebris to WENT (2 Truckloads)	Carpenter (Formwork)	C307	2	Backhoe	1	EX50							
			Electrician/Electrical Fitter	E305	1	Blower	2	1					1		
			General Welder	C318	1	Grab Lorry	1			1	1				
			Labourer (female)	C406	2	Oxy-Acetylene	1				1				
			Labourer (male)	C406	6	Water Pump 50mm	2								
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1	1							
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Welding Set	1	1		1	1				
								1							
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating to -1.7 mPD & cart away excavated material to Area B (9 Truckloads)	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX36							
			Truck Driver	C349	2	Dump Truck	2				ļ				
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of 'stop & go' sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1F/Lab.)	Labourer (female)	C406	3										
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Stripping off formwork from manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.100~114 along footpath side Backfilling sand material to Ø2100 pipe trench at Ch. 78~90 and compacting	Labourer (female)	C406	1	Backhoe	1	EX42							
			Labourer (male)	C406	3	Backhoe		T	1	EX54	h				
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe with Vibrating Hammer	1	EX40				<u></u>			
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1	<u>† – – – – – – – – – – – – – – – – – – –</u>		1			1		
						Water Pump 50mm	2								
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement													
00.00.10.00							<u> </u>			ļ					
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 11 - Dismantling upper layer of I-beam walings and struts from shoring Bay 10 - Backfilling to box culvert trench	Labourer (male)	C406		Backhoe	1	EX08							
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Backhoe	1	EX11							

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

14/8/2012

Wong Ching Lung / Site Agent

Signed:

Stephen Poon / RE

Name/Post:

Date:

Date:

Date:

14.9.12

Contract No.: DC/2009/22 Date: 13/09/2012

6 IOW

Tso Sai Kuen / Inspector of Works

14/9/2012

Sheet 2 of 3

No and

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour			T	Plan	it	
						Туре	Wo	rking	
			Trade	Code	No.	1	No.	ID	N
						Generator	1	<b> </b>	<u> </u>
					<u> </u>	Oxy-Acetylene	1	<u> </u>	$\vdash$
						Water Pump 50mm	1		
						Water Pump 75mm	2		<u> </u>
						Welding Set	1		
								++	
08:00 - 18:00 Are Nui	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1		
						Water Pump 75mm	1		
							1		<u> </u>
08 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 3 nos. grout hole (2-1, 2-2 & 2-3) and inserting grout tube	Labourer (male)	C406	3	Air Compressor	1	AC05	
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	<b></b>
						Grout Machine			1
						Mini Backhoe			]
						Oxy-Acetylene	1		<b></b>
						Water Pump 50mm	1		
						Water Pump 75mm	1		
						Welding Set	1		[
							1		
08:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.2 &.3 - Laying 450Ø PC cut length pipes (PL1602.2 -0.42m) & PL1602.3-0.65m) PL 1602.1 - Making good wall face of Ø1650 pipe entry of existing manhole Manhole S6 - Formwork shuttering for top slab	Carpenter (Formwork)	C307	2	Backhoe			1
			Labourer (male)	C406	2	Blower	2		
			Pipelayer	C331	1	Generator	1		
						Oxy-Acetylene			1
						Water Pump 50mm	1		
						Water Pump 75mm	1		
						Welding Set			1
·	Area G - Ngan Shing St.	No activity as per KLKJV arrangement					1		
	Area H - Contractor Office	No activity as per KLKJV arrangement							

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

14/9/2012

Signed:

Name/Post:

Date:

Stephen Poon / RE

Date:

Date:

14.9.12

Contract No.: DC/2009/22 Date: 13/09/2012

Day: Thursday

			Material Deli	vered
	Idling		Description	Quantity
D.	ID	Code		
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			······	
		h		
	EX53	h		
	EX21	1		
	EX21	h		
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-		h		
		h		

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Tso Sai Kuen / Inspector of Works

14/9/2012

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Sheet 3 of 3

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

### Weather:

### Typhoon / Warning Signal:

AM	<u>PM</u>	<u>Rainfall (mm)</u>	
Shower	Fine	ST 0, TP 2	

Very Hot Weather Warning - 00:00~24:00 Thunderstorm Warning - 15:00~16:00

(Hong Kong Observatory's record)

(Record verbal instructions given)	and the second sec		in in the second		1 i		
	Assistant Surveyor	Asphalter (Other Construction)	C301	Chainman	C401	Туре	No. Working
	Chainman	Asphalter (Roadworks)	C302	Concreting Labourer	C402	Air Compressor	1
	Community Liaison Officer	Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe	5
	CEG	Bar Bender & Fixer	C304	Excavator	C404	Backhoe with Vibrating Hammer	1
	Contract Manager	Bricklayer	C305	Heavy Load Labourer	C405	Blower	1
Comments by Engineer's / Contractor's Representative				Labourer (male / female) / Lorry checker / Watchman/Office attenda			
Comments by Engineer's / Contractor's Representative	Engineer	Carpenter (Fender)	C306		a providence effective car of the		1
	Environmental Officer	Carpenter (Formwork)	C307 4	Sewerman	C407	Dump Truck	2
	Foreman/Assistant Foreman	2 Concrete Repairer	C308	Automation Equipment Mechanic	E301	Generator	2
	General Foreman	Concretor	C309	Building Services Mechanic	E302	Grab Lorry	1
	Labour Officer	Construction Plant Mechanic	C310	Cable Jointer (Power)	E303	Grout Machine	
	Land Surveyor	Curtain Wall Installer	C311	Carpenter	E304	Mini Backhoe	
	Project Director	Demolition Worker	C312	Electrician/Electrical Fitter	E305	Oxy-Acetylene	1
Utilities	Project Manager	2 Diver	C313	Fire Services Mechanic		Water Pump 50mm	
(Record location & nature of works)					_E306		0
	Project Quantity Surveyor	Drainlayer	C314	Instrument Mechanic	E307	Water Pump 75mm	6
	Quantity Surveyor Manager	Electrician (Main Contractor's)	C315	Lift Electrician	E308	Welding Set	3
	Safety Officer	Floor Layer	C316	Lift Mechanic	E309		
	Site Agent	Gas Plumber	C317	Mechanical Fitter	E310		
	Surveyor	General Welder	C318 1	Overhead Linesman	E311		
		Glazier	C319	Painter	E312		
		Ground Investigation Operator Driller/Borer					
	·····		C320	Plumber and Pipe Fitter	E313		
		Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314	Mana and a second and a second and a second and a second and a second and a second and a second a se	
		Joiner	C322	Sheet Metal Worker	E315		
		Leveller	C323	Sign Fabricator	E316		
		Marble Worker	C324	Sign Installer	E317		
		Marine Construction Plant Operator	C325	Thermal Insulation Craftsman	E318		
Progress		Mason	C326	Welder	E319		
ention briefly any matter delaying or obstructing progress)							
ention orienty any matter delaying or obstructing progress)		Metal Scaffolder	C327	Labourer	E401		
		Metal Worker	C328	Semi-skilled Worker	E402	1000 I	
		Painter & Decorator	C329	Technician	Т		
		Piling Operative	C330				
		Pipelayer	C331				
		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332				
Visitor			0222				
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333 5				
Incepto humes of visitors and thire of visity		Plant and Equipment Operator (Hoist and Crane)	C334 3				
		Plant and Equipment Operator (Piling)	C335				
		Plant and Equipment Operator (Tunnelling)	C336				
		Plasterer	C337				
		Plumber	C338				······································
Accidents		Pneumatic Driller	C339				
(Describe any occurance of accident)		Prestressing Operative	<u>C340</u>	-			
		Rigger/Metal Formwork Erector	C341				
		Shotcretor	C342				
		Shotfirer	C343	at a second and an infinite second and an and an a	•		
	· · · · · · · · · · · · · · · · · · ·						
		Slope Maintenance Worker	C344		-		
		Structural Steel Erector	C345		4		
Remarks		Structural Steel Welder	C346				
		Tiler	C347				
		Trackworker	C348				
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349 2				
		Window Frame Installer					
		window Frame instaner	C350				
	Total 2						
	Assistance to Engineer N	D					
	Amah 1						
	Coordinate Engineer 1						
	Drafting Assistant 1			1		······································	
			· • · · · · · · · · · · · · · · · · · ·		· · · · · · · · · · · · · · · · · · ·		
	Driver 2						·····
	Field Assistant 3			4			1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -
	Office Assistant						
	Watchman 1						
	Total 9	(To be continued)		Total Labour	37	Total	38
	$\frown$						
	/ ľ						
ger is equivalent to ordinary worker in the trade in which	Signed:			Signed:			Ċ.

Day's record and instructions checked and agreed

Engineer's Representative

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Duplicate - Contractor

13.9.12

Name/Post: Stephen Poon / RE

Date:

Date:

13/8/2012

### Contract No.: DC/2009/22 Date: 12/09/2012

#### Day: Wednesday

IOW

Tso Sai Kuen / Inspector of Works

Date:

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											1
00.00.10.00					L								
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.10.5~10.7 and installing shoring frames Shuttering soffit of top slab for discharge chamber Excavating for Ø2100 pipe trench between manhole MH05 & MH06 and fabricating top layer I-beam walings and struts Cart away 3 truckloads of excavted materials to Area B General housekeeping & cleaning up sediments from wheel washing bay	Carpenter (Formwork)	C307		Backhoe	I	EX50					
			General Welder	C318	1	Blower	2						
			Labourer (female)	C406		Oxy-Acetylene	1						
			Labourer (male)	C406	5	Water Pump 50mm	2						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1						
						Welding Set	1						
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving	Excavating for receiving pit to -1.7 mPD and cart away excavated material to Area B (9 Truckloads)	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX36					
	Pit)												
			Truck Driver	C349	2	Dump Truck	2						
07:00 - 18:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.)	Labourer (female)	C406	3						<b>  </b>		
18:00 - 20:00		Manual control of temporary traffic light for traffic flow regulation (1F/Lab.)		(,100									
08:00 - 18:00	Area A - Ting Kok Road	Stripping off formwork from manhole MH03	Labourer (male)	C406	4	Backhoe	1	EX42					
	(СН70-125)	Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.100~125 along carriageway Backfilling for Ø2100 pipe trench at Ch. 78~90		0.000									
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe with Vibrating Hammer	1	EX40					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1						
						Water Pump 50mm	2						
L									ļ				
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Area B - Tung Tsz	Bay 12 - Dismantling upper layer of I-beam walings and struts from shoring	Laboratory (franch)			D. 11				ļ			
00.00 - 10.00		Bay 12 - Dismanting upper layer of 1-beam walings and struts from shoring Bay 10~11 - Backfilling to box culvert trench	Labourer (female)	C406		Backhoe	1	EX08					
			Labourer (male)	C406	1	Backhoe	1	EX11					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1						
						Oxy-Acetylene	1						
						Water Pump 50mm	1						1

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Engineer's Representative

Signed:  $\boldsymbol{\varsigma}$ 

Contractor's Representative

Wong Ching Lung / Site Agent

13/9/2012

Signed:

Stephen Poon / RE

13.9.12 Date:

Signed:

Name/Post:

Date:

Date:

Contract No.: DC/2009/22 Date: 12/09/2012

Day: Wednesday

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Tso Sai Kuen / Inspector of Works

13/9/2012

Martin

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time Location Activity Labour Plant Туре Working Trade Code No. No. ID No Water Pump 75mm 2 Welding Set 1 Area B - Tung TszGeneral housekeeping & cleaning up sediments from wheel washing bayNursery (CH40-CH130)Disposal of construction debris to WENT (1 Truck load) 08:00 - 18:00 Area B - Tung Tsz Labourer (male) C406 Grab Lorry 1 1 Plant and Equipment Operator (Hoist and Crane) C334 Water Pump 50mm 1 Water Pump 75mm 1 08:00 - 18:00 Area B - Tung Tsz Drilling 2 nos. grout holes (2-5 & 2-6) and inserting grout tube Labourer (male) C406 Air Compressor 2 AC05 1 Nursery (Jacking Pit) Plant and Equipment Operator (Hoist and Crane) C334 Crawler Drill 1 DR05 1 Grout Machine Mini Backhoe Oxy-Acetylene 1 Water Pump 50mm 1 Water Pump 75mm 1 Welding Set 1 08:00 - 18:00 Area E - Siu Lek Yuen Manhole S6 - Formwork shuttering for wall stems Carpenter (Formwork) C307 2 Backhoe 1 Rd.Playground PL 1602.1 - Cement grouting to fill up the cavity between heading tunnel and Ø1650 drain pipe C406 Labourer (male) 3 Blower 2 1 denerator Oxy-Acetylene Water Pump 50mm 1 Water Pump 75mm 1 Area G - Ngan Shing St. No activity as per KLKJV arrangement Area I - Contractor No activity as per kLKJV arrangement Office

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

1318/2012

Signed:

Stephen Poon / RE Name/Post:

13.9.12 Date:

Date:

Date:

Contract No.: DC/2009/22 Date

te:	12/09/2012

Day: Wednesday

			Material Deli	vered
	Idling		Description	Quantity
0.	ID	Code		
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	EX53	h		
	EX21	h		
	EAZI	11		
		h		
				**************************************

IOW

Tso Sai Kuen / Inspector of Works

13/9/2012

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Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Typhoon / Warning Signal:

AM PM Rainfall (mm)

Very Hot Weather Warning - 10:45~24:00

Fine Fine ST 0, TP 0

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given) Comments by Engineer's / Contractor's Representative	Contractor's Site Staff N Assistant Surveyor Chainman Community Liaison Officer CEG Contract Manager Engineer Environmental Officer Foreman/Assistant Foreman	Labour       1     Asphalter (Other Construction)       3     Asphalter (Roadworks)       1     Bamboo Scaffolder       1     Bar Bender & Fixer       1     Bricklayer       1     Carpenter (Fender)	Code <u>C301</u> C302 C303 C304 C305	No.	Labour Chainman Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew Excavator	Code C401 C402 C403	No.
	Chainman Community Liaison Officer CEG Contract Manager Engineer Environmental Officer	3     Asphalter (Roadworks)       1     Bamboo Scaffolder       1     Bar Bender & Fixer       1     Bricklayer	C302 C303 C304		Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew	C402 C403	-
Comments by Engineer's / Contractor's Representative	Chainman Community Liaison Officer CEG Contract Manager Engineer Environmental Officer	3     Asphalter (Roadworks)       1     Bamboo Scaffolder       1     Bar Bender & Fixer       1     Bricklayer	C302 C303 C304		Concreting Labourer Diver's Linesman / Dredger Crew / Barge Crew	C402 C403	
Comments by Engineer's / Contractor's Representative	Community Liaison Officer CEG Contract Manager Engineer Environmental Officer	1     Bamboo Scaffolder       1     Bar Bender & Fixer       1     Bricklayer	C303 C304		Diver's Linesman / Dredger Crew / Barge Crew	C403	
Comments by Engineer's / Contractor's Representative	CEG Contract Manager Engineer Environmental Officer	Bar Bender & Fixer     Bricklayer	C304				
Comments by Engineer's / Contractor's Representative	Contract Manager Engineer Environmental Officer	1 Bricklayer			Excavator		
Comments by Engineer's / Contractor's Representative	Engineer Environmental Officer		C305		· · · · · · · · · · · · · · · · · · ·	C404	
Comments by Engineer 3 / Contractor 3 Representative	Environmental Officer	I (arpenter (Fender)			Heavy Load Labourer	C405	
			C306		Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406	26
	Economica Accestant Fernancen	1 Carpenter (Formwork)	C307	4	Sewerman	C407	
	and the second s	2 Concrete Repairer	C308	:	Automation Equipment Mechanic	E301	
	General Foreman	1 Concretor	C309		Building Services Mechanic	E302	
	Labour Officer	1 Construction Plant Mechanic	C310		Cable Jointer (Power)	E303	
	Land Surveyor	1 Curtain Wall Installer	C311		Carpenter	E304	
	Project Director	1 Demolition Worker	C312		Electrician/Electrical Fitter	E305	1
Utilities	Project Manager	2 Diver	C313		Fire Services Mechanic		
(Record location & nature of works)	Project Quantity Surveyor	1 Drainlayer	C314			E306	
	Quantity Surveyor Manager	1 Electrician (Main Contractor's)			Instrument Mechanic	E307	
			C315		Lift Electrician	E308	
	Safety Officer	1 Floor Layer	C316	÷	Lift Mechanic	E309	
	Site Agent	I Gas Plumber	C317		Mechanical Fitter	E310	
	Surveyor	1 General Welder	C318	1	Overhead Linesman	E311	
		Glazier	C319		Painter	E312	
		Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	
		Grouting Worker	C321	1	Refrigeration/AC/Ventilation Mechanic	E314	
		Joiner	C322		Sheet Metal Worker	E314 E315	
		Leveller	C323		Sign Fabricator		
		Marble Worker				E316	
	t start start		C324		Sign Installer	E317	
Progress		Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318	
(Mention briefly any matter delaying or obstructing progress)		Mason	C326	f	Welder	E319	
(Mention Drienty any matter delaying or obstructing progress)		Metal Scaffolder	C327		Labourer	E401	
	······	Metal Worker	C328		Semi-skilled Worker	E402	
		Painter & Decorator	C329		Technician	Т	
		Piling Operative	C330				
		Pipelayer	C331				
		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332		annen and Andrea an an an an an anna an an an an an an	···· · ·····	
Visitor		Plant & Equipment Operator (Earthmoving Machinery)	C333	4			
(Record names of visitors and time of visit)		Plant and Equipment Operator (Hoist and Crane)	C334	2	anness and a construction of a second s		
	······································	Plant and Equipment Operator (Piling)					
	······		C335				
		Plant and Equipment Operator (Tunnelling)	C336	:			
		Plasterer	C337				
		Plumber	_C338				
Accidents		Pneumatic Driller	C339				
(Describe any occurance of accident)		Prestressing Operative	C340				
		Rigger/Metal Formwork Erector	C341				
		Shotcretor	C342				
		Shotfirer	C343				
		Slope Maintenance Worker	C344				
		Structural Steel Erector					
Remarks			C345				
handover inspection of Transformer Room was held at 10:30 A.M. amongst Mr.		Structural Steel Welder	C346		·····		
of Kam Shing (represebtative of CLP), Mr. Jeff Chan of KLKJV and Mr. Poon	······································	Tiler	C347				
ECOM		Trackworker	C348				
	2 - 1974	Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2			
dy Safety and Environmental Coordaination Meeting #130 was held at 11:30		Window Frame Installer	C350				
	Total 21	2					
	Andrew to Dest.				* ***********************************		
	Assistance to Engineer No	).	++-			·	
	Amah 1		÷				
			•••••				
	Coordinate Engineer 1		÷				
	Drafting Assistant 1				at attactions a construction of a statement		
	Driver 2						
	Driver 2 Field Assistant 3						
	Driver 2						
	Driver 2 Field Assistant 3						

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

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Engineer's Representative

12.9.12

Signed:

Date:

Contractor's Representative

Wong Ching Lung / Site Agent

12/8/2012

Name/Post: Stephen Poon / RE

Signed:

Date:

Original - ER's File

Duplicate - Contractor

### Contract No.: DC/2009/22 Date: 11/09/2012

Day: Tuesday

Plant		
Туре	No. Working	No. Idle
ir Compressor	1	1
ackhoe ackhoe with Vibrating Hammer		2
lower	4	
rawler Drill	2	· ·
enerator	2	•
rout Machine		
ini Backhoexy-Acetylene	4	1
ater Pump 50mm		• • • • • • • • • • • • • • • • • • • •
ater Pump 75mm	6 3	1
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Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

12-9-2012

Heret

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour			1	Pla	nt				Material De	livered
						Туре	Wo	rking	Ι	Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
00.00 10.00													
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.10.0~10.5 and installing shoring frames Erecting falsework, shuttering for soffit of top slab for discharge chamber & installing Ø150 uPVC downpipe Formwork shuttering for U-channel at manmade slope Excavating for Ø2100 pipe trench between manhole MH05 & MH06 and fabricating top layer of I- beam walings and struts Fixing cable trays on walls & installing earthing to connect metal fixtures at transformer room General housekeeping & cleaning up sediments from wheel washing bay		C307	2	Backhoe	1	EX50					
L			Electrician/Electrical Fitter	E305	1	Blower	2						
			General Welder	C318	1	Oxy-Acetylene	1						
			Labourer (female)	C406	2	Water Pump 50mm	2	1					
			Labourer (male)	C406	8	Water Pump 75mm	1						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						
									1	1			
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to -1.7 mPD and cart away excavated material to Area B (20 Truckloads)	Labourer (male)	C406	1	Backhoe	1	EX36					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Dump Truck	2		<u>†</u>				
			Truck Driver	C349	2			1		1			
								1					
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3								
												······································	
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Stripping off formwork for manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.110~125 along carriageway	Labourer (male)	C406		Backhoe			1	EX42	h		
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Backhoe with Vibrating Hammer	1	EX40					
				_		Oxy-Acetylene	1			ļ			
						Water Pump 50mm	2			ļ			
							_	ļ		ļ			
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 13 - Dismantling upper layer I-beam walings and struts from shoring Bay 11 - Backfilling to box culvert trench	Labourer (female)	C406	1	Backhoe	1	EX08					
			Labourer (male)	C406	1	Backhoe	1	EX11					
			Plant & Equipment Operator (Earthmoving Machinery)	C333		Generator	1	1					1
			programme and a second data and as			Oxy-Acetylene	1	1		<u> </u>			-

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed: Contractor's Representative

Wong Ching Lung / Site Agent

Signed:

Name/Post:

Stephen Poon / RE

12/8/2012 Date:

Date:

Date: 12.9.2 Contract No.: DC/2009/22 Date: 11/09/2012

Day: Tuesday

20 6 IOW

Tso Sai Kuen / Inspector of Works

12-9-2012

Hind

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered	
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
						Water Pump 50mm	1						1
						Water Pump 75mm	2						
						Welding Set	1	ļ					
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1						
						Water Pump 75mm	1		1				
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 1 no. hole (2-4) at layer 2 and inserting grout tube Cement grouting to 1 no. drill hole (2-4) at layer 2	Labourer (male)	C406	3	Air Compressor	1	AC05				and a second second second second second second second second second second second second second second second	
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05				· · · · · · · · · · · · · · · · · · ·	
						Grout Machine	1						
					[	Mini Backhoe		1	1	EX53	h		1
						Oxy-Acetylene	1						1
						Water Pump 50mm	1						
						Water Pump 75mm	1	1					
						Welding Set	1		[				
00.00 10.00													
08:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	Manhole S6 - Rendering for benching and shuttering for wall stem PL 1602.1 - Preparation works for cement grouting the cavity between heading tunnel and drain pipe1650Ø	Carpenter (Formwork)	C307	2	Backhoe			1	EX21	h		
			Labourer (male)	C406	3	Blower	2						
						Generator	1						
						Oxy-Acetylene			1		h		1
						Water Pump 50mm	1						1
						Water Pump 75mm	1						
						Welding Set			1		h		
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement											
1													
	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

12/8/2012

Signed:

Stephen Poon / RE Name/Post: Date:

19.9.12

Date:

Date:

Contract No.: DC/2009/22 Date

e:	1	1	/0	9/	2	0	1	2

Day: Tuesday

<u>V</u>6 6 IOW

Tso Sai Kuen / Inspector of Works

12-9-2012

Xel

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>PM</u> <u>AM</u> Rainfall (mm) Fine Fine ST 0, TP 0

Very Hot Weather Warning - 07:45~18:15

(Hong Kong Observatory's record)

Instructions to Contractor	Contractor's Site Staff No.	Labour	Code	No.	Labour	Code	No.	Plar	t	
(Record verbal instructions given)					· · · · · · · · · · · · · · · · · · ·		-		-	
	Assistant Surveyor 1	Asphalter (Other Construction)	C301		Chainman	C401		Туре	No. Working	No. Idle
	Chainman 3	Asphalter (Roadworks)	C302		Concreting Labourer	C402		Air Compressor	1	
	Community Liaison Officer 1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403		Backhoe	4	2
	CEG 1	Bar Bender & Fixer	C304		Excavator	C404		Backhoe with Vibrating Hammer	1	
	Contract Manager 1	Bricklayer	C305		Heavy Load Labourer	C405		Blower	4	
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office atten	dan C406	27	Crawler Drill	1	
	Environmental Officer 1	Carpenter (Formwork)	C307	4	Sewerman	C407		Dump Truck	2	
	Foreman/Assistant Foreman 2	Concrete Repairer	C308		Automation Equipment Mechanic	E301		Generator	2	
	General Foreman 1	Concretor	C309		Building Services Mechanic	E302		Grout Machine		1
	Labour Officer 1	Construction Plant Mechanic	C310		Cable Jointer (Power)	E303		Mini Backhoe		1
	Land Surveyor 1	Curtain Wall Installer	C311		Carpenter	E304	1	Oxy-Acetylene	4	1
· · · · · · · · · · · · · · · · · · ·	Project Director 1	Demolition Worker	C312		Electrician/Electrical Fitter	E305	1	Vibrating Prob	2	
Utilities	Project Manager 2	Diver	C313		Fire Services Mechanic	E306		Water Pump 50mm	Q	
(Record location & nature of works)	Project Quantity Surveyor 1	Drainlayer	C314		Instrument Mechanic	E307		Water Pump 75mm	6	
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315		Lift Electrician	E308		Welding Set		
	Safety Officer 1	Floor Layer	C316		Lift Mechanic	E308	-	weiding Set		
	Site Agent 1	Gas Plumber			Mechanical Fitter		÷			
			C317	-, -		E310				
	Surveyor 1	General Welder			Overhead Linesman	E311			···· · · · · · · · · · · · · · · · · ·	
		Glazier	C319		Painter	E312	<u> </u>	······································	· · · · · · · · · · · · · · · · · · ·	
		Ground Investigation Operator/Driller/Borer	C320		Plumber and Pipe Fitter	E313	; ;		•	
		Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314				
		Joiner	C322		Sheet Metal Worker	E315				
		Leveller	C323	-	Sign Fabricator	E316				
		Marble Worker	C324		Sign Installer	E317				
		Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318				
Progress		Mason	C326		Welder	E319				
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327		Labourer	E401				
		Metal Worker	C328		Semi-skilled Worker	E402				
		Painter & Decorator	C329		Technician	U102	•			
		Piling Operative	C330				-		······	4
		Pipelayer	C331						······································	
		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332		······································					
Visitor		Plant & Equipment Operator (Earthmoving Machinery)	C333	4						
(Record names of visitors and time of visit)	a construction and a construction of the second second second second second second second second second second	Plant and Equipment Operator (Hoist and Crane)		2						
			C334	-2					· · · · · · · · · · · · · · · · · · ·	
		Plant and Equipment Operator (Piling)	C335						····	
		Plant and Equipment Operator (Tunnelling)	C336							
		Plasterer	C337	1						
	enteres and comments of another states and	Plumber	C338							
Accidents		Pneumatic Driller	C339				·			
(Describe any occurance of accident)		Prestressing Operative	C340							
		Rigger/Metal Formwork Erector	C341							
		Shotcretor	C342							
		Shotfirer	C343	]						
		Slope Maintenance Worker	C344						······	1
		Structural Steel Erector	C345	1				1 1. THE STAR STAR STARSHIP MULTI- MARKED AND STARSHIP MARKED AND STARSHIP MARKED AND AND AND AND AND AND AND AND AND AN		
Remarks		Structural Steel Welder	C346	1	·					
		Tiler	C347		Construction and the second second second second second second second second second second second second second					
		Trackworker	C348					Same a statement and a second statement of the second second second second second second second second second s		
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2						
		Window Frame Installer	C349 C350							
	Total 22	Window Hame mistanet	0.550							
	44									
	Assistance to Engineer No.									
		· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·					
	Amah 1									
	Coordinate Engineer 1									
	Drafting Assistant 1									
	Driver 2									
	Field Assistant 3									
	Office Assistant					-		-		
	Watchman 1	and the second sec						······································	······	
	Total 9	(To be continued)			Total Labour		47	Tatal	20	····
				]	LI OLAL L'ADOUL		43		.18	

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Signed:

Engineer's Representative

11. 9.12

Signed: Contractor's Representative

Date:

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Date:

Original - ER's File

Duplicate - Contractor

11/8/2012

Wong Ching Lung / Site Agent

#### Contract No.: DC/2009/22 Date: 10/09/2012

Day: Monday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

11-9-2012

Sheet 1 of 3

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	orking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.9.4~10.0 and installing shoring frames Formwork shuttering for wall W12 at discharge chamber Fabricating upper layer of I-beams walings for shoring of Ø2100 pipe trench between manhole MH05 & MH06 Laying cable trays on walls & installing earthing to connect the metal fixtures at transformer room General cleaning and forming level studs for floor screeds at switchroom General housekeeping & cleaning up sediments from wheel washing bay		C307	2	Backhoe	1	EX50					
			Electrician/Electrical Fitter	E305	1	Blower	2		L				
<u> </u>			General Welder	C318	1	Oxy-Acetylene	1		<b> </b>				
			Labourer (female)	C406	3	Water Pump 50mm	2						
			Labourer (male)	C406	9	Water Pump 75mm	1						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						
			Plasterer	C337	1					1			
								1		1			
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to -1.7 mPD & cart away excavated material to Area B (6 Truckloads)	Labourer (male)	C406	1	Backhoe	1	EX36					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Dump Truck	2		1	1	1		
			Truck Driver	C349	2								
07:00 - 18:00	Area A Ting Kak Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.)		0.000						ļ			
18:00 - 20:00		Manual control of temporary traffic light for traffic flow regulation (3 r/Lab.)	Labourer (female)	C406	3								
08:00 - 18:00	Area A - Ting Kok Road	Formwork shuttering and concreting to access shaft of manhole MH03	Carpenter	E304	1	Backhoe			1	EX42	h		
	(CH70-125)	Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.120~125 along footpath	-										
			Labourer (male)	C406	2	Backhoe with Vibrating Hammer	1	EX40					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Oxy-Acetylene	1	1					
						Vibrating Prob	1						
						Water Pump 50mm	2						
							1						
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Nursery (CH130-CH280)	Bay 10 - Fabricating struts to stop end sheetpile shoring at junction with bay 9 to facilitate backfill works Bay 11 - Backfilling to box culvert trench	Labourer (female)	C406	1	Backhoe	1	EX08					
			Labourer (male)	C406	1	Backhoe	1	EX11					+

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

11/18/2012

Signed:

Name/Post: Stephen Poon / RE

11.9.12 Date:

Date:

Date:

Contract No.: DC/2009/22 Date: 10/09/2012

Day: Monday

IOW

Tso Sai Kuen / Inspector of Works

11-9-2012

tode

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking	1	Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1						
					1	Oxy-Acetylene	1						
Ma						Water Pump 50mm	1						1
						Water Pump 75mm	2	1		11			
						Welding Set	1						
00.00 10.00													
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1						
					ļ	Water Pump 75mm	1						
08 18:00	Area B - Tung Tsz	Drilling 2 nos. holes (1-2 & 1-3) at layer 1 and inserting grout tube						ļ					
	Nursery (Jacking Pit)	Drining 2 hos. notes (1-2 & 1-3) at layer 1 and inserting grout tube	Labourer (male)	C406	3	Air Compressor	1	AC05					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	1				
						Grout Machine			1		h		
						Mini Backhoe			1	EX53	h		
						Oxy-Acetylene	1						
						Water Pump 50mm	1						
						Water Pump 75mm	1						
						Welding Set	1						
08:00 - 18:00	Area E - Siu Lek Yuen							ļ	ļ				
08.00 - 18.00	Rd.Playground	PL 1602.1 - Formwork shuttering and concreting to seal up Ø1650 pipe entry at existing manhole wall Manhole S6 - Concreting to benching	Carpenter (Formwork)	C307		Backhoe			1	EX21	h		
			Labourer (male)	C406	3	Blower	2						
						Generator	1						
						Oxy-Acetylene			1		h		
						Vibrating Prob	1						
						Water Pump 50mm	1						
				_		Water Pump 75mm	1						
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement											
										┼──┼			
	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

11/8/2012

Signed:

Stephen Poon / RE

11. 9.12 Date:

Name/Post:

Date:

Date:

Contract No.: DC/2009/22 Dat

te:	10/09/2012
	10/0/2012

Day: Monday

IOW

Tso Sai Kuen / Inspector of Works

11-9-2012

Action

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

Typhoon / Warning Signal:

#### Weather:

<u>AM</u> <u>PM</u> Rainfall (mm) Fine ST 0, TP 0 Fine

Thunderstorm Warning - 12:50~14:00

(Hong Kong Observatory's record)

Instructions to Contractor	Contractor's Site Staff No.	Labour	Code No.	Labour	Code No.	Pla	nt
(Record verbal instructions given)				Labour	Coue no.		III.
		Asphalter (Other Construction)	C301	Chainman	C401	Type	No. Working No. Idl
		Asphalter (Roadworks)	C302	Concreting Labourer	C402	Air Compressor	
		Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe	7
		Bar Bender & Fixer	C304	Excavator	C404	Crawler Drill	
		Bricklayer	C305	Heavy Load Labourer	C404		
Comments by Engineer's / Contractor's Representative		Carpenter (Fender)		Labourer (male / female) / Lorry checker / Watchman/Office atto		Generator	1
comments of Engineer s/ contractor s representative			<u>C306</u>			Mini Backhoe	
		Carpenter (Formwork)	<u>C307</u>	Sewerman	C407	Steel Bending Machine	3
		Concrete Repairer	C308	Automation Equipment Mechanic	E301	Water Pump 50mm	4 1
		Concretor	C309	Building Services Mechanic	E302	Water Pump 75mm	1 1
		Construction Plant Mechanic	C310	Cable Jointer (Power)	E303		
		Curtain Wall Installer	C311	Carpenter	E304		
N 1 4 4 4 4		Demolition Worker	C312	Electrician/Electrical Fitter	E305		
Utilities		Diver	C313	Fire Services Mechanic	E306		
(Record location & nature of works)		Drainlayer	C314	Instrument Mechanic	E307		
		Electrician (Main Contractor's)	C314 C315			-1 }	
	· · · · · · · · · · · · · · · · · · ·			Lift Electrician	E308		
		Floor Layer	C316	Lift Mechanic	E309		
		Gas Plumber	C317	Mechanical Fitter	E310		
		General Welder	C318	Overhead Linesman	E311		
		Glazier	C319	Painter	E312		
		Ground Investigation Operator/Driller/Borer	C320	Plumber and Pipe Fitter	E313		
		Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314		
		Joiner	C322	Sheet Metal Worker	E314 E315		· · · · · · · · · · · · · · · · · · ·
		Leveller				-	
			C323	Sign Fabricator	E316		
	÷	Marble Worker	C324	Sign Installer	E317		
	••••••••••••••••••••••••••••••••••••••	Marine Construction Plant Operator	C325	Thermal Insulation Craftsman	E318		
Progress		Mason	C326	Welder	E319		
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327	Labourer	E401		
		Metal Worker	C328	Semi-skilled Worker	E402		
		Painter & Decorator	C329	Technician	T		
		Piling Operative	C330		· · · · · · · · · · · · · · · · · · ·	•••••••••••••••••••••••••••••••••••••••	· · · · · · · · · · · · · · · ·
		Pipelayer	C331	and a second sec			
		Plant and Equipment Operator (Builder's Lift and Other Machinery)					
Visitor			C332			-	
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333	· · · · · · · · · · · · · · · · · · ·		an	
(Record Manteo or Postors and time or Post)		Plant and Equipment Operator (Hoist and Crane)	C334	· Mathematican · · · · · · · · · · · · · · · · · · ·			
		Plant and Equipment Operator (Piling)	C335				
		Plant and Equipment Operator (Tunnelling)	C336				
		Plasterer	C337				
		Plumber	C338				
		Pneumatic Driller	C339				
Accidents							
(Describe any occurance of accident)		Prestressing Operative	C340				
		Rigger/Metal Formwork Erector	C341				
		Shotcretor	C342				
		Shotfirer	C343				
		Slope Maintenance Worker	C344				
		Structural Steel Erector	C345	and the second sec	· · · · · · · · · · · · · · · · · · ·		
Remarks		Structural Steel Welder	C346	a manufacture of the second state of the secon			
		Tiler	C347				
						· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
		Trackworker	C348				
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	a management and a second state of the second			
		Window Frame Installer	C350				
	Total						
	Assistance to Engineer No.					····	
	Assistance to Engineer No.			and the second			
	Driver 1			1000 /000000000000000000000000000000000		· · · · · · · · · · · · · · · · · · ·	
	Watchman 1						
						· · · · · · · · · · · · · · · · · · ·	
	**************************************				· · · · · · · · · · · · · · · · · · ·		
						11	······································
				······································			
							·····
	Total 2	(To be continued)		Total Labour	4	1 Tratal	5 16

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

10. 8.12

Name/Post: Stephen Poon / RE

Signed:

Date:

Original - ER's File

Duplicate - Contractor

Contractor's Representative

Wong Ching Lung / Site Agent

Date:

10/8/2012

### Contract No.: DC/2009/22 Date: 09/09/2012

Day: Sunday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10-9-2012

Sheet | of 3

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered		
	Area A - DN1800 No activity as per KLKJV arrangement				Туре	Wo	rking		Idling		Description	Quantit		
			Trade	Code	No.	1	No.	ID	No.	ID	Code			
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement												
								1		1				
	Area A - Pump Station	No activity as per KLKJV arrangement				Backhoe			1	EX50	i			
						Steel Bending Machine			3		i			
						Water Pump 50mm	2							
						Water Pump 75mm	1							
	Area A - Pump Station - Box Culvert	No activity as per KLKJV arrangement				Backhoe			1	EX36	i			
18:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.)	Labourer (female)	C406	3	Backhoe		<u> </u>	1	EX40	i			
:00 - 20:00		Manual control of temporary traffic light for traffic flow regulation (1 M/Lab. from Area I)												
						Backhoe			1	EX42	I			
	Area A - Ting Kok Road	No activity as per KLKJV arrangement				Water Pump 50mm	1	<b> </b>						
	(Intake Structure)				ļ	water Pump Somm				<u> </u>				
	Area B - Tung Tsz	No activity as per KLKJV arrangement				Backhoe		ļ	<u> </u>	EVOO			_	
	Nursery (CH130-CH280)								1	EX08	i			
					ļ	Backhoe		<u> </u>	1	EX11	i			
	Area B - Tung Tsz	No activity as per KLKJV arrangement			<b> </b>	Water Pump 50mm			<u> </u>					
	Nursery (CH40-CH130)								1		1			
						Water Pump 75mm		<u> </u>	1		i			
	Area B - Tung Tsz	No activity as per KLKJV arrangement			<b> </b>	Air Compressor			1	AC05	i			
	Nursery (Jacking Pit)								Í					
						Crawler Drill			1	DR05	i			
					ļ	Mini Backhoe		ļ	1	EX53	i			
						Water Pump 50mm	1			<u> </u>				
	Area C - Shallow	No activity as per KLKJV arrangement												
	Marshy Area						<u> </u>	<b> </b>	<b>_</b>				-	
	Area E - Siu Lek Yuen	No activity as per KLKJV arrangement				Backhoe			1	EX21	i	. 88%		
	Rd.Playground	· · · · · · · · · · · · · · · · · · ·					_				1	1819/1919 - 6		
						Generator			1	<u> </u>	i			
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement							<b>_</b>					

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed: Contractor's Representative

Wong Ching Lung / Site Agent

10/9/2012

Name/Post:

Date:

Stephen Poon / RE

10.9.12

Date:

Date:

Signed:

Contract No.: DC/2009/22 Date

e:	09/09/2012

Day: Sunday

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Viset

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	Labour		Plant				Material Delivered			
						Туре	Wor	·king		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area I - Contractor Office	Office cleaning and site patrol	Labourer (male)	C406	1								

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

	R
Signed:	

Engineer's Representative

Stephen Poon / RE

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

10/8/2012

Name/Post:

Date: 10. 8.12 Date:

Date:

Contract No.: DC/2009/22 Date: 09/09/2012

Day: Sunday

10 IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Asteret

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Fine Shower ST 2, TP 0

Thunderstorm Warning - 12:35~15:45

(Hong Kong Observatory's record)

Instructions to Contractor	Contractor's Site Staff No.	Labour	Code No.	Labour	Code	No.	Plant		
(Record verbal instructions given)									<b></b>
	Assistant Surveyor 1 Chainman 3	Asphalter (Other Construction)	C301	Chainman	C401		Туре	No. Working	g No. Id
	the first second s	Asphalter (Roadworks)	C302	Concreting Labourer	C402		Air Compressor	1	
	Community Liaison Officer 1	Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403		Backhoe	5	
	CEG 1	Bar Bender & Fixer	C304 2	Excavator	C404	В	Backhoe with Vibrating Hammer		1
	Contract Manager 1	Bricklayer	C305	Heavy Load Labourer	C405	В	Blower	4	
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306	Labourer (male / female) / Lorry checker / Watchman/Office atte	endan C406	27 C	rawler Drill		1
	Environmental Officer 1	Carpenter (Fornwork)	C307 2	Sewerman	C407	D	Dump Truck	5	
	Foreman/Assistant Foreman 2	Concrete Repairer	C308	Automation Equipment Mechanic	E301	G	Generator	2	
	General Foreman 1	Concretor	C309	Building Services Mechanic	E302	G	Grout Machine	1	
	Labour Officer 1	Construction Plant Mechanic	C310	Cable Jointer (Power)	E303	М	Aini Backhoe	······································	1
	Land Surveyor 1	Curtain Wall Installer	C311	Carpenter	E304		Dxy-Acetylene	5	1
¥ 1,4*4 / 4	Project Director 1	Demolition Worker	C312	Electrician/Electrical Fitter	E305		Vater Pump 50mm	8	· · ·
Utilities	Project Manager 2	Diver	C313	Fire Services Mechanic	E306		Vater Pump 75mm	6	
(Record location & nature of works)	Project Quantity Surveyor 1	Drainlayer	C314	Instrument Mechanic	E307		Velding Set	4	· • • • •
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315	Lift Electrician	E308		veiding set	4	
	Safety Officer 1	Floor Layer	C316	Lift Mechanic	E308 E309			e men 🕴 👘 👘 e marine e marine e m	•
	Site Agent 1	Gas Plumber	C317	Mechanical Fitter					
					E310				
	Surveyor 1	General Welder	C318 1	Overhead Linesman	E311				
		Glazier	<u>C319</u>	Painter	E312				
	······	Ground Investigation Operator/Driller/Borer	C320	Plumber and Pipe Fitter	E313				
		Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314				
		Joiner	<u>C322</u>	Sheet Metal Worker	E315				
		Leveller	C323	Sign Fabricator	E316				
	10 27 200 mm	Marble Worker	C324	Sign Installer	E317		and the second second second second second second second second second second second second second second second		
		Marine Construction Plant Operator	C325	Thermal Insulation Craftsman	E318				
Progress		Mason	C326	Welder	E319				
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327	Labourer	E401				
		Metal Worker	C328 1	Semi-skilled Worker	E402			······································	
		Painter & Decorator	C329	Technician	Т				-
		Piling Operative	C330		···· •				
		Pipelayer	C331						
		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332						
Visitor		Plant & Equipment Operator (Earthmoving Machinery)	C333 5				and the second s		
(Record names of visitors and time of visit)		Plant and Equipment Operator (Hoist and Crane)	C334	and the second sec					
	······································	Plant and Equipment Operator (Piling)	C335						
	time to a statistical and the statistical statistical statistical statistics and statistical statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistical statistics and statistics	Plant and Equipment Operator (Tunnelling)	C336						
		Plasterer		······································					
		Plumber	C337						
			C338						
Accidents	1970 10100000 101 000000000 101/001/00000000	Pneumatic Driller	C339						
(Describe any occurance of accident)		Prestressing Operative	C340						
		Rigger/Metal Formwork Erector	C341						
		Shotcretor	C342						
		Shotfirer	C343						
		Slope Maintenance Worker	C344	a a construction of a construction of the cons					
		Structural Steel Erector	C345						
Remarks		Structural Steel Welder	C346						
		Tiler	C347						
		Trackworker	C348						
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349 5						
		Window Frame Installer	C350			· · · ·    -			
	Total 22				-				
	Assistance to Engineer No.								
	Assistance to Engineer 110.								
	Amah 1								
	Coordinate Engineer					****			
	Drafting Assistant 1								
	Driver 2			e sufficientes e e e e e e e e e e e e e e e e e e					
	Field Assistant 3			· · · · · · · · · · · · · · · · · · ·					
	Office Assistant 1 Watchman 1			,				···•• · · · · · · · · · · · · · · · · ·	
	Total 9	(To be continued)		Total Labour		4 To	otal	41	5

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Name/Post: Stephen Poon / RE

Signed:

Date:

10.9.12

Duplicate - Contractor

Date:

10/8/2012

### Contract No.: DC/2009/22 Date: 08/09/2012

Day: Saturday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10-9-2012

Sheet 1 of 3

No. Str

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt	
						Туре	Wo	rking	Γ
			Trade	Code	No.	7	No.	ID	No.
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement							
					1			1	<u> </u>
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921 at Ch.9.1~9.4 and installing shoring frames Formwork shuttering for wall W12 of discharge chamber Fixing cable trays on walls at transformer room Excavating for Ø2100 pipe trench between manhole MH05 & MH06 to 2nd layer of walings and cart away 14 truckloads of excavated materials to Contract 2's stockpile area at Tai Wah St. General housekeeping	Carpenter (Formwork)	C307	2	Backhoe	1	EX50	
			Labourer (female)	C406	2	Blower	2		
L			Labourer (male)	C406	6	Oxy-Acetylene	1		
· .			Metal Worker	C328	1	Water Pump 50mm	2		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1		
						Welding Set	1		
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer of I-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36	
			Labourer (male)	C406	1	Oxy-Acetylene	1		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1		
							1	1	
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3				
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Backfilling sand to Ø2100 pipe trench at Ch. 78~90 and compacting Formwork shuttering and rebar fixing for access shaft of manhole MH03	Bar Bender & Fixer	C304	2	Backhoe	1	EX42	
			Carpenter	E304	1	Backhoe with Vibrating Hammer			1
			Labourer (male)	C406	2	Oxy-Acetylene	1		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2		
$\vdash$ —	Area B - Tung Tsz	No activity as per KLKJV arrangement							
	Nursery (CH00-CH40)								
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Fabricating sheetpile stop end shoring at bay 9 junction to facilitate backfill works Bay 12 ~ 13 - Delivery of 50 truckloads of sand from Contract 2's stockpile area at Tai Wah St. and backfilling between sheetpile shoring and box culvert	Labourer (female)	C406	1	Backhoe	1	EX08	
			Labourer (male)	C406	1	Backhoe	1	EX11	
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Dump Truck	5		
			Truck Driver	C349	5	Generator	1		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Signed: 🤇

Name/Post:

Stephen Poon / RE

Date: 10.1.12 Date:

10/8/2012

Date:

Contract No.: DC/2009/22 Date: 08/09/2012

Day: Saturday

Material Delivered Idling Description Quantity ID Code No. EX40 h

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Alexander

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Plai	nt				Material Del	livered
					Туре	Wo	rking		Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code		
						Oxy-Acetylene	1					· /////////	
						Water Pump 50mm	1						1
						Water Pump 75mm	2						
						Welding Set	1						1
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1						
						Water Pump 75mm	1						1
									1				
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Cement grouting to 4 nos. holes (1-5, 1-6, 1-7 & 1-8) at layer 1 General housekeeping	Labourer (male)	C406	6	Air Compressor	1	AC05					
						Crawler Drill			1	DR05	h		1
						Grout Machine	1						
						Mini Backhoe	_		1	EX53	h		
						Oxy-Acetylene	1	1					1
						Water Pump 50mm	1						1
						Water Pump 75mm	1						1
						Welding Set	1	<u>†</u>					1
							1	1					<b>†</b>
08:00 -18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Shuttering for plug end walls to seal up downstrem opening of heading tunnel for grouting	Labourer (male)	C406	4	Backhoe			1	EX21	h		
						Blower	2						
						Generator	1						
						Oxy-Acetylene			1		h		
						Water Pump 50mm	1						
						Water Pump 75mm	1						
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement											
N.	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

10/1/2012

Signed:

Stephen Poon / RE Name/Post:

Date:

0

10,9.12

Date:

Date:

Contract No.: DC/2009/22 Date:

2:	08/09/2012	

Day: Saturday

 $\leq l$ IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Halande

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

### Weather:

### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Fine Shower ST 10, TP 5

Thunderstorm Warning - 09:35~11:00

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code No.	Labour	Code No.	Plan		
(Record verbal histractions given)	Assistant Surveyor 1	Asphalter (Other Construction)	C301	Chainman	0401	T		
	Chainman 3	Asphalter (Roadworks)	C302	Chainman Concreting Labourer	C401 C402	Туре	No. Working	No. Idle
	Community Liaison Officer 1	Bamboo Scaffolder	C302	Diver's Linesman / Dredger Crew / Barge Crew		Air Compressor		4
	CEG 1	Bar Bender & Fixer	C304		C403	Backhoe	4	2
	Contract Manager 1	Bricklayer	C304 C305	Excavator Heavy Load Labourer	C404	Backhoe with Vibrating Hammer		
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)		Labourer (male / female) / Lorry checker / Watchman Office atter	C405	Blower	4	-
	Environmental Officer 1	Carpenter (Fornwork)	C3061			Crawler Drill		
	Foreman/Assistant Foreman 2	Concrete Repairer	C307 1	Sewerman	C407	Generator	2	
	General Foreman 1	Concretor	C308 C309	Automation Equipment Mechanic	E301	Grout Machine	<b>I</b>	
	Labour Officer	Construction Plant Mechanic	C309 C310	Building Services Mechanic	E302	Mini Backhoe		
	Land Surveyor 1	Construction Flant Meenance		Cable Jointer (Power)	E303	Mobile Crane	1	
	Project Director 1	Demolition Worker	C311 C312	Carpenter	E304 1	Oxy-Acetylene	5	1
Utilities	Project Manager 2	Diver	C312 C313	Electrician/Electrical Fitter	E305	Water Pump 50mm		
(Record location & nature of works)	Project Quantity Surveyor 1	Drainlayer		Fire Services Mechanic	<u>E306</u>	Water Pump 75mm	6	
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	<u>C314</u> 1 C315	Instrument Mechanic	E307	Welding Set	3	
	Safety Officer 1	Floor Layer	C315 C316	Lift Mechanic	E308	· · · · · · · · · · · · · · · · · · ·		·····
	Site Agent 1	Gas Plumber	C310 C317	Mechanical Fitter	E309	<b>   </b>		
	Surveyor 1	General Welder	C317 C318 1	Overhead Linesman	E310			÷
		Glazier	C318 1	Painter	E311 E312			
		Ground Investigation Operator/Driller/Borer	C319 C320	Plumber and Pipe Fitter	E312 E313	·	· · · · · · · · · · · · · · · · · · ·	
		Grouting Worker	C320 C321	Refrigeration/AC/Ventilation Mechanic	E313 E314			
		Joiner	C322	Sheet Metal Worker		······································		
		Leveller	C322 C323	Sign Fabricator	E315 E316			
		Marble Worker	C324	Sign Installer	E317			
	· · · · · · · · · · · · · · · · · · ·	Marine Construction Plant Operator	C325	Thermal Insulation Craftsman	E317	-		
Progress		Mason	C326	Welder	E319			
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C320 C327	Labourer	E401			
		Metal Worker	C328 1	Semi-skilled Worker	E401 E402			
		Painter & Decorator	C329	Technician	T			
	· · · · · · · · · · · · · · · · · · ·	Piling Operative	C330	recimician	1	· · · · · · · · · · · · · · · · · · ·		
		Pipelayer	C331		· · · · · · · · · · · · · · · · · · ·			
X12.14		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332					
Visitor (Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333 4					
(Record names of visitors and time of visit)		Plant and Equipment Operator (Hoist and Crane)	C334 3	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				
		Plant and Equipment Operator (Piling)	C335					
		Plant and Equipment Operator (Tunnelling)	C336	2			nin	+ · · · · · ·
		Plasterer	C337			· · · · · · · · · · · · · · · · · · ·		
		Plumber	C338					
Accidents		Pneumatic Driller	C339		······································	· · · · · · · · · · · · · · · · · · ·		•••••••••••••••••••••••••••••••••••••••
(Describe any occurance of accident)		Prestressing Operative	C340					
		Rigger/Metal Formwork Erector	C341			<b>1</b>		
		Shotcretor	C342				-	
		Shotfirer	C343				· · · · · · · · · · · · · · · · · · ·	
		Slope Maintenance Worker	C344					
		Structural Steel Erector	C345					
Remarks Site Meeting amongst Ms. Lau of LCSD, Mr. Ricky Yeung of KLKJV and Mr. YF Fu		Structural Steel Welder	C346					
of AECOM at 10:30 A.M. for handover inspection of area F		Tiler	C347					-
of AEC OW at 10.50 A.M. for handover inspection of area F		Trackworker	C348					
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349					
		Window Frame Installer	C350					
	Total 22	1 1 11 11 11 and a collision of the second sec						
	Assistance to Engineer No.			· · · · · · · · · · · · · · · · · · ·				
								1
	Amah 1							
	Coordinate Engineer							
	Drafting Assistant 1							
	Driver 2							
	Field Assistant 3	· · · · · · · · · · · · · · · · · · ·						
	Office Assistant 1	·	·					
	Watchman 1							
	Total 9	(To be continued)		Total Labour	43	Total	37	4

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Name/Post: Stephen Poon / RE Date: 10.9.12

Signed:

Original - ER's File Duplicate - Contractor

Date:

10/8/2012

### Contract No.: DC/2009/22 Date: 07/09/2012

Day: Friday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10 - 9 - 20 12 Sheet 1 of 3

Jan

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	elivered
						Туре	W	orking		Idling	g Description		Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
00.00 10.00													
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.8.8~9.1 and installing shoring frames Formwork shuttering for wall W12 at discharge chamber Fixing GMS hangers for air trunk of exhaust fans at transformer room and painting General housekeeping & cleaning up sediments from wheel washing bay	Carpenter (Formwork)	C307	1	Backhoe			ymmd	EX50	h		
			Labourer (female)	C406	2	Blower	2						
			Labourer (male)	C406	6	Oxy-Acetylene	1						
			Metal Worker	C328	1	Water Pump 50mm	2		1				
L						Water Pump 75mm	1	1	1	1			
						Welding Set	1						
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer of I-beams walings & struts	General Welder	C318	1	Backhoe	-	EX36					
			Labourer (male)	C406	1	Oxy-Acetylene	1	1					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						
							1			1			
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3								
08:00 - 18:00	Aron A. Ting Kale Dand				ļ					ļ			
08.00 - 18.00	(CH70-125)	Backfilling with sand to Ø2100 pipe trench at Ch. 78~90 and compacting Formwork shuttering for axccess shaft of manhole MH03 Extracting sheetpiles from shoring of Ø2100 pipe trench at Ch.114~120 along footpath	Carpenter	E304		Backhoe	1	EX42					
			Labourer (male)	C406	2	Backhoe with Vibrating Hammer	1	EX40					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1	1		1			
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Water Pump 50mm	2						
							Τ		[	1			
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
00.00 10.00													
)8:00 - 18:00	Nursery (CH130-CH280)	Bay 10 - Stripping off soffit formwork from top slab and dismantling falsework Bay 12 - Delivery of 33 truckloads of sand from Contract 2's stockpile area at Tai Wah St. and backfilling the gap between box culvert and trench shoring	Labourer (female)	C406		Backhoe	1	EX08					
			Labourer (male)	C406	7	Backhoe	1	EX11					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	2	Generator	1						
						Oxy-Acetylene	1						1
						Water Pump 50mm	1		l				

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor



Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

10/9/ 2012

Signed:

Name/Post:

Stephen Poon / RE

Date:

Signed:

Date:

Date:

10.9.12

Contract No.: DC/2009/22 Date

e:	07/09/20	12

Day: Friday

26 6 IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Sheet 2 of 3

Alexander

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour		6.0 Marci 600 40 100		Pla	nt				Material De	livered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
						Water Pump 75mm	2			-			
						Welding Set	1		1				
								T		T			
	Area B - Tung Tsz Nursery (CH40-CH130)	No activity as per KLKJV arrangement				Water Pump 50mm	1					er a fear a fearainn an fearainn an fearainn an fearainn an fearainn an fearainn an fearainn an fearainn an fea	
						Water Pump 75mm	1						
8:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 2 nos. holes (1-5 & 1-8) at layer 1 and inserting grout tube Cement grouting to 1 no. grout hole at Layer 1 (1-4)	Labourer (male)	C406	5	Air Compressor	1	AC05					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05					-
						Grout Machine	1						
						Mini Backhoe			1	EX53	h		
						Oxy-Acetylene	1						
·····						Water Pump 50mm	1						
						Water Pump 75mm	1						
8:00 - 18:00	Area E - Siu Lek Yuen												
5:00 - 18:00	Rd.Playground	PL 1602.1 - Laying 1650Ø PC pipes at Ch.0~7.2	Drainlayer	C314		Backhoe			1	EX21	h		
			Labourer (male)	C406	4	Blower	2						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Generator	1						
						Mobile Crane	1						
						Oxy-Acetylene			1		h		
						Water Pump 50mm	1						
					ļ	Water Pump 75mm	1						
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement											
							-						
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement										-	
<u> </u>													
	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Name/Post:

Date:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Signed:

Stephen Poon / RE

10.9.12

Date:

Date:

1019/2017

Contract No.: DC/2009/22 Dat

$10^{-1}/109/2012$	te:	07/09/2012
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Day: Friday

Ð IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

SE

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) ST 0.5, TP 0.5 Thunderstorm Warning - 03:50~05:30 & 18:05~20:00

Cloudy Fine

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code No.	Labour	Code No.	Plan	t
	Assistant Surveyor 1	Asphalter (Other Construction)	C301	Chainman	C401	Туре	No. Working
			C302	Concreting Labourer	C402	Air Compressor	1
		Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe	4
		Bar Bender & Fixer	C304 4	Excavator	C404	Backhoe with Vibrating Hammer	1
	Contract Manager 1	Bricklayer	C305	Heavy Load Labourer	C405		4
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)		Labourer (male / female) / Lorry checker / Watchman/Office attendan	C406 28		1
	Environmental Officer 1	Carpenter (Formwork)		Sewerman			1
	Foreman/Assistant Foreman 2	Concrete Repairer					· · · · ·
	General Foreman 1	Concretor		Building Services Mechanic			2
	Labour Officer 1						1
	Land Surveyor 1						
				The second			4
(Record location & nature of works)							
							<u>l</u>
							8
							6
		The second		the second s		Welding Set	4
	Surveyor						
	I						
					E313		
			C321				4       ith Vibrating Hammer     1       4     1       chine     1       k     1       k     1       oe     2       ene     4       ng Machine     2       rob     1       0     1       0     50mm       8     575mm
	Numan         S         Resther, Hadward, Child, Chi						
		Leveller	C323	Sign Fabricator			
	· · · · · · · · · · · · · · · · · · ·	Marble Worker	C324	Sign Installer			
		Marine Construction Plant Operator	C325	Thermal Insulation Craftsman			
Progress		Mason	C326				
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder					
		Metal Worker		Semi-skilled Worker			
					······ · · · · · · · · · · · · · · · ·		
	Notice         1         De Roder         0         De Roder         0         Accession         Consist         Consis         Consis         Consis						
(Record names of visitors and time of visit)	······································	Diant and Equipment Operator (Least and Course)	(333 4		· • ·	e e e e e e e e e e e e e e e e e e e	
		Plant and Equipment Operator (Hoist and Crane)					
		Plant and Equipment Operator (Pling)		termine 2.5 co. co.o.totalence co. co.o.totale communication and a second co.o.totale			
	· · · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·			
		Pneumatic Driller	C339				
(Describe any occurance of accident)		Prestressing Operative	C340				
		Rigger/Metal Formwork Erector	C341				
		Shotcretor	C342				
		Shotfirer					
				a sector and the sect	· · · · · · · · · · · · · · · · · · ·		
Remarks							
- Backhoe EX40 & EX42 on site						· · · · · · · · · · · · · · · · · · ·	
- Backhoe EX11 & EX53 on site							
Safety and Environmental Coordination Meeting #129 was held at 11:00 Hr.	······································						
	Tatal	window Frame Installer	0350				
	<u>1.2.10</u>			· · · · · · · · · · · · · · · · · · ·		······ .	and the second second second second second second second second second second second second second second second
	Assistance to Engineer No.						
	Amah 1						
	Coordinate Engineer						
	Drafting Assistant 1						· · · · · · · · · · · · · · · · · · ·
	Driver 2						
						· · · · · · · · · · · · · · · · · · ·	
		····					· · · · · · · · · · · · · · · · · · ·
		(To be continued)		Tetal Labour			
	1 1 1 1 1 9	LIV DE CUIUMAEUT		LI OLAL L'ADOUR	44 /	1 11 0121	41

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or. if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Signed:

Name/Post: Stephen Poon / RE

Engineer's Representative

Signed:

Date:

Contractor's Representative

Wong Ching Lung / Site Agent

10/P/2012

Original - ER's File

Date:

10. 9.12

Duplicate - Contractor

### Contract No.: DC/2009/22 Date: 06/09/2012

Day: Thursday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

10 - 9 - 2012 Sheet 1 of 4



### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Location Activity Labour					Pla	nt				Material De	livered
						Туре		rking	T	Idling		Description	Ouantity
			Trade	Code	No.		No.	ID	No.	ID	Code	2 con prior	Zuantity
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.8.6~8.8 and installing shoring frames Formwork shuttering for wall W12 at discharge chamber Cutting cheque plate for cable trench covers at transformer room and painting	Carpenter (Formwork)	C307	1	Backhoe			1	EX50	h		
		Installing hangers for air trunk of exhaust fans at transformer room General housekeeping & cleaning up sediments from wheel washing bay											
			Labourer (female)	C406	2	Blower	2			1			
			Labourer (male)	C406	7	Oxy-Acetylene	1			1			-
L			Metal Worker	C328	1	Water Pump 50mm	2			1			
						Water Pump 75mm	1	1	1				
						Welding Set	1	1		1			
								1		1			
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer I-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36					
			Labourer (male)	C406	1	Oxy-Acetylene	1			1			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3								
									1				
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Backfilling sand material to Ø2100 pipe trench at Ch. 78~90 and compacting Cutting & bending reinforcement bars for manhole MH03 at bending yard Formwork shuttering and rebar fixing for top slab of manhole MH03 and then concreting for upper walls & top slab Extracting sheetpiles from Ø2100 pipe trench shoring at Ch.106~114 along footpath	Bar Bender & Fixer	C304	4	Backhoe		EX42					
			Carpenter (Formwork)	C307	1	Backhoe with Vibrating Hammer	1	EX40					
			Labourer (female)	C406	1	Oxy-Acetylene			1	1	h		1
(			Labourer (male)	C406	3	Steel Bending Machine	2	1					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Vibrating Prob	1	1		1			
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Water Pump 50mm	2						
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
1							1	1		1			+

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor



Stephen Poon / RE

Signed:

Contractor's Representative

10/8/2012

Signed: 🤇

Wong Ching Lung / Site Agent

Date:

Name/Post:

Signed:

10.9.12

Date:

Date:

Contract No.: DC/2009/22 Date: 06/09/2012

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Asiet

Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

							i Sunday/P						
Time	Location	Activity	Labour			T	Pla	nt				Material De	livered
						Туре	Wo	rking		Idling		Description	Quantity
			Trade	Code	No.	1	No.	ID	No.	ID	Code		
08:00 - 18:00	Nursery (CH130-CH280)	Bay 10 - Stripping off wall formwork Bay 12 - Backfilling the box culvert trench with soil from stockpile near jacking pit Bay 13 - Stripping off formwork from access shaft and fabricating sheetpile stop end shoring to facilitate backfilling work	General Welder	C318	1	Backhoe	1	EX11					
			Labourer (male)	C406	3	Dump Truck	1						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Generator	1			1			
			Truck Driver	C349	1	Oxy-Acetylene	1			1			
						Water Pump 50mm	1						
						Water Pump 75mm	2		1	1			
						Welding Set	1		1			· · · · · · · · · · · · · · · · · · ·	
08 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1						
						Water Pump 75mm	1	1		1			
								1					
08:00 - 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling 1 nos. grout hole (1-7) and inserting grout tube Cement grouting to hole (1-1)	Labourer (male)	C406	4	Air Compressor	1	AC05					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	1	EX08					
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05		1			
						Grout Machine	1					**************************************	1
						Mini Backhoe			1	EX53	h		
						Oxy-Acetylene	1						
						Water Pump 50mm	1						1
						Water Pump 75mm	1			1			
						Welding Set	1						1
00 00 10 00													
	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Preparation works for laying 1650Ø PC pipe Cutting 1650Ø PC end pipe at contract 2's stockpile area at Tai Wah St.	Labourer (male)	C406		Backhoe			1	EX21	h		
						Blower	2						
-(						Cutting Machine	1						
						Generator	1						
·····						Oxy-Acetylene			1		h		
						Water Pump 50mm	1						
						Water Pump 75mm	1						
						Welding Set			1		h		
	Aren E. Lak Vien Street			_									
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

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Engineer's Representative

Signed:

Contractor's Representative

Signed:

Name/Post:

Signed:

Stephen Poon / RE

10 9.12

Date:

Wong Ching Lung / Site Agent 10/9/2012

Date:

Date:

Contract No.: DC/2009/22 Date: 06/09/2012

IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Hise

### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Plan		Material Delivered				
						Туре	Wor	king	Idling			Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement											
									1				
	Area I - Contractor Office	No activity as per KLKJV arrangement											

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor



Engineer's Representative

Signed:

Contractor's Representative

Signed:

Wong Ching Lung / Site Agent

10/9/2012

Name/Post: Date:

10.9.12

Stephen Poon / RE

Date:

Date:

Contract No.: DC/2009/22 Date: 06/09/2012

16 IOW

Tso Sai Kuen / Inspector of Works

10-9-2012

Minister

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1 Contractor: KWAN LEE - KULY JOINT VENTURE

Weather:			Typhoon / Warning Signal:
<u>AM</u>	<u>PM</u>	Rainfall (mm)	Nil
Cloudy	Fine	ST 0.5, TP 0	

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code No.	Labour	Code N	0.	Plant
	Assistant Surveyor 1	Asphalter (Other Construction)	C301	Chainman	C401	Туре	No. Working No. Idl
	Chainman 3	Asphalter (Roadworks)	C302	Concreting Labourer	C402	Air Compressor	1
	Community Liaison Officer 1	Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe	4 1
	CEG 1	Bar Bender & Fixer	C304	Excavator	C404	Blower	······································
	Contract Manager 1	Bricklayer	C305	Heavy Load Labourer	C405	Crawler Drill	<u>2</u>
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306	Labourer (male / female) / Lorry checker / Watchman/Office att	endan C406 2		1
	Environmental Officer 1	Carpenter (Formwork)	C307 1	Sewerman			2
	Foreman/Assistant Foreman 2	Concrete Repairer	C308	Automation Equipment Mechanic	C407 E301	Generator	<u> </u>
	General Foreman 1	Concretor	C309	Building Services Mechanic		Grout Machine	
	Labour Officer 1	Construction Plant Mechanic	C310		E302	Oxy-Acetylene	42
	Land Surveyor 1	Curtain Wall Installer		Cable Jointer (Power)	E303	Vibrating Prob	1
			C311	Carpenter	E304 1	Water Pump 50mm	8
Utilities	Project Director 1	Demolition Worker	C312	Electrician/Electrical Fitter	E305	Water Pump 75mm	6
(Record location & nature of works)	Project Manager 2	Diver	C313	Fire Services Mechanic	E306	Welding Set	5
	Project Quantity Surveyor 1	Drainlayer	C314	Instrument Mechanic	E307		
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315	Lift Electrician	E308		
	Safety Officer 1	Floor Layer	C316	Lift Mechanic	E309		
	Site Agent 1	Gas Plumber	C317	Mechanical Fitter	E310		
	Surveyor 1	General Welder	C318 1	Overhead Linesman	E311		
		Glazier	C319	Painter	E312		
		Ground Investigation Operator Driller Borer	C320	Plumber and Pipe Fitter	E313		· · · · · · · · · · · · · · · · · · ·
		Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
		Joiner	C322	Sheet Metal Worker	E315		
		Leveller	C323	Sign Fabricator			· · · · · · · · · · · · · · · · · · ·
		Marble Worker	C324 2	Sign Installer	E316		
	i i i i i i i i i i i i i i i i i i i	Marine Construction Plant Operator	024 2		E317		·····
Progress		Mason	C325	Thermal Insulation Craftsman	E318		
(Mention briefly any matter delaying or obstructing progress)	· · · · · · · · · · · · · · · · · · ·	Metal Scaffolder	C326	Welder	E319		
(Addition offerty any marter delaying of obstracting progress)			C327	Labourer	E401		
		Metal Worker	C328	Semi-skilled Worker	E402		
	· · · · · · · · · · · · · · · · · · ·	Painter & Decorator	C329	Technician	T		
		Piling Operative	C330	· · · · · · · · · · · · · · · · · · ·			
		Pipelayer	C331				
Visitor	<b>1</b>	Plant and Equipment Operator (Builder's Lift and Other Machinery)					
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333 4	· · · · · · · · · · · · · · · · · · ·			
(Account mannes of visitors and time of tisit)		Plant and Equipment Operator (Hoist and Crane)	C334 1				
		Plant and Equipment Operator (Piling)	C335				
		Plant and Equipment Operator (Tunnelling)	C336				
		Plasterer	C337	ang na manganan ang ang ang ang ang ang ang ang	·····		· · · · · · · · · · · · · · · · · · ·
		Plumber	C338				
Accidents		Pneumatic Driller	C339				· · · · · · · · · · · · · · · · · · ·
(Describe any occurance of accident)		Prestressing Operative	C340				
(Describe any occurance of accident)		Rigger/Metal Formwork Erector	C341				······
		Shotcretor		-			
		Shotfirer	C342				
			<u>C343</u>				
	1.07507303 1 1 1 0.000 for a first second data as a second data.	Slope Maintenance Worker	C344			·····	
Remarks		Structural Steel Erector	C345	· · · · · · · · · · · · · · · · · · ·			
Area A - Backhoe EX17 off site at night		Structural Steel Welder	C346	-			
		Tiler	C347				
Meeting was held at 15:30 hr amongst Ms. Leung of CLP, Mr. So of DSD, Mr.	· · · · · · · · · · · · · · · · · · ·	Trackworker	C348				
Dragon Wong of KLKJV and Mr. Poon of AECOM concerning the power supply to		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349 2				
Pump Station and hand over procedures of Transformer Room		Window Frame Installer	C350				
	Total 22						
	Assistance to Engineer No.	1	1	and a self-line and self-line an	and the set of a second s		
	Assistance to Engineer No.						
	Amah 1						
	Coordinate Engineer					** **	
	Drafting Assistant 1			1			· · · · · · · · · · · · · · · · · · ·
				an an an an an an an an an an an an an a			
	Driver 2		+				
	Field Assistant 3						
	Office Assistant 1	······ ·· ····· ·· ····· ·· ····					
	Watchman 1						1
	Total 9						

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Signed:

Name/Post: Stephen Poon / RE

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Duplicate - Contractor

Date:

6. S. n

Date:

618/2012

### Contract No.: DC/2009/22 Date: 05/09/2012

Day: Wednesday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

6-9-2012 Sheet 1 of 3

Hereit

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material De	livered
						Туре	Wo	rking		Idling	ç,	Description	Quantity
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
00.00 10.00													
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.8.4~8.6 and installing shoring frames Excavating for Ø2100 pipe trench between manhole MH05 & MH06 to second layer of walings and cart away 8 truckloads of excavated materials to Contract 2's stockpile area at Tai Wah St. Formwork shuttering for U-channel on manmade slope Installing cat ladders, painting to cheque plate trench covers and angle frames at transformer room Installing GMS hangers for air trunk at transformer room		C307		Backhoe	T	EX50					
			Labourer (male)	C406	7	Blower	2						
			Marble Worker	C324	2	Dump Truck	2	1					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1	1		1	1		
			Truck Driver	C349	2	Water Pump 50mm	2	1		1			1
						Water Pump 75mm	1	1	1				
						Welding Set	1	╂───					
				-				+	<u> </u>		+		
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Fabricating second layer of I-beams walings & struts	General Welder	C318	1	Backhoe	1	EX36					
			Labourer (male)	C406	1	Oxy-Acetylene							-
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1						
						in change bet							
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	2								
								1					
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Backfilling to Ø2100 pipe trench at Ch. 78~125 and compacting Formwork shuttering for upper walls and top slab of manhole MH03	Carpenter	E304	1	Backhoe	1	EX17					
			Labourer (male)	C406	3	Oxy-Acetylene		1	1		h		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2						
										İ		·	
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
)8:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Concreting for walls & top slab Bay 13 - Concreting for access shaft of box culvert (Total : 83.1 cu.m)	Labourer (female)	C406	1	Backhoe	1	EX08					
			Labourer (male)	C406	4	Generator	1						
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1						
						Vibrating Prob	1						1
						Water Pump 50mm	1						
						Water Pump 75mm	2						<u> </u>

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Signed:

Date:

Wong Ching Lung / Site Agent

619/2012

Name/Post: Date:

Stephen Poon / RE

69.2

Date:

Contract No.: DC/2009/22 Date: 05/09/2012

Day: Wednesday

IOW

Tso Sai Kuen / Inspector of Works

6-9-2012

History

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered		
						Туре	Wo	rking	1	Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code			
						Welding Set	1							
8:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1							
						Water Pump 75mm	1							
8:00 - 18:00	Area B - Tung Tsz	Drilling 2 nos. grout holes (1-4 & 1-6) and inserting grout tubes	Labourer (male)	C406	4	Air Compressor	1	AC05						
	Nursery (Jacking Pit)		Plant and Equipment Operator (Hoist and Crane)	C334		0 1 0 11	_	0.00	<u> </u>					
			rain and Equipment Operator (11038 and Clancy	0.334		Crawler Drill Grout Machine		DR05	<u> </u>					
						Oxy-Acetylene		<b>_</b>	1		h			
						Water Pump 50mm	1						-	
						Water Pump 75mm	1							
						Welding Set	1						_	
8:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Preparing 1650Ø cut length end pipe at contract 2's stockpile area at Tai Wah St.	Labourer (male)	C406	2	Backhoe			1	EX21	h			
						Generator	1		<u> </u>			<u> </u>	-	
						Oxy-Acetylene			1		h	······		
						Water Pump 50mm	1							
						Water Pump 75mm	1							
						Welding Set	1							
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement												
		NY												
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement					_							
	Area I - Contractor Office	No activity as per KLKJV arrangement												

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:	LE

Engineer's Representative

Name/Post:

Stephen Poon / RE

Date:

6.9. N

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent 61/2012

Date:

Date:

Signed:

Contract No.: DC/2009/22 Date: 05/09/2012

Day: Wednesday

IOW

Tso Sai Kuen / Inspector of Works

6-8-2012

Sheet 3 of 3

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Cloudy Cloudy ST 5, TP 20

Thunderstorm Warning - 00:00~01:00

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code No.	Labour	Code No.	P	lant
	Assistant Surveyor 1	Asphalter (Other Construction)	C301	Chainman	C401	Туре	No. Working No. I
	Chainman 3	Asphalter (Roadworks)	C302	Concreting Labourer	C402	Air Compressor	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	Community Liaison Officer 1	Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe	4 1
	CEG 1	Bar Bender & Fixer	C304 2	Excavator	C404	Blower	
	Contract Manager 1	Bricklayer	C305	Heavy Load Labourer	C405	Crawler Drill	2
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306	Labourer (male / female) / Long checker / Watchman Office atten		Dump Truck	
	Environmental Officer 1	Carpenter (Formwork)	C307 4	Sewerman	C407	Electric Breaker	4
	Foreman Assistant Foreman 2	Concrete Repairer	C308	Automation Equipment Mechanic	E301		
	General Foreman 1	Concretor	C309	Building Services Mechanic		Generator	····· 4
	Labour Officer 1	Construction Plant Mechanic	C310	Cable Jointer (Power)	E302	Grout Machine	1
	Land Surveyor 1	Curtain Wall Installer			E303	Oxy-Acetylene	
	Project Director 1	Demolition Worker	C311	Carpenter	E304	Water Pump 50mm	8
Utilities	Project Manager 2		C312	Electrician/Electrical Fitter	E305	Water Pump 75mm	6
(Record location & nature of works)		Diver	C313	Fire Services Mechanic	E306	Welding Set	4
	Project Quantity Surveyor 1	Drainlayer	C314	Instrument Mechanic	E307		
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315	Lift Electrician	E308		
	Safety Officer 1	Floor Layer	C316	Lift Mechanic	E309		
	Site Agent 1	Gas Plumber	C317	Mechanical Fitter	E310		
	Surveyor 1	General Welder	C318 1	Overhead Linesman	E311		
		Glazier	C319	Painter	E312		
	1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	Ground Investigation Operator Driller Borer	C320	Plumber and Pipe Fitter	E313		
		Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314		······································
		Joiner	C322	Sheet Metal Worker	E315		· · · · · · · · · · · · · · · · · · ·
		Leveller	C323	Sign Fabricator	E316	······································	
		Marble Worker	C324	Sign Installer	E317		
		Marine Construction Plant Operator	C325	Thermal Insulation Craftsman			·
Progress		Mason	C326	Welder	E318		
(Mention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327	Labourer	E319		
		Metal Worker	C328 1		E401		· · · · · · · · · · · · · · · · · · ·
		Painter & Decorator		Semi-skilled Worker	E402	····	
	· · · · · · · · · · · · · · · · · · ·		C329	Technician	T		
		Piling Operative	C330			······································	
		Pipelayer	C331 1	and a second second second second second second second second second second second second second second second			
Visitor		Plant and Equipment Operator (Builder's Lift and Other Machinery)		13977			
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333 4				
		Plant and Equipment Operator (Hoist and Crane)	C334 1				
		Plant and Equipment Operator (Piling)	C335	maa aa madaanaa ah addaanaa ah ah ah ah ah ah ah ah ah ah ah ah a			
		Plant and Equipment Operator (Tunnelling)	C336				
		Plasterer	C337				
	1	Plumber	C338				
Accidents		Pneumatic Driller	C339				
(Describe any occurance of accident)		Prestressing Operative	C340			······································	
		Rigger/Metal Formwork Erector	C341				······································
		Shotcretor	C342				
		Shotfirer	C343	and the second s			· · · · · · · · · · · · · · · · · · ·
		Slope Maintenance Worker	C344				
		Structural Steel Erector	C345	11.1 confirmers Confirments (19.00 (20.00))			
Remarks		Structural Steel Welder	C346			·	
		Tiler	C340 C347				
		Trackworker					
			C348	······································			
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349 4				
		Window Frame Installer	C350				
	Total 22			and a second second second second second second second second second second second second second second second			
	Assistance to Engineer No.	· · · · · · · · · · · · · · · · · · ·					
	Amah 1						
	Coordinate Engineer						
	Drafting Assistant 1						
	Driver 2		······································	1 The second se second second	······································		
	Field Assistant 3	1000 1 11 1 1000 a	*				· · · · · · · · · · · · · · · · · · ·
	Office Assistant 1						
	Watchman 1	· · · · · · · · · · · · · · · · · · ·		the set of provide a constrained of			
		(To be confirmed)					
	Total 9	(To be continued)		Total Labour	44	Total	36 5

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or. if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Signed: 0

Contractor's Representative

Wong Ching Lung / Site Agent

Date: 5.9.12

Name/Post: Stephen Poon / RE

Signed:

Original - ER's File Duplicate - Contractor

Date:

518/2012

### Contract No.: DC/2009/22 Date: 04/09/2012

Day: Tuesday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

5-9-2012

Sheet 1 of 3

Heret

Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	Labour								Material Delivered			
		in the second second second second second second second second second second second second second second second					Pla								
			Trade			Туре		rking	<u> </u>	Idlin	, 	Description	Quantity		
	Area A - DN1800	No activity as per KLKJV arrangement	1 rade	Code	No.		No.	ID	No.	D	Code				
	Stormwater Drain	No activity as per KLKJ v arrangement													
									+						
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch. 8.0~8.4 and installing shoring frames Adjusting levels and alignment of 2 nos.Ø450 & 4 nos.Ø900 double flange pipe with puddle at wall between discharge chamber & valve chamber Excavating for Ø2100 pipe trench between manhole MH05 & MH06 and fabricating top layer I-beam walings & struts Installing push bar for stainless steel door (D2) and fixing detachable rat guard for louvres (L2) at transformer room Painting for chequer plate trench covers at transformer room General housekeeping	General Welder	C318	0.5	Backhoe	1	EX50							
<u> </u>			Labourer (female)	C406	2	Blower	2	+							
			Labourer (male)	C406	6	Oxy-Acetylene	1	-			+				
			Metal Worker	C328		Water Pump 50mm	2	+							
			Pipelayer	C331	1	Water Pump 75mm	1		1		-				
			Plant & Equipment Operator (Earthmoving Machinery)	C333		Welding Set	2		1						
					·	it ording bot		+							
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to 0.3 mPD & cart away excavated material to Contract 2's stockpile area at Tai Wah St. (16 Truckloads)	General Welder	C318	0.5	Backhoe	1	EX36					_		
			Labourer (male)	C406	1	Dump Truck	2	1		<u> </u>			+		
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Oxy-Acetylene	1	1							
			Truck Driver	C349	2	Welding Set	1						-		
					[				1		1				
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/Lab.)	Labourer (female)	C406	3										
08:00 - 18:00	Anna A. The KID I														
	Area A - Ting Kok Road (CH70-125)	Delivery of sand material from Contract 2's stockpile area at Tai Wah St. (8 truckloads) and backfilling to Ø2100 pipe trench at Ch.78~125 Formwork shuttering for upper walls and top slab of manhole MH03 Dismantling upper layer I-beam walings and struts from shoring of Ø2100 pipe trench at Ch. 80~90	Carpenter (Formwork)	C307	2	Backhoe		EX17							
			Labourer (female)	C406	1	Dump Truck	2								
			Labourer (male)	C406	4	Oxy-Acetylene	1								
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2								
			Truck Driver	C349	2										
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement													
·····													1		

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

D
``

Engineer's Representative

Signed:

Contractor's Representative

Signed:

Name/Post:

Stephen Poon / RE

Signed:

5.9.N

Date:

Wong Ching Lung / Site Agent 5/1/2012

Date:

Date:

Contract No.: DC/2009/22 Date: 04/09/2012

Day: Tuesday

Ð IOW

Tso Sai Kuen / Inspector of Works

5-8-2012

House

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Plai	ıt				Material Delivered		
						Туре	Wo	rking		Idling		Description	Quantity	
			Trade	Code	No.		No.	ID	No.	ID	Code			
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH28(	Bay 10 - Formwork shuttering for walls and top slab Bay 13 - Rebar fixing and formwork shuttering for access shaft	Bar Bender & Fixer	C304	2	Backhoe	1	EX08						
			Carpenter (Formwork)	C307	2	Generator	1		1			• • • • • • • • • • • • • • • • • • •		
			Labourer (male)	C406	1	Oxy-Acetylene			1	1				
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	1			1				
						Water Pump 75mm	2					· · · · · · · · · · · · · · · · · · ·		
0.00 10.00														
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1							
						Water Pump 75mm	1							
18:00	A D T T													
J8 18:00	Area B - Tung Tsz Nursery (Jacking Pit)	Drilling holes at Layer land inserting grout tubes	Labourer (male)	C406	3	Air Compressor	1	AC05						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05						
						Grout Machine			1		h			
						Oxy-Acetylene			1					
						Water Pump 50mm	1							
						Water Pump 75mm	1							
0.00 10.00														
98:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Installation of guide rail and laying blinding concrete inside heading tunnel	Labourer (male)	C406	4	Backhoe			1	EX21	h			
						Electric Breaker	1							
						Generator	1							
						Oxy-Acetylene			1		h			
						Water Pump 50mm	1							
						Water Pump 75mm	1							
						Welding Set	1							
	Area F - Lek Vuen Street	No activity as per KLKJV arrangement												
(	Rest Garden											1991 - La Santa Maria and Santa Angela (Santa Santa		
· · · · · · · · · · · · · · · · · · ·	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
	Area I - Contractor Office	No activity as per KLKJV arrangement												

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:



Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

5/1/2012

Signed:

Date:

Date:

Date:

### Engineer's Representative

5.8.n

Stephen Poon / RE Name/Post:



Contract No.: DC/2009/22

Day: Tuesday

Ċ IOW

Tso Sai Kuen / Inspector of Works

5-9-2012

Aliste

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> <u>Rainfall (mm)</u> Fine Fine St 0, TP 0

Thunderstorm Warning - 23:50~24:00

(Hong Kong Observatory's record)

(Record verbal instructions given)	Contractor's Site Staff N	o. Labour	Code No.	Labour	Code	No.	Plant		
	Assistant Surveyor	Asphalter (Other Construction)	C301	Chainman	C401		Туре	No. Working	No
	Chainman 3	Asphalter (Roadworks)	C302	Concreting Labourer	C402		Air Compressor	10. 10. 1	140.
	Community Liaison Officer 1	Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403		Backhoe	4	
	CEG	Bar Bender & Fixer	C304 3	Excavator	C404		Blower	4 	
	Contract Manager 1	Bricklayer	C305	Heavy Load Labourer	C404		Crawler Drill		
Comments by Engineer's / Contractor's Representative	Engineer	Carpenter (Fender)	C306	Labourer (male / female) / Lorry checker / Watchman/Office atte	ndan C405	20	Dump Truck		
	Environmental Officer 1	Carpenter (Formwork)	C307 2	Sewerman					
	Foreman/Assistant Foreman 2	Concrete Repairer	C308	Automation Equipment Mechanic	C407		Electric Breaker	1	•
	General Foreman	Concretor	C309	Building Services Mechanic	E301		Generator	2	
	Labour Officer 1	Construction Plant Mechanic	C310	Cable Jointer (Power)	E302		Grout Machine		
	Land Surveyor 1	Curtain Wall Installer	C311		E303		Oxy-Acetylene	5	
	Project Director 1	Demolition Worker		Carpenter	E304		Water Pump 50mm	8	4
Utilities	Project Manager 2		C312	Electrician/Electrical Fitter	E305		Water Pump 75mm	6	
(Record location & nature of works)		Diver	<u>C313</u>	Fire Services Mechanic	E306		Welding Set	6	
	Project Quantity Surveyor 1	Drainlayer	C314	Instrument Mechanic	E307				1
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C315	Lift Electrician	E308				
	Safety Officer 1	Floor Layer	C316	Lift Mechanic	E309				
	Site Agent 1	Gas Plumber	C317	Mechanical Fitter	E310				
	Surveyor 1	General Welder	C318 2	Overhead Linesman	E311			and and an an an and a second as a	
		Glazier	C319	Painter	E312		, este adaménantes este construction provide este este este este este este este es		
		Ground Investigation Operator/Driller/Borer	C320	Plumber and Pipe Fitter	E313	1			
		Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314	• • • • • • • • • • • • • • • • • • • •	an ann an Canadan a' ann an Anna a' an Anna a' Anna a' Anna a' Anna a' Anna a' Anna a' Anna a' Anna a' Anna a'		
		Joiner	C322	Sheet Metal Worker	E315		·····		
		Leveller	C323	Sign Fabricator					
		Marble Worker	C324	Sign Installer	E316				
	······································	Marine Construction Plant Operator	C324 C325		E317		···· ··· ··· ··· ·····················		
Progress		Mason		Thermal Insulation Craftsman	E318				
ention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C326	Welder	E319				
sources and the starting of obstitute the progressy			C327	Labourer	E401		· · · · · · · · · · · · · · · · · · ·		
		Metal Worker	C328 1	Semi-skilled Worker	E402				
	······································	Painter & Decorator	C329	Technician	Т				
		Piling Operative	C330						1
		Pipelayer	C331						
Visitor		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332	1 · · · · · · · · · · · · · · · · · · ·					
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333 4						
(Accord names of visitors and time of visit)		Plant and Equipment Operator (Hoist and Crane)	C334 1				an france and a set of a	••••• ··· ···	
		Plant and Equipment Operator (Piling)	C335						
		Plant and Equipment Operator (Tunnelling)	C336				a summer and a second		+
		Plasterer	C337						·
		Plumber	C338						
Accidents		Pneumatic Driller	C339				······································		
(Describe any occurance of accident)		Prestressing Operative	C340						
		Rigger/Metal Formwork Erector	C341						
		Shotcretor	C342	···· · · · · · · · · · · · · · · · · ·			· · · · · · · · · · · · · · · · · · ·		
		Shotfirer	C343						
		Slope Maintenance Worker	C344						
		Structural Steel Erector	C345				the second second second second second second second second second second second second second second second se	······································	
Remarks		Structural Steel Welder	C346		······································		· · · · · · · · · · · · · · · · · · ·		
		Tiler	C347						
		Trackworker	C348	(*) THE R. P. MARSHING MEDICAL CONTRACTOR OF A CONTRACTOR O					÷
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349 1	······································					····•
		Window Frame Installer	C350						
	Total 22		0.50						
				and the second sec					÷
	Assistance to Engineer No								
	Amoh						· · · · · · · · · · · · · · · · · · ·	4	
	Amah 1								
	Coordinate Engineer								
	Drafting Assistant 1								1
	Driver 2								
	Field Assistant 3						······································	······································	
	Office Assistant 1						· · · · · · · · · · · · · · · · · · ·		
	Watchman 1			- · · · · · · · · · · · · · · · · · · ·					1 .
	Total 9	(To be continued)		Total Labour		45			- and -

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Name/Post: Stephen Poon / RE 3.9.12

Signed:

Date:

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Date:

418/2012

#### Contract No.: DC/2009/22 Date: 03/09/2012

Day: Monday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

4/9/2012 Sheet 1 of 3 Mart

Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

r																		
Time	Location	Activity	Labour				Pla	nt				Material De	elivered					
						Туре	Wo	orking		Idling	ç	Description	Quantity					
			Trade	Code	No.	1	No.	ID	No.	ID	Code							
	Area A - DN1800	No activity as per KLKJV arrangement				1		1	1	-	1							
	Stormwater Drain			_					ļ	ļ								
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.7.4~8.0 Dismantling tubular working platform outside store room Fabricating upper layer I-beam struts for Ø2100 pipe trench between manhole MH05 & MH06 General cleaning at roof and manade slope Installing push bar for stainless steel door (D1) and painting for chequer plate trench covers at transformer room Installing 2 nos. Ø450 & 4 nos .Ø900double flange pipes with puddle at wall between discharge chamber & valve chamber	General Welder	C318	0.5	Backhoe	1	EX50										
			Labourer (female)	C406	2	Blower	2				-							
			Labourer (male)	C406		Oxy-Acetylene	1											
			Metal Worker	C328		Water Pump 50mm	2				-							
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 75mm	1	+		+								
			Plumber and Pipe Fitter	E313	1	Welding Set	2		<u> </u>	-								
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit and fabricating lower layer I-beam walings and struts for shoring	General Welder	C318	0.5	Backhoe	1	EX36										
			Labourer (male)	C406	2	Oxy-Acetylene	1				1							
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	1			1								
								1		1								
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation. (1 F/Lab)	Labourer (female)	C406	3													
08:00 - 18:00	Area A - Ting Kok Road (CH70-125)	Delivery of sand material from Contract 2's stockpile area at Tai Wah St. (15 truckloads) and backfilling to Ø2100 pipe trench at Ch. 78~125 Rebar fixing for upper walls of manhole MH03 Dismantling upper layer of I-beam walings and struts from shoring of Ø2100 pipe trench at Ch. 85~100	Bar Bender & Fixer	C304	3	Backhoe	1	EX17										
			Labourer (female)	C406	1	Dump Truck	1			1								
L			Labourer (male)	C406	3	Oxy-Acetylene	1			1								
<u> </u>			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	2											
			Truck Driver	C349	1													
	Arra D. Tr. T																	
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement		_														
08:00 - 18:00	Area B - Tung Tsz Nursery (CH130-CH280)	Bay 10 - Formwork shuttering for walls and top slab Bay 13 - Erecting sheetpile stop end shoring to facilitate backfilling works	Carpenter (Formwork)	C307	2	Backhoe	1	EX08										
			General Welder	C318	1	Generator	1				1 1	Wednesder	1					
			Labourer (male)	C406	2	Oxy-Acetylene	1						1					

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

-1 Contractor's Representative

Wong Ching Lung / Site Agent

4/ 8/2012

Signed:

Name/Post:

Stephen Poon / RE

49.12 Date:

Date:

Date:

Contract No.: DC/2009/22

Day: Monday

0 IOW

Tso Sai Kuen / Inspector of Works

4/9/2012

M. Caller

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour				Pla	nt				Material Delivered		
						Туре	Wo	rking		Idling		Description	Quantity	
			Trade	Code	No.	1	No.	ID	No.	ID	Code			
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	1			1				
						Water Pump 75mm	2						1	
						Welding Set	1		1	1				
8:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1							
						Water Pump 75mm	1							
8:00 - 18:00	Area B - Tung Tsz	Developing from india is a lange of the lange												
8:00 - 18:00	Nursery (Jacking Pit)	Dewatering from jacking pit and general housekeeping	Labourer (male)	C406	3	Air Compressor	1	AC05						
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05						
						Grout Machine			1		h			
						Oxy-Acetylene	1						T	
						Water Pump 50mm	1							
						Water Pump 75mm	1							
						Welding Set	1							
0.00 10.00														
8:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	PL 1602.1 - Breaking up brick wall of exsiting manhole inside heading tunnel Excavating to formation level of 1650Ø pipe trench Cart away excavated material to Aara A (1 truckload)	Labourer (male)	C406	4	Backhoe			1	EX21	h			
						Electric Breaker	1	1	<u> </u>	1			-	
						Generator	1	1	1	1				
with 11 miles and			-			Oxy-Acetylene		<u>†                                    </u>	1	1	h	· · · · · · · · · · · · · · · · · · ·	1	
						Water Pump 50mm	1			1				
						Water Pump 75mm	1							
						Welding Set	1							
													T	
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement											-	
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												
										1			+	
	Area I - Contractor Office	No activity as per KLKJV arrangement								1			1	

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:



Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

4/8/2012

Signed:

Stephen Poon / RE

49.12

Date:

Date:

Date:

Name/Post:

Contract No.: DC/2009/22 Date: 03/09/2012

Day: Monday

( > IOW

Tso Sai Kuen / Inspector of Works

4/9/2012

Jul"

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Fine Fine ST 5, TP 10

Thunderstorm Warning - 05:20~06:30

(Hong Kong Observatory's record)

(Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code No.	Labour	Code No.	Plant	
		Asphalter (Other Construction)	C301	Chainman	C401	Туре	No. Working N
		Asphalter (Roadworks)	C302	Concreting Labourer	C402	Air Compressor	THU. HURRING
		Bamboo Scaffolder	C303	Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe	
		Bar Bender & Fixer	C304	Excavator	C404	Crawler Drill	
		Bricklayer	C305	Heavy Load Labourer	C405	Generator	
Comments by Engineer's / Contractor's Representative		Carpenter (Fender)	C306	Labourer (male / female) / Lorry checker / Watchman/Office atten	ndan C406 6	Steel Bending Machine	
		Carpenter (Formwork)	C307	Sewennan	C407	Water Pump 50mm	4
	· · · · · · · · · · · · · · · · · · ·	Concrete Repairer	C308	Automation Equipment Mechanic	E301	Water Pump 75mm	1
	·····	Concretor	C309	Building Services Mechanic	E302		
		Construction Plant Mechanic	C310	Cable Jointer (Power)	E303		
		Curtain Wall Installer	C311	Carpenter	E304		
Utilities		Demolition Worker	C312	Electrician/Electrical Fitter	E305		
(Record location & nature of works)		Diver	C313	Fire Services Mechanic	E306		
		Drainlayer	C314	Instrument Mechanic	E307		
	1 II IIIIIata areas	Electrician (Main Contractor's)	C315	Lift Electrician	E308		
		Floor Layer	C316	Lift Mechanic	E309		
		Gas Plumber	C317	Mechanical Fitter	E310		
	······································	General Welder	C318	Overhead Linesman	E311		
		Glazier	C319	Painter	E312		
		Ground Investigation Operator Driller Borer	C320	Plumber and Pipe Fitter	E313		
	······································	Grouting Worker	C321	Refrigeration/AC/Ventilation Mechanic	E314	And the second design of the second s	
		Joiner	C322	Sheet Metal Worker	E315	······································	
		Leveller	C323	Sign Fabricator	E316		
		Marble Worker	C324	Sign Installer	E317		
		Marine Construction Plant Operator	C325	Thermal Insulation Craftsman	E318		
Progress		Mason	C326	Welder	E319		
lention briefly any matter delaying or obstructing progress)		Metal Scaffolder	C327	Labourer	E401		
		Metal Worker	C328	Semi-skilled Worker	E402		
		Painter & Decorator	C329	Technician	Т		
		Piling Operative	C330				
		Pipelayer	C331		······································		· · · · · · · · · · · · · · · · · · ·
Visitor		Plant and Equipment Operator (Builder's Lift and Other Machinery)	C332				
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333				
		Plant and Equipment Operator (Hoist and Crane)	C334				
		Plant and Equipment Operator (Piling)	C335				
		Plant and Equipment Operator (Tunnelling)	C336				
		Plasterer	C337				
	· · · · · · · · · · · · · · · · · · ·	Plumber	C338				
Accidents		Pneumatic Driller	C339				
(Describe any occurance of accident)		Prestressing Operative	C340				
		Rigger/Metal Formwork Erector	C341				
	a contraction of the second second second second second second second second second second second second second	Shotcretor	C342				
		Shotfirer	C343				
	· · · · · · · · · · · · · · · · · · ·	Slope Maintenance Worker	C344				
Devente		Structural Steel Erector	C345				
Remarks		Structural Steel Welder	C346				
	· · · · · · · · · · · · · · · · · · ·	Tiler	C347				
		Trackworker	C348				
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349				
		Window Frame Installer	C350	· · · · · · · · · · · · · · · · · · ·			
	Total					·····	
	Assistance to Engineer No.						
	Driver 1						
	Watchman 1						
						••••••••••••••••••••••••••••••••••••••	
					1	· · · · · · · · · · · · · · · · · · ·	· · · · ·
				- "If Weiners communications and a province complete communication of a solution of a			
				a to the following and provide a community			
	Total 2	(To be continued)		Total Labour	i and i and i and i and i and i and i and i and i and i and i and i and i and i and i and i and i and i and i a	a preservation and a community and propagation community and	

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Signed:

Date:

Engineer's Representative

Day's record and instructions checked and agreed

Name/Post: Stephen Poon / RE

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

3. 9. 12

Date:

3/8/2012

### Contract No.: DC/2009/22 Date: 02/09/2012

Day: Sunday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

3-9-2012 Sheet 1 of 3

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	Labour				Plant						
							Working		g Idling			Description	Quantity	
			Trade	Code	No.	1	No.	ID	No.	ID	Code			
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement												
8:00 - 18:00	Area A - Pump Station				ļ									
18.00 - 18.00	Alca A - Fullip Station	Stripping off soffit formwork from roof of store room and general cleaning	Labourer (male)	C406	2	Backhoe			1	EX36	I			
						Backhoe			1	EX50	i			
					ļ	Steel Bending Machine		<u> </u>	3	ļ	i			
						Water Pump 50mm	2		<u> </u>					
						Water Pump 75mm	1					· · · · · · · · · · · · · · · · · · ·		
07:00 - 18:00 18: 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 M/Lab. from area I)	Labourer (female)	C406	3	Backhoe			1	EX17				
/								1						
	Area A - Ting Kok Road (Intake Structure)	No activity as per KLKJV arrangement				Water Pump 50mm	1							
	Area B - Tung Tsz Nursery (CH130-CH280)	No activity as per KLKJV arrangement				Backhoe			1	EX08	i			
	Area B - Tung Tsz	No activity as per KLKJV arrangement												
	Nursery (CH40-CH130)					Water Pump 50mm			1		i			
						Water Pump 75mm			1		i			
	Area B - Tung Tsz Nursery (Jacking Pit)	No activity as per KLKJV arrangement				Air Compressor			1	AC05	i			
						Crawler Drill	_		1	DR05				
						Water Pump 50mm	+			DR05		100000-00-000000-00-000000-00-000000-00-	+	
						1								
	Area C - Shallow Marshy Area	No activity as per KLKJV arrangement												
······································	Area E - Siu Lek Yuen Rd.Playground	No activity as per KLKJV arrangement				Backhoe			1	EX21	i			
······						Generator			1		i			
	Area E - Lek Vuen Streat	No activity as per KLKJV arrangement					_							
	Rest Garden	ino activity as per KLKJ V arrangement												
	Area G - Ngan Shing St.	No activity as per KLKJV arrangement												

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Name/Post:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/8/2012

Signed:

\_ \_

Stephen Poon / RE

Date: 3. 9.12

Date:

Date:

. .

Contract No.: DC/2009/22 Date

e:	02/09/2012	
	04/07/2012	

Day: Sunday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

XV/

#### Idling Code:

a Breakdown e Bad Weather b Standby f Task Completed c Awaiting Instruction g No Operator d Assemble/Disassemble h Not Required i Sunday/Public Holiday

Time Location Activity Labour Plant Туре Working Trade Code No. No. ID No 08:00 - 18:00 Area I - Contractor Office cleaning Labourer (male) C406 1 Office

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

3/8/2012

Signed:

Stephen Poon / RE Name/Post:

3.9.2 Date:

Date:

Date:

Contract No.: DC/2009/22 Date: 02/09/2012

Day: Sunday

			Material Delivered								
Idling			Description	Quantity							
0.	ID	Code									
		<u> </u>									

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

Agrice

Client Department: Drainage Services Department

Contract Title: Drainage Improvement Works in Shuen Wan, Tai Po - Contract 1

Contractor: KWAN LEE - KULY JOINT VENTURE

#### Weather:

#### Typhoon / Warning Signal:

<u>AM</u> <u>PM</u> Rainfall (mm) Cloudy Shower ST 5, TP 2

Thunderstorm Warning - 01:05~03:00 & 15:05~16:45

(Hong Kong Observatory's record)

Instructions to Contractor (Record verbal instructions given)	Contractor's Site Staff No.	Labour	Code	No.	Labour	Code No.	Pla	t	
	Assistant Surveyor 1	Asphalter (Other Construction)	C301	-	Chainman	C401	Туре	No. Working	No. Lat
	Chainman 3	Asphalter (Roadworks)	C302		Concreting Labourer	C402	Air Compressor	IND. WOLKING	NO. 101
	Community Liaison Officer 1	Bamboo Scaffolder	C303		Diver's Linesman / Dredger Crew / Barge Crew	C403	Backhoe		
	CEG 1	Bar Bender & Fixer	C304	4	Excavator	C404	Blower	2	
	Contract Manager 1	Bricklayer	C305		Heavy Load Labourer	C404 C405	Crawler Drill	<u>_</u>	
Comments by Engineer's / Contractor's Representative	Engineer 1	Carpenter (Fender)	C306		Labourer (male / female) / Lorry checker / Watchman/Office atte		Dump Truck		
	Environmental Officer 1	Carpenter (Formwork)	C307	4	Sewerman	C407	Electric Breaker	2	· · · · ·
	Foreman/Assistant Foreman 2	Concrete Repairer	C308		Automation Equipment Mechanic	E301	Generator		
	General Foreman 1	Concretor	C309		Building Services Mechanic	E302		·	·····
	Labour Officer 1	Construction Plant Mechanic	C310		Cable Jointer (Power)	E302 E303	Grout Machine		
	Land Surveyor 1	Curtain Wall Installer	C311		Carpenter	E304	Oxy-Acetylene Water Pump 50mm	3	2
¥7.411.4	Project Director 1	Demolition Worker	C312	'	Electrician/Electrical Fitter			8	k
Utilities	Project Manager 2	Diver	C312		Fire Services Mechanic	E305	Water Pump 75mm		
(Record location & nature of works)	Project Quantity Surveyor 1	Drainlayer	C313		Instrument Mechanic	E306	Welding Set		
	Quantity Surveyor Manager 1	Electrician (Main Contractor's)	C314 C315			E307			
	Safety Officer 1	Floor Layer			Lift Electrician Lift Mechanic	E308			
	Site Agent 1	Gas Plumber	C316			E309			
	Surveyor 1	General Welder	C317	•	Mechanical Fitter	E310			
		Glazier	C318	2	Overhead Linesman	E311			
		Ground Investigation Operator/Driller/Borer	<u>C319</u>		Painter	E312			
			C320		Plumber and Pipe Fitter	E313			
	1011 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Grouting Worker	C321		Refrigeration/AC/Ventilation Mechanic	E314			
		Joiner	C322		Sheet Metal Worker	E315			
		Leveller	C323		Sign Fabricator	E316			
	The suffrance and second	Marble Worker	C324		Sign Installer	E317			
Progress		Marine Construction Plant Operator	C325		Thermal Insulation Craftsman	E318			1
(Mention briefly any matter delaying or obstructing progress)		Mason	C326		Welder	E319			
(include orient and matter delaying of obstracting progress)		Metal Scaffolder	C327		Labourer	E401			
		Metal Worker	C328		Semi-skilled Worker	E402			
	······································	Painter & Decorator	C329		Technician	Т			
	· · · · · · · · · · · · · · · · · · ·	Piling Operative	C330						
		Pipelayer	C331	1					
Visitor		Plant and Equipment Operator (Builder's Lift and Other Machinery)							
(Record names of visitors and time of visit)		Plant & Equipment Operator (Earthmoving Machinery)	C333	4					
		Plant and Equipment Operator (Hoist and Crane)	C334	2					
	······································	Plant and Equipment Operator (Piling)	C335						
	······································	Plant and Equipment Operator (Tunnelling)	C336				an and a statement of the second seco		
		Plasterer	C337						
	and the second s	Plumber	C338					······	
Accidents		Pneumatic Driller	C339		and the second sec		······································	··· ··································	
(Describe any occurance of accident)		Prestressing Operative	C340			·····			
		Rigger/Metal Formwork Erector	C341						
		Shotcretor	C342						
		Shotfirer	C343		and the second sec	· · · · · · · · · · · · · · · · · · ·	and the exclusion even of the second se	1999 II. I. I. I. I. I. I. I. I. I. I. I. I.	
		Slope Maintenance Worker	C344			-			
		Structural Steel Erector	C345	1	and a second of a second				
Remarks		Structural Steel Welder	C346						
		Tiler	C347	1	The second second second second second second second second second second second second second second second se				
		Trackworker	C348			····	· · · · · · · · · · · · · · · · · · ·		
		Truck Driver / Coxswain / Barge Engineer / Working Ganger*	C349	2					
		Window Frame Installer	C350						+
	Total 22								
		The first second s	+		······································				
	Assistance to Engineer No.				· · ··································		···		
	Amah 1						and the second	· · · · · · · · · · · · · · · · · · ·	
	Coordinate Engineer	· · · · · · · · · · · · · · · · · · ·	••••						
	Drafting Assistant 1						-		
					a a manufacture and a second second second				
	Driver 2 Field Assistant 3								4
	Office Assistant 1								
	Watchman 1	teris and the second se			· · · · · · · · · · · · · · · · · · ·	a de la de la companya	an		
	Total 9	(To be continued)			Total Labour	47	Total	35	3

\* Working ganger is equivalent to ordinary worker in the trade in which he is employed or, if the trade is not listed, truck driver (refer to GS Table 1.1)

Day's record and instructions checked and agreed

Engineer's Representative

Signed:

Contractor's Representative

Wong Ching Lung / Site Agent

Original - ER's File

Name/Post: Stephen Poon / RE

Signed:

3.8.12 Date:

Date:

3/8/2012

### Contract No.: DC/2009/22 Date: 01/09/2012

Day: Saturday

Signed:

IOW

Tso Sai Kuen / Inspector of Works

Date:

3-9-2012

Sheet 1 of 3

Hunder

#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	Location	Activity	Labour	Plant						Material Delivered			
				Туре	Working		ng Idling			Description	Quantity		
			Trade	Code	No.		No.	ID	No.	ID	Code		
	Area A - DN1800 Stormwater Drain	No activity as per KLKJV arrangement											
										<u> </u>			
08:00 - 18:00	Area A - Pump Station	Excavating for heading tunnel of Ø225 sewer pipe between MS1 & FMH1023921at Ch.6.7~7.4 and installing shoring frames Stripping off soffits formwork from roof of store room and dismantling the falsework Fabricating upper layer I-beam struts for shoring of Ø2100 pipe trench between manhole MH05~06 General cleaning at roof and manade slope Installing stainless steel doors (D4 & D9) at switchroom Painting for chequer plate trench covers at transformer room Installing 2 nos. Ø450 & 4 nos. Ø900 double flange pipe with puddle at wall between discharge chamber & valve chamber	General Welder	C318	1	Backhoe	1	EX50					
			Labourer (female)	C406	2	Blower	2						
			Labourer (male)	C406	8	Oxy-Acetylene	1		1	†			·
			Metal Worker	C328	2	Water Pump 50mm	2	1		1			-
			Pipelayer	C331	1	Water Pump 75mm	1	+					
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Welding Set	2	1					
								1		1			
08:00 - 18:00	Area A - Pump Station - Box Culvert (Receiving Pit)	Excavating for receiving pit to 3.0 mPD & cart away excavated materials to Contract 2's stockpile area at Tai Wah Street. (16 Truckloads)	Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Backhoe	I	EX36					-
			Truck Driver	C349	2	Dump Truck	2		1	1			
								1	1	1			
07:00 - 18:00 18:00 - 20:00	Area A - Ting Kok Road	Manual control of "stop/go" sign for traffic flow regulation (3 F/Lab.) Manual control of temporary traffic light for traffic flow regulation (1 F/lab.)	Labourer (female)	C406	3								
08:00 - 18:00	Area A - Ting Kok Road	Backfilling sand material to Ø2100 pipe trench at Ch.78~125 and compacting	Carpenter (Formwork)	0207		D 11			ļ	ļ	ļ		
	(CH70-125)	Formwork shuttering for walls of manhole MH03 Dismantling upper layer of I-beam walings and struts from shoring of Ø2100 pipe trench at Ch. 90~100	(arpenter (rormwork)	C307	2	Backhoe		EX17					
			General Welder	C318	1	Oxy-Acetylene	1	1					1
			Labourer (female)	C406	1	Water Pump 50mm	2			<u> </u>	<u>├</u> ───┼		1
·····			Labourer (male)	C406	2					<u> </u>			
<u></u>			Plant & Equipment Operator (Earthmoving Machinery)	C333	1		-						
							1			<u> </u>			1
	Area B - Tung Tsz Nursery (CH00-CH40)	No activity as per KLKJV arrangement											
08:00 - 18:00	Nursery (CH130-CH280)	Bay 13 - Formwork shuttering for access shaft Bay 12 - Stripping off soffit formwork and dismantling the falsework Bay 11~12 - Patching up tie bolt holes at external face of wall prior to backfilling Bay 10 - Rebar fixing for walls and top slab	Bar Bender & Fixer	C304	4	Backhoe	1	EX08					
			Carpenter (Formwork)	C307	2	Generator	1						

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

Signed:

Engineer's Representative

Signed:

Contractor's Representative

3/8/2012

Signed:

Name/Post:

Stephen Poon / RE

3.9.12 Date:

Date:

Wong Ching Lung / Site Agent

Date:

Contract No.: DC/2009/22 Date: 01/09/2012

Day: Saturday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

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#### Idling Code:

a Breakdown b Standby c Awaiting Instruction d Assemble/Disassemble

e Bad Weather f Task Completed g No Operator h Not Required i Sunday/Public Holiday

Time	T	Location Activity Labour						I Sunday/I done Honday								
Time	Location	Activity	Labour	Plant						Material Delivered						
				Туре	Working		king Idling			Description	Quantity					
			Trade	Code	No.		No.	ID	No.	ID	Code					
			Labourer (male)	C406	3	Oxy-Acetylene		1	1		h	·				
			Plant & Equipment Operator (Earthmoving Machinery)	C333	1	Water Pump 50mm	1		1							
						Water Pump 75mm	2	1		<u> </u>						
								1	1							
08:00 - 18:00	Area B - Tung Tsz Nursery (CH40-CH130)	General housekeeping & cleaning up sediments from wheel washing bay	Labourer (male)	C406	1	Water Pump 50mm	1									
						Water Pump 75mm	1		1				1			
ļ								1	1							
08:00 - 12:00	Area B - Tung Tsz Nursery (Jacking Pit)	Set up crawler drill and preparation works for grouting	Labourer (male)	C406	2	Air Compressor	1	AC05								
<u> </u>			Plant and Equipment Operator (Hoist and Crane)	C334	1	Crawler Drill	1	DR05	1			and an and a second second second second second second second second second second second second second second				
						Grout Machine			1		h		1			
						Oxy-Acetylene	1		1							
						Water Pump 50mm	1	1								
						Water Pump 75mm	1						[			
						Welding Set	1									
08:00 - 18:00	Area E - Siu Lek Yuen Rd.Playground	<ul> <li>PL 1602.1 - Excavating for heading tunnel at Ch.~5.0 and installation of shoring frames Breaking up brick wall of exsiting manhole for build in Ø1650 pipe</li> <li>PL 1604.1 - Driving sheet piles and fabricating top layer I-beam walings and struts for trench shoring</li> </ul>	Labourer (male)	C406	4	Backhoe	1	EX21								
			Plant and Equipment Operator (Hoist and Crane)	C334	1	Electric Breaker	1	1	f							
						Generator	1									
	-					Oxy-Acetylene			1		h					
						Water Pump 50mm	1									
						Water Pump 75mm	1	1								
						Welding Set	1									
	Area F - Lek Yuen Street Rest Garden	No activity as per KLKJV arrangement														
-(	Area G - Ngan Shing St	No activity as per KLKJV arrangement														
	n tou O - Ngan Shing St.	no activity as per KLAS v atrangement					_									
	Area I - Contractor	No activity as per KLKJV arrangement														
	Office															

Day's record and instructions checked and agreed

Original - ER's File

Duplicate - Contractor

5 Signed:

Engineer's Representative

Signed:

Contractor's Representative

3/8/7012

Signed:

Stephen Poon / RE

3.9.12 Date:

Name/Post:

Date:

Wong Ching Lung / Site Agent

Contract No.: DC/2009/22 Date: 01/09/2012

Day: Saturday

IOW

Tso Sai Kuen / Inspector of Works

3-9-2012

) Juniour