JOB NO.: TCS01271/22

CEDD SERVICE CONTRACT NO. EDO 8/2022
ENVIRONMENTAL TEAM FOR DEVELOPMENT OF ANDERSON ROAD QUARRY SITE – SITE FORMATION AND ASSOCIATED INFRASTRUCTURE WORKS

MONTHLY ENVIRONMENTAL MONITORING AND AUDIT REPORT (OCTOBER 2022)

PREPARED FOR
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT (CEDD)

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Version	Date	Remarks
1	15 November 2022	First submission

EXECUTIVE SUMMARY

ES01 Action-United Environmental Services & Consulting (AUES) has been awarded the Civil Engineering and Development Department (CEDD) Service Contract No. NTE/07/2016 Environmental Team for Development of Anderson Road Quarry Site – Site Formation and Associated Infrastructure Works (hereinafter called "the Service Contract") on 15 December 2016. The commencement date of the Service Contract is from December 2016 and the Contract Period is 70 months. The above Contract No. NTE/07/2016 was completed in late September 2022 and current EM&A works would be covered by new Contract No. EDO 8/2022 from 22 September 2020 for the Contract Period of 12 months.

ES02 The Services under the Service Contract is to provide environmental monitoring and audit (EM&A) services for the Works Contracts pursuant to the requirement of Environmental Team (ET) under the EM&A manual to ensure that the environmental performance of the Works Contracts comply with the requirement specified in the EM&A Manual and EIA Report of Development of Anderson Road Quarry and other relevant statutory requirements.

ES03 To facilitate the project management and implementation, the Service Contract has been divided to three CEDD contracts including Contract NE/2016/01 (Contract 1), Contract NE/2016/05 (Contract 2) and Contract NE/2017/03 (Contract 3). As advised by the Resident Engineer (RE), the commencement date of Contract 1 was 21 December 2016 and the major construction works has been commenced on 12 April 2017. The commencement date of Contract 2 was 31 March 2017 and the major construction activities have been commenced on 2 May 2017. Furthermore, Contract 3 was commenced on 31 May 2018 and the major construction activities works was commenced in November 2018. The EM&A programme under the Project was commenced on 12 April 2017 pursuant to the requirement under the EM&A manual. In addition, variation order for extend service scope to E5, E6, E7 and C10 under Contract ED/2019/02 (Contract 5) was issued by AECOM. The commencement date of Contract 5 was on 30 March 2021. Moreover, variation order for extend service under Contract ED/2020/02 (Contract 4) was issued by AECOM. The commencement date of Contract 4 was on 27 September 2021.

ES04 This is the **67th** monthly EM&A report presenting the monitoring results and inspection findings for the period from **1 to 31 October 2022** (hereinafter 'the Reporting Period').

ENVIRONMENTAL MONITORING AND AUDIT ACTIVITIES

ES05 Environmental monitoring activities under the EM&A programme in the Reporting Period are summarized in the following table.

Environmental Aspect	Environmental Monitoring Parameters / Inspection	Reporting Period	
		Number of Active Monitoring Locations	Total Occasions
Air Quality	1-hour TSP	**6**	**90**
	24-hour TSP	**4**	**20**
Construction Noise	$L_{eq(30min)}$ Daytime for Contract NE/2016/01	**7**	**28**
	$L_{eq(30min)}$ Daytime for Contract NE/2017/03	**3**	**4**

BREACH OF ACTION AND LIMIT (A/L) LEVELS

ES06 No exceedance of air quality was recorded in the Reporting Period. For construction noise monitoring, no Limit Level exceedance was recorded and no noise complaint (which triggered Action Level) was received in the reporting period. The environmental exceedance, NOE issued and investigation of exceedance are summarized in the following table.

Environmental Aspect	Monitoring Parameters	Action Level	Limit Level	Event & Action		
				NOE Issued	Investigation	Corrective Actions

Environmental Aspect	Monitoring Parameters	Action Level	Limit Level	Event & Action		
				NOE Issued	Investigation	Corrective Actions
Air Quality	1-hour TSP	0	0	0	NA	NA
	24-hour TSP	0	0	0	NA	NA
Construction Noise	$L_{eq(30min)}$ Daytime	0	0	0	NA	NA

ENVIRONMENTAL COMPLAINT

ES07 In the reporting period, one (1) environmental complain was received regarding to Air Quality for Contract 1 and Contract 4.

NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

ES08 No environmental summons or successful prosecutions for the Project were recorded in the Reporting Period.

REPORTING CHANGE

ES09 There is no reporting change in the Reporting Period.

SITE INSPECTION

ES10 In this Reporting Period, joint site inspections to evaluate the site environmental performance for ***Contract 1*** were carried out by the RE, ET and Contractor on **6, 11, 18 and 25 October 2022** in which IEC joined the site inspection with SSEMC on **6 October 2022**. No non-compliance was noted during the site inspection.

ES11 In this Reporting Period, joint site inspections to evaluate the site environmental performance for ***Contract 2*** were carried out by the RE, ET and Contractor on **5, 12, 20 and 26 October 2022** in which IEC joined the site inspection on **26 October 2022**. No non-compliance was noted during the site inspection.

ES12 In this Reporting Period, joint site inspections to evaluate the site environmental performance for ***Contract 3*** were carried out by the RE, ET and Contractor on **7, 14, 21 and 28 October 2022** in which IEC joined the site inspection with SSEMC on **14 October 2022.** No non-compliance was noted during the site inspection.

ES13 In this Reporting Period, joint site inspections to evaluate the site environmental performance for ***Contract 4*** were carried out by the RE, ET and Contractor on **5, 12, 19 and 26 October 2022** in which IEC joined the site inspection with SSEMC on **19 October 2022.** No non-compliance was noted during the site inspection.

ES14 In this Reporting Period, joint site inspections to evaluate the site environmental performance for ***Contract 5*** were carried out by the RE, ET and Contractor on **6, 13, 20 and 28 October 2022** in which IEC joined the site inspection on **28 October 2022.** No non-compliance was noted during the site inspection.

FUTURE KEY ISSUES

ES15 The Contractors are reminded to pay special attention on water quality mitigation measures and should fully implement the measures as recommended in the EM&A Manual, in particular to prevent muddy water or other water pollutants from site surface overflow to public area should be properly maintained.

ES16 Since construction site is highly visible to the resident at nearby estates, the Contractors should pay special attention on potential environmental impact generated by the site activities and adhere

implement adequate air quality and noise mitigation measures as far as practicable to reduce the impact to the public.

ES17 Construction noise is one of the key environmental issues during construction work of the Project. Noise mitigation measures such as using quiet plants and noise barriers shall be implemented where practicable according to the EM&A manual.

ES18 In addition, the Contractors should ensure all effluent discharge shall be fulfilled the Technical Memorandum of Effluent Discharged into Drainage and Sewerage Systems, inland and Coastal Waters criteria or relevant discharge license requirement.

Table of Contents

1. INTRODUCTION 1
1.1 PROJECT BACKGROUND 1
1.2 REPORT STRUCTURE 1

2. PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS 3
2.1 CONSTRUCTION CONTRACT PACKAGING 3
2.2 PROJECT ORGANIZATION 4
2.3 CONSTRUCTION PROGRESS 4

3. SUMMARY OF IMPACT MONITORING REQUIREMENTS 9
3.1 GENERAL 9
3.2 MONITORING PARAMETERS 9
3.3 MONITORING LOCATIONS 9
3.4 MONITORING FREQUENCY AND PERIOD 11
3.5 MONITORING EQUIPMENT 12
3.6 MONITORING METHODOLOGY 12
3.7 DERIVATION OF ACTION/LIMIT (A/L) LEVELS 14
3.8 DATA MANAGEMENT AND DATA QA/QC CONTROL 15

4. AIR QUALITY MONITORING 16
4.1 GENERAL 16
4.2 RESULTS OF AIR QUALITY MONITORING 16

5. CONSTRUCTION NOISE MONITORING 18
5.1 GENERAL 18
5.2 NOISE MONITORING RESULTS IN REPORTING MONTH 18

6. WASTE MANAGEMENT 19
6.1 GENERAL WASTE MANAGEMENT 19
6.2 RECORDS OF WASTE QUANTITIES 19

7. SITE INSPECTION 21
7.1 REQUIREMENTS 21
7.2 FINDINGS / DEFICIENCIES DURING THE REPORTING MONTH 21

8. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE 24
8.1 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION 24

9. IMPLEMENTATION STATUS OF MITIGATION MEASURES 27
9.1 GENERAL REQUIREMENTS 27
9.2 TENTATIVE CONSTRUCTION ACTIVITIES IN THE COMING MONTH 27
9.3 KEY ISSUES FOR THE COMING MONTH 29

10. CONCLUSIONS AND RECOMMENDATIONS 30
10.1 CONCLUSIONS 30
10.2 RECOMMENDATIONS 30

LIST OF TABLES

TABLE 2-1 STATUS OF ENVIRONMENTAL LICENSES AND PERMITS OF THE CONTRACT 1
TABLE 2-2 STATUS OF ENVIRONMENTAL LICENSES AND PERMITS OF THE CONTRACT 2
TABLE 2-3 STATUS OF ENVIRONMENTAL LICENSES AND PERMITS OF THE CONTRACT 3
TABLE 2-4 STATUS OF ENVIRONMENTAL LICENSES AND PERMITS OF THE CONTRACT 4
TABLE 2-5 STATUS OF ENVIRONMENTAL LICENSES AND PERMITS OF THE CONTRACT 5
TABLE 3-1 SUMMARY OF EM&A REQUIREMENTS
TABLE 3-2 IMPACT MONITORING STATIONS - AIR QUALITY
TABLE 3-3 IMPACT MONITORING STATIONS - CONSTRUCTION NOISE
TABLE 3-4 ADDITIONAL IMPACT MONITORING STATIONS – CONSTRUCTION NOISE
TABLE 3-5 AIR QUALITY MONITORING EQUIPMENT
TABLE 3-6 CONSTRUCTION NOISE MONITORING EQUIPMENT
TABLE 3-7 ACTION AND LIMIT LEVELS FOR AIR QUALITY MONITORING
TABLE 3-8 ACTION AND LIMIT LEVELS FOR CONSTRUCTION NOISE
TABLE 4-1 SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-1)
TABLE 4-2 SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-2)
TABLE 4-3 SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-3)
TABLE 4-4 SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-5)
TABLE 4-5 SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-6)
TABLE 4-6 SUMMARY OF 24-HOUR AND 1-HOUR TSP MONITORING RESULTS (AMS-7)
TABLE 5-1 SUMMARY OF CONSTRUCTION NOISE MONITORING RESULTS
TABLE 5-2 SUMMARY OF CONSTRUCTION NOISE MONITORING RESULTS
TABLE 6-1 SUMMARY OF QUANTITIES OF INERT C&D MATERIALS
TABLE 6-2 SUMMARY OF QUANTITIES OF C&D WASTES
TABLE 7-1 SITE OBSERVATIONS OF CONTRACT 1
TABLE 7-2 SITE OBSERVATIONS OF CONTRACT 2
TABLE 7-3 SITE OBSERVATIONS OF CONTRACT 3
TABLE 7-4 SITE OBSERVATIONS OF CONTRACT 4
TABLE 7-5 SITE OBSERVATIONS OF CONTRACT 5
TABLE 8-1 STATISTICAL SUMMARY OF ENVIRONMENTAL COMPLAINTS
TABLE 8-2 STATISTICAL SUMMARY OF ENVIRONMENTAL SUMMONS
TABLE 8-3 STATISTICAL SUMMARY OF ENVIRONMENTAL PROSECUTION
TABLE 9-1 ENVIRONMENTAL MITIGATION MEASURES

LIST OF APPENDICES

APPENDIX A LAYOUT PLAN OF THE PROJECT
APPENDIX B PROJECT ORGANIZATION STRUCTURE
APPENDIX C THREE-MONTHS ROLLING CONSTRUCTION PROGRAMME
APPENDIX D MONITORING LOCATIONS FOR IMPACT MONITORING
APPENDIX E CALIBRATION CERTIFICATE OF MONITORING EQUIPMENT AND HOKLAS-ACCREDITATION CERTIFICATE OF THE TESTING LABORATORY
APPENDIX F EVENT AND ACTION PLAN
APPENDIX G IMPACT MONITORING SCHEDULE
APPENDIX H DATABASE OF MONITORING RESULT
APPENDIX I GRAPHICAL PLOTS FOR MONITORING RESULT
APPENDIX J METEOROLOGICAL DATA

APPENDIX K WASTE FLOW TABLE
APPENDIX L IMPLEMENTATION SCHEDULE FOR ENVIRONMENTAL MITIGATION MEASURES
APPENDIX M COMPLAINT LOG
APPENDIX N IMPLEMENTATION STATUS FOR WATER QUALITY MITIGATION MEASURES

INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Action-United Environmental Services & Consulting (hereinafter referred as "AUES") has been awarded the CEDD Service Contract No. NTE/07/2016 Environmental Team for Development of Anderson Road Quarry Site – Site Formation and Associated Infrastructure Works (hereinafter called "the Service Contract") on 15 December 2016. The commencement date of the Service Contract was December 2016 and the Contract Period is 70 months. The above Contract No. NTE/07/2016 was completed in late September 2022 and current EM&A works would be covered by new Contract No. EDO 8/2022 from 22 September 2020 for the Contract Period of 12 months.

1.1.2 The Services under the Service Contract is to provide environmental monitoring and audit (EM&A) services for the Works Contracts pursuant to the requirement of Environmental Team (ET) under the EM&A manual to ensure that the environmental performance of the Works Contracts comply with the requirement specified in the EM&A Manual and Environmental Impact Assessment (EIA) Report of Development of Anderson Road Quarry and other relevant statutory requirements.

1.1.3 Development of Anderson Road Quarry is to provide land and the associated infrastructures for the proposed land used at the existing Anderson Road Quarry Site at the North-eastern of East Kowloon according to the final Recommended Outline Development Plan (hereinafter named as the Project Works).

1.1.4 To facilitate the project management and implementation, the Service Contract has been divided to three CEDD contracts including Contract NE/2016/01 (Contract 1), Contract NE/2016/05 (Contract 2) and Contract NE/2017/03 (Contract 3). As advised by the Resident Engineer (RE), the commencement date of Contract 1 was 21 December 2016 and the major construction works has been commenced on 12 April 2017. The commencement date of Contract 2 was 31 March 2017 and the major construction activities have been commenced on 2 May 2017. Furthermore, Contract 3 was commenced on 31 May 2018 and the major construction activities works was commenced in November 2018. The EM&A programme under the Project was commenced on 12 April 2017 pursuant to the requirement under the EM&A manual. In addition, variation order for extend service scope to E5, E6, E7 and C10 under Contract ED/2019/02 (Contract 5) was issued by AECOM. The commencement date of Contract 5 was on 30 March 2021. Moreover, variation order for extend service under Contract ED/2020/02 (Contract 4) was issued by AECOM. The commencement date of Contract 4 was on 27 September 2021.

1.1.5 According to the Approved EM&A Manual, air quality and noise monitoring are required to be monitored during the construction phase of the Project. As part of the EM&A program, baseline monitoring is required to determine the ambient environmental conditions. Baseline monitoring including air quality and noise conducted between ***January*** and ***April 2019*** at all designated monitoring locations were before construction work commencement. Furthermore, the Baseline Monitoring Report which verified by the Independent Environmental Checker (hereinafter referred as "the IEC") has been submitted to Environmental Protection Department **(**EPD) on ***9 May 2017*** for endorsement.

1.1.6 This is the **67th** monthly EM&A report presenting the monitoring results and inspection findings for the period from **1 to 31 October 2022 (**hereinafter referred as "Reporting Period").

1.2 1.2 REPORT STRUCTURE

1.2.1 The monthly EM&A Report is structured into the following sections:-

Section 1 *Introduction*
Section 2 *Project Organization and Construction Progress*
Section 3 *Summary of Impact Monitoring Requirements*

Section 4 *Air Quality Monitoring*
Section 5 *Construction Noise Monitoring*
Section 6 *Waste Management*
Section 7 *Site Inspections*
Section 8 *Environmental Complaints and Non-Compliance*
Section 9 *Implementation Status of Mitigation Measures*
Section 10 *Conclusions and Recommendations*

2. PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS

2.1 CONSTRUCTION CONTRACT PACKAGING

2.1.1 To facilitate the project management and implementation, the Project was divided by 5 works contracts as described in following. The details of each contract are summarized below and the delineation of each contract is shown in ***Appendix A***.

Contract 1 (Contract No. NE/2016/01)

2.1.2 Commencement date of Contract 1 was in late December 2016 and tentative completion date in June 2023. The major scope of work of Contract 1 is listed below:

- Formation of about 40 hectares (ha) of land platforms at the ARQ site and the associated geotechnical works;
- Road works including construction of approximately 3-kilometer long vehicular roads, footpaths, cycle tracks, an approximately 130-meter long underpass at the southern end an a public transport terminus at the northern end at the ARQ site;
- Provision of and improvement to water supply, drainage and sewerage systems as well as landscaping works; and
- Construction of proposed subway structures and lift tower structures of pedestrian connectivity facilities.

Contract 2 (Contract No. NE/2016/05)

2.1.3 Commencement date of Contract 2 was in March 2017 and tentative completion date in January 2023. The major Scope of Work of the Contract 2 is listed below:

(i) Construction of the following pedestrian connectivity facilities with covered elevated walkways, covered at grad walkways, escalators, life towers with associate staircase and lifts:-
  (a) Linking Hiu Kwong street with Hiu Ming Street (E1)
  (b) Linking the proposed "Footbridge Link at Sau Ming Road" with Hiu Ming Street (E2, C1 and E3)
  (c) Linking the proposed bus-to-bus interchange at Tseung Kwan O Tunnel Toll Plaza with Lin Tak Road (E12)

(ii) Construction of bus-to-bus interchange (BBI) at Tseung Kwan O Tunnel Toll Plaza;

(iii) Associated landscape works;

Contract 3 (Contract No. NE/2017/03)

2.1.4 The commencement date of Contract 3 was in May 2018 and the tentative completion date in September 2023. The major Scope of Work of the Contract 3 is listed below:

(i) Site formation and road works in the following sections:-
  (a) at junction of Clear Water Bay Road (CWBR) and On Sau Road constructed under the Development at Anderson Road (DAR) project including the provision of U-turn facility and noise mitigation measures (RIW1);
  (b) at New Clear Water Bay Road (NCWBR) near Shun Lee Tsuen Road including the road widening works at NCWBR, modification of existing subway structure and provision of noise mitigation measures (RIW2); and
  (c) at the junction of Lin Tak Road and Sau Mau Ping Road, construction of flyover above Tseung Kwan O Road, provision of loading and unloading bays along Lin Tak Road and noise mitigation measures (RIW3).

(ii) construction of the following pedestrian connectivity facilities with covered elevated walkways, escalators and lift towers with associated staircases and lifts:-
  (a) linking Anderson Road Quarry site with the DAR Site (except the works covered under Contract 1) (System A and System B);
  (b) linking Hiu Ming Street with Hiu Yuk Path (E8); and

(c) linking the proposed bus-bus interchange at Tseung Kwan O Tunnel Toll Plaza with Sau Mau Ping Road (E11).

(iii) Associated landscape works.

Contract 4 (Contract No. ED/2020/02)

2.1.5 The commencement date of Contract 4 is in July 2021 and tentative completion date in December 2023. The major Scope of Work of the Contract 4 is listed below:

- Hard landscaping and other ancillary works (e.g. paver footpath, planter walls, benches, lighting etc.)
- Soft landscaping works; landscape deck, emergency vehicular access, access road:
- Park lighting system;
- Electrical and mechanical engineering works for underground water treatment facilities and pumping system for Artificial Flood Attenuation Lake; and
- Potential slope enhancement requested by GEO.

Contract 5 (Contract No. ED/2019/02)

2.1.6 The commencement date of Contract 5 in March 2021 and tentative completion data in April 2024. The major Scope of Work of the Contract 5 is listed below:

- Construction pedestrian connectivity facility with covered elevated walkway, covered at grade walkway and escalators linking Sau Mau Ping Road with the existing covered elevated walkway to Po Tat Estate (E5);
- Construction a pedestrian connectivity facility with covered elevated walkway, covered at grade walkway and escalators linking Sau Mau Ping South Estate with the existing covered walkway to Sau Mau Ping Road (E6);
- Construction a pedestrian connectivity facility with covered elevated walkway, elevated walkway, lift tower with associated staircase and lifts linking Hiu Kwong Street with podium of Sau Ming House, Sau Mau Ping Estate, provision of at grade staircase (E7)'
- Construction a pedestrian connectivity facility with covered elevated walkway, lift tower with associated staircase and lifts linking podium of Po Tat Estate to Sau Mau Ping Road (E10); and
- Ancillary works including electrical and mechanical, slope stabilization, drainage, utilities and landscaping works.

2.2 PROJECT ORGANIZATION

2.2.1 The project organization and contact details for Contracts 1, 2, 3, 4 and 5 are shown in ***Appendix B***.

2.3 CONSTRUCTION PROGRESS

2.3.2 The 3-month rolling construction programme for Contracts 1, 2, 3, 4 and 5 are shown in ***Appendix C***. The major construction activities conducted in the Reporting Period are summarized in below.

Contract 1 (NE/2016/01)

Underpass Tunnel

- Construction of Berm at Slope A3

East Portal Area

- Rock filling works for slope feature
- Overall progress for soil nailing works at slope A1
- Rock cut slope A1
- Excavation work for sewage manhole

- Subbase laying work
- Construction at east portal

PC System A
- Concrete pavement laying work
- External and internal ABWF works
- Metal works
- Lift installation and installation of outdoor louvre
- Waterproofing work

Ventilation Building
- External and internal ABWF works

Retaining Wall RWA12
- Railing installation

Contract 2 (NE/2016/05)
- Temporary Traffic Arrangement (TTA)
- Mass Concrete construction
- Formwork and Falsework installation and dismantling
- Lift Installation and lift Tower Construction
- Rebar fixing

Contract 3 (NE/2017/03)

Pedestrian Connectivity Facility E8 (PC-E8)
- Touch-up outstanding works are in progress.

Pedestrian Connectivity Facility E11 (PC-E11)
- ABWF works and E&M works at LT2 & ST2 are in-progress.
- Backfilling works at PC6 area is in-progress.
- ABWF works and E&M works at LT1 & ST1 are in-progress.
- ABWF work and E&M works inside the footbridge steel frame are in-progress.

Pedestrian Connectivity Facilities Systems A (PC-SYA)
- ABWF works and E&M works at LT1, LT2 & ST1 are in-progress.
- Install lifts at LT1 are in-progress.
- Erect footbridge steel frame and RC works at footbridge are in-progress.

Pedestrian Connectivity Facilities Systems B (PC-SYB)
- RC works at SyB-LT1 & ST1 is in-progress.
- Erect footbridge steel frame is in-progress.
- ELS works at PC1 are in-progress.

Contract 4 (ED/2020/02)
- Excavation work for Drainage Works at Portion 8, 9 & 12
- Drainage works at Portion 2a, 6 ,8, 9 & 12
- Construction of Retaining Wall (Portion 2a, 6,8,12)
- Construction of Planter at Portion 8,12
- GI Works
- Slope works at Portion 10, Portion 17

Contract 5 (ED/2019/02)

Portion 1
- Grouting for E5-PC2 Upper Piling Platform
- Piling Works at E5-PC3

- Blinding layer laying at E5-PC1

Portion 2
- Blinding layer laying atE6-PC1
- Sheetpile driving at E6-PC2
- Excavation atE6-PC3
- Blinding layer laying at E6-PC3

Portion 3
- Sheetpile driving & Wailing welding at E7-F2
- Mobilization of grouting equipment at E7-PC1
- New Piling at E7-PC1
- Relocation of light pole at E7-F2

Portion 4
- Rock Mapping at E10-F1
- Rock Coring at E10-F1
- Scaffolding erection at E10-F1

3.3.3 Summary of the relevant permits, licenses, and/or notifications on environmental protection for the Project of contracts 1, 2, 3, 4 and 5 are presented in ***Tables 2-1, 2-2, 2-3, 2-4 and 2-5***.

Table 2-1 Status of Environmental Licenses and Permits of the Contract 1

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
1	Form NA – Notification pursuant to Air pollution Control (Construction Dust) Regulation	EPD ref. no. 411762	NA	NA	Valid
	Form NB – Notification pursuant to Air pollution Control (Construction Dust) Regulation	EPD ref. no. 412730	NA	NA	Valid
2	Chemical Waste Producer Registration	Registration no. WPN 5213-292-C4115-01	15 Feb 17	End of project	Valid
3	Water Pollution Control Ordinance – Discharge License	WT00041620-2022	30 May 22	31 May 27	Valid
4	Waste Disposal Regulation – Billing Account for Disposal of Construction Waste	Account no. 7026925	20 Jan 17	End of project	Valid
5	Construction Noise Permit	GW-RE0796-22	17 Aug 22	31 Dec 22	Valid

Table 2-2 Status of Environmental Licenses and Permits of the Contract 2

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
1	Notification pursuant to Air pollution Control	EPD ref. no. 312173	NA	NA	Valid

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
	(Construction Dust) Regulation				
2	Chemical Waste Producer Registration	Registration no. WPN 5213-294-K2890-08	7 Jul 17	End of Project	Valid
3	Water Pollution Control Ordinance – Discharge License	Case no. 485699	In Progress		
4	Waste Disposal Regulation – Billing Account for Disposal of Construction Waste	Account no.7027548	12 Apr 17	End of project	Valid

Table 2-3 Status of Environmental Licenses and Permits of the Contract 3

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
1	Form NA – Notification pursuant to Air Pollution Control (Construction Dust) Regulation	EPD ref. no. 434186	31-May-18	NA	Valid
2	Chemical Waste Producer Registration	**For Area R1W3 (E11)** Registration no. WPN : 5213-294-C4239-04	6-Aug-18	End of Project	Valid
		For Area System A Registration no. WPN: 5213-293-C4239-05	6-Aug-18	End of Project	Valid
		For Area System B Registration no. WPN 5213-294-C4239-03	6-Aug-18	End of Project	Valid
		For Area E8 Registration no. WPN 5213-292-C4239-06	6-Aug-18	End of Project	Valid
3	Water Pollution Control Ordinance – Discharge License	**For Area R1W3 (E11)** WT00032742-2018	18-Jan-19	31-Jan-24	Valid
		For Area System A WT00033223-2019	31-Jan-19	31-Jan-24	Valid
		For Area System B WT00033229-2019	24-Jun-19	30-Jun-24	Valid
		For Area E8 WT00033224-2019	21-Mar-19	31-Mar-24	Valid
4	Waste Disposal Regulation – Billing Account for Disposal of Construction Waste	Account no.7031075	20-Jun-18	End of project	Valid

Table 2-4 Status of Environmental Licenses and Permits of the Contract 4

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
1	Form NA – Notification pursuant to Air Pollution Control (Construction Dust) Regulation	EPD ref. no. 470496	19 August 2021	NA	Valid
2	Waste Disposal Regulation – Billing Account for Disposal of Construction Waste	Account no. 7041336	6 September 2021	NA	Valid
3	Chemical Waste Producer Registration	Registration no. WPN 5213-296-C1206-12	14 September 21	End of project	Valid
4	Water Pollution Control Ordinance – Discharge License	Case no. 485340	In Progress		

Table 2-5 Status of Environmental Licenses and Permits of the Contract 5

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
1	Form NA – Notification pursuant to Air Pollution Control (Construction Dust) Regulation	EPD ref. no. 466255	NA	NA	Valid
2	Chemical Waste Producer Registration	Registration no. WPN 5298-293-W3611-01	12 May 21	End of project	Valid
3	Water Pollution Control Ordinance – Discharge License	WT00039694-2021	16 Nov 21	30 Nov 26	Valid
		WT00040919-2022	5 May 22	31 May 27	Valid
		WT00041457-2022	30 June 22	30 June 27	Valid
		WT00040670-2022	28 Mar 22	31 Mar 27	Valid
4	Waste Disposal Regulation – Billing Account for Disposal of Construction Waste	Account no. 7040359	3 May 21	NA	Valid

3. SUMMARY OF IMPACT MONITORING REQUIREMENTS

3.1 GENERAL

3.1.1 The Environmental Monitoring and Audit requirements are set out in the Approved EM&A manual. Environmental issues such as air quality, construction noise and water quality were identified as the key issues during the construction phase of the Project.

3.1.2 A summary of construction phase EM&A requirements are presented in the sub-sections below.

3.2 MONITORING PARAMETERS

THE EM&A PROGRAM OF CONSTRUCTION PHASE MONITORING SHALL COVER THE FOLLOWING ENVIRONMENTAL ISSUES:

- Air quality; and
- Construction noise

3.2.1 A summary of the monitoring parameters is presented in ***Table 3-1.***

Table 3-1 Summary of EM&A Requirements

Environmental Issue	Parameters
Air Quality	• 1-hour TSP by Real-Time Portable Dust Meter; and • 24-hour TSP by High Volume Air Sampler
Noise	• Leq(30min) in normal working days (Monday to Saturday) 07:00-19:00 except public holiday • Supplementary information for data auditing, statistical results such as L_{10} and L_{90} shall also be obtained for reference.

3.3 MONITORING LOCATIONS

3.3.1 According to the EM&A Manual Section 4.6, seven (7) most representative and affected air sensitive receivers (ASR) were selected as air monitoring stations (AQM). During site visit at the subject site before the baseline monitoring, it was noted that some planned ASRs identified in the EM&A Manual are still under construction/ has not yet constructed and there were no suitable location to set up the high volume sampler to carry out the baseline 24-hour TSP monitoring. Therefore, a proposed change for the baseline monitoring programme was submitted and agreed by EPD before the baseline monitoring. The impact air quality monitoring locations are listed in ***Table 3-2*** and illustrated in ***Appendix D.***

Table 3-2 Impact Monitoring Stations – Air Quality

ID	ASR ID in EIA	Location in the EM&A Manual	Identified Location during Site Visit	Status
AMS-1	ACYC-01	Chi Yum Ching She	Ground of Chi Yum Ching facing the project site	Replaced by AMS-1a
AMS-1a (*)	ACYC-01	Tan Shan Village No. 5 - 6	Ground of Tan Shan Village No. 5 - 6 facing the project site	Active
AMS-2 (#)	DARB-13	Block 8, Site B	Ground of Fung Tai House of On Tai Estate	Active
AMS-3 (:)	DARC-16	Planned Clinic and Community Centre, Site C2	Ground of Planned Clinic and Community Centre facing Anderson Road (Ancillary Facilities Building)	Active
AMS-4	DARC-26	Planned School, Site C2 Note 1	Ground of Planned School facing Anderson Road	Not yet commenced
AMS-5	DARE-06	Block 5, DAR Site E	Main roof of Oi Tat House of On Tat Estate facing the	Active

ID	ASR ID in EIA	Location in the EM&A Manual	Identified Location during Site Visit	Status
			project site	
AMS-6	DARE-17	Block 9, Site E	Main roof of Hau Tat House of On Tat Estate facing the project site	Active
AMS-7	AMYT-04	Ma Yau Tong Village	Balcony at 2nd floor of Village House Anderson Road No. 1 facing the project site	Active

Note 1: The ASR is under construction.

(#) AMS-2 was activated on 26 November 2018 since Fung Tai House became an air sensitive receiver. 1-hour TSP monitoring was commenced on 26 November 2018 while installation of HVS for 24-hour TSP was pending approval from Housing Authority.

(*) 24-hour TSP monitoring at AMS1 was abandoned since May 2019 due to lack of power supply and the landlord was unreachable. The alternation location of AMS1a was activated on 15 June 2019 for 1-hour and 24-hour TSP monitoring. The proposal was agreed by EPD on 9 Aug 2019.

(:) AMS-3 was effective on 3 December 2019.

Construction Noise

3.3.2 According to the EM&A Manual Section 5.5, three (3) most representative and affected noise sensitive receivers (NSR) were selected as monitoring stations. As recommended by the RE and agreed by IEC, one (1) additional noise monitoring location is proposed to add in Oi Tat House of On Tat Estate (hereafter "NMS-4") to oversee the possible noise impact pose to the resident in On Tat Estate, which is an existing NSR close to the major works activities. Moreover, review of impact monitoring location was proposed to IEC in view of the current site condition and it was agreed by all parties. The details of noise monitoring location are listed in ***Table 3-3*** and illustrated in ***Appendix D***.

Table 3-3 Impact Monitoring Stations – Construction Noise

ID	NSR ID in EIA	Location	Status
NMS-1	Site C2 – School 05 Note 1	Ground of planned school at DAR facing the project site	Not yet commenced
NMS-2 (@)	Site E – School	Rooftop of S.K.H. St. John's Tsang Shiu Tim Primary School, where 1m from the exterior of the building facing the project site	Active
NMS-3(:)	Site C2 – R102	Ground of Ancillary Facilities Building facing the project site	Active
NMS-4*	Oi Tat House	1m from the exterior of ground floor façade of Oi Tat House of On Tat Estate facing the project site	Suspended
NMS-4a #	Oi Tat House	Rooftop of Oi Tat House where 1m from the exterior of Oi Tat House facing the project site	Active
NMS-5#	Hau Tat House	22/F, refuge floor of Hau Tat House where 1m from the exterior of Hau Tat House facing the project site.	Active
NMS-6~	Yung Tai House of On Tai Estate	Rooftop of Yung Tai House where 1m from the exterior of the building facing the project site)	Active
NMS-7~	Chi Tai House of On Tai Estate	Rooftop of Chi Tai House where 1m from the exterior of the building facing the project site	Active

ID	NSR ID in EIA	Location	Status
NMS-8^	No. 3-4 Ma Yau Tong Village	1m from the exterior of the building façade and facing the construction site	Active

Note 1: Construction of the NSR is not yet commenced.

(*) Additional noise monitoring location was recommended by RE and agreed by IEC. It was temporary suspended and the monitoring location is relocated to NMS4a with effective on 15 Nov 2017.

(@) NMS-2 was effective on 15 November 2019.

(:) NMS-3 was effective on 3 December 2019

(#) Review of noise monitoring locations was proposed by ET and NMS-5 was effective on 15 November 2017.

(~) Review of noise monitoring locations was proposed by ET and NMS-6 and NMS-7 were effective on 28 Feb 2018.

(^) Review of noise monitoring locations was proposed by ET and NMS-8 was effective on 18 April 2018. Noise monitoring at NMS-8 was started on 3 May 2018 upon commencement of construction at relevant section.

Addition Construction Noise Monitoring Location

3.3.3 A Work Instruction was issued from AECOM to AUES in November 2018 for installing three additional noise monitoring stations under Contract 3. According to the Work Instruction, one noise monitoring station was proposed to install at System A Area and two station monitoring points were proposed to install at E8 Area. The noise monitoring locations are shown in ***Table 3-4*** below and illustrated in ***Appendix D***.

Table 3-4 Additional Impact Monitoring Stations – Construction Noise

ID	Location	Description
CN1*	Holm Glad College	Ground floor of Holm Glad College, where 1m from the exterior of the building facing E8
CN2*	Leung Shek Chee College	Ground floor of Leung Shek Chee College, where 1m from the exterior of the building facing E8
CN3	Oi Tat House of On Tat Estate	Ground floor of Oi Tat House of On Tat Estate, where 1m from the exterior of the building facing System A

Note 1: Construction of the NSR is not yet commenced.

(*) Additional noise monitoring location was terminated by RE as the construction work at E8 was completed in September 2022. The last monitoring for CN1&CN2 was on 15 September 2022.

3.4 MONITORING FREQUENCY AND PERIOD

3.4.1 The requirements of impact monitoring in the approved *EM&A Manual* and presented as follows.

Air Quality Monitoring

3.4.2 Frequency of impact air quality monitoring is as follows:

- 1-hour TSP 3 times every six days during course of works throughout the construction period
- 24-hour TSP Once every 6 days during course of works throughout the construction period

Noise Monitoring

3.4.3 Noise monitoring will be to conduct at the all available designated monitoring stations. The monitoring frequency shall depend on the scale of the construction activities. The following is an initial guide on the regular monitoring frequency for each station on a weekly basis when noise generating activities are underway:

- one set of $Leq_{(30min)}$ measurements between 07:00 and 19:00 hours on normal weekdays

3.5 MONITORING EQUIPMENT

Air Quality Monitoring

3.5.1 The 24-hour and 1-hour TSP levels shall be measured by following the standard high volume sampling method as set out in the *Title 40 of the Code of Federal Regulations, Chapter 1 (Part 50),* Appendix *B.* If the ET proposes to use a direct reading dust meter to measure 1-hour TSP levels, it shall submit sufficient information to the IEC to prove that the instrument is capable of achieving a comparable results to the HVS. The instrument should be calibrated regularly, and the 1-hour sampling shall be determined on yearly basis by the HVS to check the validity and accuracy of the results measured by direct reading method. The filter paper of 24-hour TSP measurement shall be determined by HOKLAS accredited laboratory.

3.5.2 All equipment to be used for air quality monitoring is listed in ***Table 3-5***.

Table 3-5 Air Quality Monitoring Equipment

Equipment		Model
24-hour TSP	High Volume Air Sampler	TISCH High Volume Air Sampler, HVS Model TE-5170
	Calibration Kit	TISCH Model TE-5025A
1- hour TSP	Portable Dust Meter	Sibata LD-3B Laser Dust Monitor

Noise Monitoring

3.5.3 Sound level meter in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804: 1985 (Type 1) specifications shall be used for carrying out the noise monitoring. The sound level meter shall be checked using an acoustic calibrator. The wind speed shall be checked with a portable wind speed meter capable of measuring the wind speed in ms-1.

3.5.4 Noise equipment as perform for construction phase monitoring is listed in ***Table 3-6***.

Table 3-6 Construction Noise Monitoring Equipment

Equipment	Model
Integrating Sound Level Meter	NL-31, NL-52
Calibrator	NC-75
Portable Wind Speed Indicator	Anemometer AZ Instrument 8908

3.6 MONITORING METHODOLOGY

1-hour TSP

3.6.1 The 1-hour TSP monitor was a brand named "Sibata LD-3 Laser Dust monitor Particle Mass Profiler & Counter" which is a portable, battery-operated laser photometer. The 1-hour TSP meter provides a real time 1-hour TSP measurement based on 90° light scattering. The 1-hour TSP monitor consists of the following:

(a.) A pump to draw sample aerosol through the optic chamber where TSP is measured;

(b.) A sheath air system to isolate the aerosol in the chamber to keep the optics clean for maximum reliability; and

(c.) A built-in data logger compatible with Windows based program to facilitate data collection, analysis and reporting.

3.6.2 The 1-hour TSP meter to be used will be within the valid period, calibrated by the manufacturer prior to purchasing. Zero response of the instrument will be checked before and after each monitoring event.

24-hour TSP

3.6.3 The equipment used for 24-hour TSP measurement is Thermo Andersen Model GS2310 TSP high volume air sampling system, which complied with *EPA Code of Federal Regulation, Appendix B to Part 50*. The High Volume Air Sampler (HVS) consists of the following:

(a.) An anodized aluminum shelter;
(b.) A 8"x10" stainless steel filter holder;
(c.) A blower motor assembly;
(d.) A continuous flow/pressure recorder;
(e.) A motor speed-voltage control/elapsed time indicator;
(f.) A 7-day mechanical timer, and
(g.) A power supply of 220v/50 Hz

3.6.4 For HVS for 24-hour TSP monitoring, the HVS is mounted in a metallic cage with a top for protection and also it is sat on the existing ground or the roof of building. The flow rate of the HVS between 0.6m^3/min and 1.7m^3/min will be properly set in accordance with the manufacturer's instruction to within the range recommended in *EPA Code of Federal Regulation, Appendix B to Part 50*. Glass Fiber Filter 8" x 10" of TE-653 will be used for 24-Hour TSP monitoring and would be supplied by laboratory. The general procedures of sampling are described as below:-

- A horizontal platform with appropriate support to secure the samples against gusty wind should be provided;
- No two samplers should be placed less than 2 meters apart;
- The distance between the sampler and an obstacle, such as building, must be at least twice the height that the obstacle protrudes above the sample;
- A minimum of 2 meters of separation from any supporting structure, measured horizontally is required;
- Before placing any filter media at the HVS, the power supply will be checked to ensure the sampler work properly;
- The filter paper will be set to align on the screen of HVS to ensure that the gasket formed an air tight seal on the outer edges of the filter. Then filter holder frame will be tightened to the filter hold with swing bolts. The holding pressure should be sufficient to avoid air leakage at the edge;
- The mechanical timer will be set for a sampling period of 24 hours (00:00 mid-night to 00:00 mid-night next day). Information will be recorded on the field data sheet, which would be included the sampling data, starting time, the weather condition at current and the filter paper ID with the initial weight;
- After sampling, the filter paper will be collected and transfer from the filter holder of the HVS to a sealed envelope and sent to a local HOKLAS accredited laboratory for quantifying.

3.6.5 All the sampled 24-hour TSP filters will be kept in normal air conditioned room conditions, i.e. 70% HR (Relative Humidity) and 25°C, for six months prior to disposal.

3.6.6 The HVS used for 24-hour TSP monitoring will be calibrated before the commencement for sampling, and after in two months interval for 1 point checking of maintenance and six months interval for five points calibrate in accordance with the manufacturer's instruction using the NIST-certified standard calibrator (Tisch Calibration Kit Model TE-5025A) to establish a relationship between the follow recorder meter reading in cfm (cubic feet per minute) and the standard flow rate, Qstd, in m^3/min. Motor brushes of HVS will be regularly replaced of about five hundred hours per time. The calibration certificates of all monitoring equipment used for the impact monitoring program in the Reporting Period and the HOKLAS accredited certificate of laboratory are attached in ***Appendix E***.

Noise Monitoring

3.6.7 As referred to in the Technical Memorandum (TM) issued under the NCO, sound level meters

in compliance with the International Electrotechnical Commission Publications 651: 1979 (Type 1) and 804:1985 (Type 1) specifications shall be used for carrying out the noise monitoring. Immediately prior to and following each noise measurement the accuracy of the sound level meter shall be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements may be accepted as valid only if the calibration levels from before and after the noise measurement agree to within 1.0 dB.

3.6.8 All noise measurements will be performed with the meter set to FAST response and on the A-weighted equivalent continuous sound pressure level (Leq). $Leq_{(30\ min)}$ in six consecutive $Leq_{(5\ min)}$ measurements will be used as the monitoring parameter for the time period between 07:00-19:00 hours on weekdays throughout the construction period.

3.6.9 The sound level meter will be mounted d on a tripod at a height of 1.2 m and placed at the assessment point and oriented such that the microphone is pointed to the site with the microphone facing perpendicular to the line of sight. The windshield will be fitted for all measurements. Where a measurement is to be carried out at a building, the assessment point would normally be at a position 1 m from the exterior of the building façade. Where a measurement is to be made for noise being received at a place other than a building, the assessment point would be at a position 1.2 m above the ground in a free-field situation, i.e. at least 3.5 m away from reflective surfaces such as adjacent buildings or walls.

3.6.10 Immediately prior to and following each noise measurement the accuracy of the sound level meter will be checked using an acoustic calibrator generating a known sound pressure level at a known frequency. Measurements will be accepted as valid only if the calibration level from before and after the noise measurement agrees to within 1.0 dB.

3.6.11 Noise measurements will not be made in fog, rain, wind with a steady speed exceeding 5m/s or wind with gusts exceeding 10m/s. The wind speed will be checked with a portable wind speed meter capable of measuring the wind speed in m/s.

3.6.12 The sound level meter and calibrator are calibrated and certified by a laboratory accredited under HOKLAS or any other international accreditation scheme at yearly basis. The calibration certificates of all monitoring equipment used for the impact monitoring program in the Reporting Period is attached in ***Appendix E***.

Meteorological Information

3.6.13 The meteorological information including wind direction, wind speed, humidity, rainfall, air pressure and temperature etc. during baseline monitoring is extracted from the closest Hong Kong Observatory Station. To obtain the most appropriate meteorological information where available, the data of temperature is extracted from the Kwun Tong Observatory Station; the data of wind speed and wind direction are extracted from Kai Tak Observatory Station and the data of humidity is extracted from King's Park Station.

3.7 DERIVATION OF ACTION/LIMIT (A/L) LEVELS

3.7.1 The baseline results form the basis for determining the environmental acceptance criteria for the impact monitoring. According to the approved Environmental Monitoring and Audit Manual, the air quality, construction noise were set up, namely Action and Limit levels are listed in ***Tables 3-7 and 3-8***.

Table 3-7 Action and Limit Levels for Air Quality Monitoring

Monitoring Station	Action Level (μg /m^3)		Limit Level (μg/m^3)	
	1-hour TSP	24-hour TSP	1-hour TSP	24-hour TSP
AMS-1	313	154	500	260
AMS-1a*(*)*	313	154	500	260
AMS-2	319	165	500	260
AMS-3	319	165	500	260

Monitoring Station	Action Level (μg /m³)		Limit Level (μg/m³)	
	1-hour TSP	24-hour TSP	1-hour TSP	24-hour TSP
AMS-4	315	165	500	260
AMS-5	299	166	500	260
AMS-6	303	168	500	260
AMS-7	307	156	500	260

(*) 24-hour TSP monitoring at AMS1 was abandoned since May 2019 due to lack of power supply and the landlord was unreachable. The alternation location of AMS1a was activated on 15 June 2019 for 1-hour and 24-hour TSP monitoring. The proposal was agreed by EPD on 9 Aug 2019.

Table 3-8 Action and Limit Levels for Construction Noise

Monitoring Location	Action Level	Limit Level in dB(A)
	Time Period: 0700-1900 hours on normal weekdays	
NMS-1	When one or more documented complaints are received	***70*** dB(A)[Note 1]/ ***65*** dB(A)[Note 1]
NMS-2(@)		
NMS-3(:)		***75*** dB(A)
NMS-4*		***75*** dB(A)
NMS-4a#		***75*** dB(A)
NMS-5#		***75*** dB(A)
NMS-6~		***75*** dB(A)
NMS-7~		***75*** dB(A)
NMS-8^		***75*** dB(A)
CN1+		***70*** dB(A)[Note 1]/ ***65*** dB(A)[Note 1]
CN2+		***70*** dB(A)[Note 1]/ ***65*** dB(A)[Note 1]
CN3+		***75*** dB(A)

Note 1: Noise Limit Levels for school is 70dB(A) and should be reduced to 65dB(A) during examination period.

Note: If works are to be carried out during restricted hours, the conditions stipulated in the construction noise permit issued by the Noise Control Authority have to be followed.

Remark: (*) Additional noise monitoring location was recommended by RE and agreed by IEC. It was temporary suspended and the monitoring location is relocated to NMS4a with effective on 15 Nov 2017.

(@) NMS-2 was effective on 15 November 2019.

(:) NMS-3 was effective on 3 December 2019

(#) Review of noise monitoring locations was proposed by ET and NMS-5 was effective on 15 Nov 2017.

(~) Review of noise monitoring locations was proposed by ET and NMS-6 and NMS-7 were effective on 28 Feb 2018.

(^) Review of noise monitoring locations was proposed by ET and NMS-8 was effective on 18 April 2018. Noise monitoring at NMS-8 was started on 3 May 2018 upon commencement of construction at relevant section.

(+) Additional noise monitoring locations as instructed by AECOM which effective in Dec 18.

3.7.2 Should non-compliance of the environmental quality criteria occurs, remedial actions will be triggered according to the Event and Action Plan which presented in ***Appendix F.***

3.8 DATA MANAGEMENT AND DATA QA/QC CONTROL

3.8.1 All monitoring data will be handled by the ET's in-house data recording and management system. The monitoring data recorded in the equipment will be downloaded directly from the equipment at the end of each monitoring day. The downloaded monitoring data will input into a computerized database properly maintained by the ET. The laboratory results will be input directly into the computerized database and checked by personnel other than those who input the data.

3.8.2 For monitoring parameters that require laboratory analysis, the local laboratory shall follow the QA/QC requirements as set out under the HOKLAS scheme for the relevant laboratory tests.

4. AIR QUALITY MONITORING

4.1 GENERAL

4.2.1 In the Reporting Period, air quality monitoring was performed at the active designated monitoring locations AMS-1a, AMS-2, AMS-3, AMS-5, AMS-6 and AMS-7. Since installation of HVS for 24-hour TSP at AMS-2 and AMS-3 were pending approval from relevant departments, only 1-hour TSP monitoring was conducted at AMS-2 and AMS-3. No monitoring was conducted at AMS-4 since they are planned ASR which are still under construction/ not yet constructed.

4.2.2 The air quality monitoring schedule is presented in ***Appendix G*** and the monitoring results are summarized in the following sub-sections.

4.3 RESULTS OF AIR QUALITY MONITORING

4.3.1 In the Reporting Period, a total of ***90*** events of 1-hour TSP monitoring and ***20*** events of 24-hours TSP were carried out and the monitoring results are summarized in ***Tables 4-1 to 4-5***. The detailed 24-hour TSP monitoring data are presented in ***Appendix H*** and the relevant graphical plots are shown in ***Appendix I***.

Table 4-1 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-1a)

Date	24-hour TSP (μg/m³)	1-hour TSP (μg/m³)				
		Date	Start Time	1st reading	2nd reading	3rd reading
3-Oct-22	24	5-Oct-22	14:04	63	65	66
8-Oct-22	22	11-Oct-22	14:10	64	65	63
14-Oct-22	33	17-Oct-22	14:18	64	66	68
20-Oct-22	29	22-Oct-22	13:06	67	65	68
26-Oct-22	33	28-Oct-22	14:21	46	32	41
Average (Range)	**28 (22 – 33)**	Average (Range)		**60 (32 – 68)**		

Table 4-2 Summary of 1-hour TSP Monitoring Results (AMS-2)

1-hour TSP (μg/m³)				
Date	**Start Time**	**1st reading**	**2nd reading**	**3rd reading**
5-Oct-22	14:23	68	67	70
11-Oct-22	14:36	67	68	65
17-Oct-22	14:48	67	70	68
22-Oct-22	13:38	70	69	71
28-Oct-22	13:04	44	30	42
Average (Range)		**62 (30 – 71)**		

Table 4-3 Summary of 1-hour TSP Monitoring Results (AMS-3)

1-hour TSP (μg/m³)				
Date	**Start Time**	**1st reading**	**2nd reading**	**3rd reading**
5-Oct-22	14:32	65	68	66
11-Oct-22	14:42	70	67	65
17-Oct-22	14:55	65	67	63
22-Oct-22	13:46	67	70	69
28-Oct-22	9:26	40	48	47
Average (Range)		**62 (40 – 70)**		

Table 4-4 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-5)

Date	24-hour TSP (μg/m³)	1-hour TSP (μg/m³)				
		Date	Start Time	1st reading	2nd reading	3rd reading
3-Oct-22	21	5-Oct-22	9:03	80	78	76
8-Oct-22	34	11-Oct-22	9:13	81	78	80
14-Oct-22	58	17-Oct-22	9:11	76	78	82
20-Oct-22	59	22-Oct-22	9:31	82	83	80
26-Oct-22	50	28-Oct-22	9:42	36	27	42
Average (Range)	**44 (21 – 59)**	Average (Range)		**71 (27 – 83)**		

Table 4-5 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-6)

Date	24-hour TSP (μg/m³)	1-hour TSP (μg/m³)				
		Date	Start Time	1st reading	2nd reading	3rd reading
3-Oct-22	18	5-Oct-22	10:19	78	81	80
8-Oct-22	33	11-Oct-22	10:18	79	78	80
14-Oct-22	57	17-Oct-22	10:22	80	82	83
20-Oct-22	29	22-Oct-22	9:40	81	83	79
26-Oct-22	42	28-Oct-22	10:04	41	28	37
Average (Range)	**36 (18 – 57)**	Average (Range)		**71 (28 – 83)**		

Table 4-6 Summary of 24-hour and 1-hour TSP Monitoring Results (AMS-7)

Date	24-hour TSP (μg/m³)	1-hour TSP (μg/m³)				
		Date	Start Time	1st reading	2nd reading	3rd reading
3-Oct-22	26	5-Oct-22	8:48	77	78	75
8-Oct-22	20	11-Oct-22	8:57	73	75	76
14-Oct-22	38	17-Oct-22	8:58	75	77	78
20-Oct-22	41	22-Oct-22	9:16	77	78	79
26-Oct-22	38	28-Oct-22	13:37	42	29	39
Average (Range)	**33 (20 – 41)**	Average (Range)		**69 (29 – 79)**		

4.3.2 As shown in ***Tables 4-1 to 4-6***, all the 1-hour TSP and 24-hour TSP monitoring results in the Reporting Period were below the Action and Limit Levels. No Notification of Exceedance (NOE) was issued in this Reporting Period.

4.3.3 The meteorological data during the impact monitoring days are summarized in ***Appendix J***.

5. CONSTRUCTION NOISE MONITORING

5.1 GENERAL

5.2.1 In the Reporting Period, noise monitoring was performed at designated monitoring locations NMS2 and NMS3 and the additional monitoring locations NMS4a, NMS5, NMS6, NMS7 and NMS8. No monitoring was conducted at the designated monitoring locations NMS1 since they are the planned NSR and still under the construction.

5.2.2 In addition, a Work Instruction was issued from AECOM to AUES in November 2018 for installing three additional noise monitoring stations, i.e., CN1, CN2 and CN3 for Contract 3. Impact noise monitoring was performed at the three additional noise monitoring locations since December 2018. Additional noise monitoring location was terminated by RE as the construction work at E8 was completed in September 2022. The last monitoring for CN1&CN2 was on 15 September 2022.

5.2.3 The noise monitoring schedule is presented in ***Appendix G*** and the monitoring results are summarized in the following sub-sections.

5.3 NOISE MONITORING RESULTS IN REPORTING MONTH

5.3.1 In the Reporting Period, a total of **28** events noise measurements were carried out at the designated locations under Contract 1. The noise monitoring results at the designated locations are summarized in ***Tables 5-1.*** The detailed noise monitoring data are presented in ***Appendix H*** and the relevant graphical plots are shown in ***Appendix I***.

Table 5-1 Summary of Construction Noise Monitoring Results for Contract 1

Construction Noise Level ($L_{eq30min}$), dB(A)							
Date	**NMS2**	**NMS3**	**NMS4a**	**NMS5**	**NMS6**	**NMS7**	**NMS8**
5-Oct-22	64	62	70	71	67	67	64
11-Oct-22	63	62	69	70	67	67	64
17-Oct-22	62	63	68	70	67	68	63
28-Oct-22	63	61	66	67	66	67	63
Limit Level	***70*** dB(A) / ***65*** dB(A)[Note 1]	**75 dB(A)**					

Note 1: Noise Limit Levels for school is 70dB(A) and should be reduced to 65dB(A) during examination period;

5.3.2 For the additional noise monitoring under Contract 3, a total of **4** events noise measurements were performed for the Contract. The noise monitoring results are summarized in ***Tables 5-2.*** The detailed noise monitoring data are presented in ***Appendix H*** and the relevant graphical plots are shown in ***Appendix I***.

Table 5-2 Summary of Construction Noise Monitoring Results for Contract 3

Construction Noise Level ($L_{eq30min}$), dB(A)	
Date	**CN3**
5-Oct-22	64
11-Oct-22	65
17-Oct-22	65
28-Oct-22	67
Limit Level	**75 dB(A)**

Note 1: Noise Limit Levels for school is 70dB(A) and should be reduced to 65dB(A) during examination period.

5.3.3 As shown in ***Tables 5-1 and 5-2,*** no Limit Level exceedance was recorded in this Reporting Period. No noise complaint (which triggered Action level exceedance) was received under the Project.

6. WASTE MANAGEMENT

6.1 GENERAL WASTE MANAGEMENT

6.2.1 Waste management was carried out by an on-site Environmental Officer or an Environmental Supervisor from time to time.

6.3 RECORDS OF WASTE QUANTITIES

6.3.1 All types of waste arising from the construction work are classified into the following:

- Construction & Demolition (C&D) Material;
- Chemical Waste;
- General Refuse; and
- Excavated Soil.

6.3.2 The quantities of waste for disposal in this Reporting Period are summarized in ***Tables 6-1*** and ***6-2*** and the Monthly Summary Waste Flow Table is shown in ***Appendix K***. Whenever possible, materials were reused on-site as far as practicable.

Table 6-1 Summary of Quantities of Inert C&D Materials

Type of Waste	Contract 1		Contract 2		Contract 3		Contract 4		Contract 5	
	Quantity	Disposal Location	Quantity	Disposal Location	Quantity	Disposal Location	Quantity	Disposal Location	Quantity	Disposal Location
Total generated Inert C&D Materials ('000m^3) (#)	24.468	-	0	-	1.374	-	561.180	-	0.381	-
Hard Rock and Large Broken Concrete ('000m^3)	0	-	0	-	0	-	0	-	0.374	-
Reused in this Contract (Inert) ('000m^3)	0	-	0	-	0.015	-	0	-	0.007	-
Reused in other Projects (Inert) ('000m^3)	23.920	*	0	-	0.472	-	0	*	0	-
Disposal as Public Fill (Inert) ('000m^3)	0.548	TKO 137	0	-	0.886	TKO 137	561.180	TKO 137	0.374	TKO 137

Remark (#): The total generated inert C&D materials will not take account for the hard rock and large broken concrete.
(*) Approved alternative disposal ground.

Table 6-2 Summary of Quantities of C&D Wastes

Type of Waste	Contract 1		Contract 2		Contract 3		Contract 4		Contract 5	
	Quantity	Disposal Location	Quantity	Disposal Location	Quantity	Disposal Location	Quantity	Disposal Location	Quantity	Disposal Location
Recycled Metal ('000kg)	0	-	0	-	0	-	0	-	0	-
Recycled Paper / Cardboard Packing ('000kg)	0	-	0	-	0	-	0	-	0	-
Recycled Plastic ('000kg)	0	-	0	-	1.204	Licensed collector	0	-	0	-
Chemical Wastes ('000kg)	0	-	0	-	0	-	0	-	0	-
General Refuses ('000m^3)	0.069	SENT	0.04	SENT	0.047	SENT	0	-	0.044	SENT

7. SITE INSPECTION

7.1 REQUIREMENTS

7.1.1 According to the approved EM&A Manual, the environmental site inspection shall be formulation by ET Leader. Weekly environmental site inspections should be carried out to confirm the environmental performance.

7.2 FINDINGS / DEFICIENCIES DURING THE REPORTING MONTH

Contract 1

7.2.1 In the Reporting Period, joint site inspections for Contract 1 to evaluate site environmental performance were carried out by the RE, ET and the Contractor on **6, 11, 18 and 25 October 2022** in which IEC joined the site inspection with SSEMC on **6 October 2022**. No non-compliance was noted. The findings / deficiencies of ***Contract 1*** that observed during the weekly site inspection are listed in ***Table 7-1***.

Table 7-1 Site Observations of Contract 1

Date	Findings / Deficiencies	Follow-Up Status
6 October 2022	• No adverse environmental issue was observed during site inspection.	• NA
11 October 2022	• The Contractor was reminded to apply mosquito control at East Portal. • The Contractor was reminded to spray water regularly at G2 for dust mitigation.	• Reminder only • Reminder only
18 October 2022	• The Contractor was advised to cover open stockpiles at work of G2 site. • The Contractor was reminded to spray water regularly at exposed work area.	• Stockpile of cement at G2 site was removed. • Reminder only
25 October 2022	• Drip tray should be provided for chemical storage on-site. (Platform 185) • During dry and windy season, water spraying frequency for the haul road and exposed area should be increased to reduce dust impact. (General)	• Chemical containers was removed. • Reminder only.

Contract 2

7.2.2 In the Reporting Period, joint site inspections for Contract 2 to evaluate site environmental performance were carried out by the RE, ET and the Contractor on **5, 12, 20 and 26 October 2022** in which IEC joined the site inspection with SSEMC on **26 October 2022**. No non-compliance was noted. The findings / deficiencies of ***Contract 2*** that observed during the weekly site inspection are listed in ***Table 7-2***.

Table 7-2 Site Observations of Contract 2

Date	Findings / Deficiencies	Follow-Up Status
5 October 2022	• The Contractor was advised to cover stock pile with tarpaulin sheet to avoid dust generation at E2. • The Contractor was reminded to clean stagnant water regularly at E2.	• Stock pile is covered with tarpaulin sheet. • Reminder only
12 October 2022	• The Contractor was reminded to dispose general refuse regularly at E2. • The Contractor was reminded to enhance house-keeping at E3.	• Reminder only. • Reminder only.
20 October 2022	• No adverse environmental issue was observed during site inspection.	• NA

Date	Findings / Deficiencies	Follow-Up Status
26 October 2022	• Suspected spilled oil from generator should be cleaned properly and the generator should be checked. (E3) • The Contractor was reminded to dispose construction waste accumulated on site regularly.	• Spilled oil from generator was cleaned. • Reminder only.

Contract 3

7.2.3 In the Reporting Period, joint site inspections for Contract 3 to evaluate site environmental performance were carried out by the RE, ET and the Contractor on **7, 14, 21 and 28 October 2022** in which IEC joined the site inspection with SSEMC on **14 October 2022**. No non-compliance was noted. The findings / deficiencies of ***Contract 3*** that observed during the weekly site inspection are listed in ***Table 7-3***

Table 7-3 Site Observations of Contract 3

Date	Findings / Deficiencies	Follow-Up Status
7 October 2022	• The Contractor was reminded to clean stagnant water regularly to avoid mosquito breeding.	• Reminder only
14 October 2022	• No adverse environmental issue was observed.	• NA
21 October 2022	• Construction waste should be disposed regularly. (E11) • Opened cement bag should be disposed properly to reduce dust generation. (E11)	• Construction waste was removed. • Opened cement bag was removed.
28 October 2022	• Accumulated muddy water at drainage channel should be removed. (E8) • The Contractor was reminded to spray water on site regularly.	• Muddy water at drainage channel was removed. • Reminder only

Contract 4

7.2.4 In the Reporting Period, joint site inspections for Contract 4 to evaluate site environmental performance were carried out by the RE, ET and the Contractor on **5, 12, 19 and 26 October 2022** in which IEC joined the site inspection with SSEMC on **19 October 2022**. No non-compliance was noted. The findings / deficiencies of ***Contract 4*** that observed during the weekly site inspection are listed in ***Table 7-4***

Table 7-4 Site Observations of Contract 4

Date	Findings / Deficiencies	Follow-Up Status
5 October 2022	• No adverse environmental issue was observed.	• NA
12 October 2022	• No adverse environmental issue was observed.	• NA
19 October 2022	• The Contractor was advised to provide NRMM label for excavator at Portion 8. • The Contractor was reminded to spray water regularly at exposed work area.	• NRMM label was displayed properly for NRMM using on-site. • Reminder only
26 October 2022	• During dry and windy season, water spraying frequency for the haul road and exposed area should be increased to reduce	• Reminder only

Date	Findings / Deficiencies	Follow-Up Status
	dust impact. (General)	

Contract 5

7.2.5 In the Reporting Period, joint site inspections for Contract 5 to evaluate site environmental performance were carried out by the RE, ET and the Contractor on **6, 13, 20 and 28 October 2022** in which IEC joined the site inspection on **28 October 2022**. No non-compliance was noted. The findings / deficiencies of ***Contract 5*** that observed during the weekly site inspection are listed in ***Table 7-5***

Table 7-5 Site Observations of Contract 5

Date	Findings / Deficiencies	Follow-Up Status
6 October 2022	• Chemical containers should be placed inside drip tray to avoid land contamination. (E10) • The Contractor was reminded to spray water regularly at haul road regularly to reduce dust generation.	• Drip tray was provided for chemical containers. • Reminder only
13 October 2022	• The Contractor was reminded to remove stagnant water accumulated on site regularly.	• Reminder only
20 October 2022	• The Contractor was reminded to provide water spraying on site regularly.	• Reminder only
28 October 2022	• The Contractor was reminded to remove debris at drip tray under generator. (E5)	• Reminder only

8. ENVIRONMENTAL COMPLAINT AND NON-COMPLIANCE

8.1 ENVIRONMENTAL COMPLAINT, SUMMONS AND PROSECUTION

8.1.1 In the Reporting Period, one (1) environmental complaint was received regarding to Air Quality for Contract 1 and Contract 4. Besides, no summons and prosecution under the EM&A Programme was lodged for the project. Investigation for the complaint was undertaken and presented in following sections.

Complaint received by ET on 20 October 2022

8.1.2 A public complaint was referred by 1823 to EPD on 18 October 2022, regarding the dust problem generated from the construction site in Anderson Road near On Tai Estate due to typhoon signal no. 3. EPD contacted the complainant who was a resident of Shing Tai House, On Tai Estate. The complainant expressed concern about the construction dust generated from Anderson Road Quarry (ARQ) site and requested the site to step up dust suppression measures (e.g. more frequent watering on exposed soil surfaces).

8.1.3 The case was then referred to CEDD to follow up. The complaint handling procedure in accordance with the Environmental Monitoring & Audit Manual was triggered. Environmental Team (ET) would investigate if the complaint was related to the Development of Anderson Road Quarry Site Project.

8.1.4 There were two works contracts in the Project that were working at the Site concerned, namely Contract 1 and Contract 4

8.1.5 As confirmed by the Contractor of Contract 1, the major construction activities carried out in ARQ Site on or before 18 October 2022 were roadworks and excavation in Site G-2. Site inspections were carried out on daily basis by CWSTVJV and AECOM, and jointly among AECOM, CWSTVJV and ET on weekly basis for implementation of environmental mitigation measures. The observation during site inspections on 18 and 25 October 2022 are summarised as follows.

8.1.6 As dust mitigation measures, water spraying by sprinkler and water bowser was applied to excavation works at Site G2. Besides, vehicular access roads under Contract 1 were mostly hard paved and they were sprayed continuously by two water bowsers and water sprinklers. Moreover, majority area under Contract 1 was hard paved and no notable fugitive dust problem was observed.

8.1.7 As confirmed by the Contractor of Contract 4, there were no site activities carried out near Shing Tai House. The major construction activities carried out in ARQ Site included excavation, construction of retaining wall, ground investigation and slope works. Site inspections were carried out on daily basis by CIWEC and AECOM, and jointly among the AECOM, CIWEC and ET on weekly basis for implementation of environmental mitigation measures. On 19 and 26 October 2022, it was observed that, as dust mitigation measures, part of the exposed surfaces were covered by green nets to minimize generation of fugitive dust. CIWEC had been reminded from time to time, in particular during dry season, to enhance the dust suppression measures as far as practicable.

8.1.8 However, noticeable dust impact generated by interfacing contractors on the platform same as ARQ Site was observed in October 2022.

8.1.9 EPD conducted site visit with representatives of AECOM and both Contractors of Contract 1 and Contract 4 on 21 October 2022 for the complaint investigation. EPD did not have adverse comments on Contract 1, but reminder on implementation dust suppressive measures was provided to the Contractor of Contract 4. In addition, EPD also observed noticeable dust impact generated by the interfacing contractors on the ARQ Site platform.

8.1.10 EM&A programme was executed by the ET to monitor the potential environmental impact arising from the Project and take readily action to respond to any deficiencies found on Site. There was one air quality monitoring station in On Tai Estate, which was located on ground level of Fung Tai House (AMS-2), and there were two air quality monitoring stations in On Tat Estate,

namely Oi Tat House (AMS-5) and Hau Tat House (AMS-6). According to the impact air quality monitoring results obtained in September 2022, no exceedances of environmental performance criteria were recorded, which suggested that the air quality representative sensitive receivers and nearby locations were within acceptable level.

8.1.11 In our investigation, both the Contractors had implemented dust mitigation measures to reduce to potential impact to the public. However, in particular during dry season, Contract 4 was reminded to enhance the dust suppressive measures as far as practicable. As there were no air monitoring results exceeding the limit level, it is considered that the dust mitigation measures implemented were effective in suppressing the fugitive dust.

8.1.12 Nevertheless, as the construction site is close to the residential area, both the Contractors were reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.

8.1.13 The complaint log and Investigation Reports issued in the Reporting Period are shown in ***Appendix M.***

8.1.14 The statistical summary table of environmental complaint, summons and prosecution is presented in ***Tables 8-1, 8-2*** and ***8-3***.

Table 8-1 Statistical Summary of Environmental Complaints

Reporting Period	Contract no.	Environmental Complaint Statistics		
		Frequency	Cumulative	Complaint Nature
1 Apr 2017 – 30 September 2022	1	0	**62**	**Dust, Noise, Water and light nuisance**
21 Mar 2017 – 30 September 2022	2	0	**10**	**Noise**
31 May 2018 – 30 September 2022	3	0	**8**	**Waste Management, Noise, Water Quality**
27 Sep 2021 – 30 September 2022	4	0	**3**	**Water Quality**
30 Mar 2021 – 30 September 2022	5	0	**0**	NA
1 – 31 October 2022	1	1	**63**	Air Quality
	2	0	**10**	NA
	3	0	**8**	NA
	4	1	**4**	Air Quality
	5	0	**0**	NA

Table 8-2 Statistical Summary of Environmental Summons

Reporting Period	Contract no.	Environmental Summons Statistics		
		Frequency	Cumulative	Summons Nature
1 Apr 2017 – 30 September 2022	1	0	0	NA
21 Mar 2017 – 30 September 2022	2	0	0	NA
31 May 2018 – 30 September 2022	3	0	0	NA
27 Sep 2021 – 30 September 2022	4	0	0	NA
30 Mar 2021 – 30 September 2022	5	0	0	NA
1 – 31 October 2022	1	0	0	NA

Reporting Period	Contract no.	Environmental Summons Statistics		
		Frequency	Cumulative	Summons Nature
	2	0	0	NA
	3	0	0	NA
	4	0	0	NA
	5	0	0	NA

Table 8-3 Statistical Summary of Environmental Prosecution

Reporting Period	Contract no.	Environmental Prosecution Statistics		
		Frequency	Cumulative	Prosecution Nature
1 Apr 2017 – 30 September 2022	1	0	0	NA
21 Mar 2017 – 30 September 2022	2	0	0	NA
31 May 2018 – 30 September 2022	3	0	0	NA
27 Sep 2021 – 30 September 2022	4	0	0	NA
30 Mar 2021 – 30 September 2022	5	0	0	NA
1 – 31 October 2022	1	0	0	NA
	2	0	0	NA
	3	0	0	NA
	4	0	0	NA
	5	0	0	NA

9. IMPLEMENTATION STATUS OF MITIGATION MEASURES

9.1 GENERAL REQUIREMENTS

9.1.1 The environmental mitigation measures that recommended in the Implementation Schedule for Environmental Mitigation Measures (ISEMM) in the approved EM&A Manual covered the issues of dust, noise, water and waste and they are summarized presented in ***Appendix L.***

9.1.2 All contracts under the Project shall be implementing the required environmental mitigation measures according to the approved EM&A Manual as subject to the site condition. Environmental mitigation measures generally implemented in this Reporting Period are summarized in ***Table 9-1***.

Table 9-1 Environmental Mitigation Measures

Issues	Environmental Mitigation Measures
Water Quality	• Wastewater to be treated by filtration system; such as, silt curtain or sedimentation tank before discharge. • Replace silt curtain materials if necessary
Air Quality	• Maintain damp / wet surface on access road • Keep slow speed in the sites • All vehicles must use wheel washing facility before off site • All vehicles must use wheel washing facility before off site • Sprayed water during breaking works
Noise	• Restrain operation time of plants from 07:00 to 19:00 on any working day except for Public Holiday and Sunday. • Keep good maintenance of plants • Place noisy plants away from residence or school • Provide noise barriers or hoarding to enclose the noisy plants or works • Shut down the plants when not in used.
Waste and Chemical Management	• On-site sorting prior to disposal • Follow requirements and procedures of the "Trip-ticket System" • Predict required quantity of • concrete accurately • Collect the unused fresh concrete at designated locations in the sites for subsequent disposal
General	• The site was generally kept tidy and clean.

9.2 TENTATIVE CONSTRUCTION ACTIVITIES IN THE COMING MONTH

Contract 1 (NE/2016/01)

Underpass Tunnel

- Construction of Berm at Slope A3

East Portal Area

- Rock filling works for slope feature
- Overall progress for soil nailing works at slope A1
- Rock cut slope A1
- Excavation work for sewage manhole
- Subbase laying work
- Construction at east portal

PC System A

- Concrete pavement laying work
- External and internal ABWF works
- Metal works
- Lift installation and installation of outdoor louvre
- Waterproofing work

Ventilation Building
- External and internal ABWF works

Retaining Wall RWA12
- Railing installation

Contract 2 (NE/2016/05)
- Temporary Traffic Arrangement (TTA)
- Mass Concrete construction
- Formwork and Falsework installation and dismantling
- Lift Installation and lift Tower Construction
- Rebar fixing

Contract 3 (NE/2017/03)

Pedestrian Connectivity Facility E8 (PC-E8)
- Touch-up outstanding works are in progress.

Pedestrian Connectivity Facility E11 (PC-E11)
- ABWF works and E&M works at LT2 & ST2 are in-progress.
- Backfilling works at PC6 area is in-progress.
- ABWF works and E&M works at LT1 & ST1 are in-progress.
- ABWF work and E&M works inside the footbridge steel frame are in-progress.

Pedestrian Connectivity Facilities Systems A (PC-SYA)
- ABWF works and E&M works at LT1, LT2 & ST1 are in-progress.
- Install lifts at LT1 are in-progress.
- Erect footbridge steel frame and RC works at footbridge are in-progress.

Pedestrian Connectivity Facilities Systems B (PC-SYB)
- RC works at SyB-LT1 & ST1 is in-progress.
- Erect footbridge steel frame is in-progress.
- ELS works at PC1 are in-progress.

Contract 4 (ED/2020/02)
- Excavation work for Drainage Works at Portion 2a, 6 ,8, 9 & 12
- Drainage works at Portion 2a, 6 ,8, 9 & 12
- Construction of Retaining Wall (Portion 2a, 6,8,12)
- Construction of Planter at Portion 8,12
- Slope works at Portion 10, Portion 17
- Preparation works for Construction of bridge at Portion 13b

Contract 5 (ED/2019/02)

Portion 1
- Grouting for E5-PC2 Upper Piling Platform
- Piling Works at E5-PC3
- Blinding layer laying at E5-PC1

Portion 2
- Blinding layer laying atE6-PC1
- Sheetpile driving at E6-PC2
- Excavation atE6-PC3
- Blinding layer laying at E6-PC3

Portion 3

- Sheetpile driving & Wailing welding at E7-F2
- Mobilization of grouting equipment at E7-PC1
- New Piling at E7-PC1
- Relocation of light pole at E7-F2

Portion 4

- Rock Mapping at E10-F1
- Rock Coring at E10-F1
- Scaffolding erection at E10-F1

9.3 KEY ISSUES FOR THE COMING MONTH

9.3.1 Key issues to be considered in the coming month include:

- Implementation of dust suppression measures at all times;
- Potential wastewater quality impact due to surface runoff;
- Potential fugitive dust quality impact due from the dry/loose/exposure soil surface/dusty material;
- Disposal of empty engine oil containers within site area;
- Ensure dust suppression measures are implemented properly;
- Sediment catch-pits and silt removal facilities should be regularly maintained;
- Management of chemical wastes;
- Discharge of site effluent to the nearby wetland, stockpiling or disposal of materials, and any dredging or construction area at this area are prohibited;
- Follow-up of improvement on general waste management issues; and
- Implementation of construction noise preventative control measures

9.3.2 During wet season, the Contractors should pay special attention on water quality mitigation measures and fully implement according to the ISEMM of the EM&A Manual, in particular to prevent muddy water or other water pollutants from site surface overflow to public area should be properly maintained. The implementation of water quality mitigation measures conducted by the Contractor is shown in ***Appendix N***.

10. CONCLUSIONS AND RECOMMENDATIONS

10.1 CONCLUSIONS

10.1.1 This is **67th** monthly EM&A report presenting the monitoring results and inspection findings for the Reporting Period from **1** to **31 October 2022**.

10.1.2 No 24-hour or 1-hour TSP monitoring and noise monitoring results that triggered the Action or Limit Levels were recorded. No NOEs or the associated corrective actions were therefore issued.

10.1.3 In the Reporting Period, no exceedance was recorded and no Notification of Exceedance was issued. Moreover, no noise complaints (which triggered Action Level) were received for the Project.

10.1.4 In the Reporting Period, one (1) environmental complaints were received regarding to Air Quality for Contract 1 and Contract 4.

10.1.5 No notification of summons or successful prosecution was received under the Project.

10.1.6 During the Reporting Period, weekly joint site inspection by the RE, ET with the relevant Main-contractor was carried out for Contracts 1, 2, 3, 4 and 5 in accordance with the EM&A Manual stipulation whereas IEC performed monthly site inspection for both contracts. No non-compliance observed during the site inspection.

10.2 RECOMMENDATIONS

10.2.1 The Contractors are reminded to pay special attention on water quality mitigation measures and should fully implement the measures as recommended in the EM&A Manual, in particular to prevent muddy water or other water pollutants from site surface overflow to public area should be properly maintained.

10.2.2 Since construction site is highly visible to the resident at nearby estates, the Contractors should pay special attention on potential environmental impact generated by the site activities and adhere implement adequate air quality and noise mitigation measures as far as practicable to reduce the impact to the public.

10.2.3 Construction noise is one of the key environmental issues during construction work of the Project. Noise mitigation measures such as using quiet plants and noise barriers shall be implemented where practicable according to the EM&A manual.

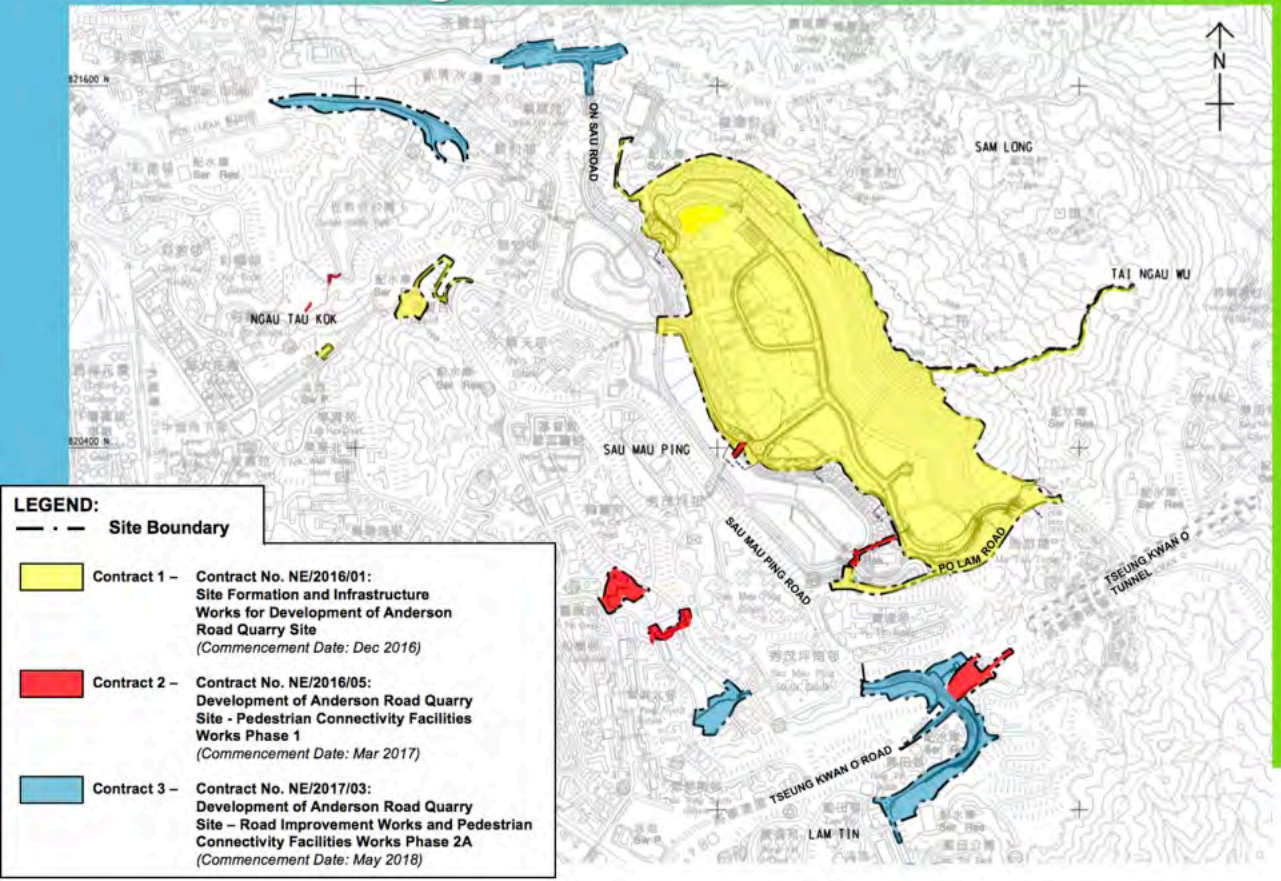
10.2.4 In addition, the Contractors should ensure all effluent discharge shall be fulfilled the Technical Memorandum of Effluent Discharged into Drainage and Sewerage Systems, inland and Coastal Waters criteria or relevant discharge license requirement.

10.2.5 Mosquito control measures should be continued to prevent mosquito breeding on site.

Appendix A

Layout plan of the Project

Contract Packages



LEGEND:

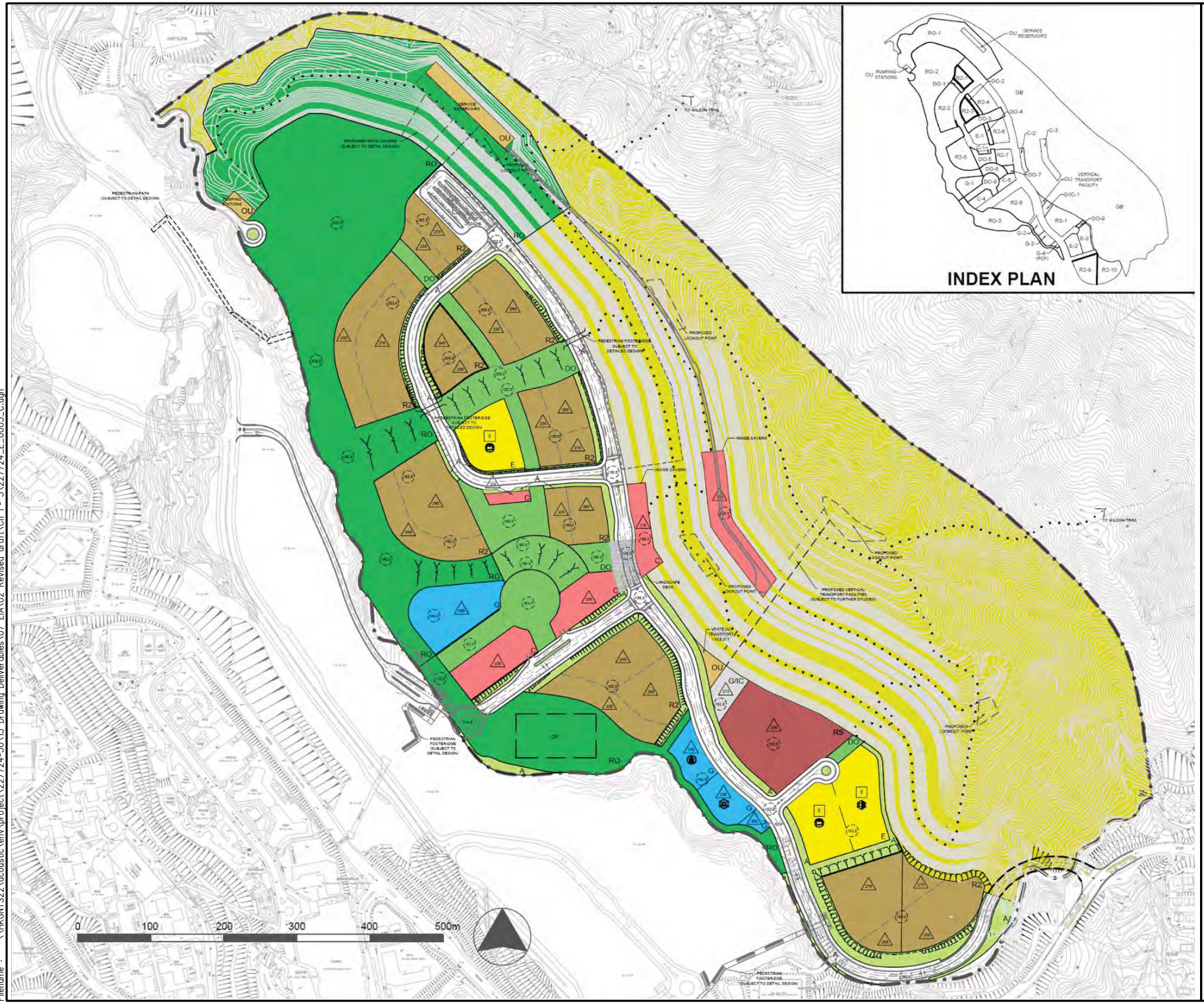
— · — **Site Boundary**

Contract 1 – **Contract No. NE/2016/01:**
Site Formation and Infrastructure Works for Development of Anderson Road Quarry Site
(Commencement Date: Dec 2016)

Contract 2 – **Contract No. NE/2016/05:**
Development of Anderson Road Quarry Site - Pedestrian Connectivity Facilities Works Phase 1
(Commencement Date: Mar 2017)

Contract 3 – **Contract No. NE/2017/03:**
Development of Anderson Road Quarry Site – Road Improvement Works and Pedestrian Connectivity Facilities Works Phase 2A
(Commencement Date: May 2018)

Layout plan of Contract 1 (N/2016/01)



Rev	Description	By	Date
C	THIRD ISSUE	GL	03/14
B	SECOND ISSUE	GL	01/14
A	FIRST ISSUE	GL	10/13

Consultant

ARUP

Contract No. and Title

Agreement No. CE 18/2012(CE)

Development of Anderson Road Quarry - Investigation

Drawing title

Recommended Outline Development Plan

Drawing no.		Rev.
227724/E/0003		C
Drawn: GL	Date: 03/14	Checked: TC / Approved: ST
Scale: AS SHOWN	Status: PRELIMINARY	

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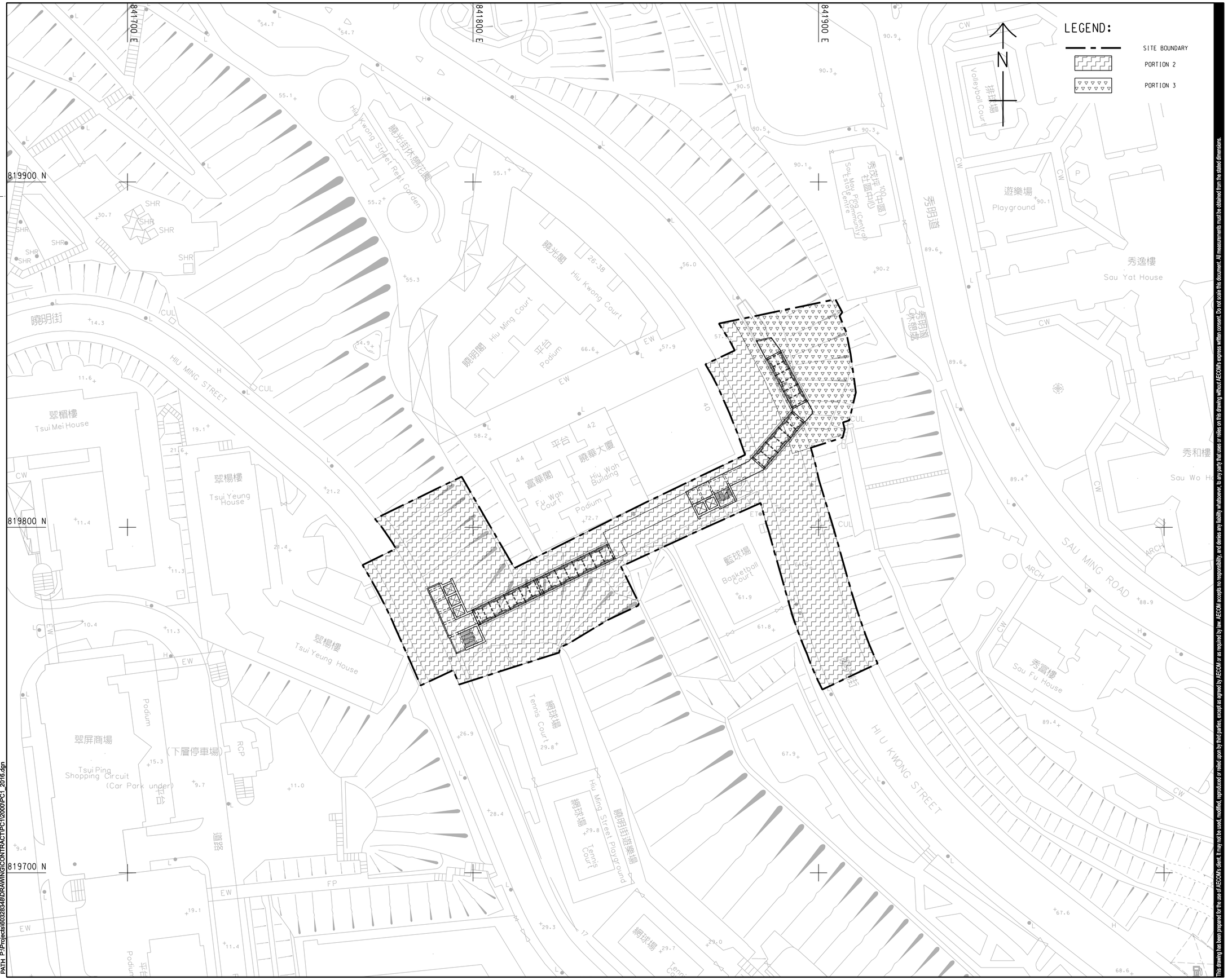
Filename : \\HKGNTS22\acoustic\env\project\227724-50\13 Drawing Deliverables\07 EIA\02 Revised draft\Ch 1 - 3\227724_E_0003_C.dgn

Layout plan of Contract 2 (NE/2016/05)



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AECOM

PROJECT 項目

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
PEDESTRIAN CONNECTIVITY FACILITIES WORKS PHASE 1

CLIENT 業主

CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT 工程顧問公司

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I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
-	OCT. 16	TENDER DRAWING	AC

STATUS 階段

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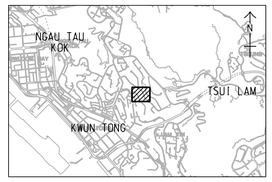

PROJECT NO. 項目編號: 60328348

CONTRACT NO. 合約編號: NE/2016/05

SHEET TITLE 圖紙名稱

E2-C1-E3 - PORTION OF SITE

SHEET NUMBER 圖紙編號

60328348/PC1/2016

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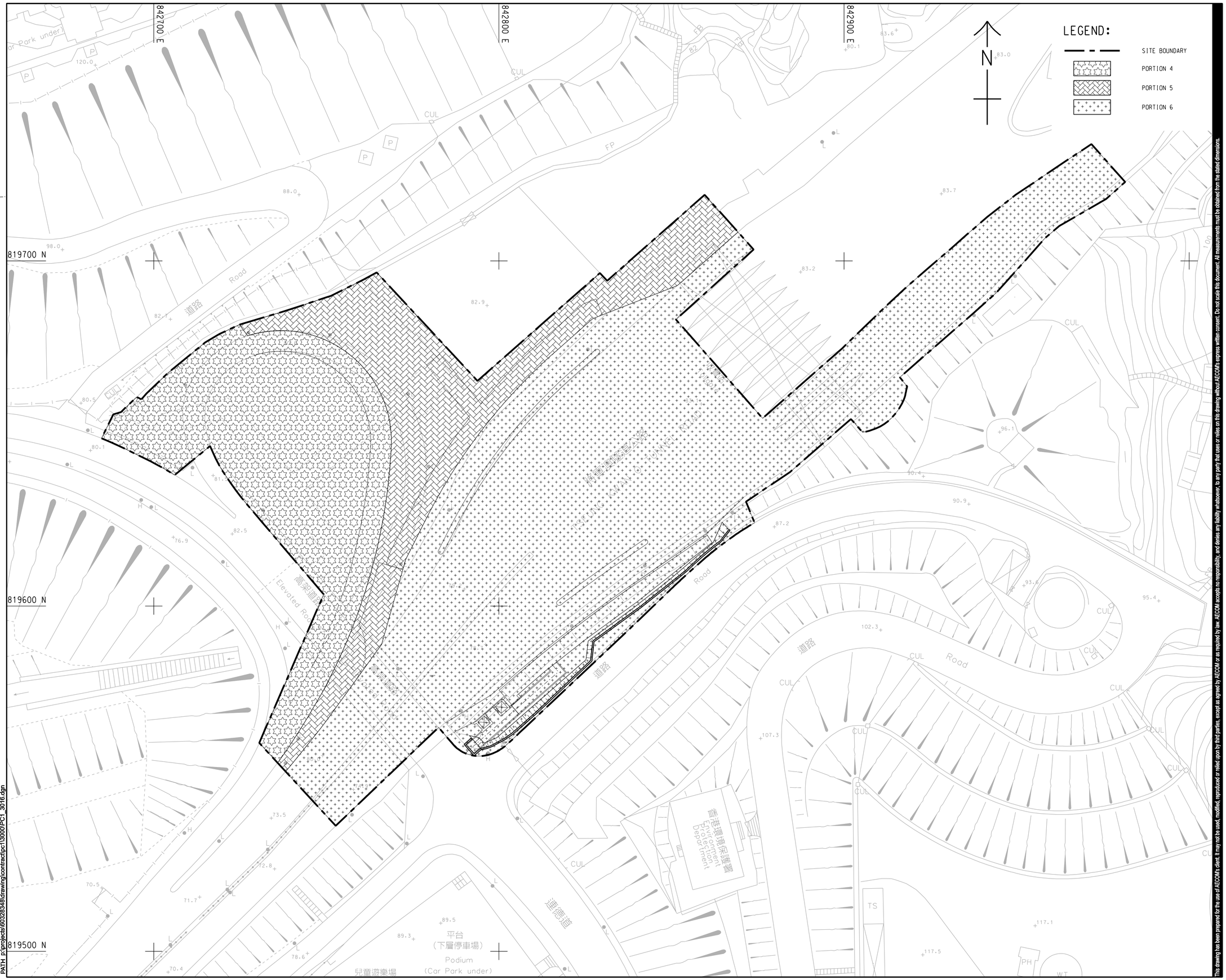

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AECOM

PROJECT
項目

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
PEDESTRIAN CONNECTIVITY FACILITIES WORKS PHASE 1

CLIENT
業主

CEDD 土木工程拓展署 Civil Engineering and Development Department

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STATUS
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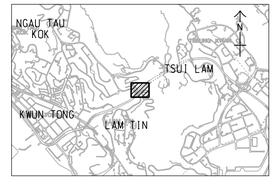

PROJECT NO. 項目編號: 60328348

CONTRACT NO. 合約編號: NE/2016/05

SHEET TITLE
圖紙名稱

E12 AND BBI - PORTION OF SITE

SHEET NUMBER
圖紙編號

60328348/PC1/3016

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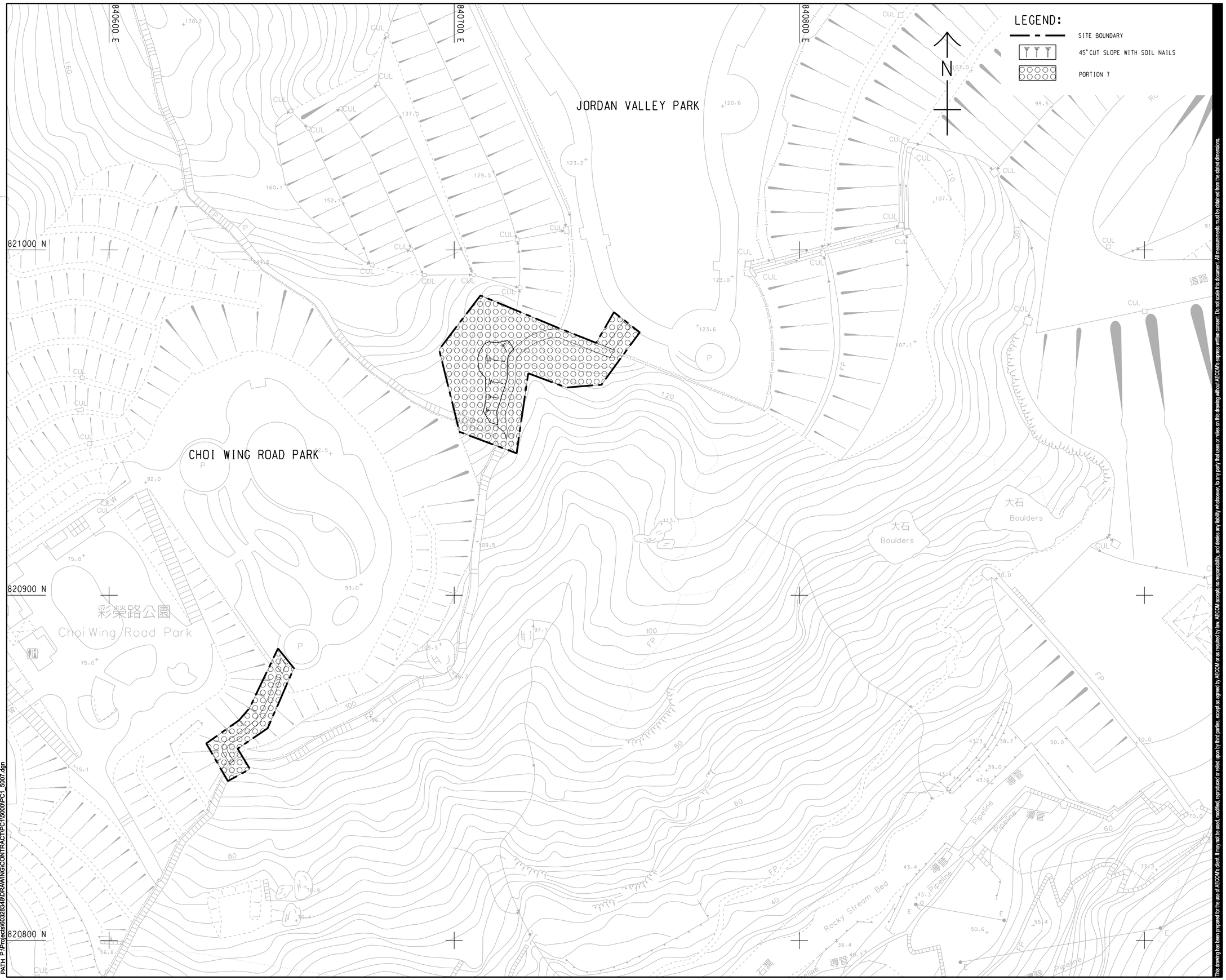

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PATH: P:\Projects\60328348\DRAWING\CONTRACT\PC1\5000\PC1_5007.dgn

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AECOM

PROJECT 項目

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
PEDESTRIAN CONNECTIVITY FACILITIES WORKS PHASE 1

CLIENT 業主

土木工程拓展署
Civil Engineering and Development Department

CONSULTANT 工程顧問公司

AECOM Asia Company Ltd.
www.aecom.com

SUB-CONSULTANTS 分判工程顧問公司

ISSUE/REVISION 修訂

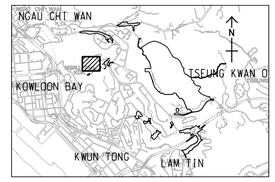
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核核
-	OCT. 16	TENDER DRAWING	AC

STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 60000



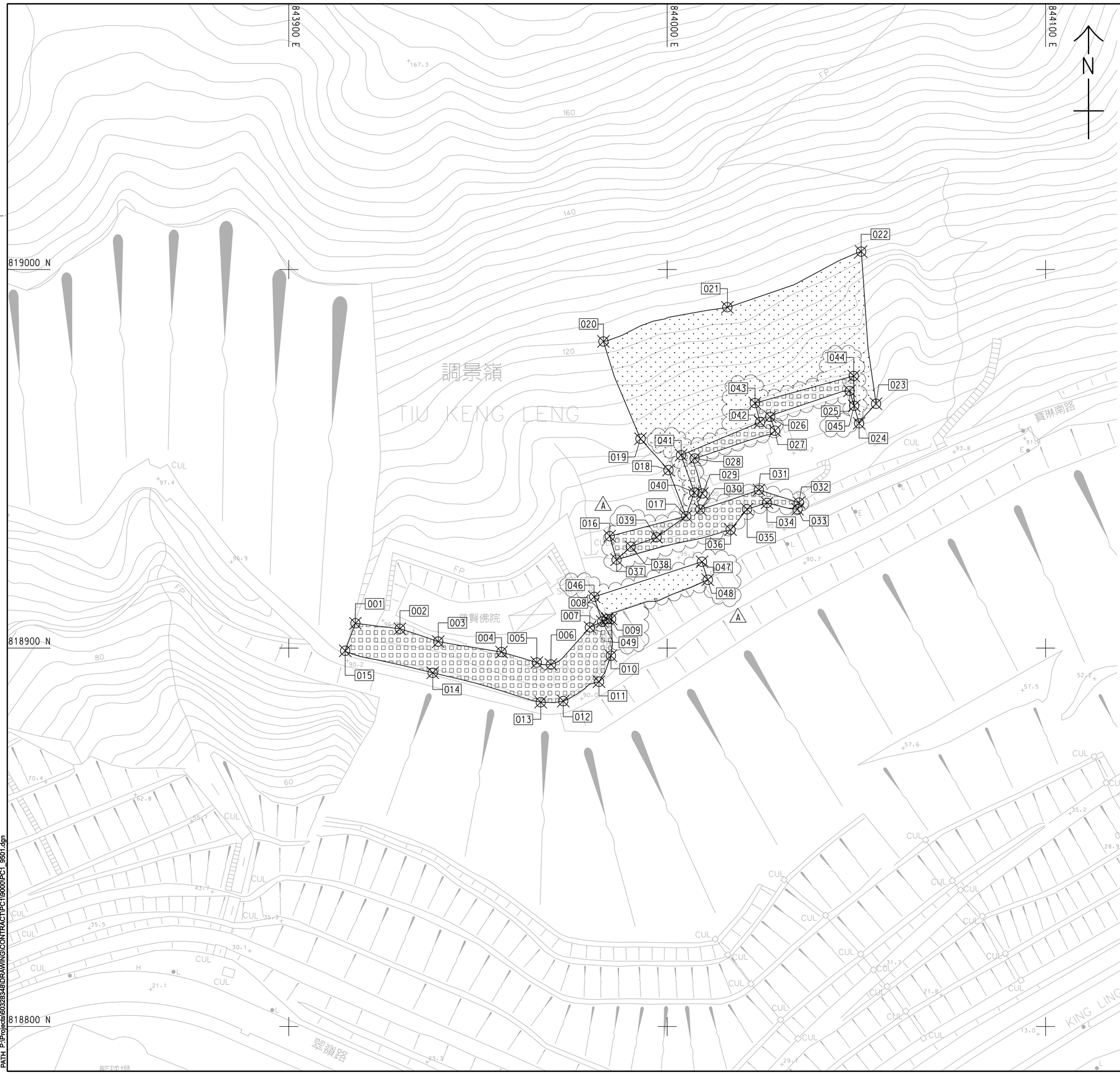
PROJECT NO. 項目編號
60328348

CONTRACT NO. 合約編號
NE/2016/05

SHEET TITLE 圖紙名稱
GREEN ROUTE - PORTION OF SITE

SHEET NUMBER 圖紙編號
60328348/PC1/5007

Project Management Initials: | Designer: PC/TK | Checked: AC | Approved: BWCW | ISO A1 594mm x 841mm



LEGEND:

PORTION 8

PORTION 9

SETTING OUT POINTS

POINTS	EASTING	NORTHING
001	843917.587	818906.541
002	843929.342	818905.094
003	843939.483	818901.709
004	843956.219	818898.942
005	843965.528	818896.168
006	843969.261	818895.667
007	843979.545	818905.452
008	843984.131	818907.650
009	843985.175	818907.685
010	843985.110	818897.974
011	843981.962	818891.121
012	843972.510	818885.990
013	843966.562	818885.703
014	843938.026	818893.479
015	843914.8936	818899.2916
016	843917.5873	818906.5418
017	844004.9983	818934.8475
018	844000.3294	818947.0185
019	843992.9288	818955.3047
020	843983.1315	818980.9995
021	844015.8829	818990.0481
022	844051.2430	819004.7564
023	844055.1790	818964.5518
024	844050.7010	818959.3870
025	844048.1970	818967.9590
026	844027.1930	818961.0890
027	844028.4560	818957.440
028	844007.2170	818950.1120
029	844009.2850	818940.8450
030	844008.6995	818936.6258
031	844024.2060	818941.7840
032	844034.8059	818938.4355
033	844034.4315	818936.6727
034	844026.3820	818938.3480
035	844021.0980	818936.6740
036	844016.7340	818931.2790
037	843986.6120	818923.3580
038	843990.360	818926.797
039	843997.172	818929.287
040	844007.154	818941.102
041	844003.647	818950.980
042	844024.555	818959.707
043	844023.162	818964.725
044	844049.278	818971.887
045	844049.396	818964.017
046	843980.693	818913.535
047	844009.179	818922.804
048	844010.709	818918.044
049	843982.791	818907.077

Plot File by: WANGGLW 2016/11/16
PATH: P:\Projects\60328348\DRAWING\CONTRACT\PC1\9000\PC1_9501.dgn

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AECOM

PROJECT 項目

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
PEDESTRIAN CONNECTIVITY FACILITIES WORKS PHASE 1

CLIENT 業主

土木工程拓展署
Civil Engineering and Development Department

CONSULTANT 工程顧問公司

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ISSUE/REVISION 修訂

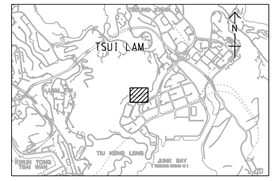
I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 核狀
A	NOV. 16	TENDER ADDENDUM NO. 1	AC
-	OCT. 16	TENDER DRAWING	AC

STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 60000



PROJECT NO. 項目編號
60328348

CONTRACT NO. 合約編號
NE/2016/05

SHEET TITLE 圖紙名稱

INFRASTRUCTURAL WORKS AT PO LAM ROAD SOUTH TIU KENG LENG – PORTION OF SITE

SHEET NUMBER 圖紙編號

60328348/PC1/9501A

Layout plan of Contract 3 (NE/2017/03) (Non-Designated Area)





圖示 A VIEW A



圖示 B VIEW B

圖則名稱 Drawing Title

行人連繫設施(巴士轉乘站、E11及E12) - 平面圖及構思圖

Pedestrian Connectivity Facilities (Bus-to-Bus Interchange, E11 and E12) - Layout Plan and Artist's Impression

項目編號 Item No.
765CL

比例 Scale

圖則編號 Drawing No.
附件五 Appendix 5

辦事處 Office
新界東拓展處
NEW TERRITORIES EAST DEVELOPMENT OFFICE

土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Project Management Initials: | Designer: | CCYT Checked: | AWYC Approved: HKT | ISO A1 594mm x 841mm

NOTES:

1. FOR NOTES AND LEGEND REFER TO DRAWING NO. 60328348/R&P/1001.
2. THIS DRAWING TO BE READ IN CONJUNCTION WITH DRAWING NOS. 60328348/R&P/1001 TO 1008.

842000 N
819600 E
820400 N
820200 N
842600 E
842100 E
842500 E
842400 E

SLOPE NO. E8-1
SLOPE NO. E8-2
PEDESTRIAN CONNECTIVITY E8 SEE DRAWING NO. 60328348/R&P/3501
HIU YUK PATH
HIU MING STREET
HIU KWONG STREET PARK STRIP
梁式芝書院 Leung Shek Chee College
曉育徑
足球場 Football Field
The Hong Kong Ching Chung Hau Po Woon Primary School
ROAD L4 (CONSTRUCTED UNDER SEPERATE CONTRACT)
EXISTING BOX CULVERT
PEDESTRIAN CONNECTIVITY SYSTEM A SEE DRAWING NO. 60328348/R&P/3101
PEDESTRIAN CONNECTIVITY SYSTEM A (CONSTRUCTED UNDER SEPERATE CONTRACT)
ROAD L1 (CONSTRUCTED UNDER SEPERATE CONTRACT)
PEDESTRIAN CONNECTIVITY SYSTEM B (CONSTRUCTED UNDER SEPERATE CONTRACT)
SLOPE NO. B1
SLOPE NO. B2
PEDESTRIAN CONNECTIVITY SYSTEM B SEE DRAWING NO. 60328348/R&P/3301
ON SAU ROAD
秀茂坪淨水配水庫 Sau Mau Ping Salt Water Service Reservoir

Plot File by: WUMT 2017/11/9
PATH P:\Projects\60328348\DRAWING\CONTRACT\R&P\1000\R&P_1008.dgn

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PROJECT 項目

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - ROAD IMPROVEMENT WORKS AND PEDESTRIAN CONNECTIVITY FACILITIES WORKS PHASE 2A

CLIENT 業主

土木工程拓展署
Civil Engineering and Development Department

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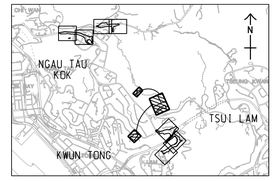
			yc
A	NOV. 17	TENDER ADDENDUM NO. 1	AWYC
-	OCT. 17	TENDER DRAWING	AWYC

STATUS 階段

SCALE 比例
A1 1 : 500

DIMENSION UNIT 尺寸單位
METRES

KEY PLAN 索引圖 A1 1 : 60000



PROJECT NO. 項目編號
60328348

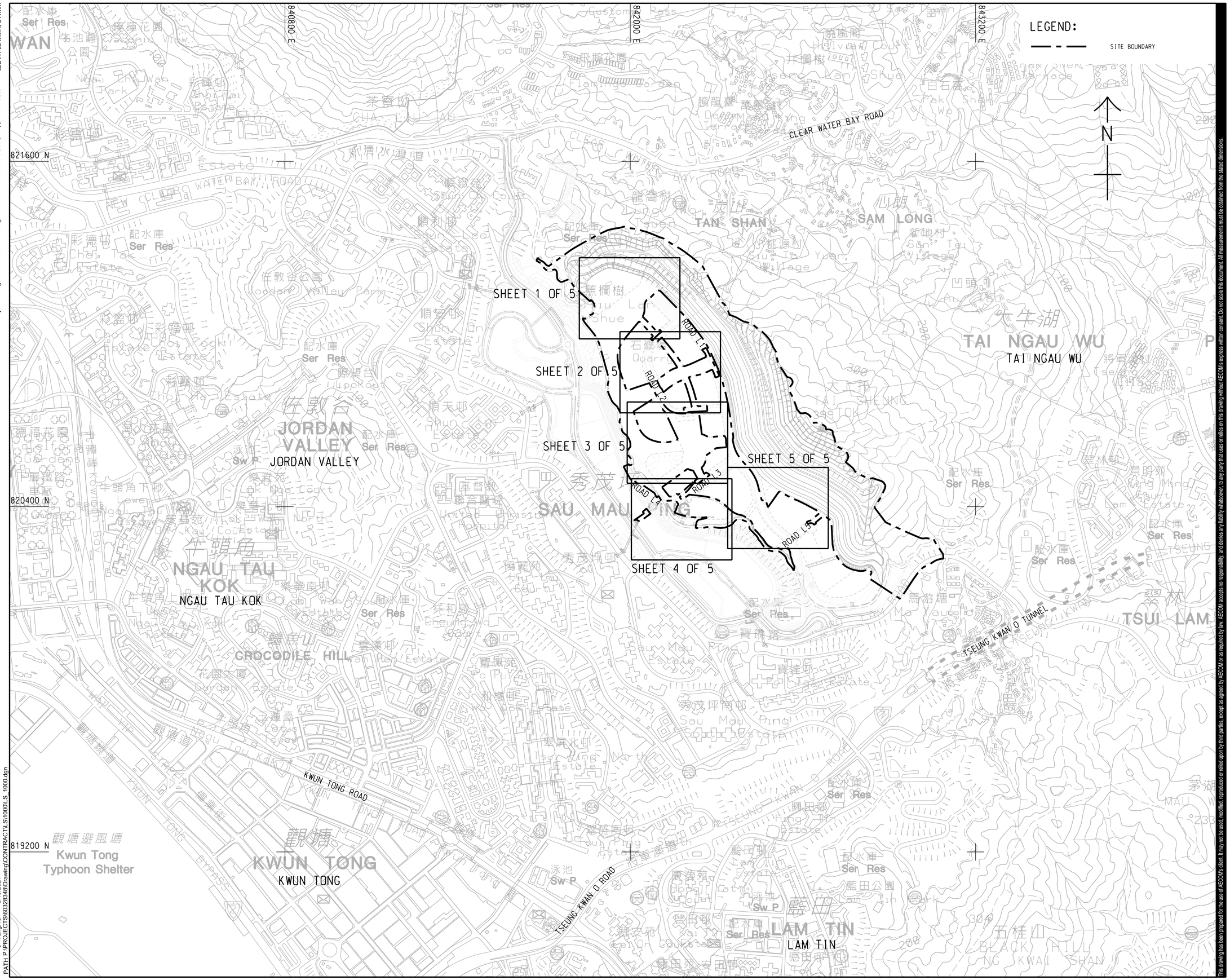
CONTRACT NO. 合約編號
NE/2017/03

SHEET TITLE 圖紙名稱
GENERAL LAYOUT

SHEET 8 OF 8

SHEET NUMBER 圖紙編號
60328348/R&P/1008A

Layout plan of Contract 4 (ED/2020/02)



AECOM

PROJECT
項目

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INFRASTRUCTURE, GREENING AND LANDSCAPE WORKS

CLIENT
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修訂

I/R 修訂	DATE 日期	DESCRIPTION 內容摘要	CHK. 複核
-	MAR. 21	TENDER DRAWING	AWYC

STATUS
階段

SCALE 比例: A1 1 : 6000

DIMENSION UNIT 尺寸單位: METRES

KEY PLAN
索引圖

PROJECT NO. 項目編號: 60328348

CONTRACT NO. 合約編號: ED/2020/02

SHEET TITLE
圖紙名稱

KEY PLAN

SHEET NUMBER
圖紙編號

60328348/LS/1000

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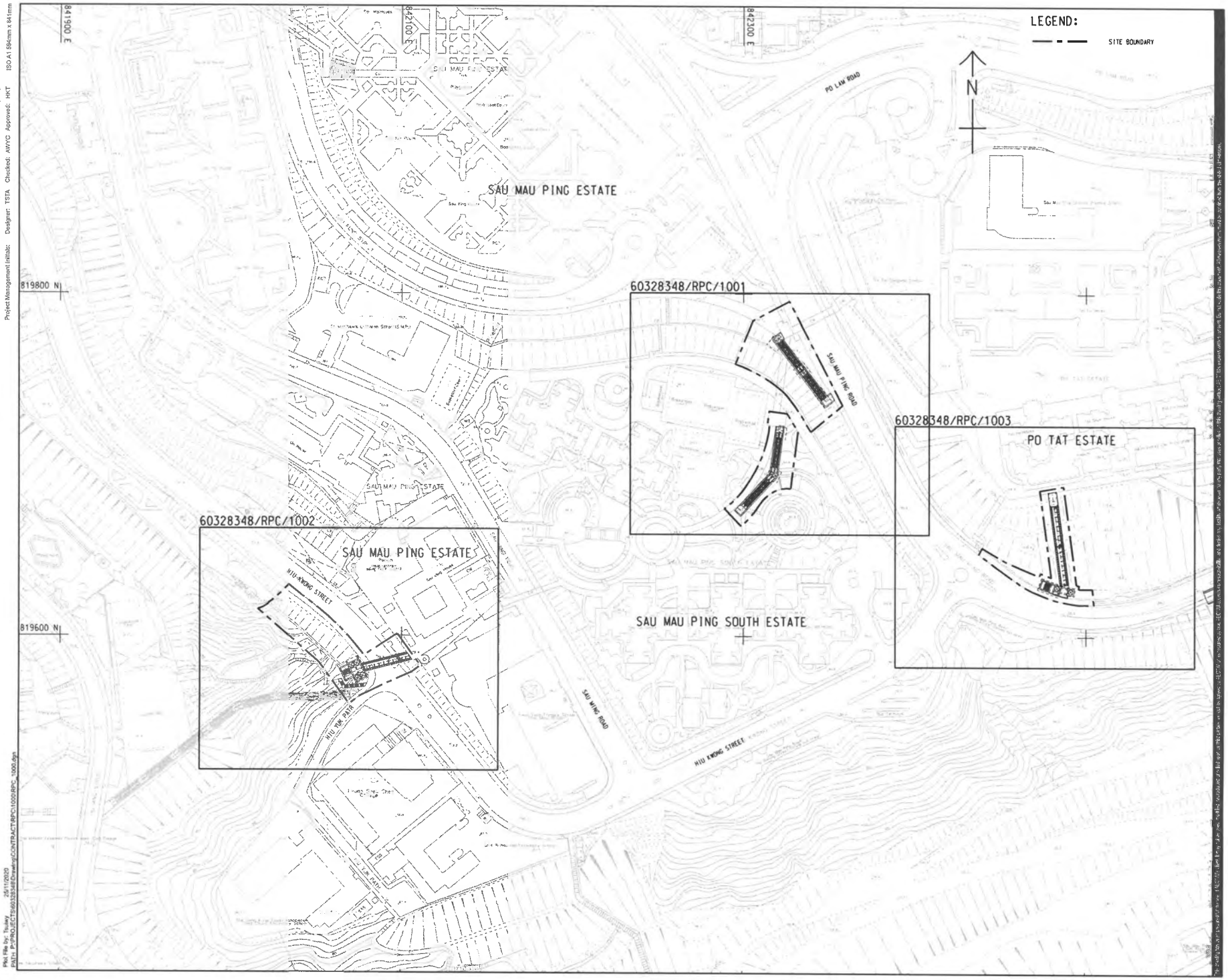
ISO A1 594mm x 841mm
Project Management Initials: Designer: DKMW Checked: AWYC Approved: HKT
Plot File by: YangRO 3/19/2021
PATH P:\PROJECTS\60328348\Drawing\CONTRACT\LS\1000\LS_1000.dgn

Layout plan of Contract 5 (ED/2019/02)



Project Management Initials: Designer: TSTA Checked: AWYC Approved: HKT ISO A1 594mm x 841mm

Plot File by: Tauwy 25/11/2020
File: P:\PROJECTS\60328348\Drawing\CONTRACT\RPC\1000\RPC_1000.dgn

AECOM

PROJECT
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS

CLIENT
CEDD 土木工程拓展署 Civil Engineering and Development Department

CONSULTANT
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VR	DATE	DESCRIPTION	CHK.
-	NOV. 20	TENDER DRAWING	AWYC

STATUS

SCALE
A1 1 : 1000

DIMENSION UNIT
METRES

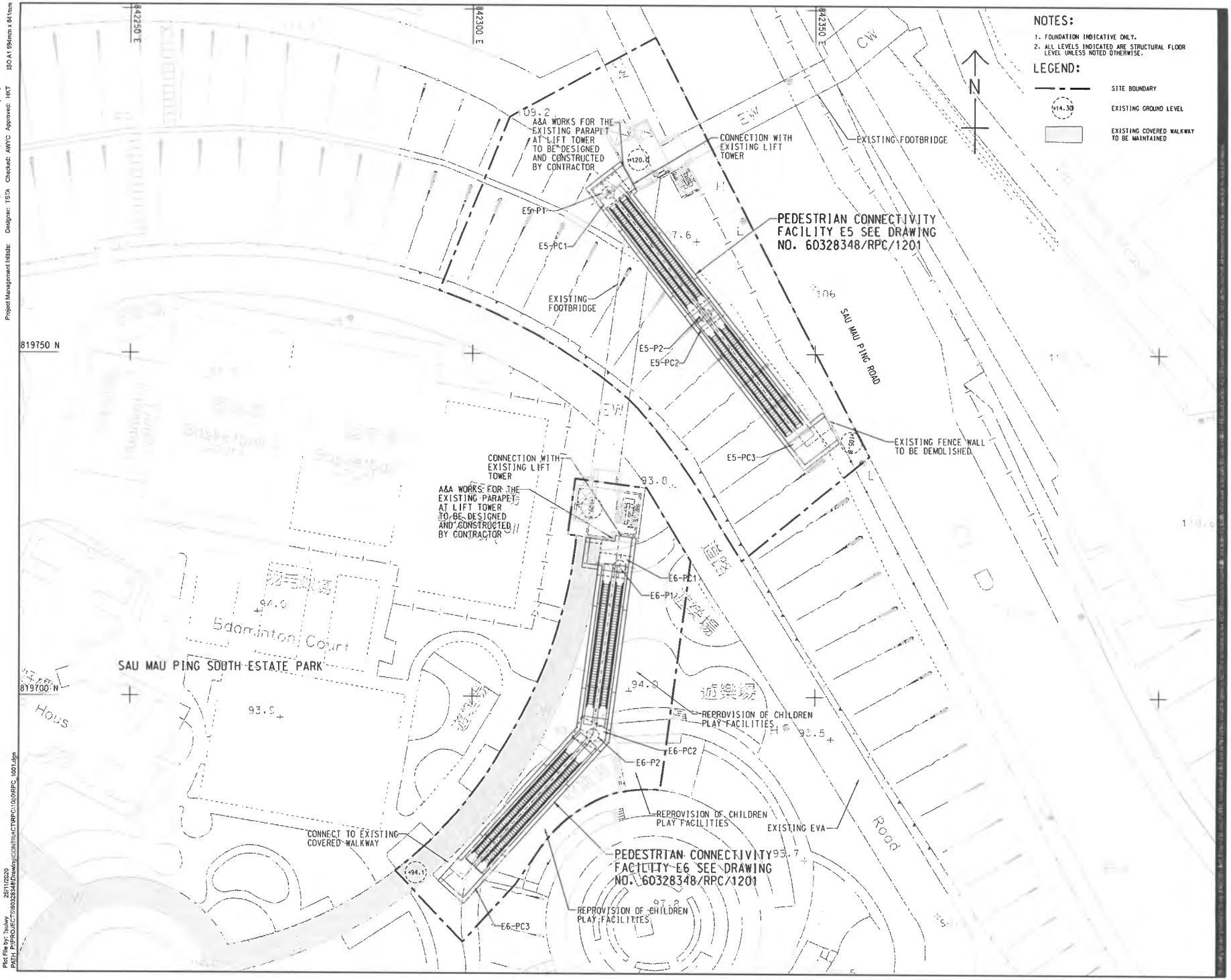
KEY PLAN

PROJECT NO.
60328348

CONTRACT NO.
ED/2019/02

SHEET TITLE
KEY PLAN

SHEET NUMBER
60328348/RPC/1000



Project Management Initials: Designer: TSTA Checked: AWYC Approved: HKT ISO A1 594mm x 841mm

Plot File by: Suiwy 25/11/2020
PATH: P:\PROJECT\60328348\Drawing\CONTRACT\RPC\1\00\RPC_1001.dgn

AECOM

PROJECT

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS

CLIENT

土木工程拓展署
CEDD Civil Engineering and Development Department

CONSULTANT

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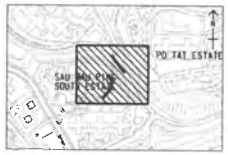
	DATE	DESCRIPTION	CHK.
-	NOV. 20	TENDER DRAWING	AWYC

STATUS

SCALE A1 1 : 250

DIMENSION UNIT METRES

KEY PLAN A1 1 : 5000



PROJECT NO. 60328348

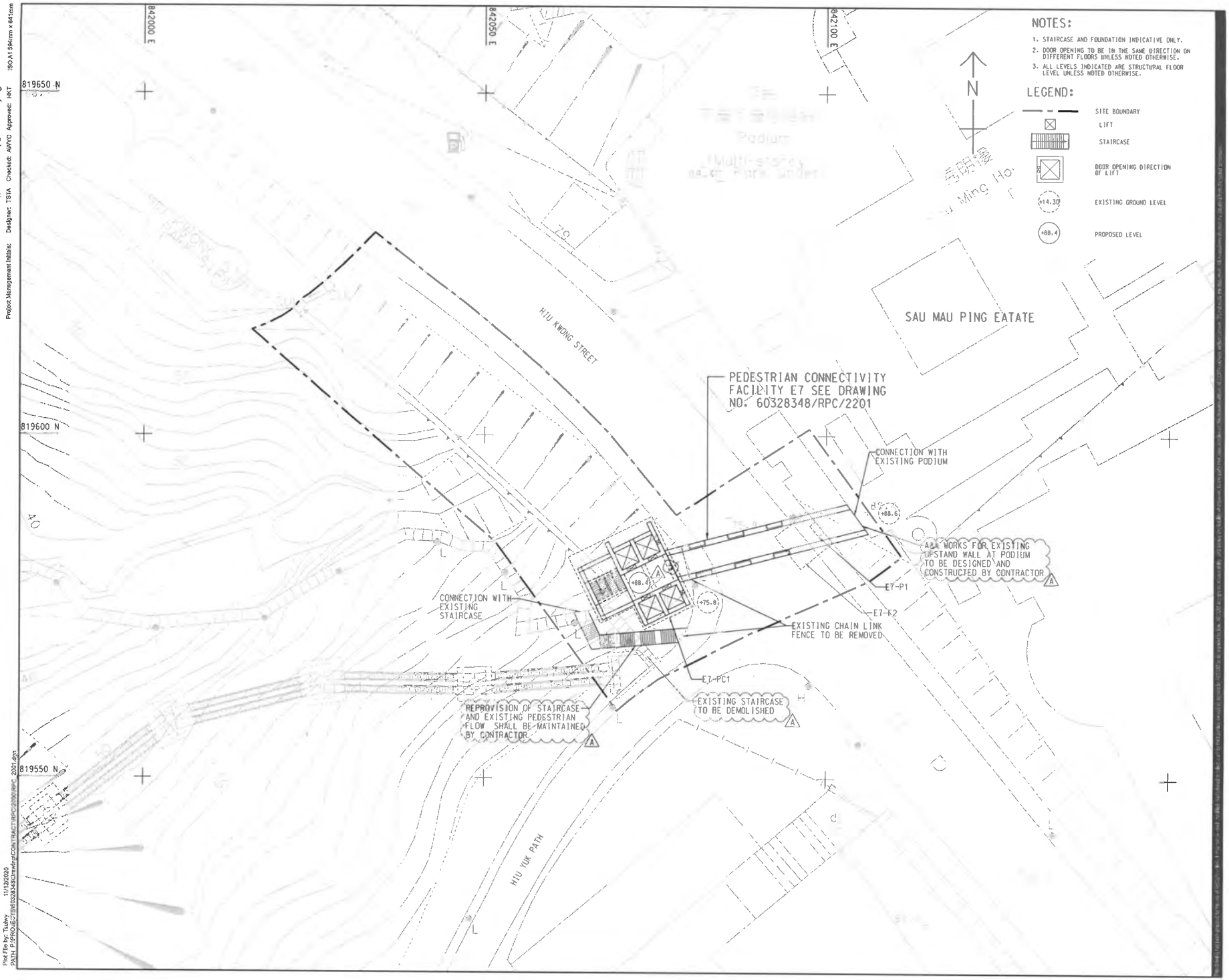
CONTRACT NO. ED/2019/02

SHEET TITLE

GENERAL LAYOUT - E5 & E6

SHEET NUMBER

60328348/RPC/1001



NOTES:

1. STAIRCASE AND FOUNDATION INDICATIVE ONLY.
2. DOOR OPENING TO BE IN THE SAME DIRECTION ON DIFFERENT FLOORS UNLESS NOTED OTHERWISE.
3. ALL LEVELS INDICATED ARE STRUCTURAL FLOOR LEVEL UNLESS NOTED OTHERWISE.

LEGEND:

- SITE BOUNDARY
- LIFT
- STAIRCASE
- DOOR OPENING DIRECTION OF LIFT
- +14.30 EXISTING GROUND LEVEL
- +88.4 PROPOSED LEVEL

AECOM

PROJECT

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS

CLIENT

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CEDD Civil Engineering and Development Department

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A	DEC. 20	TENDER ADDENDUM NO.1	AWYC
-	NOV. 20	TENDER DRAWING	AWYC
R	DATE	DESCRIPTION	CHK.

STATUS

SCALE A1 1 : 250

DIMENSION UNIT METRES

KEY PLAN A1 1 : 5000



PROJECT NO. 60328348

CONTRACT NO. ED/2019/02

SHEET TITLE

GENERAL LAYOUT - E7

SHEET NUMBER

60328348/RPC/2001A

Project Management Initials: Designer: TSTA Checked: AWYC Approved: HKT ISO A1 594mm x 841mm

Plot File by: Taulwy 11/12/2020
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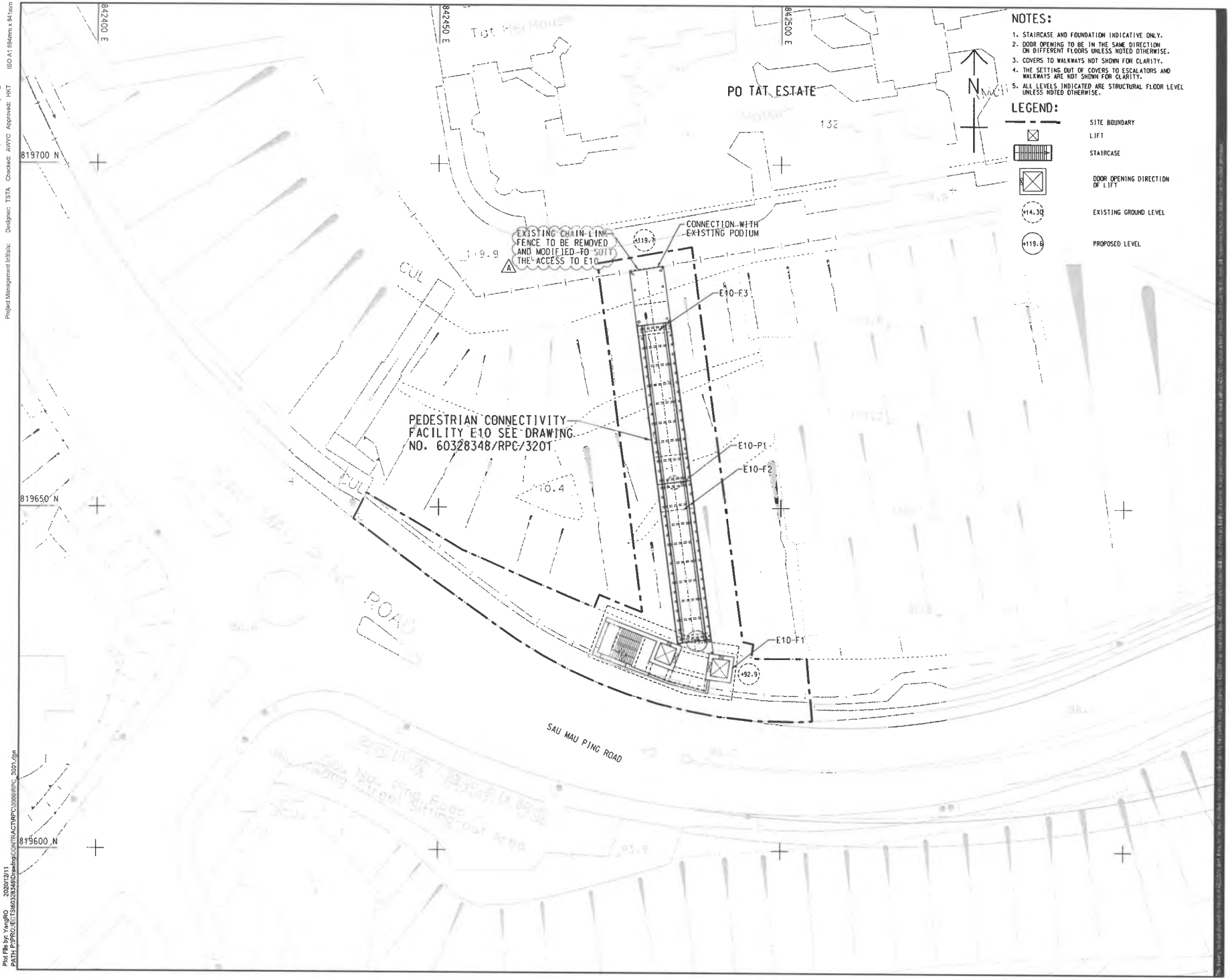

NOTES:

1. STAIRCASE AND FOUNDATION INDICATIVE ONLY.
2. DOOR OPENING TO BE IN THE SAME DIRECTION ON DIFFERENT FLOORS UNLESS NOTED OTHERWISE.
3. COVERS TO WALKWAYS NOT SHOWN FOR CLARITY.
4. THE SETTING OUT OF COVERS TO ESCALATORS AND WALKWAYS ARE NOT SHOWN FOR CLARITY.
5. ALL LEVELS INDICATED ARE STRUCTURAL FLOOR LEVEL UNLESS NOTED OTHERWISE.

LEGEND:

- SITE BOUNDARY
- LIFT
- STAIRCASE
- DOOR OPENING DIRECTION OF LIFT
- +14.30 EXISTING GROUND LEVEL
- +119.6 PROPOSED LEVEL

AECOM

PROJECT

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE
DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - REMAINING PEDESTRIAN CONNECTIVITY FACILITIES WORKS

CLIENT

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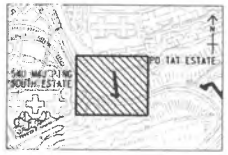
A	DEC. 20	TENDER ADDENDUM NO.1	AWYC
-	NOV. 20	TENDER DRAWING	AWYC
I/R	DATE	DESCRIPTION	CHK.

STATUS

SCALE A1 1 : 250

DIMENSION UNIT METRES

KEY PLAN A1 1 : 5000



PROJECT NO. 60328348

CONTRACT NO. ED/2019/02

SHEET TITLE

GENERAL LAYOUT - E10

SHEET NUMBER

60328348/RPC/3001A

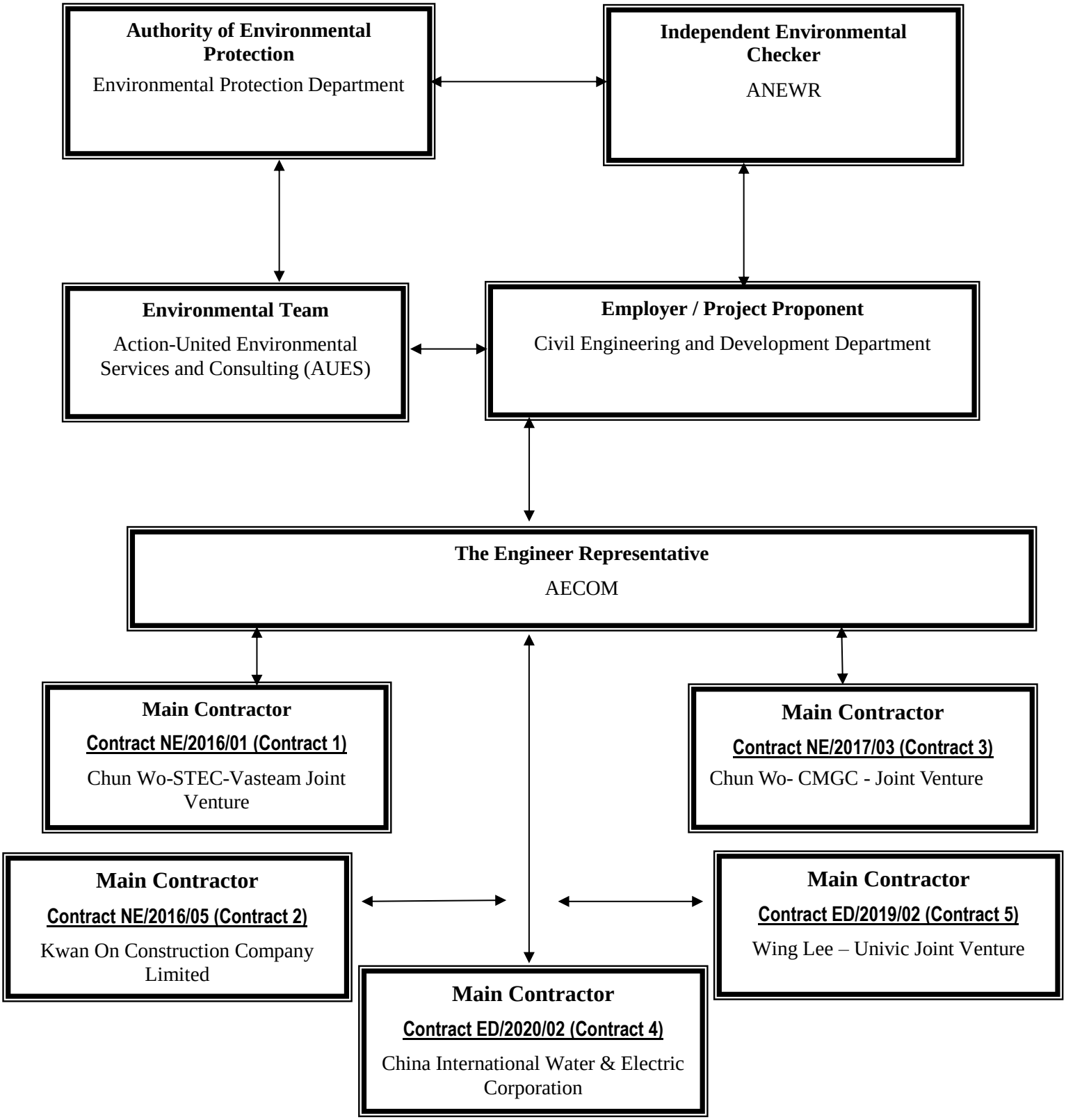
Project Management Initials: Designer: TSTA Checked: AWYC Approved: HKT ISO A1 594mm x 841mm

Plot File by: YangRO 2020/12/11
PATH P:\PROJECTS\60328348\Drawing\CONTRACT\RPC\3000\RPC_3001.dgn

Appendix B

Project Organization Structure

Project Organization Structure



Contact Details of Key Personnel for Contract 1 – NE/2016/01

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Engineer	Mr Leung Chi Foon	3842 7087	2739 0076
AECOM	Chief Resident Engineer	Lee, Yu Ching Paul	5723 6880	2473 3221
AECOM	Senior Resident Engineer	Li, Ling Tommy	9389 8792	2473 3221
ANEWR	Independent Environmental Checker	James Choi	2618 2836	3007 8648
CSVJV	Project Manager	William Leung	2638 7181	2744 6937
CSVJV	Site Agent	TY Leung	2638 7181	2744 6937
CSVJV	Project Environmental Manager	Jimmy Cheng	2638 7181	2744 6937
CSVJV	Environmental Officer	Ken Chu	2638 7181	2744 6937
AUES	Environmental Team Leader	T. W. Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Nicola Hon	2959 6059	2959 6079
AUES	Environmental Consultant	Ben Tam	2959 6059	2959 6079

Legend:

CEDD (Employer) – Civil Engineering and Development Department

AECOM (Engineer) – AECOM Asia Co. Ltd.

CSVJV (Main Contractor) – Chun Wo-STEC-Vasteam Joint Venture

ANEWR (IEC) –ANewR Consulting Limited

AUES (ET) – Action-United Environmental Services & Consulting

Contact Details of Key Personnel for Contract 2 – NE/2016/05

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Engineer	Mr Leung Chi Foon	3842 7087	2739 0076
AECOM	Chief Resident Engineer	Lee, Yu Ching Paul	5723 6880	2473 3221
AECOM	Senior Resident Engineer	Bill Hon	5599 1466	2473 3221
ANEWR	Independent Environmental Checker	James Choi	2618 2836	3007 8648
KOCCL	Project Director	Ambrose Kwong	2889 2675	2558 6900
KOCCL	Site Agent	Mr. Albert PK Ng	9150 1523	2558 6900
KOCCL	Safety and Environmental Manager	Joly C K Kwong	6111 5711	2558 6900
KOCCL	Environmental Officer	Ken Tam	9555 9958	2558 6900
KOCCL	Environmental Supervisor	Kenny Chan	5542 4335	2558 6900
AUES	Environmental Team Leader	T. W. Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Nicola Hon	2959 6059	2959 6079
AUES	Environmental Consultant	Ben Tam	2959 6059	2959 6079

Legend:

CEDD (Employer) – Civil Engineering and Development Department

AECOM (Engineer) – AECOM Asia Co. Ltd.

KOCCL (Main Contractor) –Kwan On Construction Company Limited

ANEWR (IEC) –ANewR Consulting Limited

AUES (ET) – Action-United Environmental Services & Consulting

Contact Details of Key Personnel for Contract 3 –NE/2017/03

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Engineer	Mr Leung Chi Foon	3842 7087	2739 0076
AECOM	Chief Resident Engineer	Lee, Yu Ching Paul	5723 6880	2473 3221
AECOM	Senior Resident Engineer	Brad Chan	5506 0068	2473 3221
ANEWR	Independent Environmental Checker	James Choi	2618 2836	3007 8648
CW – CMGC - JV	Construction Manager	William Leung	9464 1392	3965 9900
CW – CMGC - JV	Site Agent	Yu, Chi Kuen Paul	9456 9819	3965 9900
CW – CMGC - JV	Environmental Officer	King Lam	9570 6187	3965 9900
CW – CMGC - JV	Environmental Supervisor	Anna Tsang	9333 8499	3965 9900
AUES	Environmental Team Leader	T. W. Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Nicola Hon	2959 6059	2959 6079
AUES	Environmental Consultant	Ben Tam	2959 6059	2959 6079

Legend:

CEDD (Employer) – Civil Engineering and Development Department

AECOM (Engineer) – AECOM Asia Co. Ltd.

CW – CMGC - JV (Main Contractor) – Chun Wo- CMGC - Joint Venture

ANEWR (IEC) –ANewR Consulting Limited

AUES (ET) – Action-United Environmental Services & Consulting

Contact Details of Key Personnel for Contract 4 –ED/2020/02

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Engineer	Mr Leung Chi Foon	3842 7087	2739 0076
AECOM	Chief Resident Engineer	Lee, Yu Ching Paul	5723 6880	2473 3221
AECOM	Senior Resident Engineer	Li, Ling Tommy	9389 8792	2473 3221
ANEWR	Independent Environmental Checker	James Choi	2618 2836	3007 8648
CIWEC	Project Director	Kevin, Chan Ka Shing	6159 9750	2508 0987
CIWEC	Site Agent	Sunny. Tam Tai Shing	9197 2452	2508 0987
CIWEC	Environmental Officer	Leung King On	9034 2130	2508 0987
AUES	Environmental Team Leader	T. W. Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Nicola Hon	2959 6059	2959 6079
AUES	Environmental Consultant	Ben Tam	2959 6059	2959 6079

Legend:

CEDD (Employer) – Civil Engineering and Development Department

AECOM (Engineer) – AECOM Asia Co. Ltd.

CIWEC (Main Contractor) –China International Water & Electric Corporation

ANEWR (IEC) –ANewR Consulting Limited

AUES (ET) – Action-United Environmental Services & Consulting

Contact Details of Key Personnel for Contract 5 –ED/2019/02

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
CEDD	Engineer	Mr Leung Chi Foon	3842 7087	2739 0076
AECOM	Chief Resident Engineer	Lee, Yu Ching Paul	9824 7016	2473 3221
AECOM	Senior Resident Engineer	Bill Hon	5599 1486	2473 3221
ANEWR	Independent Environmental Checker	James Choi	2618 2836	3007 8648
WL-UJV	Construction Manager	PH Ho	9464 1392	2983 6640
WL-UJV	Site Agent	Lee Chi Wai	9255 7014	2983 6640
WL-UJV	Environmental Officer	Guo Liming	5723 9883	2983 6640
AUES	Environmental Team Leader	T. W. Tam	2959 6059	2959 6079
AUES	Environmental Consultant	Nicola Hon	2959 6059	2959 6079
AUES	Environmental Consultant	Ben Tam	2959 6059	2959 6079

Legend:

CEDD (Employer) – Civil Engineering and Development Department

AECOM (Engineer) – AECOM Asia Co. Ltd.

WL –UJV (Main Contractor) – Wing Lee – Univic Joint Venture

ANEWR (IEC) –ANewR Consulting Limited

AUES (ET) – Action-United Environmental Services & Consulting

Appendix C

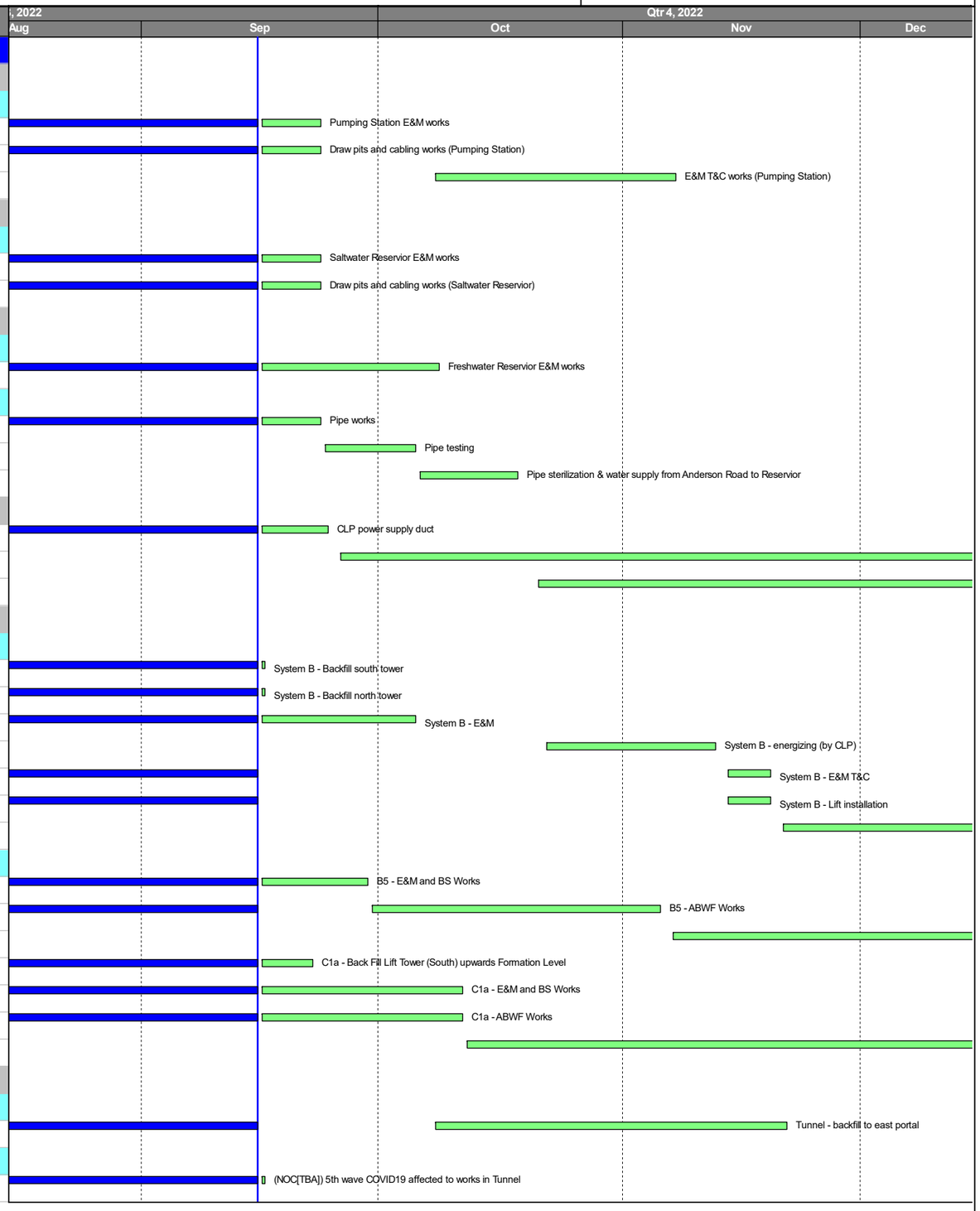
Construction Programme

- **(a) Contract 1 (NE/2016/01)**
- **(b) Contract 2 (NE/2016/05)**
- **(c) Contract 3 (NE/2017/03)**
- **(d) Contract 4 (ED/2020/02)**
- **(e) Contract 5 (ED/2019/02)**

Contract 1 (NE/2016/01)

CONTRACT NO.NE/2016/01 SITE FORMATION AND INFRASTRUCTURE WORKS FOR DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
3-MONTH ROLLING PROGRAMME

Activity ID	Activity Name	BL Project Duration	BL Project Start	BL Project Finish	At Completion Duration	Start	Finish
Anderson Rd Sub-programme (September 2022 _0) _ccn _220913							
Fresh Water Pumping Station							
Stage 5 - ABWF, Finishing & E&M							
FWP-1320	Pumping Station E&M works	0			667	29-Jun-20 A	23-Sep-22
FWP-1322	Draw pits and cabling works (Pumping Station)	0			600	16-Sep-20 A	23-Sep-22
FWP-1330	E&M T&C works (Pumping Station)	0			26	08-Oct-22	07-Nov-22
Salt Water Reservoir							
ABWF, Finishing & E&M							
SWR-1420	Saltwater Reservior E&M works	0			692	29-May-20 A	23-Sep-22
SWR-1422	Draw pits and cabling works (Saltwater Reservior)	0			600	16-Sep-20 A	23-Sep-22
Fresh Water Reservoir							
ABWF, Finishing & E&M							
FWR-2000	Freshwater Reservior E&M works	0			591	12-Oct-20 A	08-Oct-22
Temporary DN450 Water Pipe at Anderson No.3 Reservoir							
FWR-2020	Pipe works	0			170	01-Mar-22 A	23-Sep-22
FWR-2040	Pipe testing	0			8	24-Sep-22	05-Oct-22
FWR-2060	Pipe sterilization & water supply from Anderson Road to Reservior	0			11	06-Oct-22	18-Oct-22
RWS Access Road & External Works							
FWP-1430	CLP power supply duct	0			601	16-Sep-20 A	24-Sep-22
FWP-1440	Road Works & Fencing	0			103	26-Sep-22	31-Jan-23
FWP-1450	Green Roof & Paving Area	0			88	21-Oct-22	06-Feb-23
Pedestrian Connection System A & B							
PC system B							
PCB-1090	System B - Backfill south tower	81	19-Aug-19	23-Nov-19	768	16-Feb-20 A	16-Sep-22
PCB-1100	System B - Backfill north tower	81	19-Aug-19	23-Nov-19	768	16-Feb-20 A	16-Sep-22
PCB-1120	System B - E&M	22	23-Sep-19	19-Oct-19	694	05-Jun-20 A	05-Oct-22
PCB-1122	System B - energizing (by CLP)	0			19	22-Oct-22	12-Nov-22
PCB-1130	System B - E&M T&C	24	21-Oct-19	16-Nov-19	513	02-Mar-21 A	19-Nov-22
PCB-1140	System B - Lift installation	75	21-Oct-19	18-Jan-20	513	02-Mar-21 A	19-Nov-22
PCB-1150	System B - Lift T&C	27	20-Jan-20	22-Feb-20	27	21-Nov-22	21-Dec-22
PC system A							
PCA-1060	B5 - E&M and BS Works	0			373	02-Jul-21 A	29-Sep-22
PCA-1070	B5 - ABWF Works	0			260	20-Dec-21 A	05-Nov-22
PCA-1080	B5 - Testing & Commissioning	0			90	07-Nov-22	24-Feb-23
PCA-1160	C1a - Back Fill Lift Tower (South) upwards Formation Level	0			278	18-Oct-21 A	22-Sep-22
PCA-1170	C1a - E&M and BS Works	0			262	22-Nov-21 A	11-Oct-22
PCA-1180	C1a - ABWF Works	0			229	03-Jan-22 A	11-Oct-22
PCA-1190	C1a - Testing & Commissioning	0			90	12-Oct-22	30-Jan-23
Underpass Tunnel							
East Portal							
TUN-3620	Tunnel - backfill to east portal	0			191	01-Apr-22 A	21-Nov-22
VE Panels, Road Works, E&M							
TUN-3530A	(NOC[TBA]) 5th wave COVID19 affected to works in Tunnel	0			165	28-Feb-22 A	16-Sep-22



Planned Bar (WP) ◇ Planned Milestone (WP)
Actual Bar ◆ Milestone
Forecast Bar

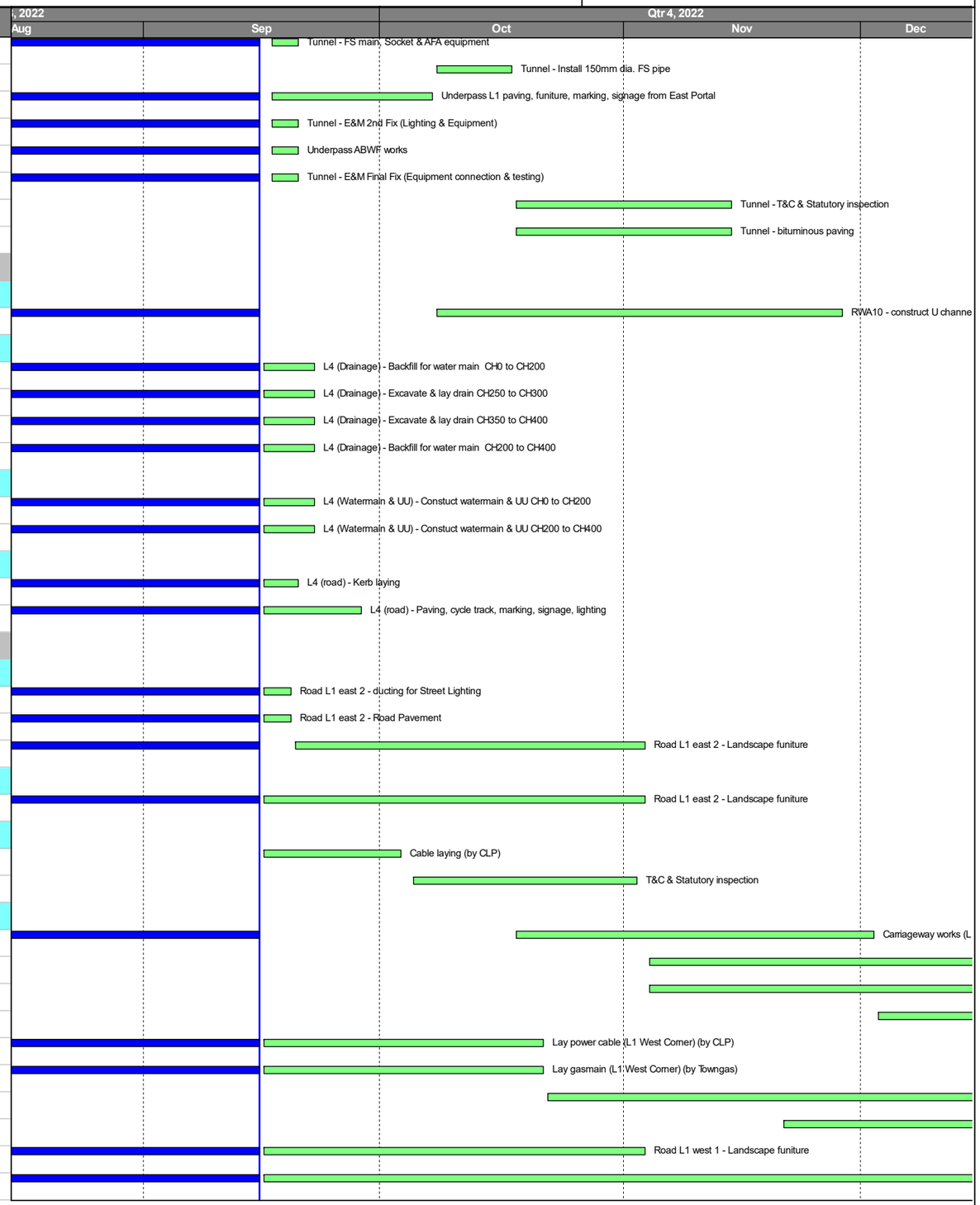
3-month Rolling Programme

Anderson Rd Sub-programme
15-Sep-22

Date	Revision	Checked	Approved
15-Sep-22	C1-MPU202209		

CONTRACT NO.NE/2016/01 SITE FORMATION AND INFRASTRUCTURE WORKS FOR DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
3-MONTH ROLLING PROGRAMME

Activity ID	Activity Name	BL Project Duration	BL Project Start	BL Project Finish	At Completion Duration	Start	Finish
TUN-3540	Tunnel - FS main, Socket & AFA equipment	0			571	19-Oct-20 A	20-Sep-22
TUN-3542	Tunnel - Install 150mm dia. FS pipe	0			8	08-Oct-22	17-Oct-22
TUN-3550	Underpass L1 paving, funiture, marking, signage from East Portal	0			584	19-Oct-20 A	07-Oct-22
TUN-3560	Tunnel - E&M 2nd Fix (Lighting & Equipment)	0			571	19-Oct-20 A	20-Sep-22
TUN-3570	Underpass ABWF works	0			554	09-Nov-20 A	20-Sep-22
TUN-3580	Tunnel - E&M Final Fix (Equipment connection & testing)	0			554	09-Nov-20 A	20-Sep-22
TUN-3590	Tunnel - T&C & Statutory inspection	0			24	18-Oct-22	14-Nov-22
TUN-3630	Tunnel - bituminous paving	0			24	18-Oct-22	14-Nov-22
Road L4 (RWA18, Noise Barrier, RWA12, Utilities & Road Works)							
Demolish Existing Retaining Wall R10							
L4-4430	RWA10 - construct U channel & footpath	0			197	01-Apr-22 A	28-Nov-22
Road Works - Drainage							
L4-4260	L4 (Drainage) - Backfill for water main CH0 to CH200	0			465	02-Mar-21 A	22-Sep-22
L4-4280	L4 (Drainage) - Excavate & lay drain CH250 to CH300	0			465	02-Mar-21 A	22-Sep-22
L4-4300	L4 (Drainage) - Excavate & lay drain CH350 to CH400	0			465	02-Mar-21 A	22-Sep-22
L4-4310	L4 (Drainage) - Backfill for water main CH200 to CH400	0			242	29-Nov-21 A	22-Sep-22
Watermain & Utilities							
L4-4320	L4 (Watermain & UU) - Constuct watermain & UU CH0 to CH200	0			228	15-Dec-21 A	22-Sep-22
L4-4330	L4 (Watermain & UU) - Constuct watermain & UU CH200 to CH400	0			228	15-Dec-21 A	22-Sep-22
Road Formation							
L4-4410	L4 (road) - Kerb laying	0			175	19-Feb-22 A	20-Sep-22
L4-4420	L4 (road) - Paving, cycle track, marking, signage, lighting	0			162	15-Mar-22 A	28-Sep-22
Road Works L5,L1 east (between Junction L3 & L5)							
Road L1 east part 2 (L5 toward PC system B)							
RL1b-1040	Road L1 east 2 - ducting for Street Lighting	0			815	19-Dec-19 A	19-Sep-22
RL1b-1050	Road L1 east 2 - Road Pavement	0			722	17-Apr-20 A	19-Sep-22
RL1b-1060	Road L1 east 2 - Landscape funiture	0			712	13-Jun-20 A	03-Nov-22
Road L1 east part 3 (Junction L3 toward L5)							
RL1c-1060	Road L1 east 2 - Landscape funiture	0			712	13-Jun-20 A	03-Nov-22
Works for USRT							
USRT10030	Cable laying (by CLP)	0			14	16-Sep-22	03-Oct-22
USRT10050	T&C & Statutory inspection	0			25	05-Oct-22	02-Nov-22
Road Works							
RL1-2010	Carriageway works (L1 junction L3)	0			179	03-May-22 A	02-Dec-22
RL1-2030	Footpath & cycle track (L1 junction L3)	0			50	04-Nov-22	03-Jan-23
RL1-2070	Carriageway works (Road L2 & L3)	0			50	04-Nov-22	03-Jan-23
RL1-2090	Footpath & cycle track (Road L2 & L3)	0			52	03-Dec-22	07-Feb-23
RL1-2130	Lay power cable (L1 West Corner) (by CLP)	0			154	15-Apr-22 A	21-Oct-22
RL1-2150	Lay gasmain (L1 West Corner) (by Towngas)	0			154	15-Apr-22 A	21-Oct-22
RL1-2170	Carriageway works (L1 West Corner)	0			50	22-Oct-22	19-Dec-22
RL1-2190	Footpath & cycle track (L1 West Corner)	0			50	21-Nov-22	19-Jan-23
RL1c-1140	Road L1 west 1 - Landscape funiture	0			410	21-Jun-21 A	03-Nov-22
RL1c-1150	Road L1 west 1 - E&M works	0			221	11-Apr-22 A	05-Jan-23



Planned Bar (WP) ◇ Planned Milestone (WP)
Actual Bar ◆ Milestone
Forecast Bar

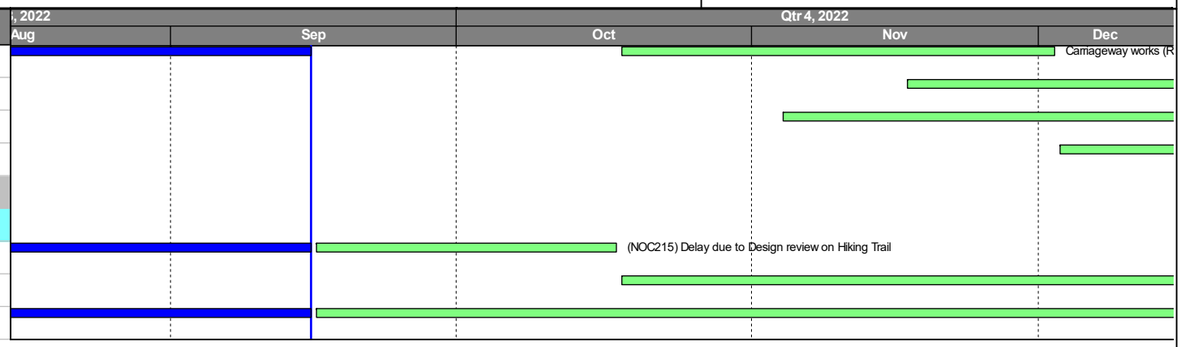
3-month Rolling Programme

Anderson Rd Sub-programme
15-Sep-22

Date	Revision	Checked	Approved
15-Sep-22	C1-MPU202209		

CONTRACT NO.NE/2016/01 SITE FORMATION AND INFRASTRUCTURE WORKS FOR DEVELOPMENT OF ANDERSON ROAD QUARRY SITE
3-MONTH ROLLING PROGRAMME

Activity ID	Activity Name	BL Project Duration	BL Project Start	BL Project Finish	At Completion Duration	Start	Finish
RL3-2010	Carriageway works (Road L3)	0			179	03-May-22 A	02-Dec-22
RL3-2030	Footpath & cycle track (Road L3)	0			66	17-Nov-22	07-Feb-23
RL4-2010	Carriageway works (Road L4)	0			50	04-Nov-22	03-Jan-23
RL4-2030	Footpath & cycle track (Road L4)	0			52	03-Dec-22	07-Feb-23
Hiking Trail Connecting to Wison Trail (Portion B5)							
Construction works at Hiking Trail							
HIK10130	(NOC215) Delay due to Design review on Hiking Trail	0			383	06-Jul-21 A	17-Oct-22
HIK10150	Resume work - Construction of Dwarf Walls for Hiking Trail (SP001 to SP001A)	0			78	18-Oct-22	18-Jan-23
HIK10250	Slope works at Portion B5	0			497	14-Jun-21 A	13-Feb-23



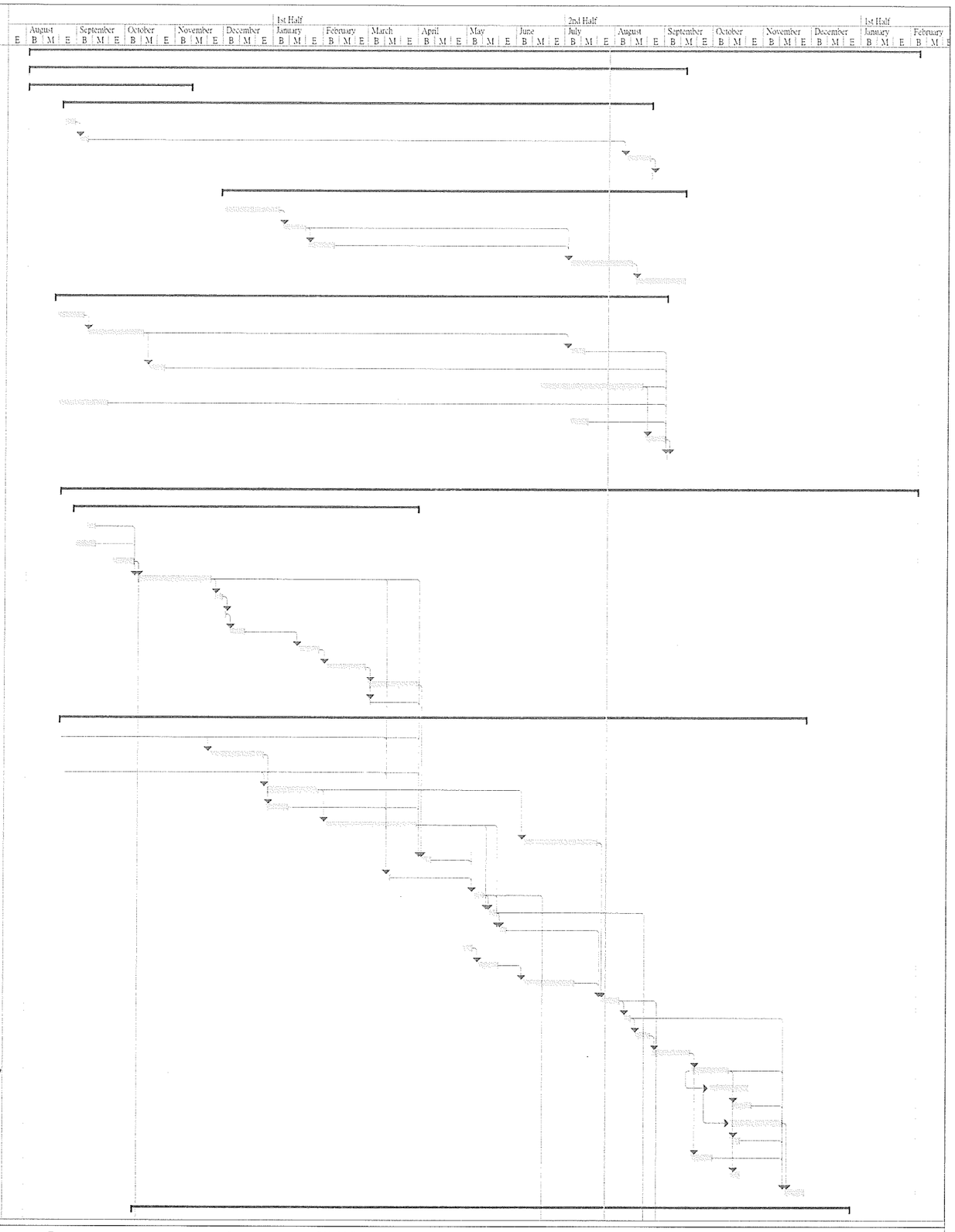
Planned Bar (WP) ◇ ◇ Planned Milestone (WP)
Actual Bar ◆ ◆ Milestone
Forecast Bar

3-month Rolling Programme
Anderson Rd Sub-programme
15-Sep-22

Date	Revision	Checked	Approved
15-Sep-22	C1-MPU202209		

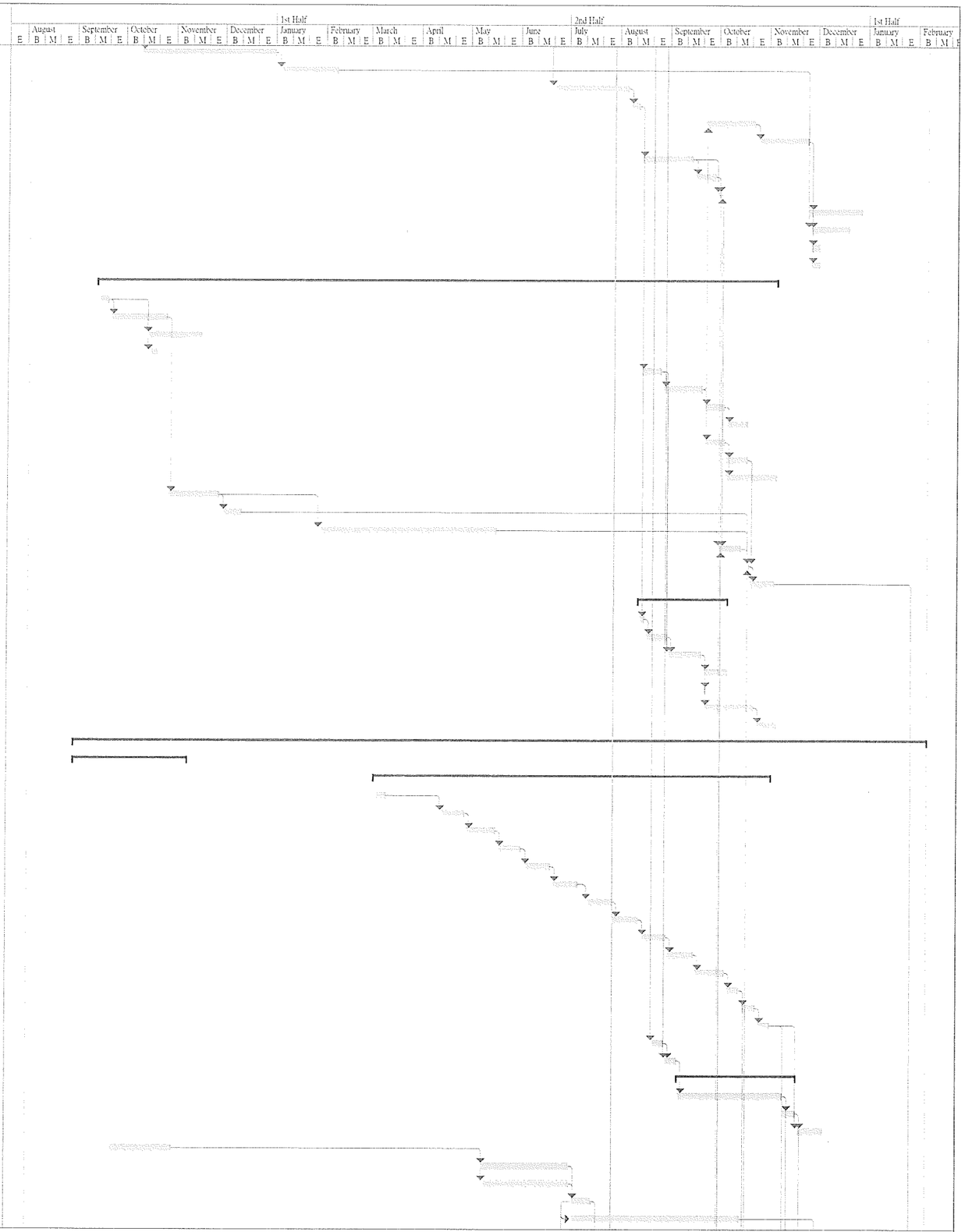
Contract 2 (NE/2016/05)

ID	Task Name	Duration	Start	Finish	Predecessors	Successors
1	**NE/2016/05**	**457 days**	**Tue 3/8/21**	**Mon 6/2/23**		
2	**Portion 1**	**333 days**	**Tue 3/8/21**	**Wed 14/9/22**		
3	**E1 Escalator**	**84 days**	**Tue 3/8/21**	**Thu 11/11/21**		
110	**Landscaping on Slope**	**297 days**	**Tue 24/8/21**	**Wed 24/8/22**		
111	U-Channel	7 days	Tue 24/8/21	Tue 31/8/21		112
112	Hydroseeding	7 days	Wed 1/9/21	Wed 8/9/21	111	113
113	Planting	14 days	Mon 8/8/22	Tue 23/8/22	112	114
114	Handover of Slope	1 day	Wed 24/8/22	Wed 24/8/22	113	
115	**Construction of LCSD Rest Garden**	**233 days**	**Wed 1/12/21**	**Wed 14/9/22**		
116	XP & TTA Obtainment	28 days	Wed 1/12/21	Wed 5/1/22		117
117	Remove Ext. Planter Wall	14 days	Thu 6/1/22	Fri 21/1/22	116	118,119
118	Remove Ext. Tree	12 days	Sat 22/1/22	Tue 8/2/22	117	119
119	Construction of Pavement	35 days	Mon 4/7/22	Fri 12/8/22	118,117	120
120	Construction of Paviion, Bench	28 days	Sat 13/8/22	Wed 14/9/22	119	
121	**Construction of Sau Mau Ping Memorial Park**	**309 days**	**Fri 20/8/21**	**Sat 3/9/22**		
122	Submission for Pole Light, Pavilion, Bench	15 days	Fri 20/8/21	Mon 6/9/21		123
123	Procurement of Pole Light, Pavilion, Bench	30 days	Tue 7/9/21	Wed 13/10/21	122	124,125
124	Construction of Paviion	10 days	Mon 4/7/22	Thu 14/7/22	123	130
125	Construction of Pole Light with Cabling	10 days	Fri 15/10/21	Tue 26/10/21	123	130
126	Construction of Pavement	56 days	Wed 15/6/22	Fri 19/8/22		130,129
127	Construction of Irrigation System	28 days	Fri 20/8/21	Tue 21/9/21		130
128	Construction of Railing	12 days	Mon 4/7/22	Sat 16/7/22		130
129	Planting	12 days	Sat 20/8/22	Fri 2/9/22	126	130
130	Handover to LCSD	1 day	Sat 3/9/22	Sat 3/9/22	124,125,126,128,129,127	
131						
132	**Portion 2**	**439 days**	**Tue 24/8/21**	**Mon 6/2/23**		
133	**E3-PC2 Pile Cap, Column and Pier**	**175 days**	**Wed 1/9/21**	**Sat 2/4/22**		
134	Concrete Capping Works	6 days	Wed 8/9/21	Tue 14/9/21		137
135	Temporary Working Platform for Piling	12 days	Wed 1/9/21	Tue 14/9/21		137
136	Risk Assessment for Existing RC Canopy at Fu Wah Court	12 days	Fri 24/9/21	Fri 8/10/21		137,174
137	Piling Works	40 days	Sat 9/10/21	Thu 25/11/21	135,134,136	138,153,154
138	Anchor Plate for Pile Heads incl. Testing	6 days	Fri 26/11/21	Thu 2/12/21	137	139
139	Construction of Blindng Layer	2 days	Fri 3/12/21	Sat 4/12/21	138	140
140	Constructiono of Pile Cap	10 days	Mon 6/12/21	Thu 16/12/21	139	141
141	Construction of Column	12 days	Tue 18/1/22	Mon 31/1/22	140	142
142	Construction of Pier Head and Corbal	22 days	Fri 4/2/22	Tue 1/3/22	141	143,144
143	Concrete Curing for Pier Head	28 days	Wed 2/3/22	Sat 2/4/22	142	153
144	Bearing Installation at Corbal	3 days	Wed 2/3/22	Fri 4/3/22	142	153
145	**E3-FB1 Bridge**	**380 days**	**Tue 24/8/21**	**Tue 29/11/22**		
146	Design Submission of Temporary Support at E3-Abt	1 day	Tue 24/8/21	Tue 24/8/21		153,147,154
147	Design Submission Approval of Temporary Support at E3-Abt	28 days	Wed 24/11/21	Tue 28/12/21	146	150
148	Shop Drawing Submission of E3-FB1	1 day	Fri 27/8/21	Fri 27/8/21		153,149,154
149	Shop Drawing Approval of E3-FB1	28 days	Wed 29/12/21	Mon 31/1/22	148	151,152
150	Procurement of Material for Temp. Support	12 days	Wed 29/12/21	Wed 12/1/22	147	153,154
151	Procurement / fabribation for E3-FB1 (1st - 3rd Session)	50 days	Fri 4/2/22	Sat 2/4/22	149	155,156,157
152	Procurement / fabribation for E3-FB1 (4th Session)	40 days	Tue 7/6/22	Sat 23/7/22	149	161
153	Erect Temp. Support at E3-Abt (For 1st Session, E3-FB1)	6 days	Mon 4/4/22	Mon 11/4/22	146,148,150,137,143,144	155
154	Bearing Installation at E3-Abt	3 days	Tue 15/3/22	Thu 17/3/22	146,148,150,137	155
155	Lifting & Install E3-FB1 - 1st Session (from E3-Abt)	6 days	Sat 7/5/22	Sat 14/5/22	151,153,154	156,157,176
156	Lifting & Install E3-FB1 - 2nd Session (from E3-P1)	6 days	Mon 16/5/22	Sat 21/5/22	155,151	234,157
157	Lifting & Install E3-FB1 - 3rd Session (Connect 1st & 2nd Session)	6 days	Mon 23/5/22	Sat 28/5/22	155,156,151	161
158	Fabribation & Delivery of Temp Steel Platform in Mainland	6 days	Sat 30/4/22	Sat 7/5/22		159
159	Fabribation & Delivery of Temp Steel Platform in HK	12 days	Tue 10/5/22	Mon 23/5/22	158	160
160	Install Temporary Steel Platform for E3-LT1 to E3-P1	28 days	Tue 7/6/22	Sat 9/7/22	159	161
161	Lifting & Install E3-FB1 - 4th Session (E3-LT1 to E3-P1)	12 days	Mon 25/7/22	Sat 6/8/22	157,152,160	235,162
162	Erection of Scaffolding	6 days	Mon 8/8/22	Sat 13/8/22	161	163,172
163	Concreting Bridge Deck	10 days	Mon 15/8/22	Thu 25/8/22	162	164
164	Construction of RC Planters	21 days	Fri 26/8/22	Mon 19/9/22	163	170,165
165	Installation of Corrugated Roof Panel & Gutter	21 days	Tue 20/9/22	Thu 13/10/22	164	169,171,172,167,166SS+10 day
166	Floor Tiling	21 days	Sat 1/10/22	Tue 25/10/22	165SS+10 days	168SS+11 days
167	Installation of GRP Feature	12 days	Fri 14/10/22	Thu 27/10/22	165	172
168	Installation of E&M Works incl. Lighting, Power Cable (From E3 Pillar	28 days	Fri 14/10/22	Tue 15/11/22	166SS+11 days	172
169	Installation of Downpipe	6 days	Fri 14/10/22	Thu 20/10/22	165	172
170	Installation of Irrigation System	12 days	Tue 20/9/22	Mon 3/10/22	164	172
171	Fall Arrest System	6 days	Fri 14/10/22	Thu 20/10/22	165	
172	Dismantling of Scaffolding & Temporary Support to E3-FB1	12 days	Wed 16/11/22	Tue 29/11/22	165,167,168,169,170,162	
173	**Covered Walkway, Sump Pit, E2 Pillar Box**	**366 days**	**Sat 9/10/21**	**Tue 27/12/22**		

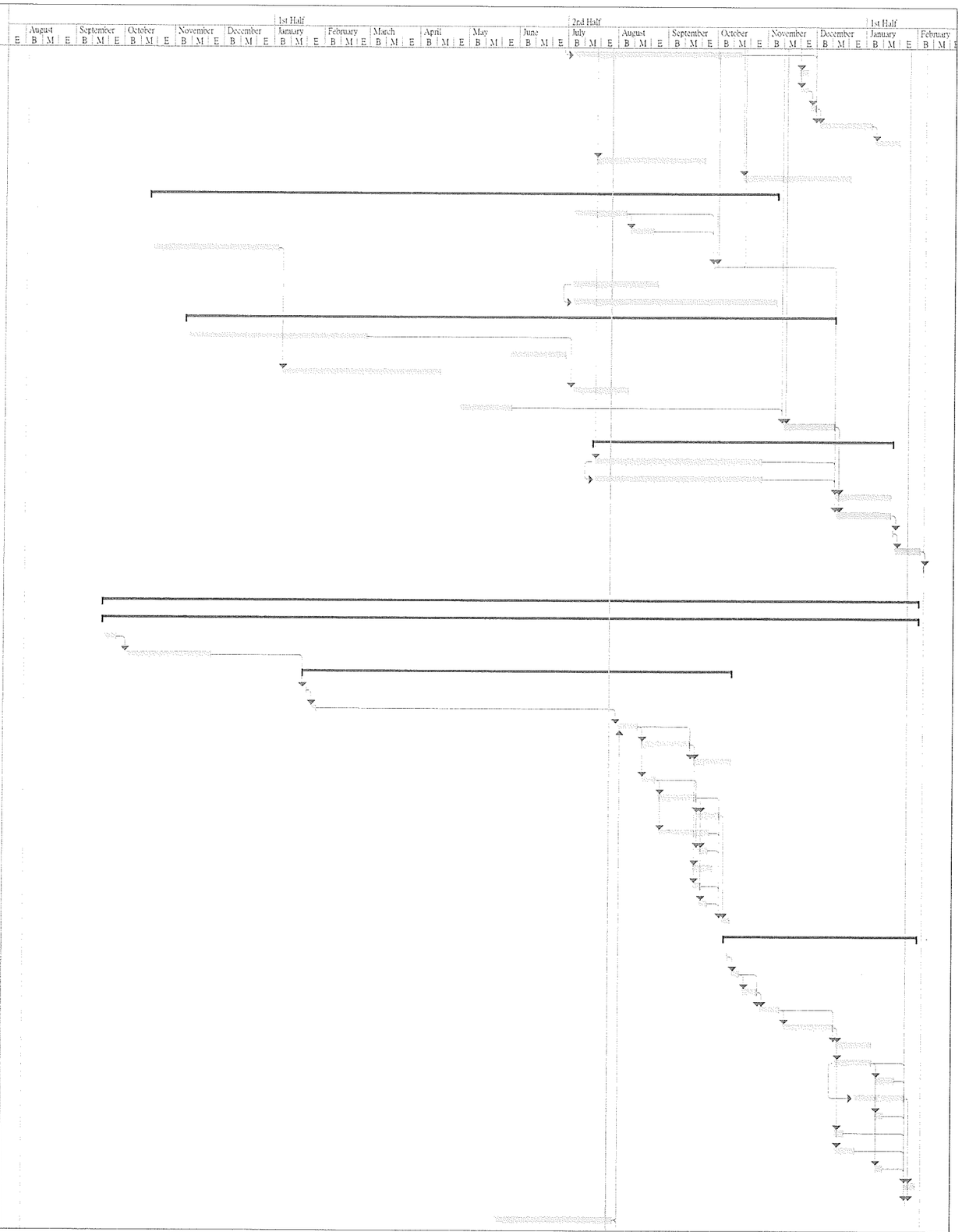


Project: NE201605_Programme_20	Task		Summary		Inactive Milestone		Duration-only		Start-only		External Milestone		Critical Split	
	Split		Project Summary		Inactive Summary		Manual Summary Rollup		Finish-only		Deadline		Progress	
	Milestone		Inactive Task		Manual Task		Manual Summary		External Tasks		Critical		Manual Progress	

ID	Task Name	Duration	Start	Finish	Predecessors	Successors
174	Excavation of Sump Pit	69 days	Sat 9/10/21	Fri 31/12/21	136	175
175	Construction of Sump Pit	28 days	Mon 3/1/22	Mon 7/2/22	174	184
176	Construction of Footing of Covered Walkway	40 days	Mon 20/6/22	Fri 5/8/22	155	177
177	Backfilling and Compaction Test	6 days	Sat 6/8/22	Fri 12/8/22	176	192,206,180
178	Installation of Steel Frame (Covered Walkway)	28 days	Wed 21/9/22	Sat 22/10/22	193	179
179	Installation of Roofing (Covered Walkway)	28 days	Mon 24/10/22	Thu 24/11/22	178	183,185,186,184
180	Construction of E2 Pillar Box (Civil)	28 days	Sat 13/8/22	Wed 14/9/22	177	181,182
181	Construction of E2 Pillar Box (E&M)	12 days	Thu 15/9/22	Wed 28/9/22	180	182,257
182	E2 Pillar Energized from E3 Pillar	1 day	Fri 30/9/22	Fri 30/9/22	257,180,181	202
183	Construction of Pavement	28 days	Fri 25/11/22	Tue 27/12/22	179	
184	Installation of E&M Works (Pump & Lighting)	21 days	Fri 25/11/22	Mon 19/12/22	175,179	
185	Installation of Irrigation Pipe	6 days	Fri 25/11/22	Thu 1/12/22	179	
186	Fall Arrest System	6 days	Fri 25/11/22	Thu 1/12/22	179	
187	**E2 Lift Tower**	**342 days**	**Tue 14/9/21**	**Sat 5/11/22**		
188	Scaffolding Modification	6 days	Tue 14/9/21	Mon 20/9/21		189,190,191
189	Window and Louvre Installation	28 days	Tue 21/9/21	Tue 26/10/21	188	199
190	Tiling Works on Wall	28 days	Fri 15/10/21	Tue 16/11/21	188	
191	Waterproofing Works	5 days	Fri 15/10/21	Wed 20/10/21	188	
192	Erect Falseworks for E2-LT1 RC Decking at +66.3mPD	12 days	Sat 13/8/22	Fri 26/8/22	177	193,208
193	Construction of E2-LT1 RC Decking at +66.3mPD	21 days	Sat 27/8/22	Tue 20/9/22	192	196,178,194
194	Erect Falseworks for E2-LT1 Staircase Landing at +62.85mPD	12 days	Wed 21/9/22	Tue 4/10/22	193	195
195	Construction of E2-LT1 Staircase Landing at +62.85mPD	12 days	Wed 5/10/22	Tue 18/10/22	194	
196	Installation of Steel Frame (E2-LT1 Canopy)	12 days	Wed 21/9/22	Tue 4/10/22	193	197,198
197	Installation of Railing	12 days	Wed 5/10/22	Tue 18/10/22	196	203
198	Tiling Works	28 days	Wed 5/10/22	Sat 5/11/22	196	
199	E&M Works	28 days	Wed 27/10/21	Sat 27/11/21	189	200,201
200	Cabling for Permanent Power	12 days	Mon 29/11/21	Sat 11/12/21	199	203
201	Lift Installation	85 days	Fri 28/1/22	Tue 17/5/22	199	203,202
202	Lift T&C	12 days	Sat 1/10/22	Fri 14/10/22	201,257,182	203
203	LE5 Submission to EMSD	1 day	Wed 19/10/22	Wed 19/10/22	201,200,197,257,202	204
204	Use Permit for E2-LT1	14 days	Thu 20/10/22	Fri 4/11/22	203	310
205	**E2-PC2 Pile Cap**	**47 days**	**Sat 13/8/22**	**Thu 6/10/22**		
206	Excavation for Column Construction	3 days	Sat 13/8/22	Tue 16/8/22	177	207
207	Construction of Column	12 days	Wed 17/8/22	Tue 30/8/22	206	208
208	Construction of Pier Head and Corbal	18 days	Wed 31/8/22	Tue 20/9/22	207,192	211,209,210
209	Concrete Curing for Pier Head and Corbal	14 days	Wed 21/9/22	Thu 6/10/22	208	
210	Bearing Installation	3 days	Wed 21/9/22	Fri 23/9/22	208	
211	Drainage	28 days	Wed 21/9/22	Sat 22/10/22	208	212
212	Reinstatment	12 days	Mon 24/10/22	Sat 5/11/22	211	
213	**E3-LT1 Lift TowerPortion 2**	**433 days**	**Tue 31/8/21**	**Mon 6/2/23**		
214	**E3-LT1 Lift tower structure**	**57 days**	**Tue 31/8/21**	**Mon 8/11/21**		
219	**E3-ST1 Staircase (landing & stairs)**	**201 days**	**Fri 4/3/22**	**Wed 2/11/22**		
220	1st pour (+25.0 - +28.6mPD)	7 days	Fri 4/3/22	Fri 11/3/22	218	221
221	2nd pour (+28.6 - +32.2mPD)	10 days	Thu 14/4/22	Thu 28/4/22	220	222
222	3rd pour (+32.2 - +35.8mPD)	14 days	Fri 29/4/22	Tue 17/5/22	221	223
223	4th pour (+35.8 - +38.8mPD)	14 days	Wed 18/5/22	Thu 2/6/22	222	224
224	5th pour (+38.8 - +41.8mPD)	14 days	Sat 4/6/22	Mon 20/6/22	223	225
225	6th pour (+41.8 - +45.4mPD)	14 days	Tue 21/6/22	Thu 7/7/22	224	226
226	7th pour (+45.4 - +49.0mPD)	14 days	Wed 13/7/22	Thu 28/7/22	225	227
227	8th pour (+49.0 - +52.6mPD)	14 days	Fri 29/7/22	Sat 13/8/22	226	228
228	9th pour (+52.6 - +56.2mPD)	14 days	Mon 15/8/22	Tue 30/8/22	227	229
229	10th pour (+56.2 - +59.7mPD)	15 days	Wed 31/8/22	Fri 16/9/22	228	230
230	11th pour (+59.7 - +63.3mPD)	16 days	Sat 17/9/22	Wed 5/10/22	229	231
231	12th pour (+63.3mPD)	8 days	Thu 6/10/22	Fri 14/10/22	230	232,252
232	13th pour (+66.5mPD)	8 days	Sat 15/10/22	Mon 24/10/22	231	233
233	14th pour (+70.45mPD)	8 days	Tue 25/10/22	Wed 2/11/22	232	266,239
234	Erection of small crane at roof	7 days	Mon 22/8/22	Mon 29/8/22	156	235
235	Removal of tower crane & footing	7 days	Tue 30/8/22	Tue 6/9/22	234,161	237
236	**Reinstatement works for tower crane slab**	**63 days**	**Wed 7/9/22**	**Fri 18/11/22**		
237	Slab Opening Reinstatement	56 days	Wed 7/9/22	Thu 10/11/22	235	238,266
238	Parapet Wall (Remaining)	7 days	Fri 11/11/22	Fri 18/11/22	237	246,247,239
239	Removal of small crane	14 days	Sat 19/11/22	Mon 5/12/22	238,233	
240	Steel truss - welding works & welding test	31 days	Thu 23/9/21	Sun 31/10/21		241,242
241	Window installation	45 days	Tue 10/5/22	Sat 2/7/22	240	243
242	Louvre installation	45 days	Tue 10/5/22	Sat 2/7/22	240	243
243	Water tightness test for E3-LT1 louvre / windows	12 days	Mon 4/7/22	Sat 16/7/22	241,242	244SS,245SS,251,268
244	Tiles (Wall/Staircase/Floor)	90 days	Mon 4/7/22	Sat 15/10/22	243SS	249



ID	Task Name	Duration	Start	Finish	Predecessors	Successors
245	Paint	90 days	Mon 4/7/22	Sat 15/10/22	243SS	249
246	Fall Arrest System (Roof)	6 days	Sat 19/11/22	Fri 25/11/22	238	
247	Waterproof (Roof)	6 days	Sat 19/11/22	Fri 25/11/22	238	248
248	Water tightness test for E3-LT1 roof	4 days	Sat 26/11/22	Wed 30/11/22	247	249
249	Dismantle of scaffolding working platform	30 days	Thu 1/12/22	Wed 4/1/23	248,244,245	250
250	Glass canopy at G/F	15 days	Thu 5/1/23	Sat 21/1/23	249	
251	Install inclined plate at the recess of Windows & Louvres	59 days	Mon 18/7/22	Fri 23/9/22	243	
252	Railing (GMS) on staircase	59 days	Sat 15/10/22	Thu 22/12/22	231	
253	**E&M works**	**317 days**	**Mon 18/10/21**	**Mon 7/11/22**		
254	Excavation and Laying Cable by CLP (Next to HD Site)	30 days	Mon 4/7/22	Sat 6/8/22		255,257
255	Excavation by KO and Laying Cable by CLP (Outside E3-LT1)	14 days	Mon 8/8/22	Tue 23/8/22	254	257
256	E3 Pillar Box (Civil)	65 days	Mon 18/10/21	Tue 4/1/22		263
257	E3 Pillar Energized by CLP	1 day	Thu 29/9/22	Thu 29/9/22	181,254,255	270,203,202,182,271
258	Telemetry Duct	47 days	Mon 4/7/22	Fri 26/8/22		259SS
259	Drainage Manhole	109 days	Mon 4/7/22	Mon 7/11/22	258SS	
260	**Electrical installation**	**329 days**	**Tue 9/11/21**	**Tue 13/12/22**		
261	Lift Shafts	90 days	Tue 9/11/21	Mon 28/2/22	218	264
262	Sump Pit (E&M)	30 days	Thu 26/5/22	Thu 30/6/22		
263	Pillar Box (E&M)	82 days	Wed 5/1/22	Thu 14/4/22	256	
264	Lighting	31 days	Mon 4/7/22	Mon 8/8/22	261	
265	Machine room (Above Lift Shaft)	28 days	Mon 25/4/22	Sat 28/5/22		266
266	Machine room (Above E3-ST1 Staircase & Tower Crane)	28 days	Fri 11/11/22	Tue 13/12/22	237,265,233	271,270
267	**Lift installation**	**159 days**	**Mon 18/7/22**	**Wed 18/1/23**		
268	Lift Car Installation	90 days	Mon 18/7/22	Sat 29/10/22	243	269SS,270,271
269	Door frames / Misc.	90 days	Mon 18/7/22	Sat 29/10/22	268SS	270,271
270	Self test	30 days	Wed 14/12/22	Tue 17/1/23	257,268,269,266	
271	T&C	30 days	Wed 14/12/22	Tue 17/1/23	266,257,268,269	272
272	Submit LE5 to EMSD	1 day	Wed 18/1/23	Wed 18/1/23	271	273
273	Pre-handing over inspection (E3-LT1 & E3-FB1) by HyD/Structure	15 days	Thu 19/1/23	Sat 4/2/23	272	274
274	Ready to open Lift Tower E3-LT1 / Footbridge E3-FB1 to public	1 day	Mon 6/2/23	Mon 6/2/23	273	
275						
276	**Portion 3**	**414 days**	**Mon 20/9/21**	**Fri 3/2/23**		
277	**E2-FB1 Bridge**	**414 days**	**Mon 20/9/21**	**Fri 3/2/23**		
278	Shop Drawing Approval of E3-FB1	7 days	Mon 20/9/21	Tue 28/9/21		279
279	Procurement of Material for E3-FB1	45 days	Mon 4/10/21	Thu 25/11/21	278	281
280	**E2-FB1 - 1st Span (Housing Lift Tower to E2-P2)**	**215 days**	**Fri 21/1/22**	**Tue 11/10/22**		
281	Bridge Erection (Only allow on Sat to Sun / Public Holiday)	2 days	Fri 21/1/22	Sun 23/1/22	279	282
282	Remaining Steelworks before Bridge Deck Casting	6 days	Mon 24/1/22	Sat 29/1/22	281	283
283	Concreting Bridge Deck	12 days	Tue 2/8/22	Mon 15/8/22	282,311	284,286,285
284	Construction of RC Planter	28 days	Tue 16/8/22	Fri 16/9/22	283	292,291,285
285	Floor Tiling	21 days	Sat 17/9/22	Tue 11/10/22	283,284	
286	Erection of Scaffolding	10 days	Tue 16/8/22	Fri 26/8/22	283	287,288,289,290
287	Installation of Corrugated Roof Panel & Gutter	21 days	Sat 27/8/22	Tue 20/9/22	286	290,293,294,288
288	Installation of GRP Feature	12 days	Wed 21/9/22	Tue 4/10/22	286,287	294
289	Installation of E&M Works incl. Unistruct & Lighting	28 days	Sat 27/8/22	Wed 28/9/22	286	294
290	Installation of Downpipe	6 days	Wed 21/9/22	Tue 27/9/22	287,286	294
291	Installation of Railing	12 days	Sat 17/9/22	Fri 30/9/22	284	
292	Installation of Irrigation System	6 days	Sat 17/9/22	Fri 23/9/22	284	294
293	Fall Arrest System	6 days	Wed 21/9/22	Tue 27/9/22	287	294
294	Dismantling of Scaffolding	6 days	Wed 5/10/22	Tue 11/10/22	288,289,290,292,287,293	
295	**E2-FB1 - 2nd Span (E2-P2 to E2-LT1)**	**102 days**	**Sat 8/10/22**	**Fri 3/2/23**		
296	Bridge Lifting (Only allow on Sat to Sun / Public Holiday)	2 days	Sat 8/10/22	Mon 10/10/22		297
297	Remaining Steelworks before Bridge Deck Casting	6 days	Tue 11/10/22	Mon 17/10/22	296	299,298
298	Erection of Scaffolding	10 days	Tue 18/10/22	Fri 28/10/22	297	299
299	Concreting Bridge Deck	12 days	Sat 29/10/22	Fri 11/11/22	297,298	300,301
300	Construction of RC Planter	28 days	Sat 12/11/22	Wed 14/12/22	299	306,307,301,302
301	Floor Tiling	21 days	Thu 15/12/22	Sat 7/1/23	299,300	
302	Installation of Corrugated Roof Panel & Gutter	21 days	Thu 15/12/22	Sat 7/1/23	300	308,305,303,309,304SS+10 day
303	Installation of GRP Feature	12 days	Mon 9/1/23	Sat 21/1/23	302	309
304	Installation of E&M Works incl. Unistruct & Lighting	28 days	Tue 27/12/22	Fri 27/1/23	302SS+10 days	309,310
305	Installation of Downpipe	6 days	Mon 9/1/23	Sat 14/1/23	302	309
306	Installation of Irrigation System	6 days	Thu 15/12/22	Wed 21/12/22	300	309
307	Installation of Railing	12 days	Thu 15/12/22	Wed 28/12/22	300	310
308	Fall Arrest System	6 days	Mon 9/1/23	Sat 14/1/23	302	309
309	Dismantling of Scaffolding	6 days	Sat 28/1/23	Fri 3/2/23	303,304,305,306,308,302	
310	Ready to open Lift Tower E2-LT1 & E2-FB1	1 day	Sat 28/1/23	Sat 28/1/23	307,304,204	
311	Underground Drainage	60 days	Sat 21/5/22	Mon 1/8/22		312,283

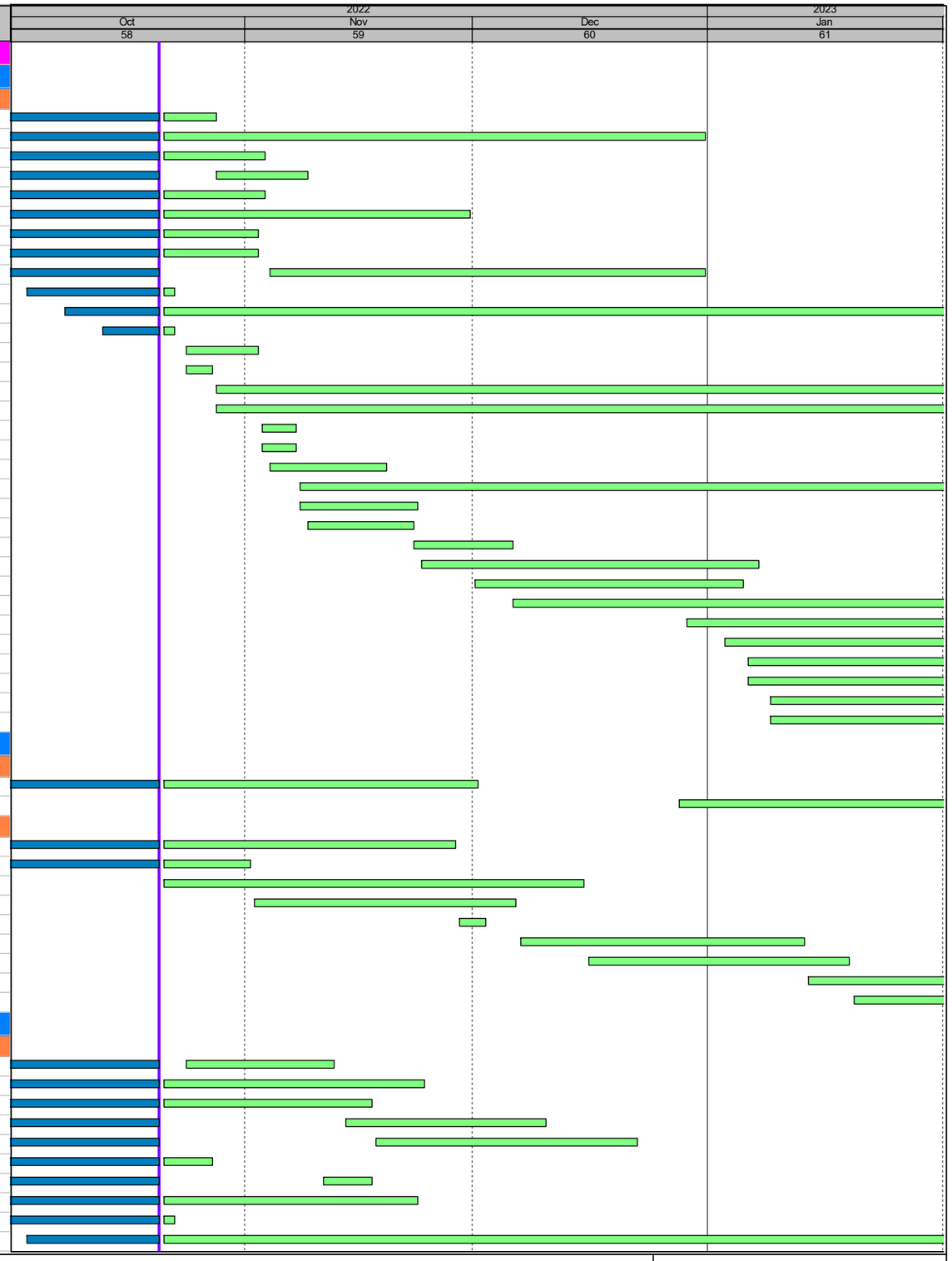


Project: NE201605_Programme_20

Task | Split | Milestone | Summary | Project Summary | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | External Tasks | External Milestone | Deadline | Critical | Critical Split | Progress | Manual Progress

Contract 3 (NE/2017/03)

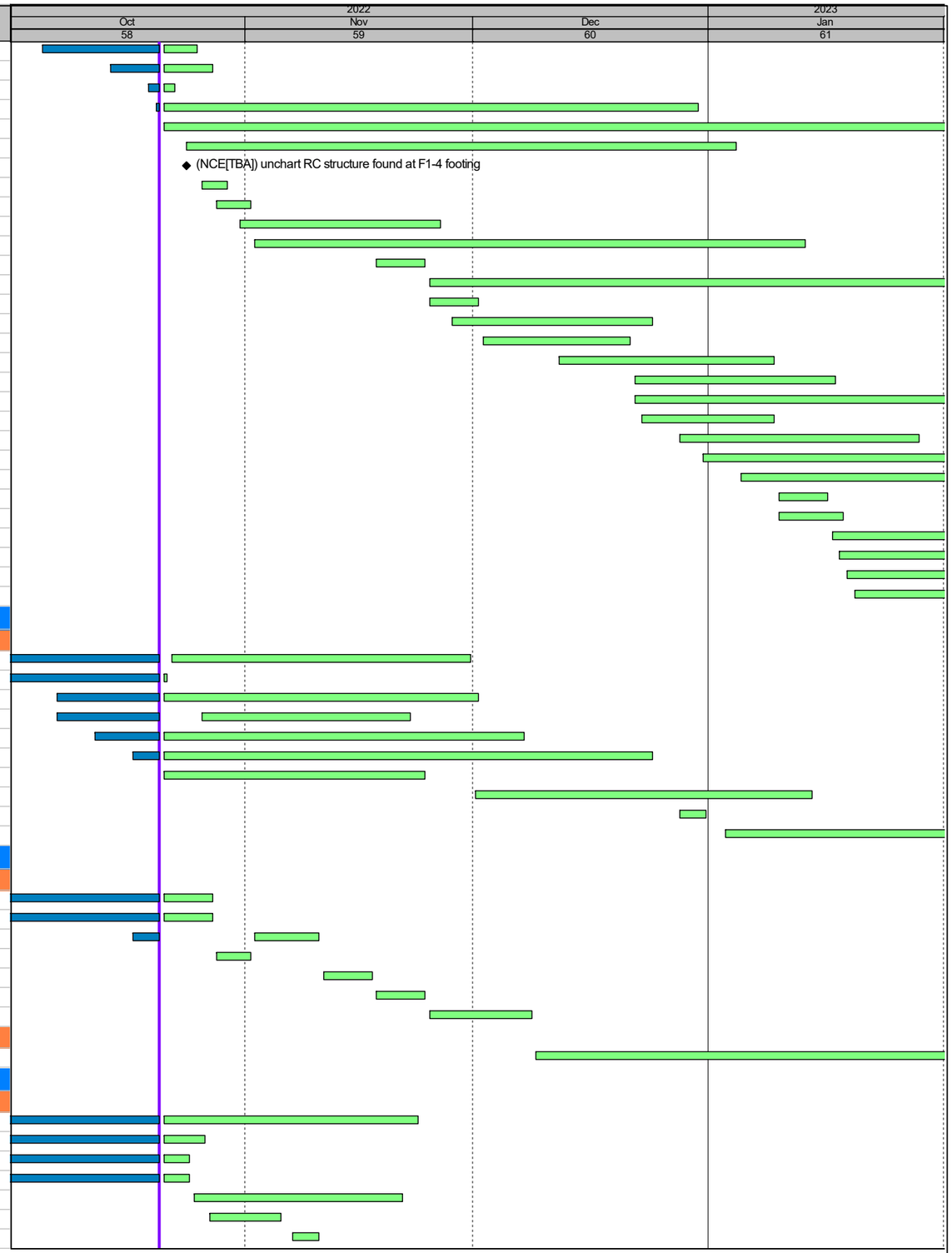
Activity ID	Activity Name	Duration	Start	Finish
NE2017/03 - ARQ PHASE 2A - Monthly Programme Update (202210)-0 _221020		1234	04-Nov-20 A	06-Jan-24
Road Improvement Works Location 1 (RIW1)		742	04-Nov-20 A	10-May-23
Construction Works		742	04-Nov-20 A	10-May-23
CON10650	Construct RW wall (RWC2 type 1a & 1 [Bay 2 to Bay 1])	225	04-Nov-20 A	28-Oct-22
CON11328C	CSD reviewing at CT5	252	18-Jan-22 A	31-Dec-22
CON10268A	(NCE[TBA]) Utilities (CLP cable, HKT cable portection & asbestos pipe remova	36	15-Apr-22 A	03-Nov-22
CON10650A	(NCE148) Inclement weather 21/5/2021 to 20/6/2021 RWC2 type 1a, 1 & 2	12	19-Jul-22 A	09-Nov-22
CON11550A	Gas Main Diversion Works	29	11-Aug-22 A	03-Nov-22
CON10231E	(CE358) Watermain diversion due to unforeseen ground condition (by WSD &	30	17-Aug-22 A	30-Nov-22
CON12472	Construct 2nos storm manhole & strom drain pipe	23	29-Aug-22 A	02-Nov-22
CON12474	Construct 2nos sewage manhole & strom drain pipe	23	29-Aug-22 A	02-Nov-22
CON10271	Further ELS to RWC2 type 5 due to unforeseen ground utilities	54	31-Aug-22 A	31-Dec-22
CON10750F	(NCE210) Inclement weather (21/7/2022 to 20/8/2022) on RIW1 RWC2 type :	17	03-Oct-22 A	22-Oct-22
CON12690	Modification existing TTA, Site formation works, construct temporaty road, pre-c	96	08-Oct-22 A	03-Feb-23
CON12372A	(NCE216) Inclement weather (21/8/2022 to 20/9/2022) on KS27 east side	9	13-Oct-22 A	22-Oct-22
CON10750H	(NCE216) Inclement weather (21/8/2022 to 20/9/2022) on RIW1 RWC2 type :	9	24-Oct-22	02-Nov-22
CON12372B	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on KS27 east side	4	24-Oct-22	27-Oct-22
CON12410	Application for power supply & energization (KS27)	156	28-Oct-22	10-May-23
CON12390	ELS works & construct subway footing (KS27 east side)	90	28-Oct-22	16-Feb-23
CON10750J	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on RIW1 RWC2 typ	4	03-Nov-22	07-Nov-22
CON12474A	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on KS27 west side	4	03-Nov-22	07-Nov-22
CON11552	Install sheet pile for pile cap construction (FE1-PC1b, 32m, 1m/d)	14	04-Nov-22	19-Nov-22
CON10752	Install sheet pile & ELS to RW pile cap (RWC2 type 3, stage 1)	72	08-Nov-22	06-Feb-23
CON12476	Connect to existing manhole	14	08-Nov-22	23-Nov-22
CON10650B	(NCE153) Inclement weather 21/6/2021 to 20/7/2021 RWC2 type 1a, 1 & 2	12	09-Nov-22	23-Nov-22
CON10650C	(NCE157) Inclement weather 21/7/2021 to 20/8/2021 RWC2 type 1a, 1 & 2	11	23-Nov-22	06-Dec-22
CON11554	ELS works for pile cap construction (FE1-PC1b, 32m, 1m/d)	36	24-Nov-22	07-Jan-23
CON10240	Existing sewage drainage pipe diversion (lower stream)	28	01-Dec-22	05-Jan-23
CON10652	Construct RW footing (RWC2 type 2)	60	06-Dec-22	21-Feb-23
CON10654	Construct RW wall (RWC2 type 2)	60	29-Dec-22	14-Mar-23
CON11330	Construct CT5 piling foundation (12nos, 6d/no, 1 team + setup)	90	03-Jan-23	25-Apr-23
CON10272	Cut slope works (RWC2 Bay 48 to Bay 47)	30	06-Jan-23	13-Feb-23
CON10274	Cut slope works (RWC2 type 4 Bay 45 to Bay 38)	60	06-Jan-23	20-Mar-23
CON12330	Construct subway footing (KS27 west side, bay 1)	18	09-Jan-23	01-Feb-23
CON11650	Construct NB RC pile cap (FE1-PC1b, 32m, 1m/d, 1 team)	24	09-Jan-23	08-Feb-23
Road Improvement Works Location 2 (RIW2)		490	10-Jan-22 A	19-Jun-23
Construction Works in Slope C3 (Portion B)		386	10-Jan-22 A	07-Mar-23
CON20790	Construct RW bay 9 to bay 13 base (L=30m) (due to unforeseen ground conc	66	10-Jan-22 A	01-Dec-22
CON20170	Fabrication of NB steel post - along slope side	70	28-Dec-22	07-Mar-23
Construction Noise Semi-Enclosure SE2 (Portion C)		341	23-Aug-22 A	19-Jun-23
CON219671A	(NCE208) Excavation & Install additional sheet pile for exposed 132kV cable p	60	23-Aug-22 A	28-Nov-22
CON21660	(CE332) Excavate trial trench, SLG meeting & UU portection works	24	03-Sep-22 A	01-Nov-22
CON21776	ELS works at CT4 (12nos. strut, 0.25no/d, 1 team + setup)	48	21-Oct-22	15-Dec-22
CON21658	(CE332) Construct piling fdn of SE2 (Bay9 to Bay12, stage 2 38nos. 1 team)	30	02-Nov-22	06-Dec-22
CON219671B	(NCE[TBA]) Inclement weather 21/9/2022 to 20/10/2022 at SE2 (Bay13 to Bay	4	29-Nov-22	02-Dec-22
CON21670	Install pipe pile wall at SE2 Bay4 to Bay8 (48m 68no. 1 team + setup)	30	07-Dec-22	13-Jan-23
CON21778	Construct NB pile cap (CT4 Bay1 to Bay3; L=30m)	27	16-Dec-22	19-Jan-23
CON21690	Excavate & install lateral support (SE2 Bay4 to Bay12; L=110m)	125	14-Jan-23	19-Jun-23
CON21780	Construct NB RC L-shaped wall (CT4 Bay1 to Bay3; L=30m)	42	20-Jan-23	13-Mar-23
Road Improvement Works Location 3 (RIW3)		896	16-Aug-21 A	30-Aug-23
Construction Works		896	16-Aug-21 A	30-Aug-23
CON32410	Construct type 2 NB footing (SE1 bay13 to bay8)	150	16-Aug-21 A	12-Nov-22
CON30170	Slope works & fill no-fine concrete at slope D1 (Level 1/4, 400m3)	72	19-Aug-21 A	24-Nov-22
CON30410F	JV prepare pipe pile wall design; ICE review & approval; PM review, comment	266	24-Aug-21 A	17-Nov-22
CON32412	Construct SE1 bay13 & bay8 (lower-pour) retaining wall	24	05-Nov-21 A	10-Dec-22
CON30412B	Install pipe pile wall (around 32nos. 1d/no.+ setup) (Bay 14b to Bay 16)	59	14-Jan-22 A	22-Dec-22
CON31706A	(RFI295) Design review to footing F1-4	36	15-Feb-22 A	27-Oct-22
CON30392	Backfill RWD1 (bay10 to bay13)	60	12-Apr-22 A	17-Nov-22
CON32750	(CE497) Construct footing of RWD2 bay8 & bay9	60	13-Sep-22 A	23-Nov-22
CON31708C	Further trial pit excavation	42	24-Sep-22 A	22-Oct-22
CON31212	Rock slope mapping (Stage 2)	180	03-Oct-22 A	20-May-23



Actual Work
Remaining Work
Milestone

NE/2017/03 Development of Anderson Road Quarry Site - Investigation Design & Construction
Development of Anderson Road Quarry Site Road - Improvement Works & Pedestrian Connectivity Facilities Works Phase 2A
3-Month Rolling Programme

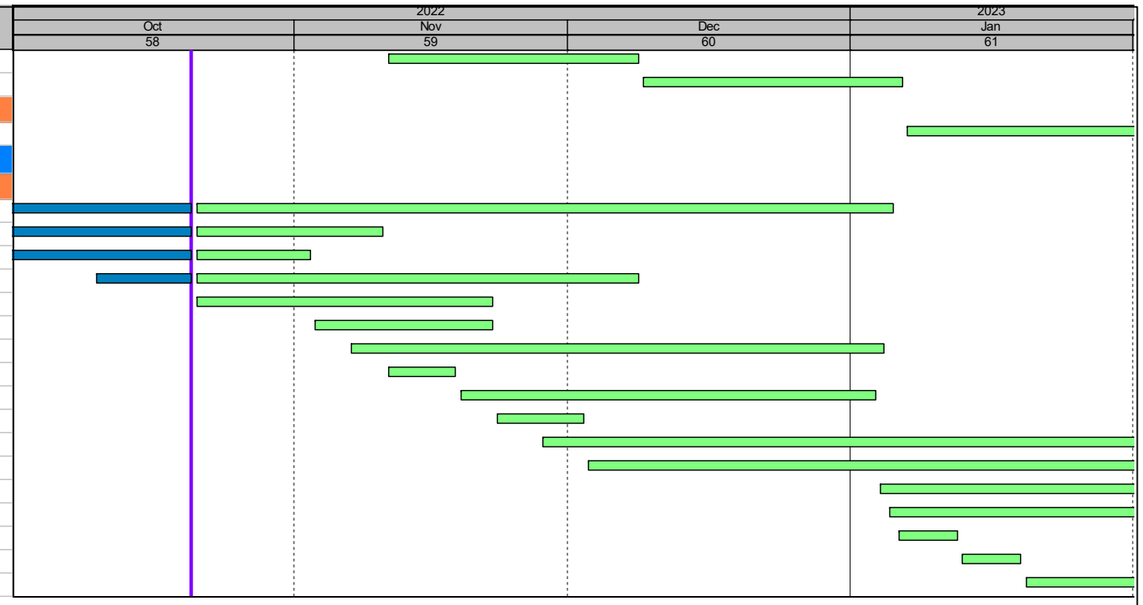
Activity ID	Activity Name	Duration	Start	Finish
CON31430	Install safety fencing, from haul road & hoarding (Slope D4, CH275 to CH430)	18	05-Oct-22 A	25-Oct-22
CON30652D	(NCE216) Inclement weather (21/8/2022 to 20/9/2022) on RIW3 WM	9	14-Oct-22 A	27-Oct-22
CON32402E	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on RIW3 SE1 bay8	4	19-Oct-22 A	22-Oct-22
CON32770	(CE497) Construct wall of RWD2 bay8 & bay9	60	20-Oct-22 A	30-Dec-22
CON31170	Soil nail works (11NE-D/F246, stage 2)	150	21-Oct-22	25-Apr-23
CON31708E	Coordition with UU parties for conformation & removal unchart RC structure	60	24-Oct-22	04-Jan-23
CON31708D	(NCE[TBA]) unchart RC structure found at F1-4 footing	0	24-Oct-22	
CON31430A	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on RIW3 Slope D4	4	26-Oct-22	29-Oct-22
CON30652E	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on RIW3 WM	4	28-Oct-22	01-Nov-22
CON31450	Trees felling (Slope D4, CH275 to CH430)	24	31-Oct-22	26-Nov-22
CON30670	Application of TTA / discussion with WSD for fresh watermain B and salt watern	60	02-Nov-22	13-Jan-23
CON30392A	(NCE201) Inclement weather (21/5/2022 to 20/6/2022) on RIW3 WM	6	18-Nov-22	24-Nov-22
CON30190	Excavation, find-out rock-head & ELS works (Level 1/4)	126	25-Nov-22	03-May-23
CON30392B	(NCE202) Inclement weather (21/6/2022 to 20/7/2022) on RIW3 WM	6	25-Nov-22	01-Dec-22
CON31470	Erect working platform	24	28-Nov-22	24-Dec-22
CON30392C	(NCE210) Inclement weather (21/7/2022 to 20/8/2022) on RIW3 WM	17	02-Dec-22	21-Dec-22
CON32414	(CE[TBA]) Additional rock break due to unforeseen ground condition @ SE1 b	22	12-Dec-22	09-Jan-23
CON30656	Lay twin DN600 watermain at RW RWD1a Bay10 - Bay13 (FW CH290 to CH:	20	22-Dec-22	17-Jan-23
CON30394	Backfill RWD1 (bay6 to bay10)	48	22-Dec-22	22-Feb-23
CON30412C	ELS works and shotcrete (Bay 14b to Bay 16)	12	23-Dec-22	09-Jan-23
CON31490	Install monitoring & instrumentation (Slope D4)	24	28-Dec-22	28-Jan-23
CON32790	Drainage & utilities works (RWD2 remaining)	42	31-Dec-22	22-Feb-23
CON31710	Construct footing, pier & pier head F1-4	144	05-Jan-23	04-Jul-23
CON30412D	Install UU support (Bay 14b to Bay 16)	6	10-Jan-23	16-Jan-23
CON32416	Construct type 2 NB footing (SE1 bay7)	8	10-Jan-23	18-Jan-23
CON30412E	Pre-drill & construct mini pile at RWD1 (bay 14b) (10nos, 3.0d/no, 1 team)	30	17-Jan-23	23-Feb-23
CON30490	Drainage & utilities works (bay 8 to bay 14)	42	18-Jan-23	10-Mar-23
CON32430	Construct SE1 bay7 (lower-pour) retaining wall	12	19-Jan-23	04-Feb-23
CON31214	PM review & acceptance and slope stabilization measures (Stage 2)	180	20-Jan-23	30-Aug-23
Pedestrian Connectivity Facility (PC-E11)		347	04-Nov-21 A	09-Feb-23
Construction Works		347	04-Nov-21 A	09-Feb-23
CON42630	Construct covered-walkway between PC-E11 & BBI toilet	102	04-Nov-21 A	30-Nov-22
CON42632A	PMI[TBA] - Addition duration for trim concrete & existing CI pipe diversion	30	17-Aug-22 A	21-Oct-22
CON42850	E&M works to PC-E11 @E11-FB1	48	07-Oct-22 A	01-Dec-22
CON42832	E&M works to PC-E11 @LT1 (Other than lift shaft area)	36	07-Oct-22 A	22-Nov-22
CON42732	ABWF works @LT1 (Other than lift shaft area)	48	12-Oct-22 A	07-Dec-22
CON42930	Lifts installation works in E11-LT1	60	17-Oct-22 A	24-Dec-22
CON42952	T&C to lift E11-LT2	30	21-Oct-22	24-Nov-22
CON42610A	Install fall arrest system on roof of footbridge	36	01-Dec-22	14-Jan-23
CON42930A	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) on E11	4	28-Dec-22	31-Dec-22
CON42970	T&C to lift E11-LT1	30	03-Jan-23	09-Feb-23
Pedestrian Connectivity Facility (PC-E8)		508	19-Jul-22 A	08-Dec-23
Construction Works		120	19-Jul-22 A	08-Dec-22
CON40710	Slope replacement works cycle 4 (slope 326)	60	19-Jul-22 A	27-Oct-22
CON40712	Construct additional standpipe and piezometer for groundwater monitoring	60	19-Jul-22 A	27-Oct-22
CON43310	Paving works (lower portion)	12	17-Oct-22 A	10-Nov-22
CON40712A	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) affected to E8	4	28-Oct-22	01-Nov-22
CON43330	Laying of cable ducts for light poles & re-installation of light poles (lower portion	6	11-Nov-22	17-Nov-22
CON43550	Installation of watermains for Irrigation (lower portion)	6	18-Nov-22	24-Nov-22
CON43570	Reinstatement of planter wall (lower portion)	12	25-Nov-22	08-Dec-22
Works Under Section 7A		365	09-Dec-22	08-Dec-23
CON41970	Establishment Works for Landscape Softworks in Section 7 (Portion G)	365	09-Dec-22	08-Dec-23
Pedestrian Connectivity Facility System A (SYA)		547	09-Jul-22 A	06-Jan-24
Construction Works		150	09-Jul-22 A	06-Jan-23
CON50496	E&M works (Open area for lift tower & staircase)	120	09-Jul-22 A	23-Nov-22
CON50310	Construct deck slab, planter wall and roofing for SYA	51	05-Sep-22 A	26-Oct-22
CON50430	Lifts installation works in SYA-LT1C & SYA-LT2A	48	06-Sep-22 A	24-Oct-22
CON50410	Lifts installation works in SYA-LT1A & SYA-LT1B	48	06-Sep-22 A	24-Oct-22
CON50450	T&C and Statutory Inspection to 4nos lift _SYA	24	25-Oct-22	21-Nov-22
CON50310A	(NCE216) Inclement weather (21/8/2022 to 20/9/2022) affected to SYA footbri	9	27-Oct-22	05-Nov-22
CON50310B	(NCE[TBA]) Inclement weather (21/9/2022 to 20/10/2022) affected to SYA foot	4	07-Nov-22	10-Nov-22



Actual Work
Remaining Work
◆ Milestone

NE/2017/03 Development of Anderson Road Quarry Site - Investigation Design & Construction
Development of Anderson Road Quarry Site Road - Improvement Works & Pedestrian Connectivity Facilities Works Phase 2A
3-Month Rolling Programme

Activity ID	Activity Name	Duration	Start	Finish
CON50350	ABWF works (footbridge)	24	11-Nov-22	08-Dec-22
CON50530	T&C and Statutory Inspection _SYA	22	09-Dec-22	06-Jan-23
Construction Works in Section 8A		365	07-Jan-23	06-Jan-24
CON50550	Establishment Works for Landscape Softworks in Section 8 (Portion H and I)	365	07-Jan-23	06-Jan-24
Pedestrian Connectivity Facility System B (SYB)		524	21-Jun-21 A	27-Apr-23
Construction Works		524	21-Jun-21 A	27-Apr-23
CON52170	Construct superstructure SYB-LT1 (excluding part of support to escalator)	460	21-Jun-21 A	05-Jan-23
CON53330	PM review & approval design for additional temporary road near PC3	90	16-May-22 A	10-Nov-22
CON52110	Construct pier SYB-P3 (3 pour) {PC4-R}	51	19-Jul-22 A	02-Nov-22
CON51950	Construct pier SYB-P6 (3 pour) {PC6-L}	52	10-Oct-22 A	08-Dec-22
CON51990	Construct pier SYB-P1 (1 pour) {PC1}	28	21-Oct-22	22-Nov-22
CON52110A	(NCE210) Inclement weather (21/7/2022 to 20/8/2022) on Sys B P3	17	03-Nov-22	22-Nov-22
CON52530	Construct escalator pit P4 to P7	48	07-Nov-22	04-Jan-23
CON53350	Mobilisation & set up	7	11-Nov-22	18-Nov-22
CON53370	Cut-slope works & installation of temporary soil nail	36	19-Nov-22	03-Jan-23
CON52110B	(NCE216) Inclement weather (21/8/2022 to 20/9/2022) on Sys B P3	9	23-Nov-22	02-Dec-22
CON53230	Application for power supply & energization (SYB)	120	28-Nov-22	27-Apr-23
CON52150	Construct pier SYB-P5 (5 pour) {PC4-L}	65	03-Dec-22	23-Feb-23
CON53390	Form temporary road	24	04-Jan-23	03-Feb-23
CON52550	Construct escalator pit P3 to P4	48	05-Jan-23	04-Mar-23
CON52170A	(NCE201) Inclement weather (21/5/2022 to 20/6/2022) on SYB-LT1	6	06-Jan-23	12-Jan-23
CON52170B	(NCE202) Inclement weather (21/6/2022 to 20/7/2022) on SYB-LT1	6	13-Jan-23	19-Jan-23
CON52170C	(NCE210) Inclement weather (21/7/2022 to 20/8/2022) on SYB-LT1	17	20-Jan-23	11-Feb-23



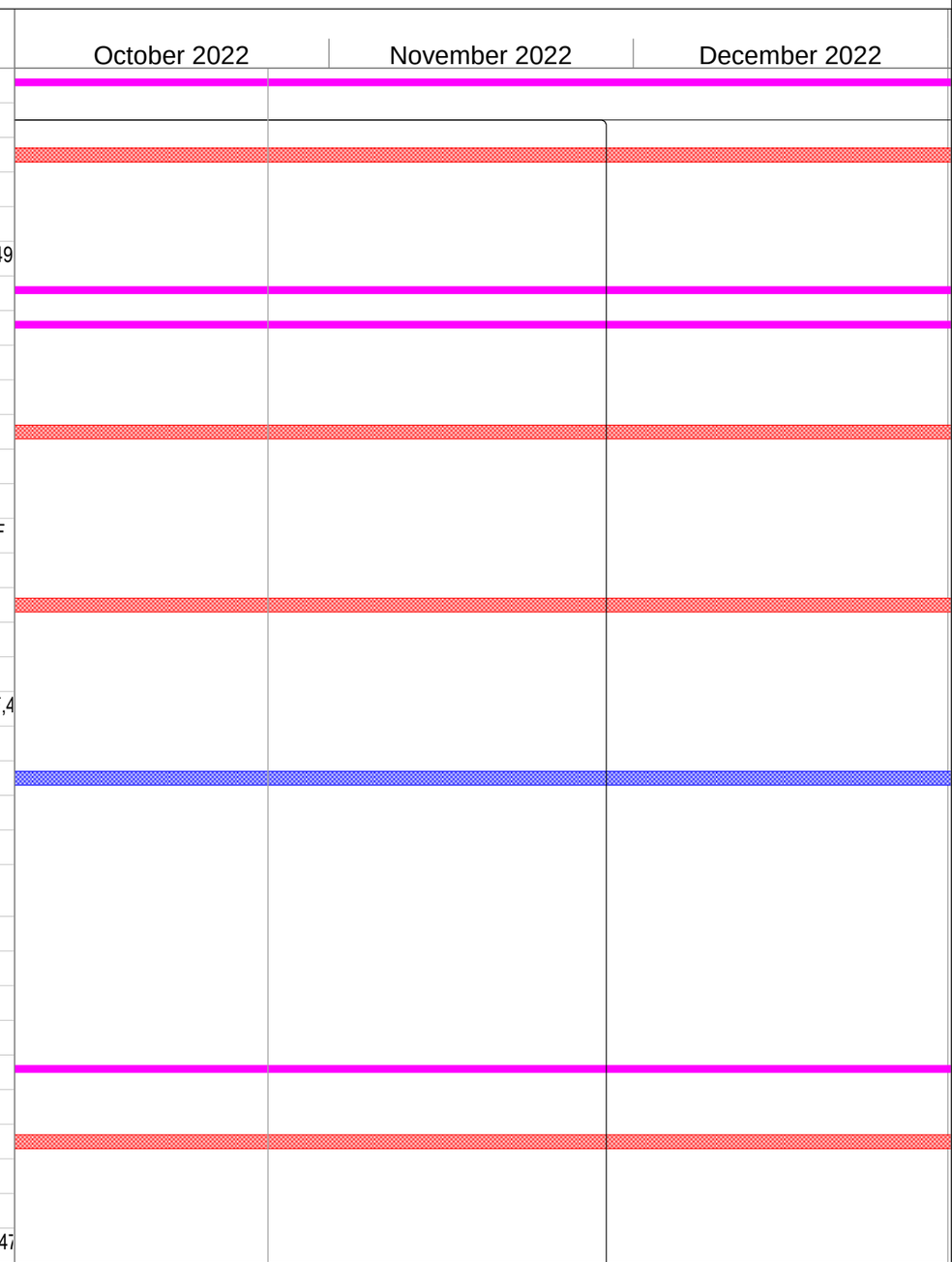
Actual Work
Remaining Work
Milestone

Contract 4 (ED/2020/02)

China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
1	**Contract Period**	**1341 days**	**Fri 30/7/21**	**Mon 31/3/25**	**Fri 30/7/21**	**Mon 31/3/25**	
2	Contract Starting Date [Contract Award Date 21 Jul 2021]	0 days	Fri 30/7/21	Fri 30/7/21	Fri 30/7/21	Fri 30/7/21	
3	Contract Duration	1247 days	Sat 31/7/21	Sat 28/12/24	Sat 31/7/21	Sat 28/12/24	2FS+1 day
4	Original Completion Date	0 days	Sat 28/12/...	Sat 28/12/...	Sun 29/12/24	Sun 29/12/24	3
5	Potential EOT due to CEs and Inclement weather	93 days	Sun 29/12/24	Mon 31/3/25	Sun 29/12/24	Mon 31/3/25	4
6	Completion of the Whole of the Works	0 days	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	28,39,63,79,94,110,121,138,149
7	**Section of Works and Relevant Portions of Work**	**1341 days**	**Fri 30/7/21**	**Mon 31/3/25**	**Mon 30/8/21**	**Mon 31/3/25**	
8	**Section of Works 1 - Portions 1a, 2a & 2b**	**945 days**	**Mon 30/8/21**	**Sun 31/3/24**	**Mon 30/8/21**	**Mon 1/4/24**	
9	Original Completion Date	0 days	Wed 13/12/23	Wed 13/12/23	Mon 1/4/24	Mon 1/4/24	11FF,16FF,21FF
10	Access date for Portion 1a	0 days	Fri 29/4/22	Fri 29/4/22	Fri 29/4/22	Fri 29/4/22	2
11	Construction Duration for Portion 1a	594 days	Fri 29/4/22	Wed 13/12/23	Fri 29/4/22	Wed 13/12/...	10
12	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Thu 14/12/23	Sun 21/1/24	Thu 14/12/23	Sun 21/1/24	11
13	Potentail EOT due to CEs	70 days	Mon 22/1/24	Sun 31/3/24	Mon 22/1/24	Sun 31/3/24	12
14	Completion of Works in Portion 1a	0 days	Sun 31/3/24	Sun 31/3/24	Mon 1/4/24	Mon 1/4/24	360,356,352,361,359,13,377FF
15	Access date for Portion 2a	0 days	Mon 30/8/21	Mon 30/8/21	Mon 30/8/21	Mon 30/8/21	2
16	Construction Duration for Portion 2a	836 days	Mon 30/8/21	Wed 13/12/23	Mon 30/8/21	Wed 13/12/...	15
17	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Thu 14/12/23	Sun 21/1/24	Thu 14/12/23	Sun 21/1/24	16
18	Potentail EOT due to CEs	70 days	Mon 22/1/24	Sun 31/3/24	Mon 22/1/24	Sun 31/3/24	17
19	Completion of Works in Portion 2a	0 days	Sun 31/3/24	Sun 31/3/24	Mon 1/4/24	Mon 1/4/24	18,416FF,420FF,421FF,422FF,4
20	Access date for Portion 2b	0 days	Tue 14/12/21	Tue 14/12/21	Tue 22/2/22	Tue 22/2/22	2
21	Construction Duration for Portion 2b	730 days	Tue 14/12/21	Wed 13/12/23	Tue 22/2/22	Wed 21/2/24	20
22	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Thu 14/12/23	Sun 21/1/24	Thu 22/2/24	Sun 31/3/24	21
23	Completion of Works in Portion 2b	0 days	Sun 21/1/24	Sun 21/1/24	Mon 1/4/24	Mon 1/4/24	445,448,451,452,450,449,22
24	**Section of Works 1A - Establishment Works for all Landscape Softworks in Section 1 of the Works**	**365 days**	**Sun 31/3/24**	**Mon 31/3/25**	**Mon 1/4/24**	**Mon 31/3/25**	
25	Original Completion Date	0 days	Thu 12/12/24	Thu 12/12/24	Mon 31/3/25	Mon 31/3/25	9FS+365 days
26	Commencement of Establishment Work for Section 1	0 days	Sun 31/3/24	Sun 31/3/24	Mon 1/4/24	Mon 1/4/24	14,19,23
27	Establishment Work Duration for Section 1	365 days	Mon 1/4/24	Mon 31/3/25	Mon 1/4/24	Mon 31/3/25	26
28	Completion of Works in Section 1	0 days	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	27,456
29	**Section of Works 2 - Portion 8**	**769 days**	**Fri 30/7/21**	**Wed 6/9/23**	**Tue 22/2/22**	**Mon 1/4/24**	
30	Access date for Portion 8	0 days	Fri 30/7/21	Fri 30/7/21	Tue 22/2/22	Tue 22/2/22	2
31	Construction Duration for Portion 8	730 days	Fri 30/7/21	Sat 29/7/23	Tue 22/2/22	Wed 21/2/24	30
32	Original Completion Date	0 days	Sat 29/7/23	Sat 29/7/23	Thu 22/2/24	Thu 22/2/24	31
33	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Sun 30/7/23	Wed 6/9/23	Thu 22/2/24	Sun 31/3/24	32
34	Completion of Works in Portion 8	0 days	Wed 6/9/23	Wed 6/9/23	Mon 1/4/24	Mon 1/4/24	478,481,468,470,472,474,476,47

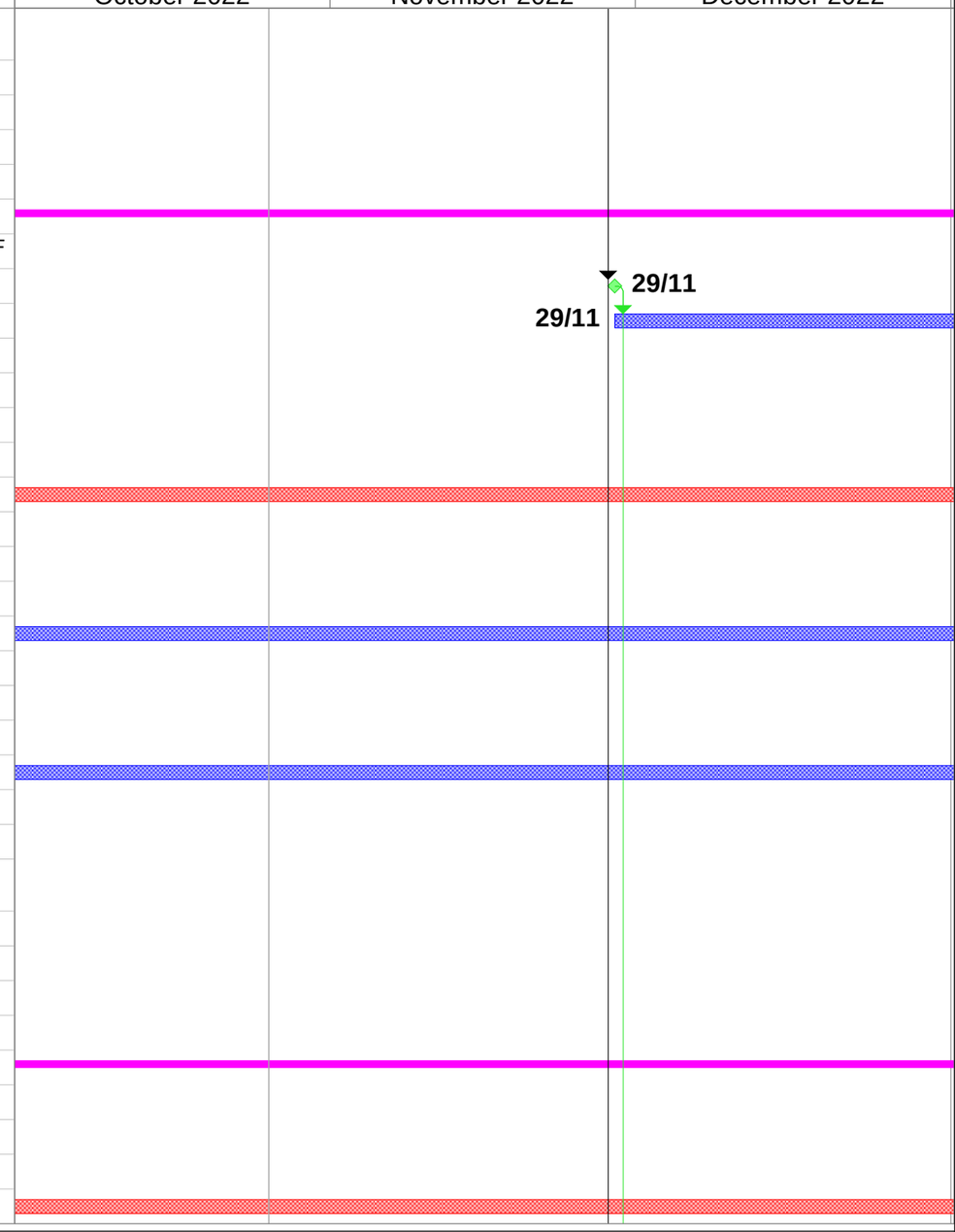


China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

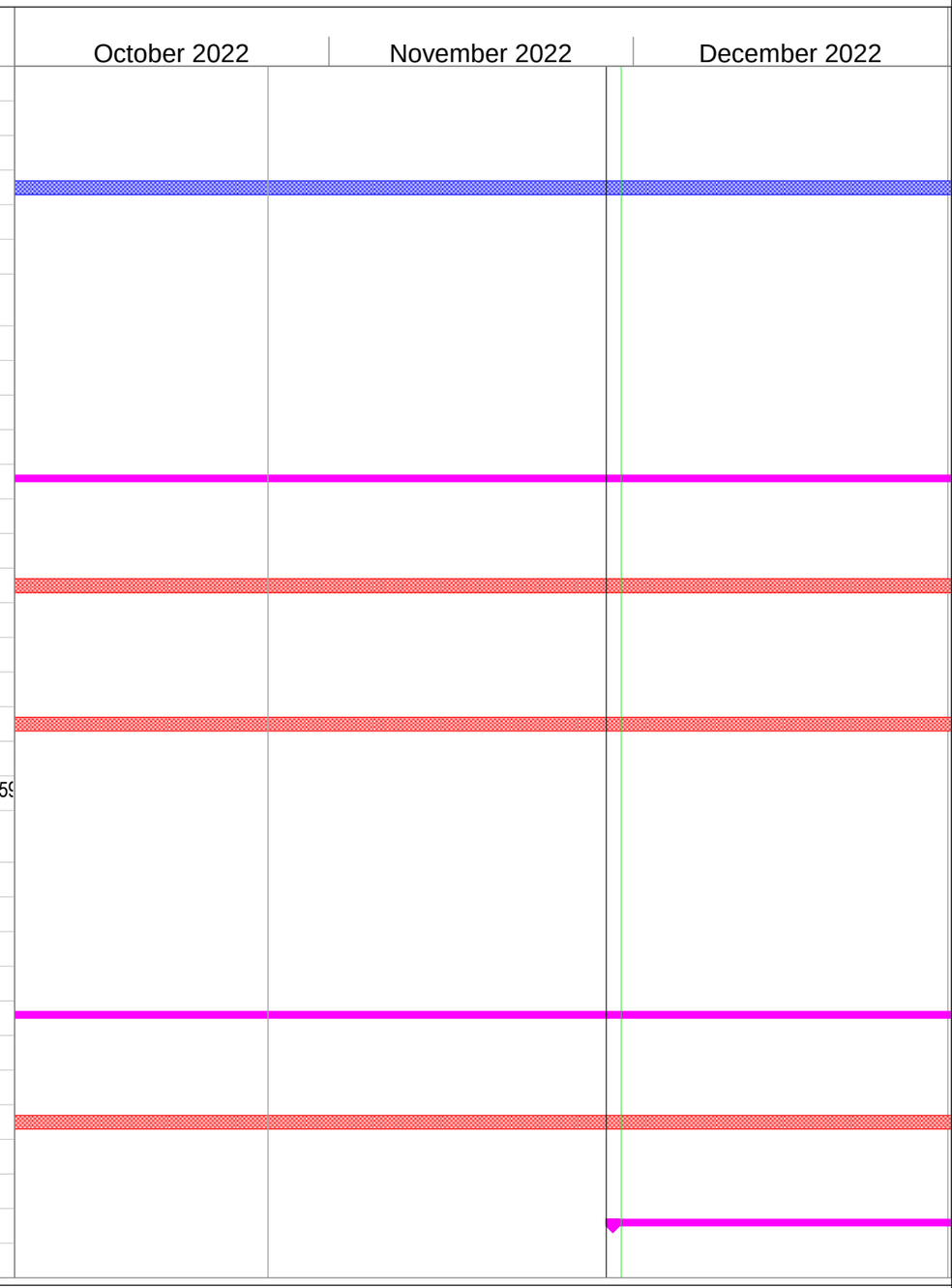
CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
35	**Section of Works 2A - Establishment Works for all Landscape Softworks in Section 2 of the Works**	**365 days**	**Wed 6/9/23**	**Thu 5/9/24**	**Mon 1/4/24**	**Mon 31/3/25**	
36	Original Completion Date	0 days	Sun 28/7/24	Sun 28/7/24	Mon 31/3/25	Mon 31/3/25	32FS+365 days
37	Commencement of Establishment Work for Section 2	0 days	Wed 6/9/23	Wed 6/9/23	Mon 1/4/24	Mon 1/4/24	34
38	Establishment Work Duration for Section 2	365 days	Thu 7/9/23	Thu 5/9/24	Mon 1/4/24	Mon 31/3/25	37
39	Completion of Works in Section 2	0 days	Thu 5/9/24	Thu 5/9/24	Mon 31/3/25	Mon 31/3/25	38,485
40	**Section of Works 3 - Portions 1b, 3, 4, 5**	**770 days**	**Fri 30/7/21**	**Thu 7/9/23**	**Sat 23/4/22**	**Mon 1/4/24**	
41	Original Completion Date	0 days	Tue 30/5/23	Tue 30/5/23	Mon 1/4/24	Mon 1/4/24	43FF,48FF-60 days,52FF,56FF
42	Access date for Portion 1b	0 days	Tue 29/11/22	Tue 29/11/22	Wed 23/8/23	Wed 23/8/23	2
43	Construction Duration for Portion 1b	183 days	Tue 29/11/22	Tue 30/5/23	Wed 23/8/23	Wed 21/2/24	42
44	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Wed 31/5/23	Sat 8/7/23	Thu 22/2/24	Sun 31/3/24	43
45	Completion of Works in Portion 1b	0 days	Sat 8/7/23	Sat 8/7/23	Mon 1/4/24	Mon 1/4/24	499,498,496,44
46	Access date for Portion 3	0 days	Wed 29/9/21	Wed 29/9/21	Sat 23/4/22	Sat 23/4/22	2
47	PMI 003 & 004 issued	61 days	Wed 29/9/21	Sun 28/11/21	Sat 23/4/22	Wed 22/6/22	46
48	Construction Duration for Portion 3	609 days	Sun 28/11/21	Sat 29/7/23	Thu 23/6/22	Wed 21/2/24	47FS-1 day
49	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Sun 30/7/23	Wed 6/9/23	Thu 22/2/24	Sun 31/3/24	48
50	Completion of Works in Portion 3	0 days	Thu 7/9/23	Thu 7/9/23	Mon 1/4/24	Mon 1/4/24	507,49
51	Access date for Portion 4	0 days	Fri 30/7/21	Fri 30/7/21	Sat 23/4/22	Sat 23/4/22	2
52	Construction Duration for Portion 4	670 days	Fri 30/7/21	Tue 30/5/23	Sat 23/4/22	Wed 21/2/24	51
53	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Wed 31/5/23	Sat 8/7/23	Thu 22/2/24	Sun 31/3/24	52
54	Completion of Works in Portion 4	0 days	Sun 9/7/23	Sun 9/7/23	Mon 1/4/24	Mon 1/4/24	512,53
55	Access date for Portion 5	0 days	Sun 27/2/22	Sun 27/2/22	Mon 21/11/...	Mon 21/11/...	2
56	Construction Duration for Portion 5	458 days	Sun 27/2/22	Tue 30/5/23	Mon 21/11/...	Wed 21/2/24	55
57	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Wed 31/5/23	Sat 8/7/23	Thu 22/2/24	Sun 31/3/24	56
58	Completion of Works in Portion 5	0 days	Sat 8/7/23	Sat 8/7/23	Mon 1/4/24	Mon 1/4/24	2,517,57
59	**Section of Works 3A - Establishment Works for all Landscape Softworks in Section 3 of the Works**	**365 days**	**Thu 7/9/23**	**Fri 6/9/24**	**Mon 1/4/24**	**Mon 31/3/25**	
60	Original Completion Date	0 days	Wed 29/5/24	Wed 29/5/24	Mon 31/3/25	Mon 31/3/25	41FS+365 days
61	Commencement of Establishment Work for Section 3	0 days	Thu 7/9/23	Thu 7/9/23	Mon 1/4/24	Mon 1/4/24	50,45,54,58
62	Establishment Work Duration for Section 3	365 days	Fri 8/9/23	Fri 6/9/24	Mon 1/4/24	Mon 31/3/25	61
63	Completion of Works in Section 3	0 days	Fri 6/9/24	Fri 6/9/24	Mon 31/3/25	Mon 31/3/25	62,521
64	**Section of Works 4 - Portions 6, 12**	**804 days**	**Fri 30/7/21**	**Wed 11/10/23**	**Tue 18/1/22**	**Mon 1/4/24**	
65	Original Completion Date	0 days	Tue 13/6/23	Tue 13/6/23	Mon 1/4/24	Mon 1/4/24	68FF-81 days,72FF
66	Access date for Portion 6	0 days	Sat 29/1/22	Sat 29/1/22	Wed 20/7/22	Wed 20/7/22	2
67	Deferred possession	81 days	Sat 29/1/22	Tue 19/4/22	Wed 20/7/22	Sat 8/10/22	66
68	Construction Duration for Portion 6	501 days	Wed 20/4/22	Sat 2/9/23	Sun 9/10/22	Wed 21/2/24	67



CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
69	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Sun 3/9/23	Wed 11/10/23	Thu 22/2/24	Sun 31/3/24	68
70	Completion of Works in Portion 6	0 days	Wed 11/10/23	Wed 11/10/23	Mon 1/4/24	Mon 1/4/24	539,540,538,69
71	Access date for Portion 12	0 days	Fri 30/7/21	Fri 30/7/21	Tue 18/1/22	Tue 18/1/22	2
72	Construction Duration for Portion 12	684 days	Fri 30/7/21	Tue 13/6/23	Sat 9/4/22	Wed 21/2/24	71
73	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Wed 14/6/23	Sat 22/7/23	Thu 22/2/24	Sun 31/3/24	72
74	Completion of Works in Portion 12	0 days	Wed 11/10/23	Wed 11/10/23	Mon 1/4/24	Mon 1/4/24	556,558,560,553,559,73
75	**Section of Works 4A - Establishment Works for all Landscape Softworks in Section 4 of the Works**	**365 days**	**Wed 11/10/23**	**Thu 10/10/24**	**Mon 1/4/24**	**Mon 31/3/25**	
76	Original Completion Date	0 days	Thu 13/6/24	Thu 13/6/24	Mon 31/3/25	Mon 31/3/25	65FS+365 days
77	Commencement of Establishment Work for Section 4	0 days	Wed 11/10/23	Wed 11/10/23	Mon 1/4/24	Mon 1/4/24	70,74
78	Establishment Work Duration for Section 4	365 days	Thu 12/10/23	Thu 10/10/24	Mon 1/4/24	Mon 31/3/25	77
79	Completion of Works in Section 4	0 days	Thu 10/10/24	Thu 10/10/24	Mon 31/3/25	Mon 31/3/25	78,565
80	**Section of Works 5A - Portions 9, 10**	**738 days**	**Fri 30/7/21**	**Sun 6/8/23**	**Fri 25/3/22**	**Mon 1/4/24**	
81	Original Completion Date	0 days	Wed 28/6/23	Wed 28/6/23	Mon 1/4/24	Mon 1/4/24	83FF,87FF
82	Access date for Portion 9	0 days	Wed 29/9/21	Wed 29/9/21	Wed 25/5/22	Wed 25/5/22	2
83	Construction Duration for Portion 9	638 days	Wed 29/9/21	Wed 28/6/23	Wed 25/5/22	Wed 21/2/24	82
84	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Thu 29/6/23	Sun 6/8/23	Thu 22/2/24	Sun 31/3/24	83
85	Completion of Works in Portion 9	0 days	Sun 6/8/23	Sun 6/8/23	Mon 1/4/24	Mon 1/4/24	583,581,584,84
86	Access date for Portion 10	0 days	Fri 30/7/21	Fri 30/7/21	Fri 25/3/22	Fri 25/3/22	2
87	Construction Duration for Portion 10	699 days	Fri 30/7/21	Wed 28/6/23	Fri 25/3/22	Wed 21/2/24	86
88	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Thu 29/6/23	Sun 6/8/23	Thu 22/2/24	Sun 31/3/24	87
89	Completion of Works in Portion 10	0 days	Sun 6/8/23	Sun 6/8/23	Mon 1/4/24	Mon 1/4/24	687,636,629,617,611,606,601,59
90	**Section of Works 5AI - Establishment Works for all Landscape Softworks in Section 5A of the Works**	**365 days**	**Sun 6/8/23**	**Mon 5/8/24**	**Mon 1/4/24**	**Mon 31/3/25**	
91	Original Completion Date	0 days	Fri 28/6/24	Fri 28/6/24	Mon 31/3/25	Mon 31/3/25	81FS+365 days
92	Commencement of Establishment Work for Section 5A	0 days	Sun 6/8/23	Sun 6/8/23	Mon 1/4/24	Mon 1/4/24	85,89
93	Establishment Work Duration for Section 5A	365 days	Mon 7/8/23	Mon 5/8/24	Mon 1/4/24	Mon 31/3/25	92
94	Completion of Works in Section 5A	0 days	Mon 5/8/24	Mon 5/8/24	Mon 31/3/25	Mon 31/3/25	93,691
95	**Section of Works 5B - Portion 11**	**558 days**	**Sun 27/2/22**	**Thu 7/9/23**	**Mon 23/10...**	**Mon 31/3/25**	
96	Original Completion Date	0 days	Wed 28/6/23	Wed 28/6/23	Mon 31/3/25	Mon 31/3/25	98FF
97	Access date for Portion 11	0 days	Sun 27/2/22	Sun 27/2/22	Mon 23/10/...	Mon 23/10/...	2
98	Construction Duration for Portion 11	487 days	Sun 27/2/22	Wed 28/6/23	Mon 23/10/...	Thu 20/2/25	97
99	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Thu 29/6/23	Sun 6/8/23	Fri 21/2/25	Mon 31/3/25	98
100	Completion of Works in Portion 11	0 days	Thu 7/9/23	Thu 7/9/23	Mon 31/3/25	Mon 31/3/25	695,99
101	**Section of Works 6 - Portion 7**	**365 days**	**Tue 29/11/22**	**Tue 28/11/23**	**Sun 2/4/23**	**Mon 1/4/24**	
102	Original Completion Date	0 days	Tue 28/11/23	Tue 28/11/23	Mon 1/4/24	Mon 1/4/24	104FF



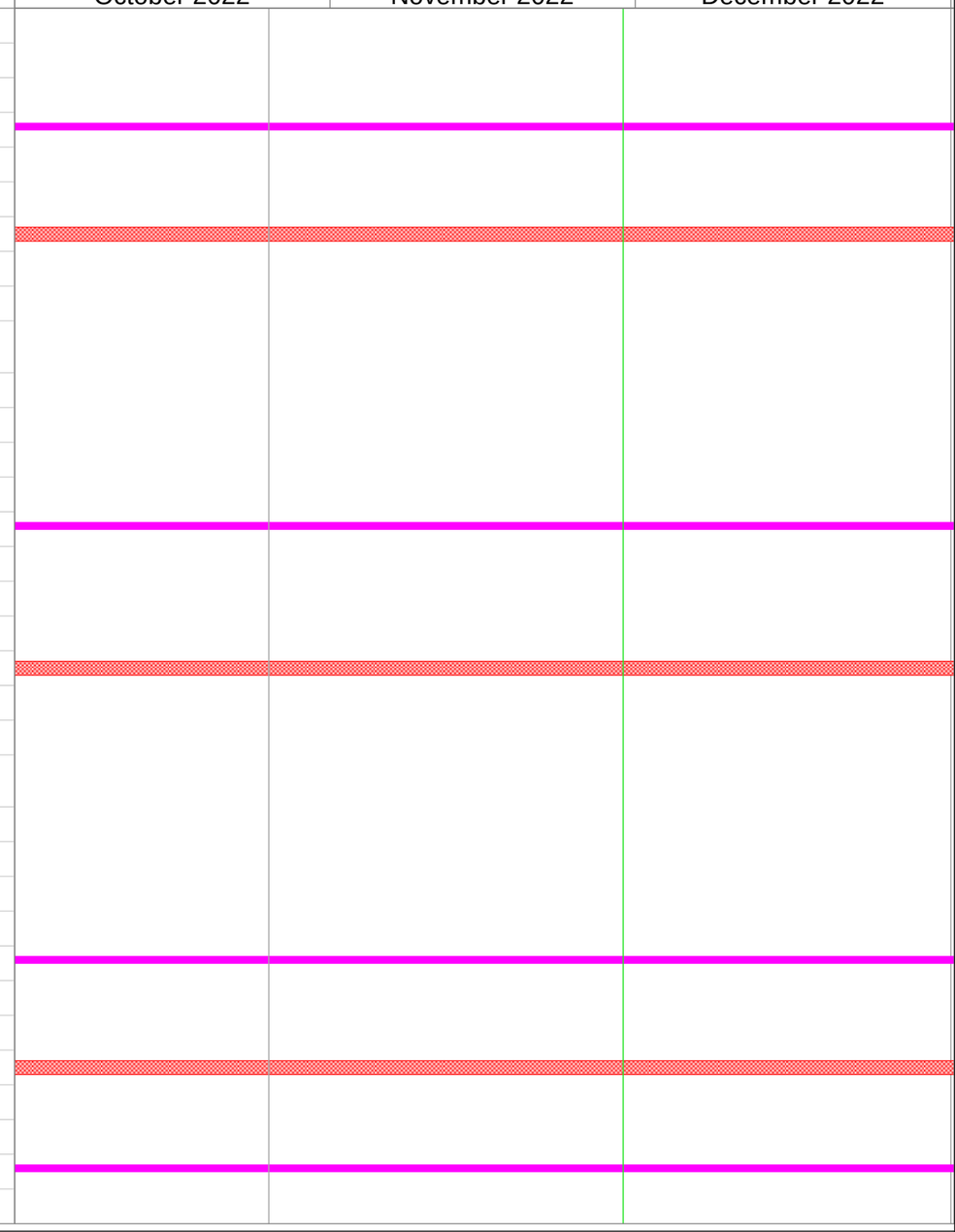
CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
103	Access date for Portion 7	0 days	Tue 29/11/22	Tue 29/11/22	Sun 2/4/23	Sun 2/4/23	2
104	Construction Duration for Portion 7	365 days	Tue 29/11/22	Tue 28/11/23	Sun 2/4/23	Sun 31/3/24	103
105	Completion of Works in Portion 7	0 days	Tue 28/11/23	Tue 28/11/23	Mon 1/4/24	Mon 1/4/24	104,706,707
106	**Section of Works 6A - Establishment Works for all Landscape Softworks in Section 6 of the Works**	**365 days**	**Tue 28/11/23**	**Wed 27/11/24**	**Mon 1/4/24**	**Mon 31/3/25**	
107	Original Completion Date	0 days	Wed 27/11/24	Wed 27/11/24	Mon 31/3/25	Mon 31/3/25	102FS+365 days
108	Commencement of Establishment Work for Section 6	0 days	Tue 28/11/23	Tue 28/11/23	Mon 1/4/24	Mon 1/4/24	105
109	Establishment Work Duration for Section 6	365 days	Wed 29/11/23	Wed 27/11/24	Mon 1/4/24	Mon 31/3/25	108
110	Completion of Works in Section 6	0 days	Wed 27/11/24	Wed 27/11/24	Mon 31/3/25	Mon 31/3/25	109,711
111	**Section of Works 7A - Portions 13a, 14 (DELETED)**	**706 days**	**Fri 30/7/21**	**Wed 5/7/23**	**Thu 2/6/22**	**Mon 31/3/25**	
112	Access date for Portion 13a	0 days	Sat 29/1/22	Sat 29/1/22	Fri 2/12/22	Fri 2/12/22	2
113	Construction Duration for Portion 13a	486 days	Sat 29/1/22	Mon 29/5/23	Sat 2/12/23	Mon 31/3/25	112
114	Completion of Works in Portion 13a	0 days	Wed 5/7/23	Wed 5/7/23	Mon 31/3/25	Mon 31/3/25	113,722
115	Access date for Portion 14	0 days	Fri 30/7/21	Fri 30/7/21	Thu 2/6/22	Thu 2/6/22	2
116	Construction Duration for Portion 14	669 days	Fri 30/7/21	Mon 29/5/23	Thu 2/6/22	Sun 31/3/24	115
117	Completion of Works in Portion 14	0 days	Mon 29/5/23	Mon 29/5/23	Mon 1/4/24	Mon 1/4/24	116,734,733
118	**Section of Works 7AI - Establishment Works for all Landscape Softworks in Section 7A of the Works (DELETED)**	**402 days**	**Mon 29/5/23**	**Thu 4/7/24**	**Mon 1/4/24**	**Mon 31/3/25**	
119	Commencement of Establishment Work for Section 7A	0 days	Mon 29/5/23	Mon 29/5/23	Mon 1/4/24	Mon 1/4/24	117
120	Establishment Work Duration for Section 7A	365 days	Tue 30/5/23	Tue 28/5/24	Mon 1/4/24	Mon 31/3/25	119
121	Completion of Works in Section 7A	0 days	Thu 4/7/24	Thu 4/7/24	Mon 31/3/25	Mon 31/3/25	120,739
122	**Section of Works 7B - Portions 13b, 15**	**752 days**	**Sun 27/2/22**	**Tue 19/3/24**	**Fri 11/3/22**	**Mon 1/4/24**	
123	Original Completion Date	0 days	Fri 29/12/23	Fri 29/12/23	Mon 1/4/24	Mon 1/4/24	126FF-52 days,131FF-52 days
124	Access date for Portion 13b	0 days	Sun 27/2/22	Sun 27/2/22	Fri 11/3/22	Fri 11/3/22	2
125	Deferred possession	52 days	Sun 27/2/22	Tue 19/4/22	Fri 11/3/22	Sun 1/5/22	124
126	Construction Duration for Portion 13b	671 days	Wed 20/4/22	Mon 19/2/24	Mon 2/5/22	Sat 2/3/24	125
127	Potential EOT due to Inclement weather up to 31 July 2022	29 days	Tue 20/2/24	Tue 19/3/24	Sun 3/3/24	Sun 31/3/24	126
128	Completion of Works in Portion 13b	0 days	Tue 19/3/24	Tue 19/3/24	Mon 1/4/24	Mon 1/4/24	759,766,762,764,753,763,765,12
129	Access date for Portion 15	0 days	Sun 27/2/22	Sun 27/2/22	Fri 11/3/22	Fri 11/3/22	2
130	Deferred possession	52 days	Sun 27/2/22	Tue 19/4/22	Fri 11/3/22	Sun 1/5/22	129
131	Construction Duration for Portion 15	671 days	Wed 20/4/22	Mon 19/2/24	Mon 2/5/22	Sat 2/3/24	130
132	Potential EOT due to Inclement weather up to 31 July 2022	29 days	Tue 20/2/24	Tue 19/3/24	Sun 3/3/24	Sun 31/3/24	131
133	Completion of Works in Portion 15	0 days	Tue 19/3/24	Tue 19/3/24	Mon 1/4/24	Mon 1/4/24	132
134	**Section of Works 7BI - Establishment Works for all Landscape Softworks in Section 7B of the Works**	**365 days**	**Tue 19/3/24**	**Wed 19/3/25**	**Mon 1/4/24**	**Mon 31/3/25**	
135	Original Completion Date	0 days	Sat 28/12/24	Sat 28/12/24	Mon 31/3/25	Mon 31/3/25	123FS+365 days



CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

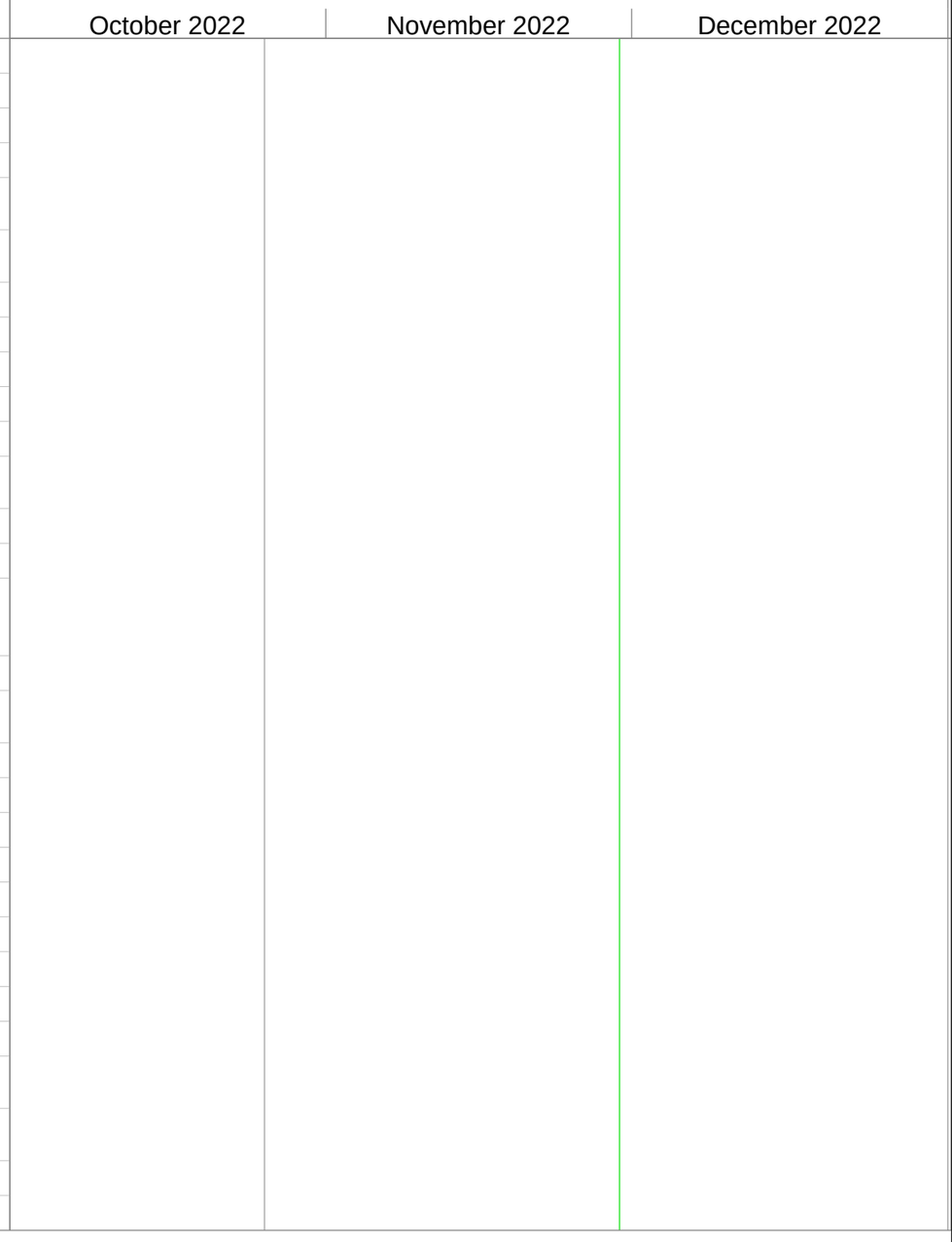
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
136	Commencement of Establishment Work for Section 7B	0 days	Tue 19/3/24	Tue 19/3/24	Mon 1/4/24	Mon 1/4/24	128,133
137	Establishment Work Duration for Section 7B	365 days	Wed 20/3/24	Wed 19/3/25	Mon 1/4/24	Mon 31/3/25	136
138	Completion of Works in Section 7B	0 days	Wed 19/3/25	Wed 19/3/25	Mon 31/3/25	Mon 31/3/25	137,770
139	**Section of Works 8 - Portion 16**	**402 days**	**Thu 16/6/22**	**Sat 22/7/23**	**Fri 24/2/23**	**Mon 1/4/24**	
140	Original Completion Date	0 days	Wed 28/6/23	Wed 28/6/23	Mon 1/4/24	Mon 1/4/24	142
141	Access date for Portion 16	0 days	Thu 16/6/22	Thu 16/6/22	Fri 24/2/23	Fri 24/2/23	2
142	Construction Duration for Portion 16	378 days	Thu 16/6/22	Wed 28/6/23	Mon 13/3/23	Sun 24/3/24	141
143	Potential EOT due to Inclement weather up to 31 July 2022	7 days	Thu 29/6/23	Wed 5/7/23	Mon 25/3/24	Sun 31/3/24	142
144	Completion of Works in Portion 16	0 days	Sat 22/7/23	Sat 22/7/23	Mon 1/4/24	Mon 1/4/24	780,143
145	**Section of Works 8A - Establishment Works for all Landscape Softworks in Section 8 of the Works**	**365 days**	**Sat 22/7/23**	**Sun 21/7/24**	**Mon 1/4/24**	**Mon 31/3/25**	
146	Original Completion Date	0 days	Fri 28/6/24	Fri 28/6/24	Mon 31/3/25	Mon 31/3/25	140FS+365 days
147	Commencement of Establishment Work for Section 8	0 days	Sat 22/7/23	Sat 22/7/23	Mon 1/4/24	Mon 1/4/24	144
148	Establishment Work Duration for Section 8	365 days	Sun 23/7/23	Sun 21/7/24	Mon 1/4/24	Mon 31/3/25	147
149	Completion of Works in Section 8	0 days	Sun 21/7/24	Sun 21/7/24	Mon 31/3/25	Mon 31/3/25	148,784
150	**Section of Works 9 - Portion 17**	**740 days**	**Sun 27/2/22**	**Thu 7/3/24**	**Wed 23/3/22**	**Mon 1/4/24**	
151	Original Completion Date	0 days	Fri 29/12/23	Fri 29/12/23	Mon 1/4/24	Mon 1/4/24	154FF-30 days
152	Access date for Portion 17	0 days	Sun 27/2/22	Sun 27/2/22	Wed 23/3/22	Wed 23/3/22	2
153	Deferred possession	30 days	Sun 27/2/22	Mon 28/3/22	Sat 2/4/22	Sun 1/5/22	152
154	Construction Duration for Portion 17	671 days	Tue 29/3/22	Sun 28/1/24	Mon 2/5/22	Sat 2/3/24	153
155	Potential EOT due to Inclement weather up to 31 July 2022	29 days	Mon 29/1/24	Mon 26/2/24	Sun 3/3/24	Sun 31/3/24	154
156	Completion of Works in Portion 17	0 days	Thu 7/3/24	Thu 7/3/24	Mon 1/4/24	Mon 1/4/24	843,875,155
157	**Section of Works 9A - Establishment Works for all Landscape Softworks in Section 9 of the Works**	**365 days**	**Thu 7/3/24**	**Fri 7/3/25**	**Mon 1/4/24**	**Mon 31/3/25**	
158	Original Completion Date	0 days	Sun 29/12/24	Sun 29/12/24	Mon 31/3/25	Mon 31/3/25	151FS+365 days
159	Commencement of Establishment Work for Section 9	0 days	Thu 7/3/24	Thu 7/3/24	Mon 1/4/24	Mon 1/4/24	156
160	Establishment Work Duration for Section 9	365 days	Fri 8/3/24	Fri 7/3/25	Mon 1/4/24	Mon 31/3/25	159
161	Completion of Works in Section 9	0 days	Fri 7/3/25	Fri 7/3/25	Mon 31/3/25	Mon 31/3/25	160,879
162	**Section of Works 10 - All Tree Protection and Preservation Works**	**922 days**	**Fri 30/7/21**	**Tue 6/2/24**	**Thu 22/9/22**	**Mon 31/3/25**	
163	Original Completion Date	0 days	Fri 29/12/23	Fri 29/12/23	Mon 31/3/25	Mon 31/3/25	165
164	Commencement of All Tree Protection and Preservation Work	0 days	Fri 30/7/21	Fri 30/7/21	Thu 22/9/22	Thu 22/9/22	2
165	All Tree Protection and Preservation Work Duration for Section 10	883 days	Fri 30/7/21	Fri 29/12/23	Thu 22/9/22	Thu 20/2/25	164
166	Potential EOT due to Inclement weather up to 31 July 2022	39 days	Sat 30/12/23	Tue 6/2/24	Fri 21/2/25	Mon 31/3/25	165
167	Completion of All Tree Protection and Preservation Work	0 days	Tue 6/2/24	Tue 6/2/24	Mon 31/3/25	Mon 31/3/25	883,166
168	**Preliminaries**	**1341 days**	**Fri 30/7/21**	**Mon 31/3/25**	**Fri 30/7/21**	**Mon 31/3/25**	
169	**Establishment of Commercial/Organization**	**226 days**	**Fri 30/7/21**	**Sat 12/3/22**	**Thu 3/10/24**	**Mon 31/3/25**	



China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
170	Inform Contractor of the name and delegated authorities of the PMD (EF	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
171	Confirmation and arrangement of the method of payment	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
172	Issue forms to CIC& PCFB	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
173	Submission of MPF form to MPFSA	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
174	Notification to Labour Department/Marine Department of the commencement date and other details of the contract	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
175	Submission of Summary Details of Contract to the Departmental Safety and Environmental	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
176	Nominate a Labour Officer	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
177	Set up Site Liaison Group (SLG)	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
178	Professional video production company and a competent video director	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
179	Surveyor, Key People	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
180	Traffic Consultant, Traffic Engineer	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
181	Particulars of Independent service provider for Digital Works Supervision System	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
182	Contractor's Management Team	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
183	BIM team	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
184	Competent member of the sites supervisory staff to oversee and supervise tree works related to arboricultural operations and preservation of trees within the Site	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
185	Content of Contract Webpage (Monthly update afterwards)	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
186	Particulars of the assigned person (competent member with arboriculture knowledge of the site supervisory for tree preservation)	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
187	Details of Geotechnical monitoring team	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
188	Design of the CRE Site Office certified by an accepted ICE	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
189	Design Architect	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
190	Specially required staff	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
191	Public Relation Officer	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
192	Site Safety Committee (SSC) Meeting (monthly afterwards)	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
193	Meeting of the SSMC (monthly afterwards)	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
194	Professional Indemnity Insurance in respect of Contractor's Design	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
195	Proposed gasket material for waterworks	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
196	7 days advance notice of the date on which workers begin to wear Site uniform; Provide uniforms within 5 days after the design is accepted by	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
197	2 Engineering Graduates 3 Technician apprentices	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2
198	Commissioning of DWSS	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2
199	Agree on the content and presentation of the dashboard of DWSS	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2



China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

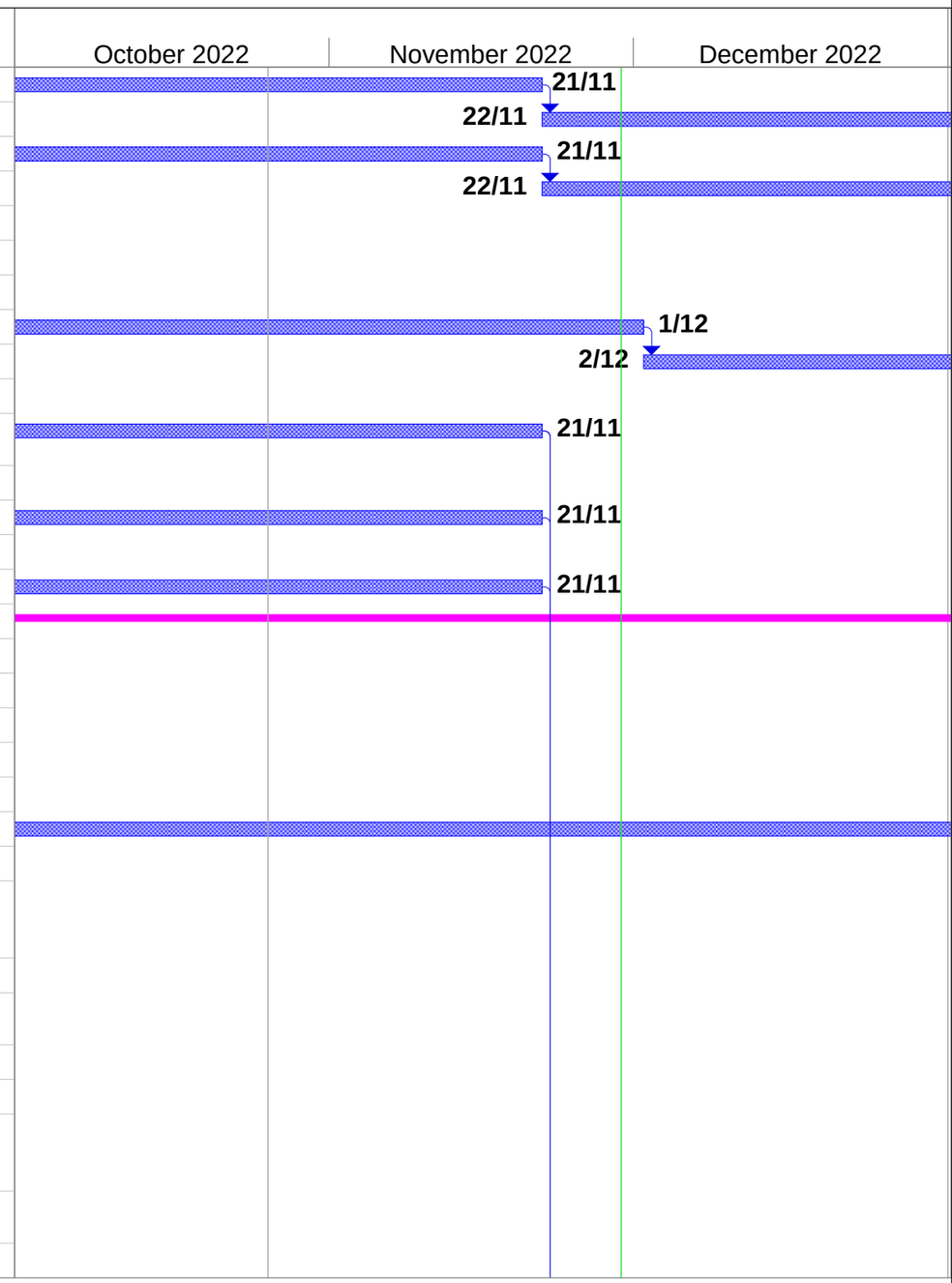
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
200	Monthly collaboration and information exchange of BIM	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2
201	Combined Services Drawing (CSD) and CBWD generated from BIM mo	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2
202	Video script for Project Video Film	180 days	Fri 30/7/21	Tue 25/1/22	Thu 3/10/24	Mon 31/3/25	2
203	Employment of Construction Industry Council's Graduates (min. 4 gradu	180 days	Fri 30/7/21	Tue 25/1/22	Thu 3/10/24	Mon 31/3/25	2
204	Nomination of Treatment process specialist, Design Engineer, and Independent Checking Engineer (ICE)	34 days	Mon 7/2/22	Sat 12/3/22	Tue 29/10/24	Sun 1/12/24	283SS
205	**Plan & Proposals**	**60 days**	**Fri 30/7/21**	**Mon 27/9/21**	**Fri 31/1/25**	**Mon 31/3/25**	
206	Preparation and submission of Noise Mitigation Plan (3 hard copies, 2 electronic copies)	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
207	Preparation and submission of Waste Management Plan (WMP)	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
208	Preparation and submission of Draft Construction Health and Safety Plan (3 copies)	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
209	Preparation and submission of Quality Policy statement and quality plar	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
210	Preparation and submission of Draft Environmental Management Plan (EMP) 3 copies	4 days	Fri 30/7/21	Mon 2/8/21	Fri 28/3/25	Mon 31/3/25	2
211	Tender requirements for suppliers of Plant and Materials, Equipment and Insurance Proposal	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
212	Preparation of Proposal for arrangement for placement of storage compartments/ drinking water facilities/ toilet/ hand-wash facilities/ showering/ rubbishbin/ working shelter on Site	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
213	Preparation Proposal for security system	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
214	Preparation and submission of DWSS proposal	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
215	Preparation and submission of Subcontractor Management Plan (SMP)	21 days	Fri 30/7/21	Thu 19/8/21	Tue 11/3/25	Mon 31/3/25	2
216	Preparation and submission of Construction Health and Safety Plan (6 copies)	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
217	Weather protection scheme	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
218	Proposal of COBie information requirements	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
219	Preparation and submission of Final Environmental Management Plan (EMP) 3 copies	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
220	Preparation of Proposed Plans for submission of each Release of construction and Project Video Films	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
221	Preparation and submission of Site Traffic Safety Management Plan (STSMP), (monthly update)	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
222	Preparation and submission of Site Management Plan for TTS	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
223	Preparation and submission of BIM Execution Plan accordance with the PSA 1.14D	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
224	Public Relation (PR) Company, PR plan	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
225	Preparation and submission of Temporary drainage management plan	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
226	**Procurements of Major Materials**	**430 days**	**Tue 15/2/22**	**Thu 20/4/23**	**Wed 19/4/23**	**Mon 31/3/25**	
227	Procurement & material submission of bearing for elevated walkway	90 days	Thu 26/5/22	Tue 23/8/22	Wed 14/6/23	Mon 11/9/23	2SS+300 days

October 2022 | November 2022 | December 2022

China International Water Electric Corp.

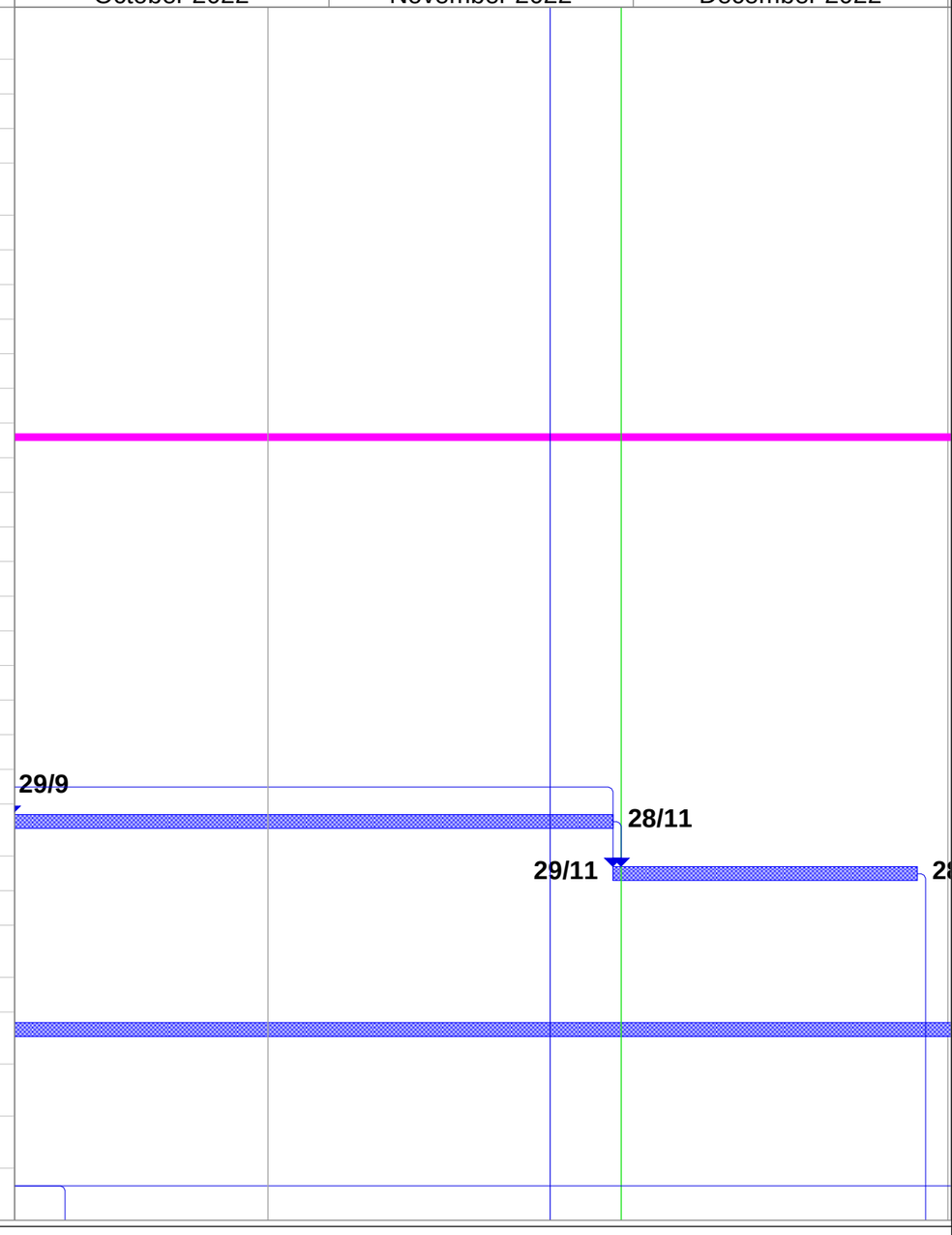
Task | Critical Task | Milestone | Summary

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
228	Design, manufacturing and FAT of bearing for elevated walkway	90 days	Wed 24/8/22	Mon 21/11/22	Tue 12/9/23	Sun 10/12/23	227
229	Deliveries and site inspection of bearing for elevated walkway etc.	60 days	Tue 22/11/22	Fri 20/1/23	Mon 11/12/...	Thu 8/2/24	228
230	Procurement & material submission of movement joinst for elevated wal	90 days	Wed 24/8/22	Mon 21/11/22	Wed 14/6/23	Mon 11/9/23	2SS+390 days
231	Design, manufacturing and FAT of movement joinst for elevated walkwa	90 days	Tue 22/11/22	Sun 19/2/23	Tue 12/9/23	Sun 10/12/23	230
232	Deliveries and site inspection of movement joinst for elevated walkway e	60 days	Mon 20/2/23	Thu 20/4/23	Mon 11/12/...	Thu 8/2/24	231
233	Procurement of Raise Planter Type A&B	90 days	Tue 15/2/22	Sun 15/5/22	Thu 3/10/24	Tue 31/12/24	2SS+200 days
234	Manufacturing, FAT & delivery of Raise Planter Type A&B	90 days	Mon 16/5/22	Sat 13/8/22	Wed 1/1/25	Mon 31/3/25	233
235	Procurement of Balustrade Wall BW1-2	90 days	Sat 3/9/22	Thu 1/12/22	Thu 3/10/24	Tue 31/12/24	2SS+400 days
236	Manufacturing, FAT & delivery of Balustrade Wall BW1-2	90 days	Fri 2/12/22	Wed 1/3/23	Wed 1/1/25	Mon 31/3/25	235
237	Procurement of Children Play Areas & water play area Park Facilities	90 days	Thu 26/5/22	Tue 23/8/22	Wed 19/4/23	Mon 17/7/23	2SS+300 days
238	Design, Manufacturing, FAT & delivery of Children Play Areas & water play area Park Facilities	90 days	Wed 24/8/22	Mon 21/11/22	Tue 18/7/23	Sun 15/10/23	237
239	Procurement of Adult fitness Area Park Facilities	90 days	Thu 26/5/22	Tue 23/8/22	Wed 19/4/23	Mon 17/7/23	2SS+300 days
240	Design Manufacturing, FAT & delivery of Adult fitness Area Park Facilitie	90 days	Wed 24/8/22	Mon 21/11/22	Tue 18/7/23	Sun 15/10/23	239
241	Procurement of Elderly fitness Area Park Facilities	90 days	Thu 26/5/22	Tue 23/8/22	Wed 19/4/23	Mon 17/7/23	2SS+300 days
242	Design, Manufacturing, FAT & delivery of Elderly fitness Area Park Facil	90 days	Wed 24/8/22	Mon 21/11/22	Tue 18/7/23	Sun 15/10/23	241
243	**Programme**	**1332 days**	**Fri 30/7/21**	**Sat 22/3/25**	**Sun 8/8/21**	**Mon 31/3/25**	
244	Preparation & Submission of First Works Program	6 days	Fri 30/7/21	Wed 4/8/21	Sun 8/8/21	Fri 13/8/21	2
245	Preparation & Submission of Three Months Rolling Program	14 days	Fri 30/7/21	Thu 12/8/21	Sat 14/8/21	Fri 27/8/21	2
246	Program Review and Acceptance of First Program	14 days	Thu 5/8/21	Wed 18/8/21	Sat 14/8/21	Fri 27/8/21	244
247	Preparation and Submission of Detailed Works Program	60 days	Thu 19/8/21	Sun 17/10/21	Sat 28/8/21	Tue 26/10/21	246,245
248	Program Review and Acceptance of Works Program	14 days	Mon 18/10/21	Sun 31/10/21	Wed 27/10/...	Tue 9/11/21	247
249	Implementation of Programme Management and Monthly Reporting	1238 days	Mon 1/11/21	Sat 22/3/25	Wed 10/11/...	Mon 31/3/25	248
250	**Permit and Licences**	**60 days**	**Fri 30/7/21**	**Mon 27/9/21**	**Fri 31/1/25**	**Mon 31/3/25**	
251	Detailed construction sequences with associated traffic diversion schemes and obtain endorsement in principle from the relevant authorities and the Supervisor	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
252	Risk Assessment for slope works	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
253	Welfare facilities for workers in accordance with requirements in PS Clause 1.69B	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
254	UU detection equipment brand/model	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
255	Certified calibration certificates	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
256	Contract Computer Facilities, Electronic Document Management System, Site Record Information System, Digital Works Supervision System and other software	6 days	Fri 30/7/21	Wed 4/8/21	Wed 26/3/25	Mon 31/3/25	2
257	Name of the designated bank and all related arrangement details for payment of wages to all the Site Workers	6 days	Fri 30/7/21	Wed 4/8/21	Wed 26/3/25	Mon 31/3/25	2
258	Site Cleanliness and Tidiness	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2



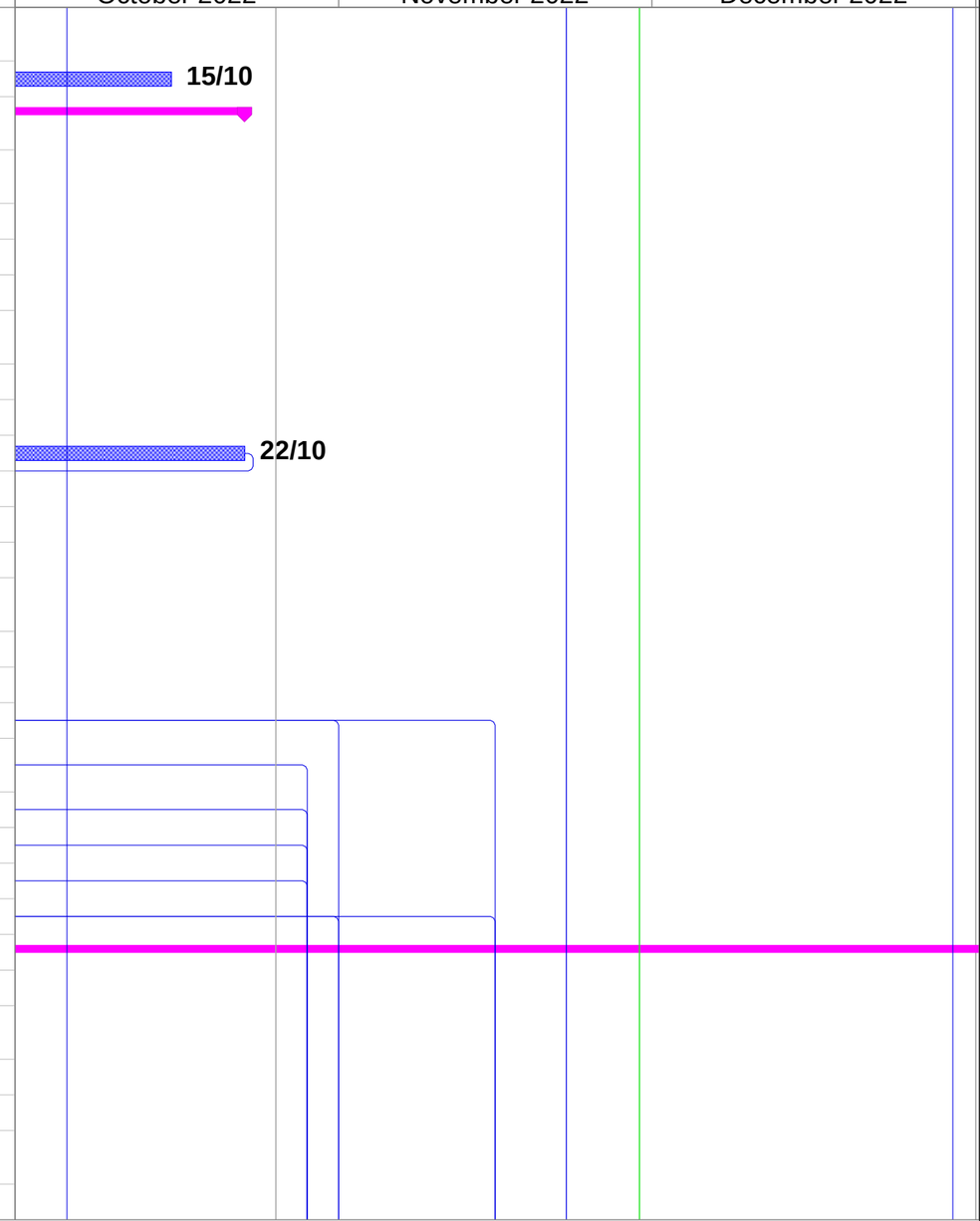
CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
259	3 sets of coloured record photos in SR size (recording existing building/ street furniture……)	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
260	Contract Cars	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
261	Design of uniform for site workers	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
262	Survey Equipment for Initial survey	7 days	Fri 30/7/21	Thu 5/8/21	Tue 25/3/25	Mon 31/3/25	2
263	Inclinometer access tubes - suppliers, material specification and samples of the tubes and couplings	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
264	Payment of Wages System for Site Workers	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
265	Tree survey record	14 days	Fri 30/7/21	Thu 12/8/21	Tue 18/3/25	Mon 31/3/25	2
266	Supply of Survey Equipment for PM use	30 days	Fri 30/7/21	Sat 28/8/21	Sun 2/3/25	Mon 31/3/25	2
267	Complete setting up and begin to operate the Security System	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
268	Initial Survey	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
269	Assessment for the risk resulting from working in hot weather	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
270	**Contractor's Design**	**659 days**	**Fri 30/7/21**	**Fri 19/5/23**	**Sat 22/1/22**	**Mon 31/3/25**	
271	Prepare & Submission Contractor's Design - Architectural & Structural	90 days	Fri 30/7/21	Wed 27/10/21	Sat 22/1/22	Thu 21/4/22	2
272	Internal Review & Submission Contractor's Design - Architectural & Stru	30 days	Thu 28/10/21	Fri 26/11/21	Fri 22/4/22	Sat 21/5/22	271
273	PM Review & AIP Contractor's Design - Architectural	30 days	Sat 27/11/21	Sun 26/12/21	Sun 22/5/22	Mon 20/6/22	271,272
274	Re-submission Contractor's Design - Architectural & Structural	90 days	Mon 27/12/21	Sat 26/3/22	Tue 21/6/22	Sun 18/9/22	273
275	Design Checker Review & Endorsement of Contractor's Design - Archite	60 days	Sun 27/3/22	Wed 25/5/22	Mon 19/9/22	Thu 17/11/22	274
276	DDA Submission (circulation to Government Authorities)	7 days	Thu 26/5/22	Wed 1/6/22	Fri 18/11/22	Thu 24/11/22	275
277	Time risk allowance for DDA processing	30 days	Thu 2/6/22	Fri 1/7/22	Fri 24/2/23	Sat 25/3/23	276
278	Vetting Process and Approval by Government Authorities and PM	45 days	Sat 2/7/22	Mon 15/8/22	Tue 14/5/24	Thu 27/6/24	277,276
279	Design Checker issue certificate of Approved Design	7 days	Tue 16/8/22	Mon 22/8/22	Fri 28/6/24	Thu 4/7/24	278,277
280	Prepare Contractor's Design - Toilet , Management office & Store room	90 days	Sat 2/7/22	Thu 29/9/22	Sun 26/3/23	Fri 23/6/23	277
281	Internal review, ICE, CSD and submission Contractor's Design - Toilet , Management office & Store room	60 days	Fri 30/9/22	Mon 28/11/22	Sat 24/6/23	Tue 22/8/23	280
282	AIP Contractor's Design - Toilet , Management office & Store room	30 days	Tue 29/11/22	Wed 28/12/22	Wed 23/8/23	Thu 21/9/23	280,281
283	Prepare Contractor's Design - Underground Water Treatment Plant	90 days	Mon 7/2/22	Sat 7/5/22	Tue 3/9/24	Sun 1/12/24	2SS+192 days
284	Internal review, ICE, CSD and submission Contractor's Design - Underground Water Treatment Plant	90 days	Sun 8/5/22	Fri 5/8/22	Mon 2/12/24	Sat 1/3/25	283,204
285	AIP Contractor's Design - Underground Water Treatment Plant	30 days	Sat 6/8/22	Sun 4/9/22	Sun 2/3/25	Mon 31/3/25	283,284
286	Prepare Contractor's Design - Entry Portal, Shelters, Signage, Solar Panels & Associated System etc.	150 days	Tue 23/8/22	Thu 19/1/23	Fri 5/7/24	Sun 1/12/24	279
287	Internal review, ICE, CSD and submission Contractor's Design - Entry Portal, Shelters, Signage, Solar Panels & Associated System etc.	90 days	Fri 20/1/23	Wed 19/4/23	Mon 2/12/24	Sat 1/3/25	286
288	AIP Contractor's Design - Entry Portal, Shelters, Signage, Solar Panels & Associated System etc.	30 days	Thu 20/4/23	Fri 19/5/23	Sun 2/3/25	Mon 31/3/25	286,287
289	Prepare Contractor's Design - Park lighting, irrigation system, smart system etc.	70 days	Sun 29/5/22	Sat 6/8/22	Mon 21/11/22	Sun 29/1/23	276SS+3 days



CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

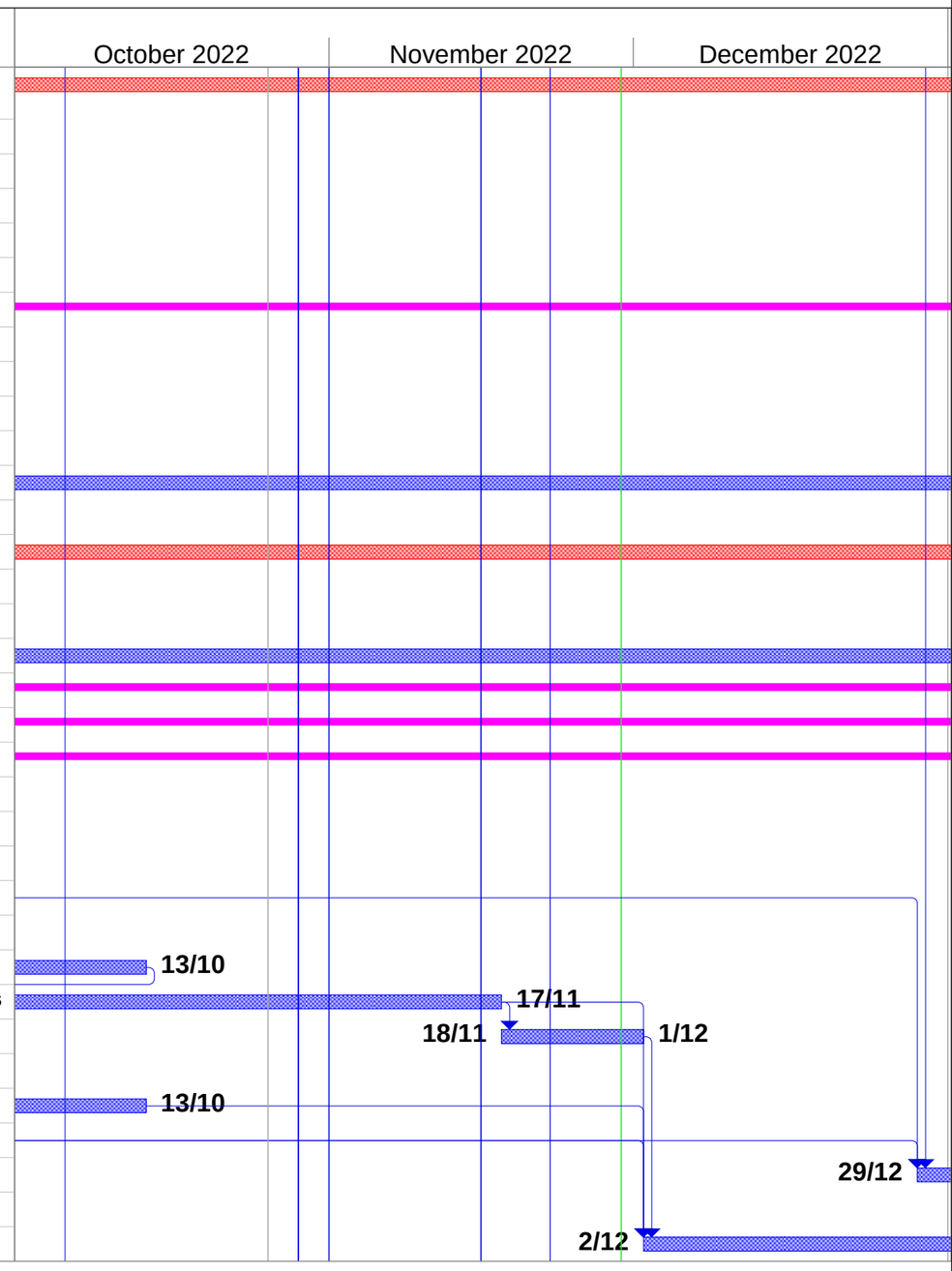
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
290	Internal review, ICE, CSD and submission Contractor's Design - Park lighting, irrigation system, smart system etc.	40 days	Sun 7/8/22	Thu 15/9/22	Tue 21/1/25	Sat 1/3/25	289
291	AIP Contractor's Design- Park lighting, irrigation system, smart system e	30 days	Fri 16/9/22	Sat 15/10/22	Sun 2/3/25	Mon 31/3/25	289,290
292	**Contractor's Design [Enhancement on Architectural Design & Associated Works]**	**450 days**	**Fri 30/7/21**	**Sat 22/10/22**	**Fri 19/11/21**	**Sat 11/2/23**	
293	Proposal of proposed architects firm & quotation for acceptance of the Project Manager	60 days	Fri 30/7/21	Mon 27/9/21	Fri 19/11/21	Mon 17/1/22	2
294	Prepare & Submission Preliminary Arch., Design	90 days	Tue 28/9/21	Sun 26/12/21	Tue 18/1/22	Sun 17/4/22	293
295	PM Review & AIP Preliminary Architectural Design	30 days	Mon 27/12/21	Tue 25/1/22	Mon 18/4/22	Tue 17/5/22	294
296	Vetting of design through public engagement activities	60 days	Wed 26/1/22	Sat 26/3/22	Wed 18/5/22	Sat 16/7/22	295
297	Submission of design to DSD, LCSD and other authorities for vetting and acceptance	60 days	Sun 27/3/22	Wed 25/5/22	Sun 17/7/22	Wed 14/9/22	296
298	Preparation & submission of detailed design for approval	90 days	Thu 26/5/22	Tue 23/8/22	Thu 15/9/22	Tue 13/12/22	297
299	Time risk allowance for DDA processing	30 days	Wed 24/8/22	Thu 22/9/22	Wed 14/12/...	Thu 12/1/23	297,298
300	Approval of detailed design	30 days	Fri 23/9/22	Sat 22/10/22	Fri 13/1/23	Sat 11/2/23	297,298,299
301	**Method Statements & Temporary Works**	**120 days**	**Fri 30/7/21**	**Fri 26/11/21**	**Thu 24/3/22**	**Mon 31/3/25**	
302	Prepartion & submission of generic method statement for site formation	60 days	Fri 30/7/21	Mon 27/9/21	Wed 18/1/23	Sat 18/3/23	2
303	Preparation & submission of generic method statement for earth slope v	60 days	Fri 30/7/21	Mon 27/9/21	Wed 18/1/23	Sat 18/3/23	2
304	Preparation & submission of generic method statement for retaining wall construction	60 days	Fri 30/7/21	Mon 27/9/21	Thu 24/3/22	Sun 22/5/22	2
305	Preparation & submission of generic method statement for G.I works	60 days	Fri 30/7/21	Mon 27/9/21	Mon 3/10/22	Thu 1/12/22	2
306	Preparation & Submission of generic method statement for drainage wo	60 days	Fri 30/7/21	Mon 27/9/21	Fri 31/1/25	Mon 31/3/25	2
307	Preparation and submission of generic method statement of road works	60 days	Fri 30/7/21	Mon 27/9/21	Fri 28/4/23	Mon 26/6/23	2
308	Preparation & submission of generic method statement of elevated walkway construciton	120 days	Fri 30/7/21	Fri 26/11/21	Wed 13/7/22	Wed 9/11/22	2
309	Temporary Work for cut/fill slope works	60 days	Fri 30/7/21	Mon 27/9/21	Sun 11/9/22	Wed 9/11/22	2
310	Temporary Work for retaining wall construction	60 days	Fri 30/7/21	Mon 27/9/21	Sun 11/9/22	Wed 9/11/22	2
311	Temporary Work for elevated walkway construction	60 days	Fri 30/7/21	Mon 27/9/21	Sun 11/9/22	Wed 9/11/22	2
312	Temporary Work for road and drainage works	60 days	Fri 30/7/21	Mon 27/9/21	Fri 28/4/23	Mon 26/6/23	2
313	**BIM Deliverable**	**1341 days**	**Fri 30/7/21**	**Mon 31/3/25**	**Fri 30/7/21**	**Mon 31/3/25**	
314	Submission of COBie Information Requirements for Asset Management	30 days	Fri 30/7/21	Sat 28/8/21	Fri 30/7/21	Sat 28/8/21	2
315	Submission of BIM Execution Plan in accordance with the PS Appendix 1.14D	60 days	Fri 30/7/21	Mon 27/9/21	Fri 30/7/21	Mon 27/9/21	2,314FF+30 days
316	Submission of Combined Services Drawings	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2
317	Submission of proposal for BIM training plan	90 days	Fri 30/7/21	Wed 27/10/21	Wed 1/1/25	Mon 31/3/25	2
318	Nomination of staff or subcontractor to attend BIM skill training courses under the pre approved list of the CITF managed by the CIC	120 days	Fri 30/7/21	Fri 26/11/21	Mon 2/12/24	Mon 31/3/25	2
319	Collaboration and Model Sharing	60 days	Thu 28/10/21	Sun 26/12/21	Thu 28/10/21	Sun 26/12/21	315FS+30 days



China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

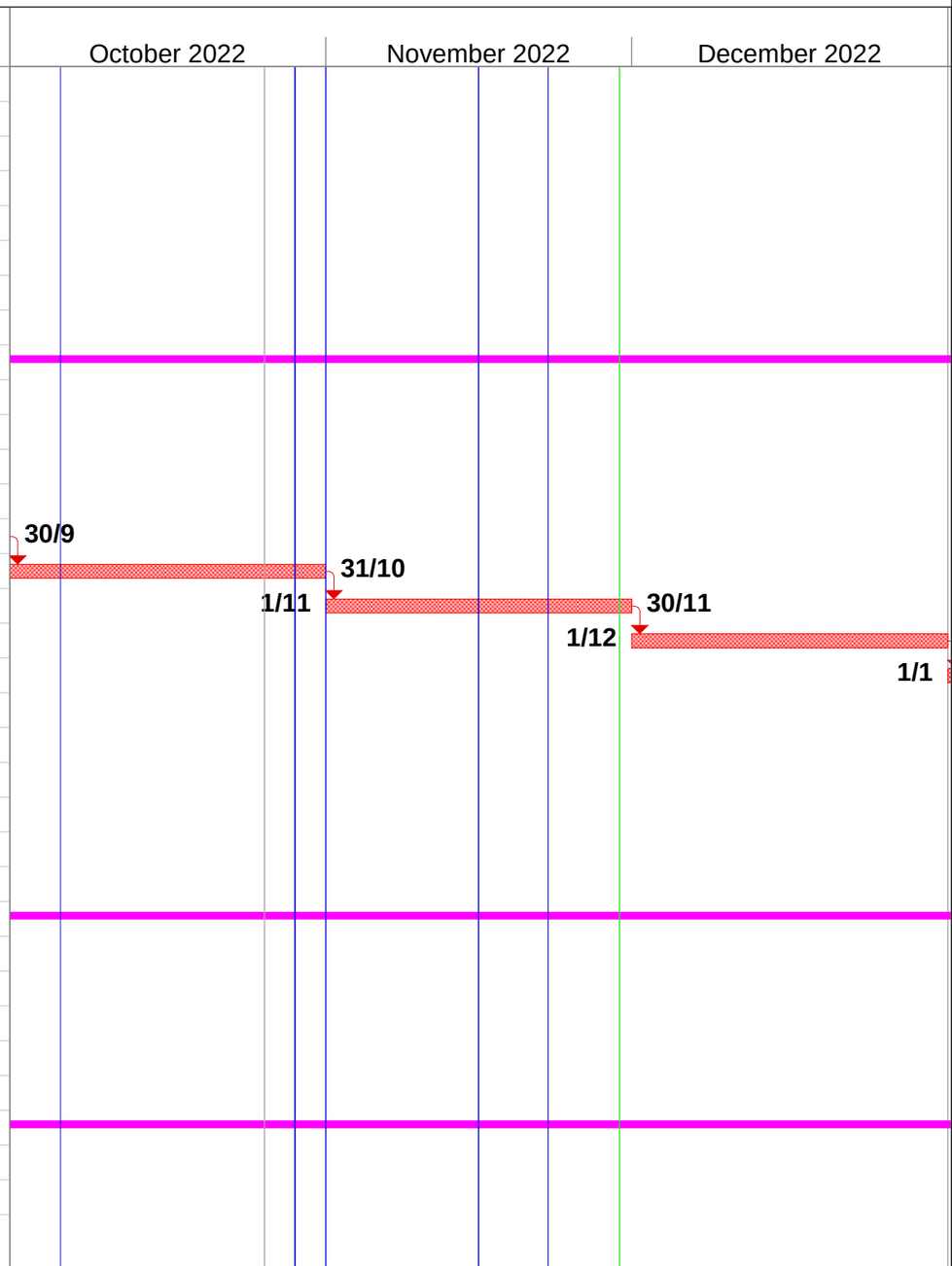
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
320	Monthly Coordination meeting& Submission of monthly BIM progress reports & Submission of 4D Simulation	1191 days	Mon 27/12/21	Mon 31/3/25	Mon 27/12/21	Mon 31/3/25	319
321	Submission of COBie data deliverables	30 days	Fri 31/1/25	Sat 1/3/25	Fri 31/1/25	Sat 1/3/25	320FS-60 days
322	Submission of a Fully Coordinated BIM Model with field verified in LOD 5	30 days	Tue 18/2/25	Wed 19/3/25	Sun 2/3/25	Mon 31/3/25	320FS-42 days
323	Submission of O&M Manuals, Product Catalogues and Operating Data	30 days	Tue 18/2/25	Wed 19/3/25	Sun 2/3/25	Mon 31/3/25	320FS-42 days
324	Submission of As-built drawings	30 days	Tue 18/2/25	Wed 19/3/25	Sun 2/3/25	Mon 31/3/25	320FS-42 days
325	Submission of Asset Data	30 days	Tue 18/2/25	Wed 19/3/25	Sun 2/3/25	Mon 31/3/25	320FS-42 days
326	**Work Area**	**1341 days**	**Fri 30/7/21**	**Mon 31/3/25**	**Fri 30/7/21**	**Mon 31/3/25**	
327	CRE Site Office Design & ICE Endorsement	30 days	Fri 30/7/21	Sat 28/8/21	Thu 16/9/21	Fri 15/10/21	
328	CRE Site office Design Review and Acceptance	30 days	Sun 29/8/21	Mon 27/9/21	Sat 16/10/21	Sun 14/11/21	327
329	CRE Site office Construction Works	90 days	Tue 28/9/21	Sun 26/12/21	Mon 15/11/...	Sat 12/2/22	328
330	Completion of CRE Site office Construction Works	0 days	Mon 24/1/22	Mon 24/1/22	Sun 13/2/22	Sun 13/2/22	329
331	CRE Site office Mobilization & Maintenance	1143 days	Mon 24/1/22	Tue 11/3/25	Sun 13/2/22	Mon 31/3/25	329,330
332	Access for Works Area	0 days	Fri 30/7/21	Fri 30/7/21	Fri 30/7/21	Fri 30/7/21	
333	Maintenance Duration for Works Area	1340 days	Sat 31/7/21	Mon 31/3/25	Sat 31/7/21	Mon 31/3/25	332FS+1 day
334	Vacate / Handover Works Area	0 days	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	333,331,336
335	Setting up Contractor's Project office	90 days	Tue 28/9/21	Sun 26/12/21	Mon 15/11/...	Sat 12/2/22	2
336	Contractor Site office Maintenance	1143 days	Mon 24/1/22	Tue 11/3/25	Sun 13/2/22	Mon 31/3/25	335
337	**Construction Works**	**1341 days**	**Fri 30/7/21**	**Mon 31/3/25**	**Fri 30/7/21**	**Mon 31/3/25**	
338	**Section of Works 1 - Portions 1a, 2a, 2b**	**976 days**	**Fri 30/7/21**	**Sun 31/3/24**	**Mon 24/1/22**	**Mon 31/3/25**	
339	**Portion 1a**	**976 days**	**Fri 30/7/21**	**Sun 31/3/24**	**Mon 6/6/22**	**Mon 31/3/25**	
340	Preparation& submission of MS, Temp., works, associated plans & d	50 days	Fri 30/7/21	Fri 17/9/21	Mon 6/6/22	Mon 25/7/22	2
341	Engineer's AIP of MS, Temp., works, plans& associated docs	21 days	Fri 8/4/22	Thu 28/4/22	Tue 26/7/22	Mon 15/8/22	340
342	Provision of site access [273 days after starting date as per Contract]	8 days	Fri 29/4/22	Fri 6/5/22	Tue 16/8/22	Tue 23/8/22	341,10,300FS-180 days
343	Mobilization& Site Clearance	14 days	Sat 7/5/22	Fri 20/5/22	Wed 24/8/22	Tue 6/9/22	342
344	Excavation and Construction of Drainage Works	108 days	Sat 21/5/22	Mon 5/9/22	Wed 7/9/22	Fri 23/12/22	343
345	Pipe laying, backfilling and reinstatement work	109 days	Mon 27/6/22	Thu 13/10/22	Fri 14/10/22	Mon 30/1/23	343,344FS-71 days
346	CCTV inspection, testing and commissioning of Drainage Works	73 days	Tue 6/9/22	Thu 17/11/22	Sat 24/12/22	Mon 6/3/23	344FS-38 days,345FS-38 days
347	Time Risk Allowance	14 days	Fri 18/11/22	Thu 1/12/22	Tue 7/3/23	Mon 20/3/23	346
348	Excavation and Construction of Waterworks	108 days	Sat 21/5/22	Mon 5/9/22	Wed 26/10/...	Fri 10/2/23	343
349	Testing and Commissioning of Waterline for Freshwater	38 days	Tue 6/9/22	Thu 13/10/22	Sat 11/2/23	Mon 20/3/23	348
350	Excavation and construction of draw pits and ducting	108 days	Sat 21/5/22	Mon 5/9/22	Sat 3/12/22	Mon 20/3/23	343
351	Construction of store room builder works	107 days	Thu 29/12/22	Fri 14/4/23	Fri 22/9/23	Sat 6/1/24	343,350,282
352	Construction of store room finishing works	85 days	Sat 15/4/23	Sat 8/7/23	Sun 7/1/24	Sun 31/3/24	351
353	Backfilling and compaction of materials	73 days	Fri 2/12/22	Sun 12/2/23	Tue 21/3/23	Thu 1/6/23	350,349,346,347



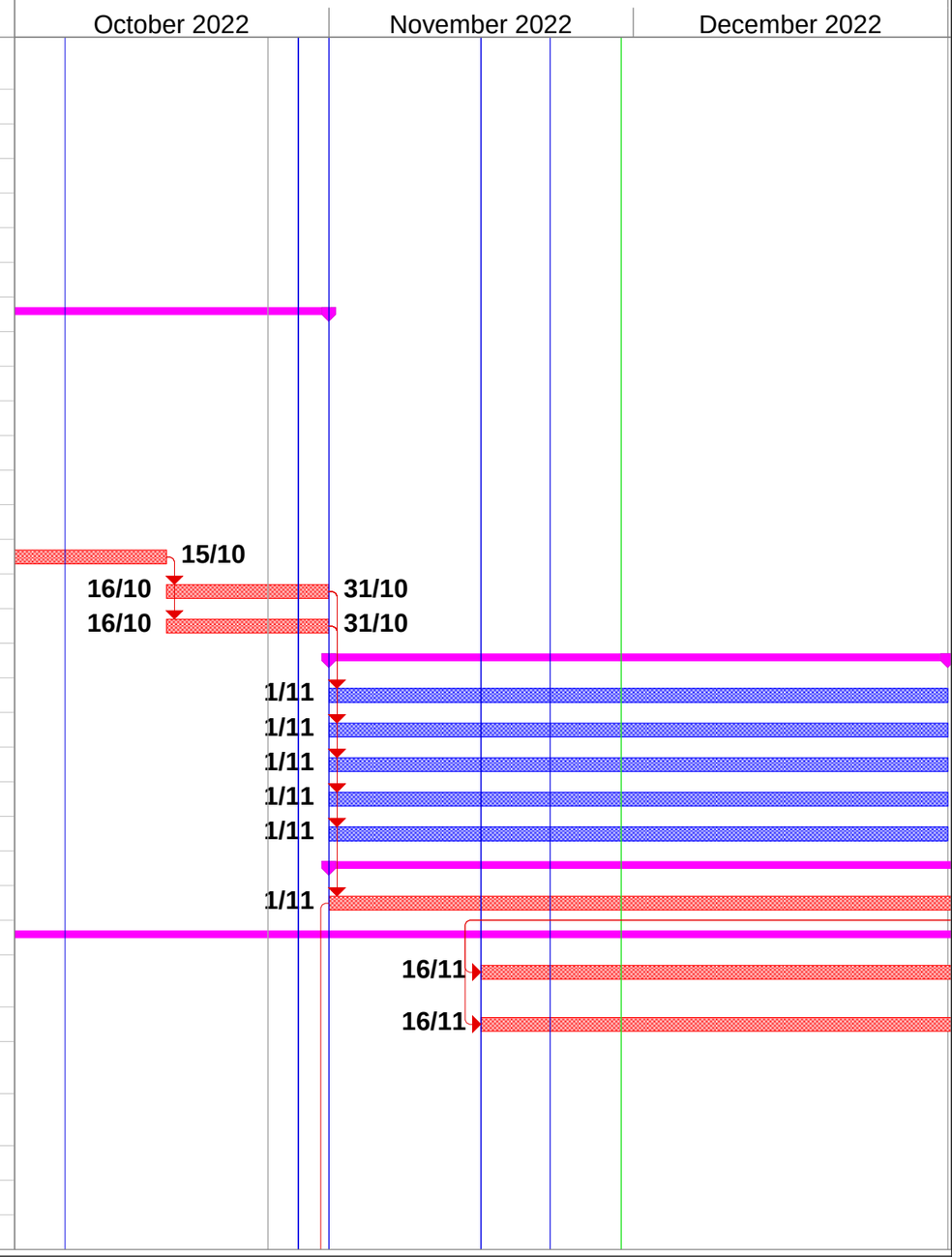
China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

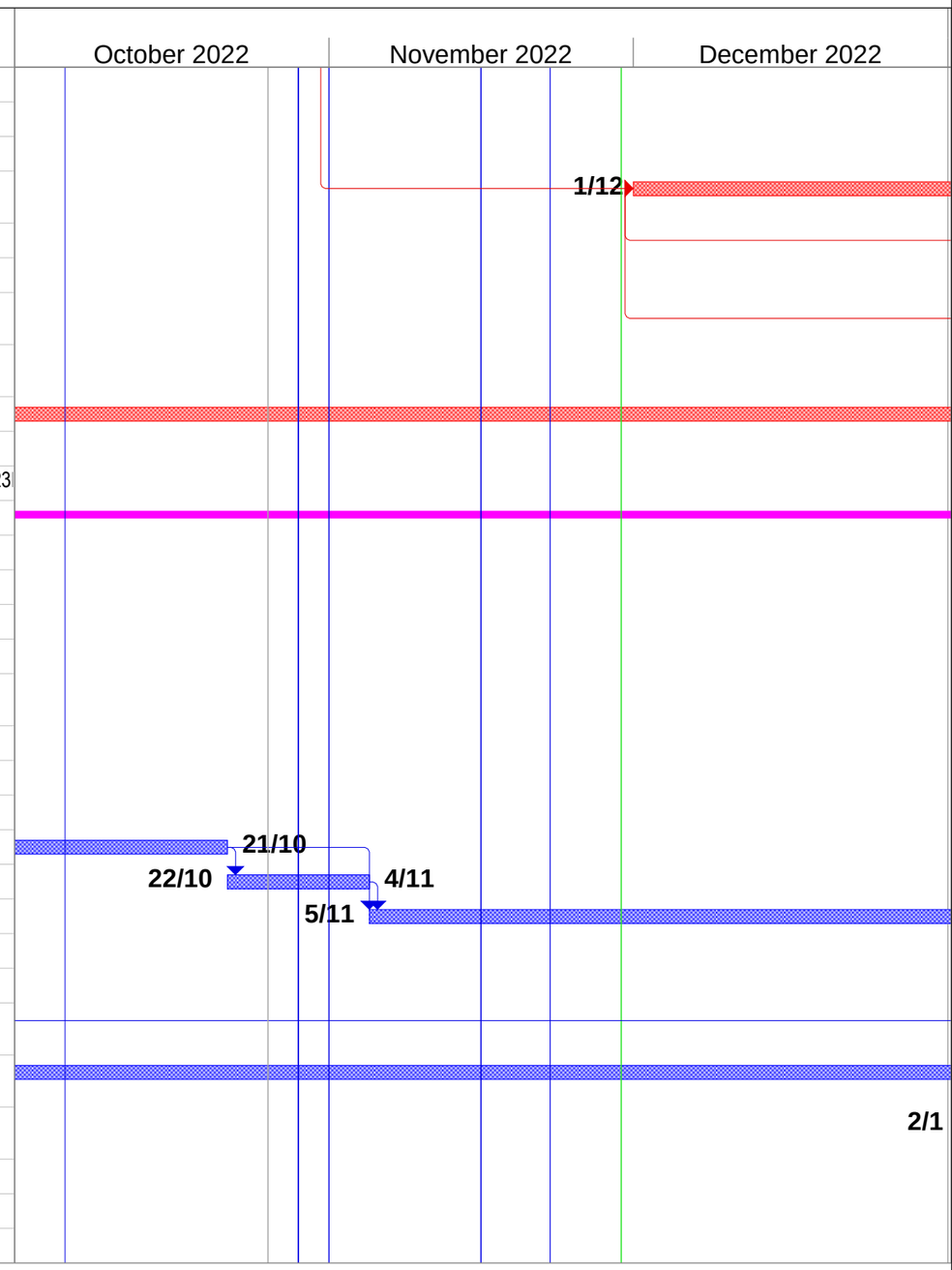
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
354	Construction of U-channels with cover	107 days	Mon 13/2/23	Tue 30/5/23	Fri 2/6/23	Sat 16/9/23	353
355	Installation of lighting	107 days	Mon 13/2/23	Tue 30/5/23	Fri 2/6/23	Sat 16/9/23	353
356	Testing and Commissioning of lighting	37 days	Wed 31/5/23	Thu 6/7/23	Sat 24/2/24	Sun 31/3/24	355
357	Application for (WW0046 - Part I & II)	30 days	Thu 23/2/23	Fri 24/3/23	Fri 18/8/23	Sat 16/9/23	289FS+200 days
358	Miscellaneous works (e.g. irrigation system and T&C)	72 days	Wed 31/5/23	Thu 10/8/23	Sun 17/9/23	Mon 27/11/...	354,355,357
359	Hard landscape works including soil placement	67 days	Fri 11/8/23	Mon 16/10/23	Tue 28/11/23	Fri 2/2/24	358
360	Soft landscaping works	58 days	Tue 17/10/23	Wed 13/12/23	Sat 3/2/24	Sun 31/3/24	358,359
361	Application for (WW0046 - Part IV & V)	60 days	Fri 11/8/23	Mon 9/10/23	Thu 1/2/24	Sun 31/3/24	358
362	DOS - Play Area Design (cum PR Enhancement)	616 days	**Mon 25/7/22**	**Sun 31/3/24**	Mon 25/7/22	Mon 31/3/25	
363	DOS Play Area Design Proposal	22 days	Mon 25/7/22	Mon 15/8/22	Mon 25/7/22	Mon 15/8/22	2
364	Play Area Enhancement Design	31 days	Mon 1/8/22	Wed 31/8/22	Mon 1/8/22	Wed 31/8/22	363FS-15 days
365	Engagement of Park Facilities Supplier/Specialist	31 days	Mon 1/8/22	Wed 31/8/22	Mon 1/8/22	Wed 31/8/22	363FS-15 days
366	Submission of Play Area Proposal to LCSD	15 days	Thu 1/9/22	Thu 15/9/22	Thu 1/9/22	Thu 15/9/22	365,364
367	Submisiion of Play Area Engagement/PR Event Proposal	15 days	Fri 16/9/22	Fri 30/9/22	Fri 16/9/22	Fri 30/9/22	366
368	Vetting by Departments	31 days	Sat 1/10/22	Mon 31/10/22	Sat 1/10/22	Mon 31/10/...	367
369	Preparation of Events	30 days	Tue 1/11/22	Wed 30/11/22	Tue 1/11/22	Wed 30/11/...	368
370	Engagement/PR Events	31 days	Thu 1/12/22	Sat 31/12/22	Thu 1/12/22	Sat 31/12/22	369
371	Finalization of DOS Play Area Design	31 days	Sun 1/1/23	Tue 31/1/23	Sun 1/1/23	Tue 31/1/23	370
372	LCSD Endorsement	14 days	Wed 1/2/23	Tue 14/2/23	Wed 1/2/23	Tue 14/2/23	371
373	Shop Drawing	14 days	Wed 15/2/23	Tue 28/2/23	Wed 15/2/23	Tue 28/2/23	372
374	Order & Production of Play Equipment	182 days	Wed 15/2/23	Tue 15/8/23	Tue 1/10/24	Mon 31/3/25	372
375	DOS - Construction - Civil Work and hard landscape	184 days	Wed 1/3/23	Thu 31/8/23	Wed 1/3/23	Thu 31/8/23	373
376	Installation of Safety Mat & Play Equipment	122 days	Fri 1/9/23	Sun 31/12/23	Fri 1/9/23	Sun 31/12/23	375
377	Certification & Handover	91 days	Mon 1/1/24	Sun 31/3/24	Mon 1/1/24	Sun 31/3/24	376
378	**Portion 2a**	**976 days**	**Fri 30/7/21**	**Sun 31/3/24**	**Thu 7/7/22**	**Mon 31/3/25**	
379	Provision of site access [31 days after starting date as per Contract]	8 days	Mon 30/8/21	Mon 6/9/21	Sat 28/12/24	Sat 4/1/25	15
380	Mobilization & Site Clearance	14 days	Tue 7/9/21	Mon 20/9/21	Sun 5/1/25	Sat 18/1/25	379
381	Preparation & submission of MS, Temp., works, associated plans & c	51 days	Tue 21/9/21	Wed 10/11/21	Sun 19/1/25	Mon 10/3/25	380
382	Engineer's AIP of MS, Temp., works, plans & associated docs	21 days	Thu 11/11/21	Wed 1/12/21	Tue 11/3/25	Mon 31/3/25	381
383	Time Risk Allowance	24 days	Fri 30/7/21	Sun 22/8/21	Sat 8/3/25	Mon 31/3/25	
384	**Lake Park - Enhancement Design**	**640 days**	**Fri 1/7/22**	**Sun 31/3/24**	**Thu 7/7/22**	**Mon 31/3/25**	
385	**Schematic Landscape Master (LMP)**	**77 days**	**Fri 1/7/22**	**Thu 15/9/22**	**Thu 7/7/22**	**Mon 31/3/25**	
386	Draft 1 -LMP with building footprint	7 days	Fri 1/7/22	Thu 7/7/22	Thu 7/7/22	Wed 13/7/22	
387	Draft 2 - LMP with building layout, EVA, Schedule of Accommocation (SOA)	8 days	Fri 8/7/22	Fri 15/7/22	Thu 14/7/22	Thu 21/7/22	386



ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
388	Draft 3 - LMP with landscape features (fence wall, shether, furniture, railing, view deck with BFA ramp etc.)	8 days	Sat 16/7/22	Sat 23/7/22	Fri 22/7/22	Fri 29/7/22	387
389	Final Draft - LMP with Water Play design, Prelim MEP	8 days	Sun 24/7/22	Sun 31/7/22	Sat 30/7/22	Sat 6/8/22	388
390	Revision of Urban forest Layout	8 days	Sat 16/7/22	Sat 23/7/22	Fri 22/7/22	Fri 29/7/22	
391	Finalization - Urban Forest Layout	8 days	Sun 24/7/22	Sun 31/7/22	Sat 30/7/22	Sat 6/8/22	390
392	Review by CEDD	24 days	Fri 8/7/22	Sun 31/7/22	Thu 14/7/22	Sat 6/8/22	389FF,391FF
393	Circlation LMP to DSD for comment	15 days	Mon 1/8/22	Mon 15/8/22	Mon 17/3/25	Mon 31/3/25	392
394	LMP Finalzation	46 days	Mon 1/8/22	Thu 15/9/22	Fri 14/2/25	Mon 31/3/25	392
395	**Design AIP, GBP & Approval**	**92 days**	**Mon 1/8/22**	**Mon 31/10/22**	**Sun 7/8/22**	**Mon 31/3/25**	
396	Design Package 1 - Building Design	46 days	Mon 1/8/22	Thu 15/9/22	Fri 14/2/25	Mon 31/3/25	392
397	Design Package 2 - Shelter, Fence Wall, Railing, decking	46 days	Mon 1/8/22	Thu 15/9/22	Fri 14/2/25	Mon 31/3/25	392
398	Design Package 3 - Structural	46 days	Mon 1/8/22	Thu 15/9/22	Fri 14/2/25	Mon 31/3/25	392
399	Design Package 4 - MEP	46 days	Mon 1/8/22	Thu 15/9/22	Fri 14/2/25	Mon 31/3/25	392
400	Bi-weekly Review by CEDD	40 days	Sun 7/8/22	Thu 15/9/22	Sun 7/8/22	Thu 15/9/22	392
401	Aip/Circulation to DSD for comment	23 days	Thu 1/9/22	Fri 23/9/22	Sun 9/3/25	Mon 31/3/25	400FS-15 days
402	GBP Preparation & Submission	45 days	Thu 1/9/22	Sat 15/10/22	Thu 1/9/22	Sat 15/10/22	400FS-15 days
403	ICE Approval	16 days	Sun 16/10/22	Mon 31/10/22	Sun 16/10/22	Mon 31/10/...	402
404	FSD Approval	16 days	Sun 16/10/22	Mon 31/10/22	Sun 16/10/22	Mon 31/10/...	402
405	**Construction Drawing (CD)**	**61 days**	**Tue 1/11/22**	**Sat 31/12/22**	**Thu 30/1/25**	**Mon 31/3/25**	
406	CD package 1 - Architectural	61 days	Tue 1/11/22	Sat 31/12/22	Thu 30/1/25	Mon 31/3/25	403,404
407	CD package 2 - Structural	61 days	Tue 1/11/22	Sat 31/12/22	Thu 30/1/25	Mon 31/3/25	403,404
408	CD package 3 - MEP	61 days	Tue 1/11/22	Sat 31/12/22	Thu 30/1/25	Mon 31/3/25	403,404
409	CD package 4 - Landscape	61 days	Tue 1/11/22	Sat 31/12/22	Thu 30/1/25	Mon 31/3/25	403,404
410	CD package 5 - Details	61 days	Tue 1/11/22	Sat 31/12/22	Thu 30/1/25	Mon 31/3/25	403,404
411	**Shop Drawing**	**181 days**	**Tue 1/11/22**	**Sun 30/4/23**	**Tue 1/11/22**	**Sun 30/4/23**	
412	Shop Drawing & Material submission	181 days	Tue 1/11/22	Sun 30/4/23	Tue 1/11/22	Sun 30/4/23	403,404
413	**Construction**	**578 days**	**Thu 1/9/22**	**Sun 31/3/24**	**Thu 1/9/22**	**Mon 31/3/25**	
414	Footing & foundation (buildings,sheltders, fence wall & viewing deck)	181 days	Wed 16/11/22	Mon 15/5/23	Wed 16/11/22	Mon 15/5/23	412FS-166 days
415	Laying of UU & Civil Works	181 days	Wed 16/11/22	Mon 15/5/23	Wed 16/11/...	Mon 15/5/23	412FS-166 days
416	Super structure (Entry Portal, Water Treatment Plant, Function Rm, Toilets)	425 days	Wed 1/2/23	Sun 31/3/24	Wed 1/2/23	Sun 31/3/24	414FS-104 days,415FS-104 days
417	Building Facade (Entry Portal, Water Treatment Plant, Function Rm, Toilets)	214 days	Thu 1/6/23	Sun 31/12/23	Fri 30/8/24	Mon 31/3/25	416SS+120 days
418	Shethers	184 days	Tue 16/5/23	Wed 15/11/23	Sun 29/9/24	Mon 31/3/25	414,415
419	Boundary fence wall	184 days	Tue 16/5/23	Wed 15/11/23	Sun 29/9/24	Mon 31/3/25	414,415
420	MEP	321 days	Tue 16/5/23	Sun 31/3/24	Tue 16/5/23	Sun 31/3/24	414,415,416FF



ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
421	Water Play installation	183 days	Sun 1/10/23	Sun 31/3/24	Sun 1/10/23	Sun 31/3/24	416FF
422	Interior	183 days	Sun 1/10/23	Sun 31/3/24	Sun 1/10/23	Sun 31/3/24	416FF
423	T & C	183 days	Sun 1/10/23	Sun 31/3/24	Sun 1/10/23	Sun 31/3/24	416FF
424	Hard Landscape (Planter ,bioswale, boardwalk, wetland, soil cell, paving, etc)	427 days	Thu 1/12/22	Wed 31/1/24	Thu 1/12/22	Wed 31/1/24	412SS+30 days
425	Landscape lighting	184 days	Tue 1/8/23	Wed 31/1/24	Sun 29/9/24	Mon 31/3/25	424SS+242 days
426	Irrigation system	62 days	Fri 1/12/23	Wed 31/1/24	Wed 29/1/25	Mon 31/3/25	425FF
427	Soft Landscape (Lake Island, Lake side and riparian planting) (In planting seasons)	61 days	Tue 1/8/23	Sat 30/9/23	Thu 30/1/25	Mon 31/3/25	424SS+242 days
428	Soft Landscape (Trees and "flower sea") (In planting seasons)	60 days	Thu 1/2/24	Sun 31/3/24	Thu 1/2/24	Sun 31/3/24	424,429
429	Nursery for Trees and Flower sea"	518 days	Thu 1/9/22	Wed 31/1/24	Thu 1/9/22	Wed 31/1/24	
430	Preparation of O&M Manual	184 days	Wed 1/3/23	Thu 31/8/23	Sun 29/9/24	Mon 31/3/25	
431	As-built drg/model	182 days	Mon 2/10/23	Sun 31/3/24	Mon 2/10/23	Sun 31/3/24	416FF,420FF,421FF,422FF,423
432	**Portion 2b**	**798 days**	**Sat 2/10/21**	**Fri 8/12/23**	**Mon 24/1/22**	**Sun 31/3/24**	
433	Preparation & submission of MS, Temp., works, associated plans & c	51 days	Sat 2/10/21	Sun 21/11/21	Mon 24/1/22	Tue 15/3/22	2
434	Engineer's AIP of MS, Temp., works, plans & associated docs	22 days	Mon 22/11/21	Mon 13/12/21	Wed 16/3/22	Wed 6/4/22	433
435	Provision of site access [137 days after starting date as per Contract	7 days	Tue 14/12/21	Mon 20/12/21	Thu 7/4/22	Wed 13/4/22	20,434
436	Mobilization & Site Clearance	16 days	Tue 21/12/21	Wed 5/1/22	Thu 14/4/22	Fri 29/4/22	435
437	Hard landscaping work for Island - placement of boulders, soil placement and planters construction	107 days	Thu 6/1/22	Fri 22/4/22	Sat 30/4/22	Sun 14/8/22	436
438	Soft landscaping works for Island	74 days	Sat 23/4/22	Tue 5/7/22	Mon 15/8/22	Thu 27/10/22	437
439	Construction of artificial lake	97 days	Mon 7/2/22	Sat 14/5/22	Sat 23/7/22	Thu 27/10/22	436FS+32 days
440	Construction of artificial island	74 days	Sat 23/4/22	Tue 5/7/22	Mon 15/8/22	Thu 27/10/22	436,438FF
441	Construction of pavers for viewing steps	108 days	Wed 6/7/22	Fri 21/10/22	Fri 28/10/22	Sun 12/2/23	440,439
442	Time Risk Allowance	14 days	Sat 22/10/22	Fri 4/11/22	Mon 13/2/23	Sun 26/2/23	441
443	Construction of pavers for viewing deck A	108 days	Sat 5/11/22	Mon 20/2/23	Mon 27/2/23	Wed 14/6/23	441,442
444	Construction of pavers for viewing deck B	95 days	Tue 21/2/23	Fri 26/5/23	Thu 15/6/23	Sun 17/9/23	443
445	Construction of pavers for timber decking	55 days	Sat 27/5/23	Thu 20/7/23	Mon 18/9/23	Sat 11/11/23	444
446	Soft landscaping works (soil placement and planting works) for Riparian zone A	71 days	Wed 6/7/22	Wed 14/9/22	Sat 24/12/22	Sat 4/3/23	440,438,439
447	Soft landscaping works (soil placement and planting works) for Riparian zone B	109 days	Thu 15/9/22	Sun 1/1/23	Sun 5/3/23	Wed 21/6/23	446
448	Soft landscaping works (soil placement and planting works) for Riparian zone C	107 days	Mon 2/1/23	Tue 18/4/23	Thu 22/6/23	Fri 6/10/23	447
449	Soft landscaping works (other works) for Riparian zone C	36 days	Wed 19/4/23	Wed 24/5/23	Sat 7/10/23	Sat 11/11/23	447,448
450	Placement of boulders along artificial planting	107 days	Thu 25/5/23	Fri 8/9/23	Sat 16/12/23	Sun 31/3/24	448,449
451	Installation of lighting for Portion 2b	106 days	Fri 21/7/23	Fri 3/11/23	Sun 12/11/23	Sun 25/2/24	445,448,449

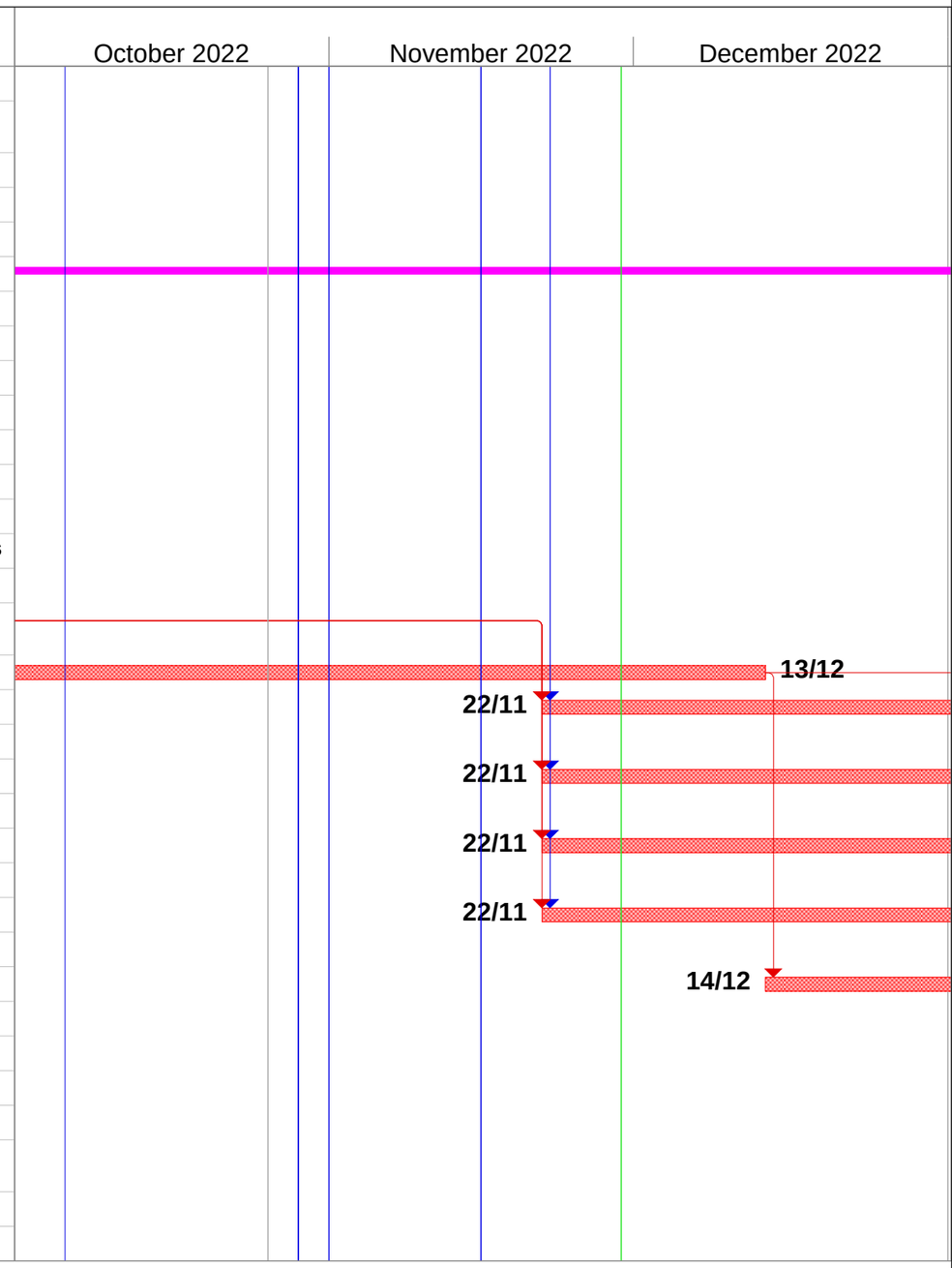


China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

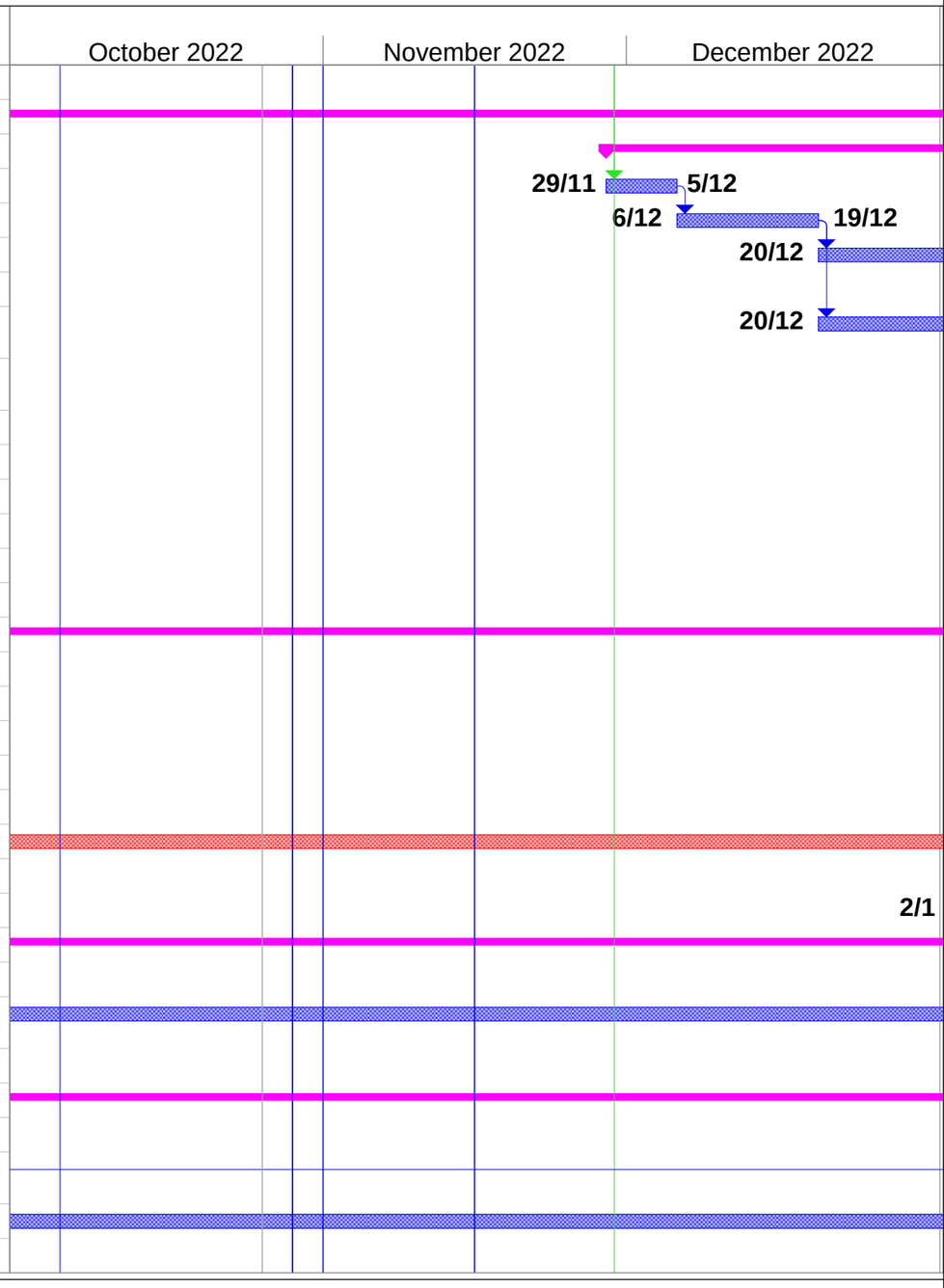
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
452	Testing and Commissioning of lighting for Portion 2b	35 days	Sat 4/11/23	Fri 8/12/23	Mon 26/2/24	Sun 31/3/24	451
453	**Section of Works 1A - Establishment Works for all Landscape Softworks in Section 1 of the Works**	**365 days**	**Sun 31/3/24**	**Mon 31/3/25**	**Mon 1/4/24**	**Mon 31/3/25**	
454	Commencement of Establishment Work for Section 1	0 days	Sun 31/3/24	Sun 31/3/24	Mon 1/4/24	Mon 1/4/24	23,452,446,360,359,377,431
455	Establishment Work Duration for Section 1	365 days	Mon 1/4/24	Mon 31/3/25	Mon 1/4/24	Mon 31/3/25	454
456	Completion of Works in Section 1	0 days	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	Mon 31/3/25	455
457	**Section of Works 2 - Portion 8**	**769 days**	**Fri 30/7/21**	**Wed 6/9/23**	**Fri 30/7/21**	**Sun 31/3/24**	
458	**Portion 8**	**769 days**	**Fri 30/7/21**	**Wed 6/9/23**	**Tue 22/2/22**	**Sun 31/3/24**	
459	Provision of site access [on starting date as per Contract]	7 days	Fri 30/7/21	Thu 5/8/21	Tue 22/2/22	Mon 28/2/22	2
460	Mobilization& Site Clearance	14 days	Fri 6/8/21	Thu 19/8/21	Tue 1/3/22	Mon 14/3/22	459
461	Preparation& submission of MS, Temp., works, associated plans & d	52 days	Fri 20/8/21	Sun 10/10/21	Tue 15/3/22	Thu 5/5/22	460
462	Engineer's AIP of MS, Temp., works, plans& associated docs	22 days	Mon 11/10/21	Mon 1/11/21	Fri 6/5/22	Fri 27/5/22	461
463	Excavation for Drainage Works	108 days	Tue 2/11/21	Thu 17/2/22	Sat 28/5/22	Mon 12/9/22	460,462
464	Construction of Drainage Works	108 days	Tue 7/12/21	Thu 24/3/22	Sat 2/7/22	Mon 17/10/...	460,462,463FS-73 days
465	CCTV inspection, testing and commissioning of Drainage Works	71 days	Fri 18/2/22	Fri 29/4/22	Tue 13/9/22	Tue 22/11/22	463FS-35 days,464FS-35 days
466	Time Risk Allowance	16 days	Sat 30/4/22	Sun 15/5/22	Wed 23/11/...	Thu 8/12/22	465
467	Backfilling and compaction of materials, shelters, stairs and pavement installation etc.	120 days	Mon 16/5/22	Mon 12/9/22	Fri 9/12/22	Fri 7/4/23	465,466
468	Tai Chi Area Construction	120 days	Tue 16/8/22	Tue 13/12/22	Sat 11/3/23	Sat 8/7/23	467FS-28 days
469	Adult Fitness Area Construction	120 days	Tue 22/11/22	Tue 21/3/23	Mon 16/10/...	Mon 12/2/24	467FS-28 days,240
470	Adult Fitness Area - Equipment installation	48 days	Wed 22/3/23	Mon 8/5/23	Tue 13/2/24	Sun 31/3/24	469
471	Elderly Fitness Area Construction	120 days	Tue 22/11/22	Tue 21/3/23	Mon 16/10/...	Mon 12/2/24	467FS-28 days,242
472	Elderly Fitness Area - Equipment installation	48 days	Wed 22/3/23	Mon 8/5/23	Tue 13/2/24	Sun 31/3/24	471
473	Children Paly Area 4 Construction	120 days	Tue 22/11/22	Tue 21/3/23	Mon 16/10/...	Mon 12/2/24	467FS-28 days,238
474	Children Paly Area 4 - Facility installation	48 days	Wed 22/3/23	Mon 8/5/23	Tue 13/2/24	Sun 31/3/24	473
475	Children Paly Area 5 Construction	120 days	Tue 22/11/22	Tue 21/3/23	Mon 16/10/...	Mon 12/2/24	467FS-28 days,238
476	Children Paly Area 5 - Facility installation	48 days	Wed 22/3/23	Mon 8/5/23	Tue 13/2/24	Sun 31/3/24	475
477	Soft landscaping works including soil placement for planting	121 days	Wed 14/12/22	Thu 13/4/23	Sun 9/7/23	Mon 6/11/23	468
478	Irrigation system& miscellaneous work	72 days	Fri 14/4/23	Sat 24/6/23	Sat 20/1/24	Sun 31/3/24	477
479	Installation of draw pits ducting and reinstatement works	121 days	Sat 25/2/23	Sun 25/6/23	Wed 20/9/23	Thu 18/1/24	477FS-48 days
480	Installation of lighting	74 days	Sat 20/5/23	Tue 1/8/23	Wed 13/12/...	Sat 24/2/24	479FS-37 days
481	Testing and Commissioning of lighting	36 days	Wed 2/8/23	Wed 6/9/23	Sun 25/2/24	Sun 31/3/24	480
482	**Section of Works 2A - Establishment Works for all Landscape Softworks in Section 2 of the Works**	**365 days**	**Wed 6/9/23**	**Thu 5/9/24**	**Mon 1/4/24**	**Mon 31/3/25**	
483	Commencement of Establishment Work for Section 2	0 days	Wed 6/9/23	Wed 6/9/23	Mon 1/4/24	Mon 1/4/24	478,481,477
484	Establishment Work Duration for Section 2	365 days	Thu 7/9/23	Thu 5/9/24	Mon 1/4/24	Mon 31/3/25	483



China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
485	Completion of Works in Section 2	0 days	Thu 5/9/24	Thu 5/9/24	Mon 31/3/25	Mon 31/3/25	484
486	**Section of Works 3 - Portions 1b, 3, 4, 5**	**770 days**	**Fri 30/7/21**	**Thu 7/9/23**	**Thu 23/6/22**	**Sun 31/3/24**	
487	**Portion 1b**	**222 days**	**Tue 29/11/22**	**Sat 8/7/23**	**Wed 23/8/23**	**Sun 31/3/24**	
488	Provision of site access [487 days after starting date as per Contract]	7 days	Tue 29/11/22	Mon 5/12/22	Wed 23/8/23	Tue 29/8/23	42
489	Mobilization& Site Clearance	14 days	Tue 6/12/22	Mon 19/12/22	Wed 30/8/23	Tue 12/9/23	488
490	Excavation and Construction of Sewerage line	65 days	Tue 20/12/22	Wed 22/2/23	Wed 13/9/23	Thu 16/11/23	489
491	CCTV inspection, testing and commissioning of sewerage Line	37 days	Wed 8/2/23	Thu 16/3/23	Thu 2/11/23	Fri 8/12/23	490FS-15 days
492	Excavation and Construction of Waterlines for treated water & flushing water	65 days	Tue 20/12/22	Wed 22/2/23	Fri 15/9/23	Sat 18/11/23	489
493	Testing and Commissioning of Waterlines for treated water and flushing water	37 days	Mon 6/2/23	Tue 14/3/23	Thu 2/11/23	Fri 8/12/23	492FS-17 days
494	Time Risk Allowance	7 days	Fri 17/3/23	Thu 23/3/23	Sat 9/12/23	Fri 15/12/23	493,491
495	Backfilling and compaction of materials	36 days	Fri 24/3/23	Fri 28/4/23	Sat 16/12/23	Sat 20/1/24	493,491,494
496	Construction of pavers	65 days	Sat 29/4/23	Sun 2/7/23	Sat 27/1/24	Sun 31/3/24	495
497	Installation of lighting	57 days	Sat 29/4/23	Sat 24/6/23	Sun 21/1/24	Sun 17/3/24	495
498	Testing and Commissioning of lighting	14 days	Sun 25/6/23	Sat 8/7/23	Mon 18/3/24	Sun 31/3/24	497
499	Soft landscape works (installation of pot planters)	50 days	Sat 29/4/23	Sat 17/6/23	Sun 11/2/24	Sun 31/3/24	495
500	**Portion 3**	**648 days**	**Mon 29/11/21**	**Thu 7/9/23**	**Thu 23/6/22**	**Sun 31/3/24**	
501	Provision of site access	7 days	Mon 29/11/21	Sun 5/12/21	Thu 23/6/22	Wed 29/6/22	47
502	Mobilization& Site Clearance	14 days	Mon 6/12/21	Sun 19/12/21	Thu 30/6/22	Wed 13/7/22	501
503	Preparation& submission of MS, Temp., works, associated plans & d	52 days	Mon 20/12/21	Wed 9/2/22	Thu 14/7/22	Sat 3/9/22	502
504	Engineer AIP of MS, Temp., works, plans& associated docs	21 days	Thu 10/2/22	Wed 2/3/22	Sun 4/9/22	Sat 24/9/22	503
505	Installation of chain-link fencing + Provision of temporary drainage sy	200 days	Thu 3/3/22	Sun 18/9/22	Sun 25/9/22	Wed 12/4/23	504
506	Ground Cleaning, Scarifying, Ripping, Cultivation and Soil Replacem	225 days	Mon 19/9/22	Mon 1/5/23	Thu 13/4/23	Thu 23/11/23	505
507	Soft landscaping works - Hydroseeding planting	129 days	Tue 2/5/23	Thu 7/9/23	Fri 24/11/23	Sun 31/3/24	506
508	Pre-planting at Holding Nursery Area	180 days	Mon 2/1/23	Fri 30/6/23	Wed 4/10/23	Sun 31/3/24	
509	**Portion 4**	**710 days**	**Fri 30/7/21**	**Sun 9/7/23**	**Fri 9/6/23**	**Sun 31/3/24**	
510	Provision of site access [on starting date as per Contract]	7 days	Fri 30/7/21	Thu 5/8/21	Fri 9/6/23	Thu 15/6/23	51
511	Remove AHM, Ground Cleaning, Scarifying, Ripping, Cultivation and Soil Replacement	200 days	Fri 23/9/22	Mon 10/4/23	Fri 16/6/23	Mon 1/1/24	510,505FS+4 days
512	Soft landscaping works - Hydroseeding planting	90 days	Tue 11/4/23	Sun 9/7/23	Tue 2/1/24	Sun 31/3/24	511
513	**Portion 5**	**497 days**	**Sun 27/2/22**	**Sat 8/7/23**	**Mon 21/11...**	**Sun 31/3/24**	
514	Provision of site access [212 days after starting date as per Contract]	7 days	Sun 27/2/22	Sat 5/3/22	Mon 21/11/...	Sun 27/11/22	55
515	Installation of chain-link fencing + + Provision of temporary drainage system	162 days	Sun 6/3/22	Sun 14/8/22	Mon 28/11/22	Mon 8/5/23	514
516	Ground Cleaning, Scarifying, Ripping, Cultivation and Soil Replacem	242 days	Mon 11/7/22	Thu 9/3/23	Tue 4/4/23	Fri 1/12/23	514,515FS-35 days
517	Soft landscaping works - Hydroseeding planting	121 days	Fri 10/3/23	Sat 8/7/23	Sat 2/12/23	Sun 31/3/24	515,516

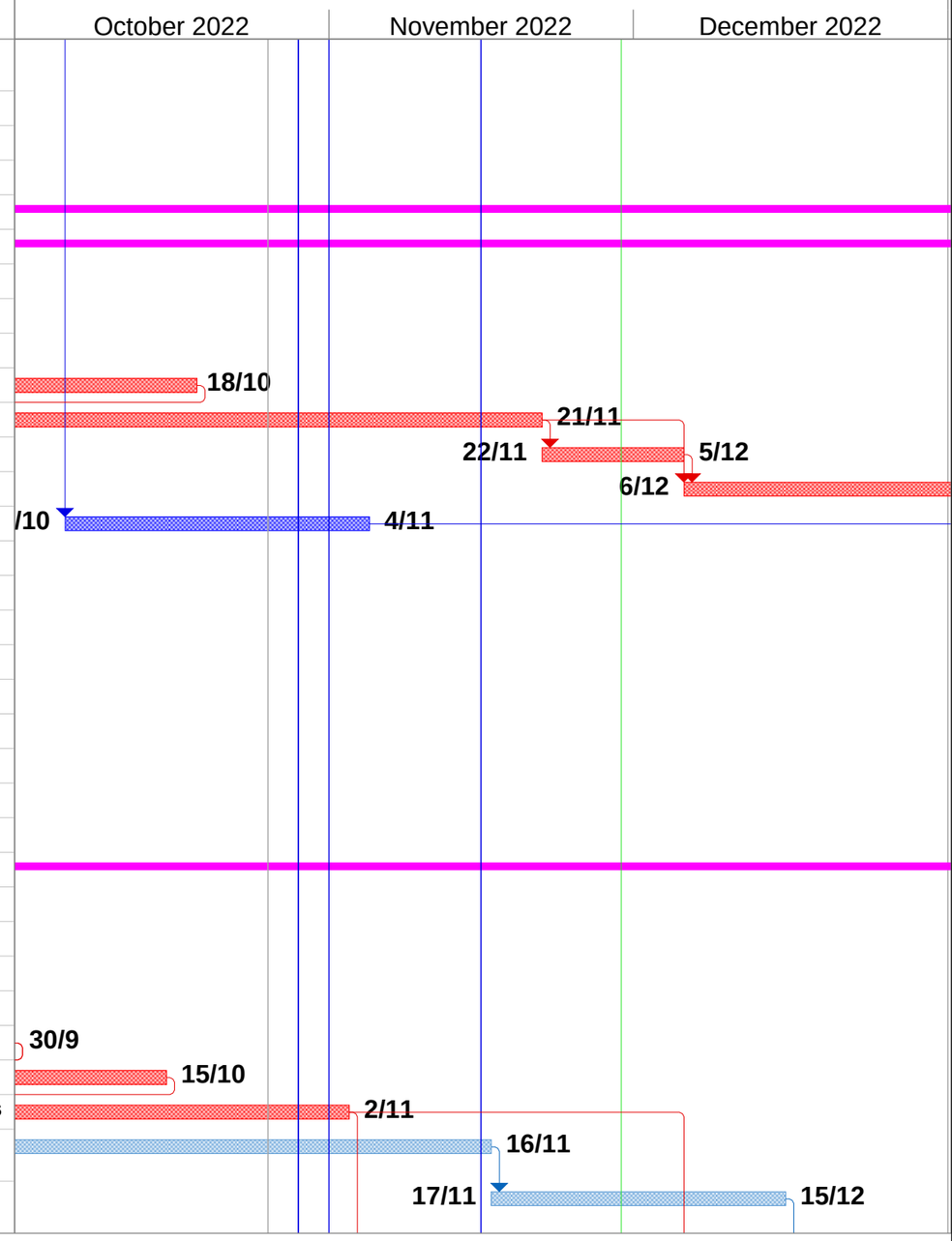


China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

Updated on: 22 Aug 2022

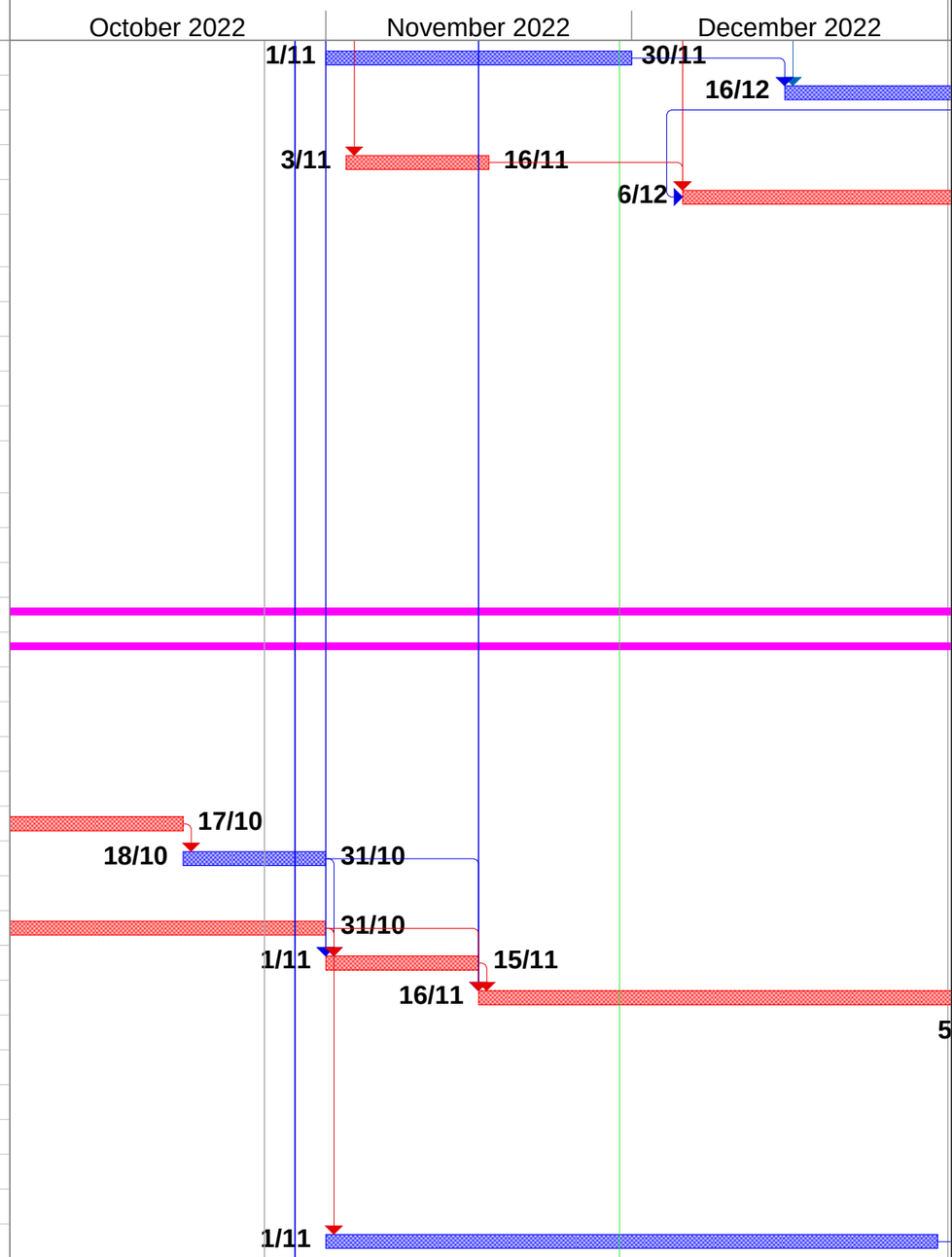
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
518	**Section of Works 3A - Establishment Works for all Landscape Softworks in Section 3 of the Works**	**365 days**	**Thu 7/9/23**	**Fri 6/9/24**	**Mon 1/4/24**	**Mon 31/3/25**	
519	Commencement of Establishment Work for Section 3	0 days	Thu 7/9/23	Thu 7/9/23	Mon 1/4/24	Mon 1/4/24	517,512,499,498,507,508
520	Establishment Work Duration for Section 3	365 days	Fri 8/9/23	Fri 6/9/24	Mon 1/4/24	Mon 31/3/25	519
521	Completion of Works in Section 3	0 days	Fri 6/9/24	Fri 6/9/24	Mon 31/3/25	Mon 31/3/25	520
522	**Section of Works 4 - Portions 6, 12**	**804 days**	**Fri 30/7/21**	**Wed 11/10/23**	**Tue 18/1/22**	**Mon 31/3/25**	
523	**Portion 6**	**621 days**	**Sat 29/1/22**	**Wed 11/10/23**	**Wed 20/7/22**	**Mon 31/3/25**	
524	Provision of site access [183 days after starting date as per Contract]	0 days	Sat 29/1/22	Sat 29/1/22	Mon 31/3/25	Mon 31/3/25	66
525	Deferred possession	81 days	Sat 29/1/22	Tue 19/4/22	Wed 20/7/22	Sat 8/10/22	67SS
526	Mobilization& Site Clearance	14 days	Wed 20/4/22	Tue 3/5/22	Sun 9/10/22	Sat 22/10/22	525
527	Excavation and Construction of Drainage Works	90 days	Thu 21/7/22	Tue 18/10/22	Mon 9/1/23	Sat 8/4/23	526FS+78 days
528	Testing and commissioning of Drainage Works	70 days	Tue 13/9/22	Mon 21/11/22	Sat 4/3/23	Fri 12/5/23	527FS-36 days
529	Time Risk Allowance	14 days	Tue 22/11/22	Mon 5/12/22	Sat 13/5/23	Fri 26/5/23	528
530	Backfilling and compaction of materials	48 days	Tue 6/12/22	Sun 22/1/23	Sat 27/5/23	Thu 13/7/23	528,529
531	Application for Irrigation system (WW0046 Part I& II)	30 days	Thu 6/10/22	Fri 4/11/22	Wed 14/6/23	Thu 13/7/23	289FS+60 days
532	Miscellaneous works (e.g. irrigation system)	44 days	Mon 23/1/23	Tue 7/3/23	Fri 14/7/23	Sat 26/8/23	530,531
533	Construction of U-channels with cover	100 days	Mon 23/1/23	Tue 2/5/23	Mon 21/8/23	Tue 28/11/23	530
534	Construction of ramp and installation of seating	100 days	Mon 23/1/23	Tue 2/5/23	Sun 16/7/23	Mon 23/10/...	530
535	Instalation of railings& finishing works etc.	36 days	Wed 3/5/23	Wed 7/6/23	Tue 24/10/23	Tue 28/11/23	530,534
536	Installation of lighting	70 days	Wed 8/3/23	Tue 16/5/23	Sun 27/8/23	Sat 4/11/23	532
537	Testing and Commissioning of lighting	36 days	Fri 5/5/23	Fri 9/6/23	Tue 24/10/23	Tue 28/11/23	536FS-12 days
538	Soil placment for planting work	28 days	Sat 10/6/23	Fri 7/7/23	Wed 29/11/...	Tue 26/12/23	533,534,537,535
539	Soft landscaping works	96 days	Sat 8/7/23	Wed 11/10/23	Wed 27/12/...	Sun 31/3/24	533,534,537,535,538
540	Application for Irrigation system (WW0046 Part IV& V)	60 days	Wed 8/3/23	Sat 6/5/23	Thu 1/2/24	Sun 31/3/24	532
541	**Portion 12**	**804 days**	**Fri 30/7/21**	**Wed 11/10/23**	**Tue 18/1/22**	**Mon 31/3/25**	
542	Provision of site access [on starting date as per Contract]	7 days	Fri 30/7/21	Thu 5/8/21	Tue 18/1/22	Mon 24/1/22	71
543	Mobilization& Site Clearance	14 days	Fri 6/8/21	Thu 19/8/21	Tue 25/1/22	Mon 7/2/22	542
544	Preparation& submission of MS, Temp., works, associated plans & d	52 days	Fri 20/8/21	Sun 10/10/21	Tue 8/2/22	Thu 31/3/22	543
545	Engineer's AIP of MS, Temp., works, plans& associated docs	22 days	Mon 11/10/21	Mon 1/11/21	Fri 1/4/22	Fri 22/4/22	544
546	Excavation for Drainage Works	333 days	Tue 2/11/21	Fri 30/9/22	Thu 12/5/22	Sun 9/4/23	543,545
547	Construction of Drainage Works	245 days	Sun 13/2/22	Sat 15/10/22	Tue 23/8/22	Mon 24/4/23	543,545,546FS-230 days
548	CCTV inspection, testing and commissioning of Drainage Works	46 days	Sun 18/9/22	Wed 2/11/22	Tue 28/3/23	Fri 12/5/23	546FS-28 days,547FS-28 days
549	Excavation and Construction of Waterlines for fresh water & flushing water and connection to existing tee-off	60 days	Sun 18/9/22	Wed 16/11/22	Thu 9/3/23	Sun 7/5/23	543FS+320 days,545FS+320 days
550	Testing and Commissioning of Waterlines for fresh water and flushing water	29 days	Thu 17/11/22	Thu 15/12/22	Mon 8/5/23	Mon 5/6/23	549



China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

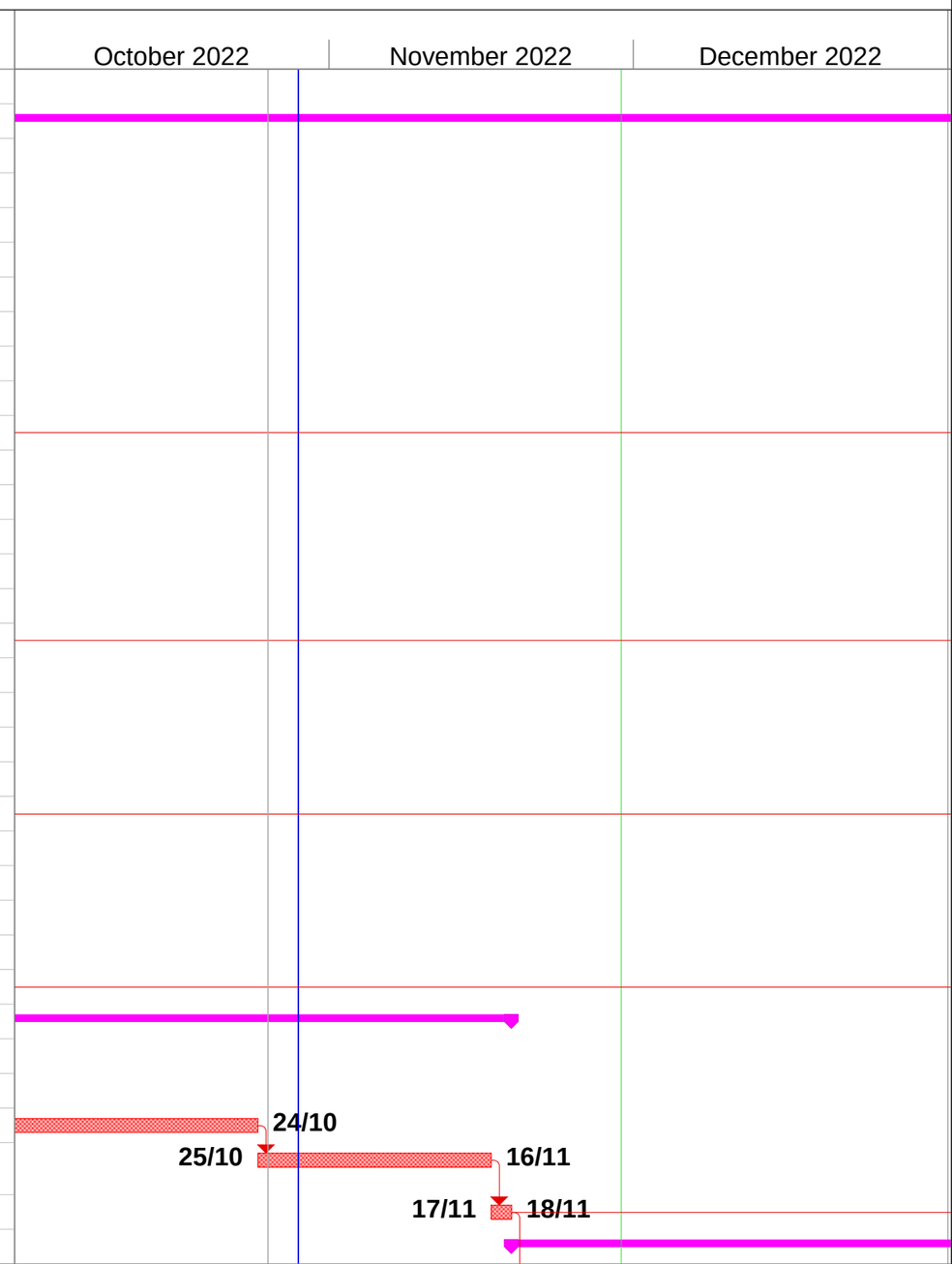
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
551	Application for Irrigation system (WW0046 Part I& II)	30 days	Tue 1/11/22	Wed 30/11/22	Sun 7/5/23	Mon 5/6/23	
552	Miscellaneous works (e.g. irrigation system)	60 days	Fri 16/12/22	Mon 13/2/23	Tue 6/6/23	Fri 4/8/23	550,551
553	Application for Irrigation system (WW0046 Part IV& V)	60 days	Tue 14/2/23	Fri 14/4/23	Thu 1/2/24	Sun 31/3/24	552
554	Time Risk Allowance	14 days	Thu 3/11/22	Wed 16/11/22	Sat 13/5/23	Fri 26/5/23	548
555	Backfilling and compaction of materials	60 days	Tue 6/12/22	Fri 3/2/23	Sat 27/5/23	Tue 25/7/23	548,554,552FS-70 days
556	Hard landscaping works i.e. paving blocks, planters, boulders installation etc.	110 days	Sat 4/2/23	Wed 24/5/23	Wed 26/7/23	Sun 12/11/23	555
557	Installation of lighting	120 days	Thu 25/5/23	Thu 21/9/23	Mon 13/11/...	Mon 11/3/24	556
558	Testing and Commissioning of lighting	20 days	Fri 22/9/23	Wed 11/10/23	Tue 12/3/24	Sun 31/3/24	557
559	Soil placement for planting areas	90 days	Thu 25/5/23	Tue 22/8/23	Mon 13/11/...	Sat 10/2/24	555,556
560	Soft landscaping work i.e. trees, shrubs greening works	50 days	Wed 23/8/23	Wed 11/10/23	Sun 11/2/24	Sun 31/3/24	555,556,559
561	PMI 005 : Additional GI at Portion 12	15 days	Mon 16/5/22	Mon 30/5/22	Mon 17/3/25	Mon 31/3/25	
562	**Section of Works 4A - Establishment Works for all Landscape Softworks in Section 4 of the Works**	**365 days**	**Wed 11/10/23**	**Thu 10/10/24**	**Mon 1/4/24**	**Mon 31/3/25**	
563	Commencement of Establishment Work for Section 4	0 days	Wed 11/10/23	Wed 11/10/23	Mon 1/4/24	Mon 1/4/24	74,560,539,559,538
564	Establishment Work Duration for Section 4	365 days	Thu 12/10/23	Thu 10/10/24	Mon 1/4/24	Mon 31/3/25	563
565	Completion of Works in Section 4	0 days	Thu 10/10/24	Thu 10/10/24	Mon 31/3/25	Mon 31/3/25	564
566	**Section of Works 5A - Portions 9, 10**	**738 days**	**Fri 30/7/21**	**Sun 6/8/23**	**Fri 25/3/22**	**Mon 31/3/25**	
567	**Portion 9 [Sitting Out Area C & R2-1 Footpath]**	**677 days**	**Wed 29/9/21**	**Sun 6/8/23**	**Wed 25/5/22**	**Mon 31/3/25**	
568	Provision of site access [61 days after starting date as per Contract]	8 days	Wed 29/9/21	Wed 6/10/21	Wed 25/5/22	Wed 1/6/22	82
569	Mobilization& Site Clearance	15 days	Thu 7/10/21	Thu 21/10/21	Thu 2/6/22	Thu 16/6/22	568
570	Preparation& submission of MS, Temp., works, associated plans & d	49 days	Fri 22/10/21	Thu 9/12/21	Fri 17/6/22	Thu 4/8/22	569
571	Engineer AIP of MS, Temp., works, plans& associated docs	24 days	Fri 10/12/21	Sun 2/1/22	Fri 5/8/22	Sun 28/8/22	570
572	Excavation and construction of drainage line and catchpits	288 days	Mon 3/1/22	Mon 17/10/22	Mon 29/8/22	Mon 12/6/23	569,571
573	CCTV inspection, testing and commissioning of Drainage Lines	14 days	Tue 18/10/22	Mon 31/10/22	Tue 13/6/23	Mon 26/6/23	572
574	Application for Irrigation system (WW0046: Part I& II)	30 days	Sat 11/12/21	Sun 9/1/22	Sat 6/8/22	Sun 4/9/22	
575	Excavation and construction of draw pits and ducting & Irrigation syst	295 days	Mon 10/1/22	Mon 31/10/22	Mon 5/9/22	Mon 26/6/23	569,571,574
576	Time Risk Allowance	15 days	Tue 1/11/22	Tue 15/11/22	Tue 27/6/23	Tue 11/7/23	575,573,307,312
577	Backfilling and compaction of road materials	50 days	Wed 16/11/22	Wed 4/1/23	Wed 12/7/23	Wed 30/8/23	575,573,307,312,576
578	Construction of proposed U-channel	50 days	Thu 5/1/23	Thu 23/2/23	Thu 31/8/23	Thu 19/10/23	577
579	Installation of E1 kerbs	40 days	Fri 24/2/23	Tue 4/4/23	Fri 20/10/23	Tue 28/11/23	578
580	Construction of porous pavement footpath	54 days	Wed 5/4/23	Sun 28/5/23	Wed 29/11/...	Sun 21/1/24	579
581	Installation of street furniture, traffic signs, bollards and road marking	70 days	Mon 29/5/23	Sun 6/8/23	Mon 22/1/24	Sun 31/3/24	580
582	Installation of lamp posts & street lighting	56 days	Mon 29/5/23	Sun 23/7/23	Mon 22/1/24	Sun 17/3/24	580
583	Testing and Commissioning of lamp posts, street lighting	14 days	Mon 24/7/23	Sun 6/8/23	Mon 18/3/24	Sun 31/3/24	582
584	Application for Irrigation system (WW0046: Part IV& V)	60 days	Tue 1/11/22	Fri 30/12/22	Thu 1/2/24	Sun 31/3/24	575



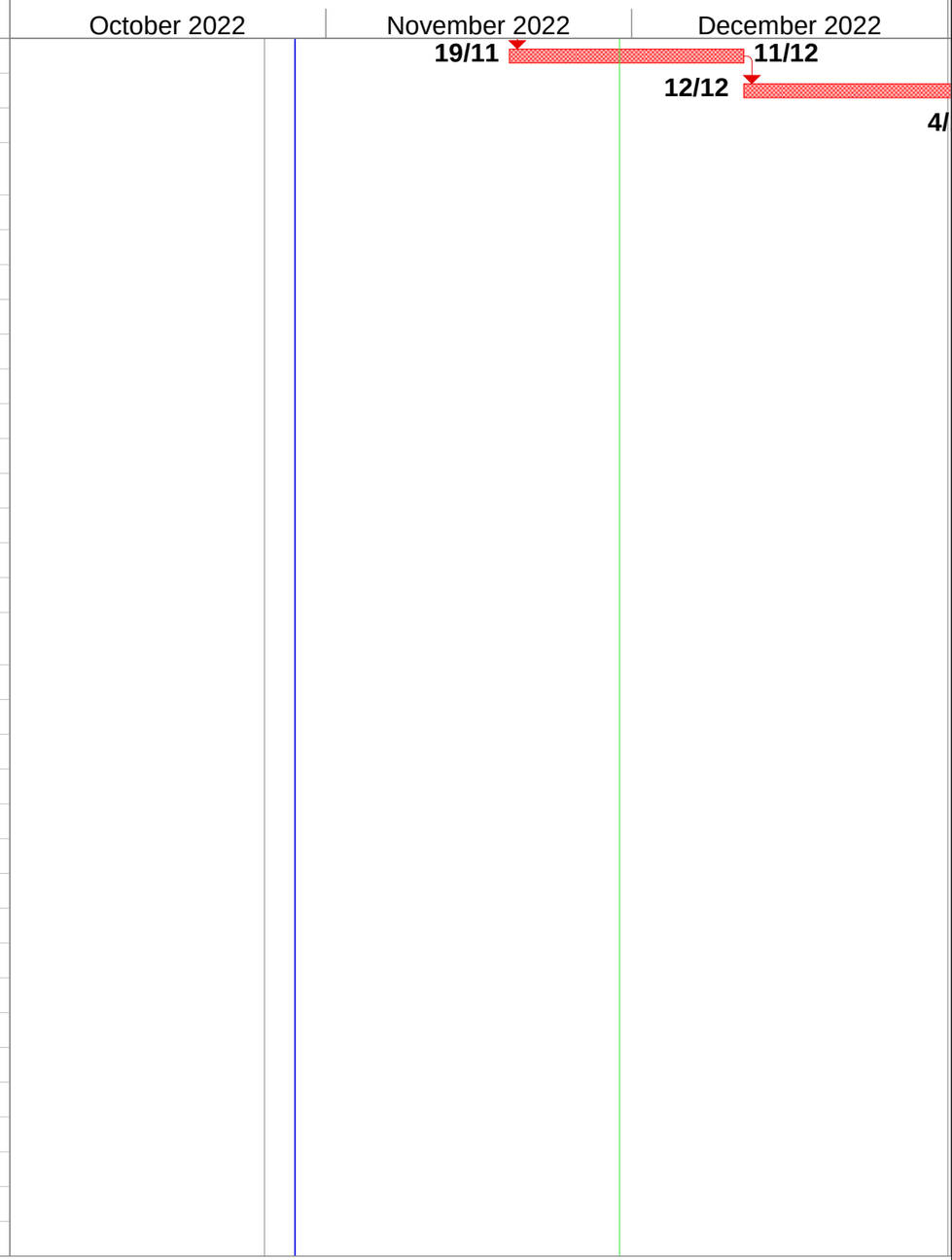
China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

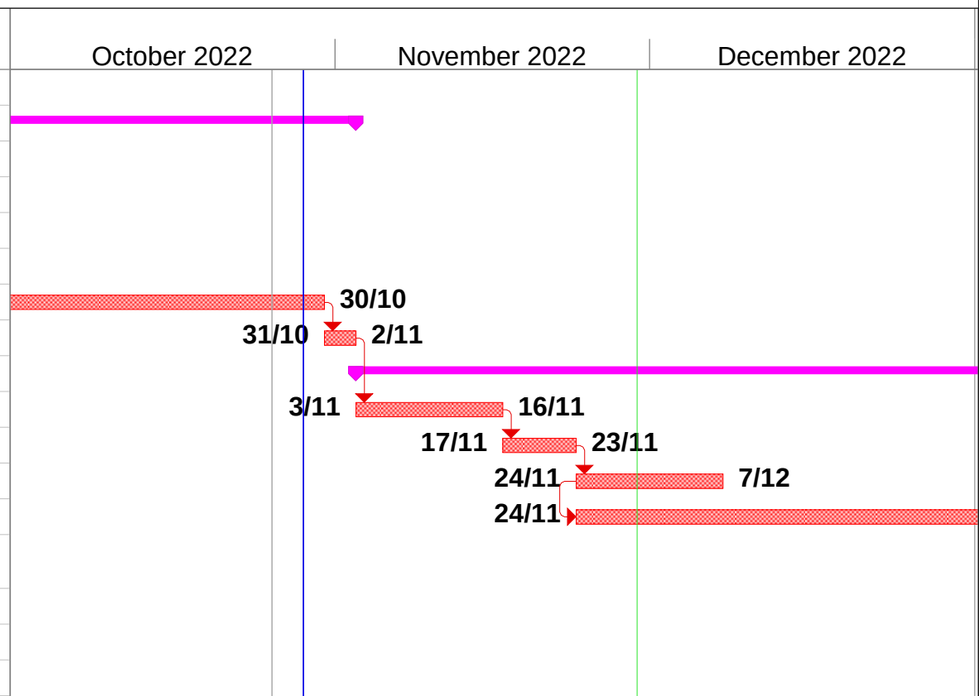
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
585	Landscaping works	120 days	Sun 9/4/23	Sun 6/8/23	Mon 2/12/24	Mon 31/3/25	581FF
586	**Portion 10**	**738 days**	**Fri 30/7/21**	**Sun 6/8/23**	**Fri 25/3/22**	**Sun 31/3/24**	
587	Provision of site access [on starting date as per Contract]	7 days	Fri 30/7/21	Thu 5/8/21	Fri 25/3/22	Thu 31/3/22	86
588	Slope inspection & assessment work	50 days	Fri 6/8/21	Fri 24/9/21	Fri 1/4/22	Fri 20/5/22	587
589	Mobilization, access arrangements, logistic plan & Site Clearance	52 days	Sat 25/9/21	Mon 15/11/21	Sat 21/5/22	Mon 11/7/22	587,588
590	Preparation & submission of MS, Temp., works, associated plans & d	37 days	Tue 16/11/21	Wed 22/12/21	Tue 12/7/22	Wed 17/8/22	589
591	Time Risk Allowance	16 days	Thu 23/12/21	Fri 7/1/22	Thu 18/8/22	Fri 2/9/22	590
592	Engineer's AIP of MS, Temp., works, plans & associated docs	21 days	Sat 8/1/22	Fri 28/1/22	Sat 3/9/22	Fri 23/9/22	590,591
593	**Slope Works at Feature No. 11NE-D/C998 (409m)**	**46 days**	**Sat 29/1/22**	**Tue 15/3/22**	**Sat 24/9/22**	**Tue 8/11/22**	
594	Construction of concrete maintenance staircase with hand railings	39 days	Sat 29/1/22	Tue 8/3/22	Sat 24/9/22	Tue 1/11/22	589,592
595	Installation of display sign for slope registration no. x2	7 days	Wed 9/3/22	Tue 15/3/22	Wed 2/11/22	Tue 8/11/22	594,592,588,589
596	**Slope Works at Feature No. 11NE-D/FR657 (63m)**	**61 days**	**Wed 16/3/22**	**Sun 15/5/22**	**Wed 9/11/22**	**Sun 8/1/23**	
597	Demolition and removal of disused water pipe and sprinkler syster	14 days	Wed 16/3/22	Tue 29/3/22	Wed 9/11/22	Tue 22/11/22	595
598	Filling of void with cement soil	8 days	Wed 30/3/22	Wed 6/4/22	Wed 23/11/...	Wed 30/11/...	597
599	Construction of concrete berm	21 days	Thu 7/4/22	Wed 27/4/22	Thu 1/12/22	Wed 21/12/...	598
600	Installation of hand railings	15 days	Thu 28/4/22	Thu 12/5/22	Thu 22/12/22	Thu 5/1/23	599
601	Installation of display sign for slope registration no. x1	3 days	Fri 13/5/22	Sun 15/5/22	Fri 6/1/23	Sun 8/1/23	600
602	**Slope Works at Feature No. 11NE-D/C1003 (265m)**	**50 days**	**Mon 16/5/22**	**Mon 4/7/22**	**Mon 9/1/23**	**Mon 27/2/23**	
603	Demolition and removal of disused water pipe and sprinkler syster	14 days	Mon 16/5/22	Sun 29/5/22	Mon 9/1/23	Sun 22/1/23	601
604	Construction of concrete berm	25 days	Mon 30/5/22	Thu 23/6/22	Mon 23/1/23	Thu 16/2/23	603
605	Installation of hand railings	8 days	Fri 24/6/22	Fri 1/7/22	Fri 17/2/23	Fri 24/2/23	604
606	Installation of display sign for slope registration no. x1	3 days	Sat 2/7/22	Mon 4/7/22	Sat 25/2/23	Mon 27/2/23	605
607	**Slope Works at Feature No. 11NE-D/C1006 (60m)**	**34 days**	**Tue 5/7/22**	**Sun 7/8/22**	**Tue 28/2/23**	**Sun 2/4/23**	
608	Demolition and removal of disused water pipe and sprinkler syster	10 days	Tue 5/7/22	Thu 14/7/22	Tue 28/2/23	Thu 9/3/23	606
609	Construction of concrete berm (~30m)	14 days	Fri 15/7/22	Thu 28/7/22	Fri 10/3/23	Thu 23/3/23	608
610	Installation of hand railings (~30m)	7 days	Fri 29/7/22	Thu 4/8/22	Fri 24/3/23	Thu 30/3/23	609
611	Installation of display sign for slope registration no. x1	3 days	Fri 5/8/22	Sun 7/8/22	Fri 31/3/23	Sun 2/4/23	610
612	**Slope Works at Feature No. 11NE-D/C987 (90m)**	**103 days**	**Mon 8/8/22**	**Fri 18/11/22**	**Mon 3/4/23**	**Fri 14/7/23**	
613	Demolition and removal of disused water pipe and sprinkler syster	10 days	Mon 8/8/22	Wed 17/8/22	Mon 3/4/23	Wed 12/4/23	611
614	Construction of concrete berm	33 days	Thu 18/8/22	Mon 19/9/22	Thu 13/4/23	Mon 15/5/23	613
615	Installation of hand railings	35 days	Tue 20/9/22	Mon 24/10/22	Tue 16/5/23	Mon 19/6/23	614
616	Installation of non-biodegradable erosion control mat with hydroseeding	23 days	Tue 25/10/22	Wed 16/11/22	Tue 20/6/23	Wed 12/7/23	615
617	Installation of display sign for slope registration no. x1	2 days	Thu 17/11/22	Fri 18/11/22	Thu 13/7/23	Fri 14/7/23	616
618	**Slope Works at Feature No. 11NE-D/C980 (55m)**	**88 days**	**Sat 19/11/22**	**Tue 14/2/23**	**Sat 15/7/23**	**Tue 10/10/...**	



ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
619	Demolition and removal of disused water pipe and sprinkler syste	23 days	Sat 19/11/22	Sun 11/12/22	Sat 15/7/23	Sun 6/8/23	617
620	Construction of concrete berm	23 days	Mon 12/12/22	Tue 3/1/23	Mon 7/8/23	Tue 29/8/23	619
621	Installation of hand railings	17 days	Wed 4/1/23	Fri 20/1/23	Wed 30/8/23	Fri 15/9/23	620
622	Installation of non-biodegradable erosion control mat with hydroseeding	23 days	Sat 21/1/23	Sun 12/2/23	Sat 16/9/23	Sun 8/10/23	621
623	Installation of display sign for slope registration no. x1	2 days	Mon 13/2/23	Tue 14/2/23	Mon 9/10/23	Tue 10/10/23	622
624	**Slope Works at Feature No. 11NE-D/C174 (70m)**	**39 days**	**Wed 15/2/23**	**Sat 25/3/23**	**Wed 11/10...**	**Sat 18/11/23**	
625	Damaged slope surface repairing	36 days	Wed 15/2/23	Wed 22/3/23	Wed 11/10/...	Wed 15/11/...	623
626	Installation of display sign for slope registration no. x1	3 days	Thu 23/3/23	Sat 25/3/23	Thu 16/11/23	Sat 18/11/23	625
627	**Slope Works at Feature No. 11NE-D/C688 (167m)**	**62 days**	**Sun 26/3/23**	**Fri 26/5/23**	**Sun 19/11/...**	**Fri 19/1/24**	
628	Slope surface repairing & Installation of tree rings x9	53 days	Sun 26/3/23	Wed 17/5/23	Sun 19/11/23	Wed 10/1/24	626
629	Installation of display sign for slope registration no. x1	9 days	Thu 18/5/23	Fri 26/5/23	Thu 11/1/24	Fri 19/1/24	628
630	**Slope Works at Feature No. 11NE-D/C999 (250m)**	**20 days**	**Sat 27/5/23**	**Thu 15/6/23**	**Sat 20/1/24**	**Thu 8/2/24**	
631	Demolition and removal of disused water pipe and sprinkler syste	17 days	Sat 27/5/23	Mon 12/6/23	Sat 20/1/24	Mon 5/2/24	629
632	Installation of display sign for slope registration no. x2	3 days	Tue 13/6/23	Thu 15/6/23	Tue 6/2/24	Thu 8/2/24	631
633	**Slope Works at Feature No. 11NE-D/C1026 (60m)**	**52 days**	**Fri 16/6/23**	**Sun 6/8/23**	**Fri 9/2/24**	**Sun 31/3/24**	
634	Filling of void with cement soil	16 days	Fri 16/6/23	Sat 1/7/23	Fri 9/2/24	Sat 24/2/24	632
635	Installation of non-biodegradable erosion control mat with hydroseeding	34 days	Sun 2/7/23	Fri 4/8/23	Sun 25/2/24	Fri 29/3/24	634
636	Installation of display sign for slope registration no. x1	2 days	Sat 5/8/23	Sun 6/8/23	Sat 30/3/24	Sun 31/3/24	635
637	**Slope Works at Feature No. 11NE-D/C979 (45m)**	**39 days**	**Sat 29/1/22**	**Tue 8/3/22**	**Sat 24/9/22**	**Tue 1/11/22**	
638	Time Risk Allowance	9 days	Sat 29/1/22	Sun 6/2/22	Sat 24/9/22	Sun 2/10/22	589,592
639	Demolition and removal of disused water pipe and sprinkler syste	7 days	Mon 7/2/22	Sun 13/2/22	Mon 3/10/22	Sun 9/10/22	589,592,638
640	Construction of concrete berm	14 days	Mon 14/2/22	Sun 27/2/22	Mon 10/10/...	Sun 23/10/22	639
641	Installation of hand railings	7 days	Mon 28/2/22	Sun 6/3/22	Mon 24/10/...	Sun 30/10/22	640
642	Installation of display sign for slope registration no. x1	2 days	Mon 7/3/22	Tue 8/3/22	Mon 31/10/...	Tue 1/11/22	641
643	**Slope Works at Feature No. 11NE-D/C947 (420m)**	**82 days**	**Wed 9/3/22**	**Sun 29/5/22**	**Wed 2/11/22**	**Sun 22/1/23**	
644	Demolition and removal of disused water pipe and sprinkler syste	29 days	Wed 9/3/22	Wed 6/4/22	Wed 2/11/22	Wed 30/11/...	642
645	Filling of void with cement soil	7 days	Thu 7/4/22	Wed 13/4/22	Thu 1/12/22	Wed 7/12/22	644
646	Removal of damaged wire mesh and construction of new wire me	29 days	Thu 14/4/22	Thu 12/5/22	Thu 8/12/22	Thu 5/1/23	645
647	Installation of hand railings	14 days	Fri 13/5/22	Thu 26/5/22	Fri 6/1/23	Thu 19/1/23	646
648	Installation of display sign for slope registration no. x2	3 days	Fri 27/5/22	Sun 29/5/22	Fri 20/1/23	Sun 22/1/23	647
649	**Slope Works at Feature No. 11NE-D/C977 (300m)**	**81 days**	**Mon 30/5/22**	**Thu 18/8/22**	**Mon 23/1/23**	**Thu 13/4/23**	
650	Demolition and removal of disused water pipe and sprinkler syste	22 days	Mon 30/5/22	Mon 20/6/22	Mon 23/1/23	Mon 13/2/23	648
651	Construction of 450 mm U-channel (~175m)	29 days	Tue 21/6/22	Tue 19/7/22	Tue 14/2/23	Tue 14/3/23	650
652	Construction of wire mesh	28 days	Wed 20/7/22	Tue 16/8/22	Wed 15/3/23	Tue 11/4/23	651



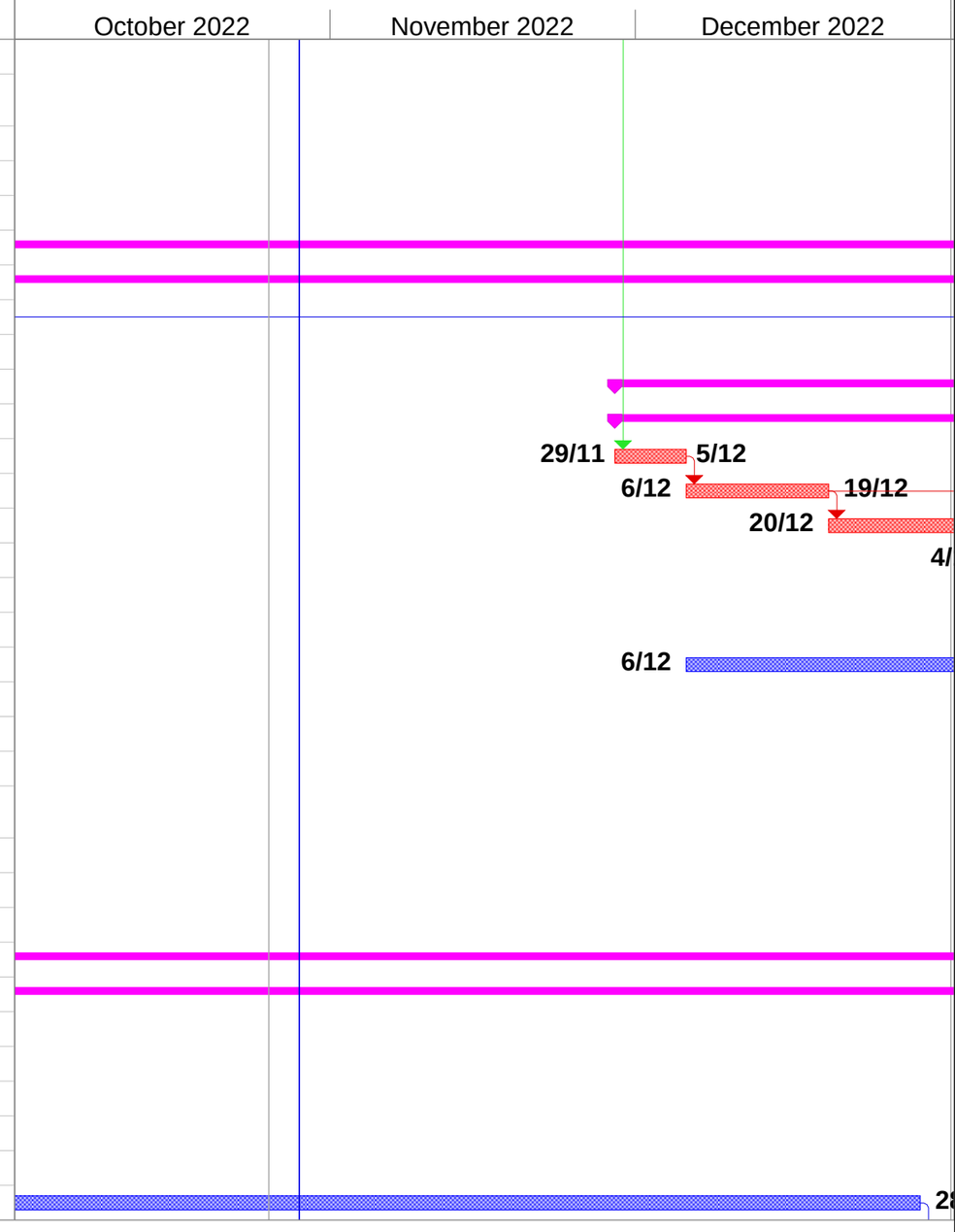
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
653	Installation of display sign for slope registration no. x2	2 days	Wed 17/8/22	Thu 18/8/22	Wed 12/4/23	Thu 13/4/23	652
654	**Slope Works at Feature No. 11NE-D/C986 (190m)**	**76 days**	**Fri 19/8/22**	**Wed 2/11/22**	**Fri 14/4/23**	**Wed 28/6/23**	
655	Demolition and removal of disused water pipe and sprinkler syster	7 days	Fri 19/8/22	Thu 25/8/22	Fri 14/4/23	Thu 20/4/23	653
656	Filling of void with cement soil	7 days	Fri 26/8/22	Thu 1/9/22	Fri 21/4/23	Thu 27/4/23	655
657	Construction of concrete berm	14 days	Fri 2/9/22	Thu 15/9/22	Fri 28/4/23	Thu 11/5/23	656
658	Installation of hand railings	7 days	Fri 16/9/22	Thu 22/9/22	Fri 12/5/23	Thu 18/5/23	657
659	Construction of wire mesh	38 days	Fri 23/9/22	Sun 30/10/22	Fri 19/5/23	Sun 25/6/23	658
660	Installation of display sign for slope registration no. x2	3 days	Mon 31/10/22	Wed 2/11/22	Mon 26/6/23	Wed 28/6/23	659
661	**Slope Works at Feature No. 11NE-D/C871 (260m)**	**91 days**	**Thu 3/11/22**	**Wed 1/2/23**	**Thu 29/6/23**	**Wed 27/9/23**	
662	Demolition and removal of disused water pipe and sprinkler syster	14 days	Thu 3/11/22	Wed 16/11/22	Thu 29/6/23	Wed 12/7/23	660
663	Construction of lockable gate	7 days	Thu 17/11/22	Wed 23/11/22	Thu 13/7/23	Wed 19/7/23	662
664	Removal of existing damaged hand railings	14 days	Thu 24/11/22	Wed 7/12/22	Thu 20/7/23	Wed 2/8/23	663
665	Installation of hand railings	70 days	Thu 24/11/22	Wed 1/2/23	Thu 20/7/23	Wed 27/9/23	664SS
666	Installation of non-biodegradable erosion control mat with hydroseeding	24 days	Mon 9/1/23	Wed 1/2/23	Mon 4/9/23	Wed 27/9/23	665FF
667	**Slope Works at Feature No. 11NE-D/C976 (185m)**	**92 days**	**Thu 2/2/23**	**Thu 4/5/23**	**Thu 28/9/23**	**Thu 28/12/...**	
668	Demolition and removal of disused water pipe and sprinkler syster	16 days	Thu 2/2/23	Fri 17/2/23	Thu 28/9/23	Fri 13/10/23	666
669	Construction of concrete berm	17 days	Sat 18/2/23	Mon 6/3/23	Sat 14/10/23	Mon 30/10/...	668
670	Installation of hand railings	7 days	Tue 7/3/23	Mon 13/3/23	Tue 31/10/23	Mon 6/11/23	669
671	Repainting of existing steel maintenance staircase	7 days	Tue 14/3/23	Mon 20/3/23	Tue 7/11/23	Mon 13/11/...	670
672	Construction of wire mesh	35 days	Tue 21/3/23	Mon 24/4/23	Tue 14/11/23	Mon 18/12/...	671
673	Removal of existing handrailing near steel landing plates	7 days	Tue 25/4/23	Mon 1/5/23	Tue 19/12/23	Mon 25/12/...	672
674	Installation of display sign for slope registration no. x2	3 days	Tue 2/5/23	Thu 4/5/23	Tue 26/12/23	Thu 28/12/23	673
675	**Slope Works at Feature No. 11NE-D/C978 (350m)**	**49 days**	**Fri 5/5/23**	**Thu 22/6/23**	**Fri 29/12/23**	**Thu 15/2/24**	
676	Demolition and removal of disused water pipe and sprinkler syster	7 days	Fri 5/5/23	Thu 11/5/23	Fri 29/12/23	Thu 4/1/24	674
677	Construction of concrete berm	17 days	Fri 12/5/23	Sun 28/5/23	Fri 5/1/24	Sun 21/1/24	676
678	Installation of hand railings	16 days	Mon 29/5/23	Tue 13/6/23	Mon 22/1/24	Tue 6/2/24	677
679	Repainting of existing steel maintenance staircase	7 days	Wed 14/6/23	Tue 20/6/23	Wed 7/2/24	Tue 13/2/24	678
680	Installation of display sign for slope registration no. x2	2 days	Wed 21/6/23	Thu 22/6/23	Wed 14/2/24	Thu 15/2/24	679
681	**Slope Works at Feature No. 11NE-D/C988 (370m)**	**42 days**	**Fri 23/6/23**	**Thu 3/8/23**	**Fri 16/2/24**	**Thu 28/3/24**	
682	Demolition and removal of disused water pipe and sprinkler syster	7 days	Fri 23/6/23	Thu 29/6/23	Fri 16/2/24	Thu 22/2/24	680
683	Construction of concrete berm	18 days	Fri 30/6/23	Mon 17/7/23	Fri 23/2/24	Mon 11/3/24	682
684	Installation of hand railings	15 days	Tue 18/7/23	Tue 1/8/23	Tue 12/3/24	Tue 26/3/24	683
685	Installation of display sign for slope registration no. x2	2 days	Wed 2/8/23	Thu 3/8/23	Wed 27/3/24	Thu 28/3/24	684
686	**Slope Works at Feature No. 11NE-D/C1004 (375m)**	**3 days**	**Fri 4/8/23**	**Sun 6/8/23**	**Fri 29/3/24**	**Sun 31/3/24**	



China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
687	Installation of display sign for slope registration no. x2	3 days	Fri 4/8/23	Sun 6/8/23	Fri 29/3/24	Sun 31/3/24	685
688	**Section of Works 5AI - Establishment Works for all Landscape Softworks in Section 5A of the Works**	**365 days**	**Sun 6/8/23**	**Mon 5/8/24**	**Mon 1/4/24**	**Mon 31/3/25**	
689	Commencement of Establishment Work for Section 5A	0 days	Sun 6/8/23	Sun 6/8/23	Mon 1/4/24	Mon 1/4/24	89
690	Establishment Work Duration for Section 5A	365 days	Mon 7/8/23	Mon 5/8/24	Mon 1/4/24	Mon 31/3/25	689
691	Completion of Works in Section 5A	0 days	Mon 5/8/24	Mon 5/8/24	Mon 31/3/25	Mon 31/3/25	690
692	**Section of Works 5B - Portion 11**	**558 days**	**Sun 27/2/22**	**Thu 7/9/23**	**Fri 13/12/24**	**Mon 31/3/25**	
693	Portion 11	558 days	**Sun 27/2/22**	**Thu 7/9/23**	Fri 13/12/24	Mon 31/3/25	
694	Provision of site access [212 days after starting date as per Contract]	7 days	Sun 27/2/22	Sat 5/3/22	Fri 13/12/24	Thu 19/12/24	97
695	Road marking& miscellaneous work	102 days	Mon 29/5/23	Thu 7/9/23	Fri 20/12/24	Mon 31/3/25	694,581SS
696	**Section of Works 6 - Portion 7**	**365 days**	**Tue 29/11/22**	**Tue 28/11/23**	**Sun 2/4/23**	**Sun 31/3/24**	
697	**Portion 7**	**365 days**	**Tue 29/11/22**	**Tue 28/11/23**	**Sun 2/4/23**	**Sun 31/3/24**	
698	Provision of site access [487 days after starting date as per Contract]	7 days	Tue 29/11/22	Mon 5/12/22	Sun 2/4/23	Sat 8/4/23	103
699	Mobilization& Site Clearance	14 days	Tue 6/12/22	Mon 19/12/22	Sun 9/4/23	Sat 22/4/23	698
700	Time Risk Allowance	15 days	Tue 20/12/22	Tue 3/1/23	Sun 23/4/23	Sun 7/5/23	699
701	Backfilling and Compaction of Material	71 days	Wed 4/1/23	Wed 15/3/23	Mon 8/5/23	Mon 17/7/23	699,700
702	Construction of U-channels with cover and catchpits	72 days	Thu 16/3/23	Fri 26/5/23	Tue 18/7/23	Wed 27/9/23	701
703	Road Paving work and asscociates street furniture	73 days	Sat 27/5/23	Mon 7/8/23	Thu 28/9/23	Sat 9/12/23	702
704	Application for Irrigation system (WW0046 Part I& II)	30 days	Tue 6/12/22	Wed 4/1/23	Tue 29/8/23	Wed 27/9/23	
705	Miscellaneous works (e.g. irrigation system)	73 days	Sat 27/5/23	Mon 7/8/23	Thu 28/9/23	Sat 9/12/23	702,704
706	Soft landscaping works	113 days	Tue 8/8/23	Tue 28/11/23	Sun 10/12/23	Sun 31/3/24	705,703
707	Application for Irrigation system (WW0046 Part IV& V)	60 days	Tue 8/8/23	Fri 6/10/23	Thu 1/2/24	Sun 31/3/24	705
708	**Section of Works 6A - Establishment Works for all Landscape Softworks in Section 6 of the Works**	**365 days**	**Tue 28/11/23**	**Wed 27/11/24**	**Mon 1/4/24**	**Mon 31/3/25**	
709	Commencement of Establishment Work for Section 6	0 days	Tue 28/11/23	Tue 28/11/23	Mon 1/4/24	Mon 1/4/24	706
710	Establishment Work Duration for Section 6	365 days	Wed 29/11/23	Wed 27/11/24	Mon 1/4/24	Mon 31/3/25	709
711	Completion of Works in Section 6	0 days	Wed 27/11/24	Wed 27/11/24	Mon 31/3/25	Mon 31/3/25	710
712	**Section of Works 7A - Portions 13a, 14 (DELETED)**	**706 days**	**Fri 30/7/21**	**Wed 5/7/23**	**Wed 21/9/22**	**Mon 31/3/25**	
713	**Portion 13a**	**523 days**	**Sat 29/1/22**	**Wed 5/7/23**	**Fri 2/12/22**	**Sun 31/3/24**	
714	Provision of site access [183 days after starting date as per Contract]	9 days	Sat 29/1/22	Sun 6/2/22	Fri 2/12/22	Sat 10/12/22	112,305
715	Mobilization& Site Clearance	14 days	Mon 7/2/22	Sun 20/2/22	Sun 11/12/22	Sat 24/12/22	714
716	(G.I Works) Geotechnical Instrumentation Installation	72 days	Mon 21/2/22	Tue 3/5/22	Sun 25/12/22	Mon 6/3/23	725,715,727
717	Time Risk Allowance	21 days	Wed 4/5/22	Tue 24/5/22	Tue 7/3/23	Mon 27/3/23	716
718	Bulk excavation of cut slope {Access path& Site G-2}	72 days	Fri 1/7/22	Sat 10/9/22	Tue 28/3/23	Wed 7/6/23	716,759,717
719	Cutting& filling of slopes to formation level {Access path & Site G-2}	109 days	Sun 11/9/22	Wed 28/12/22	Thu 8/6/23	Sun 24/9/23	716,759,717,718

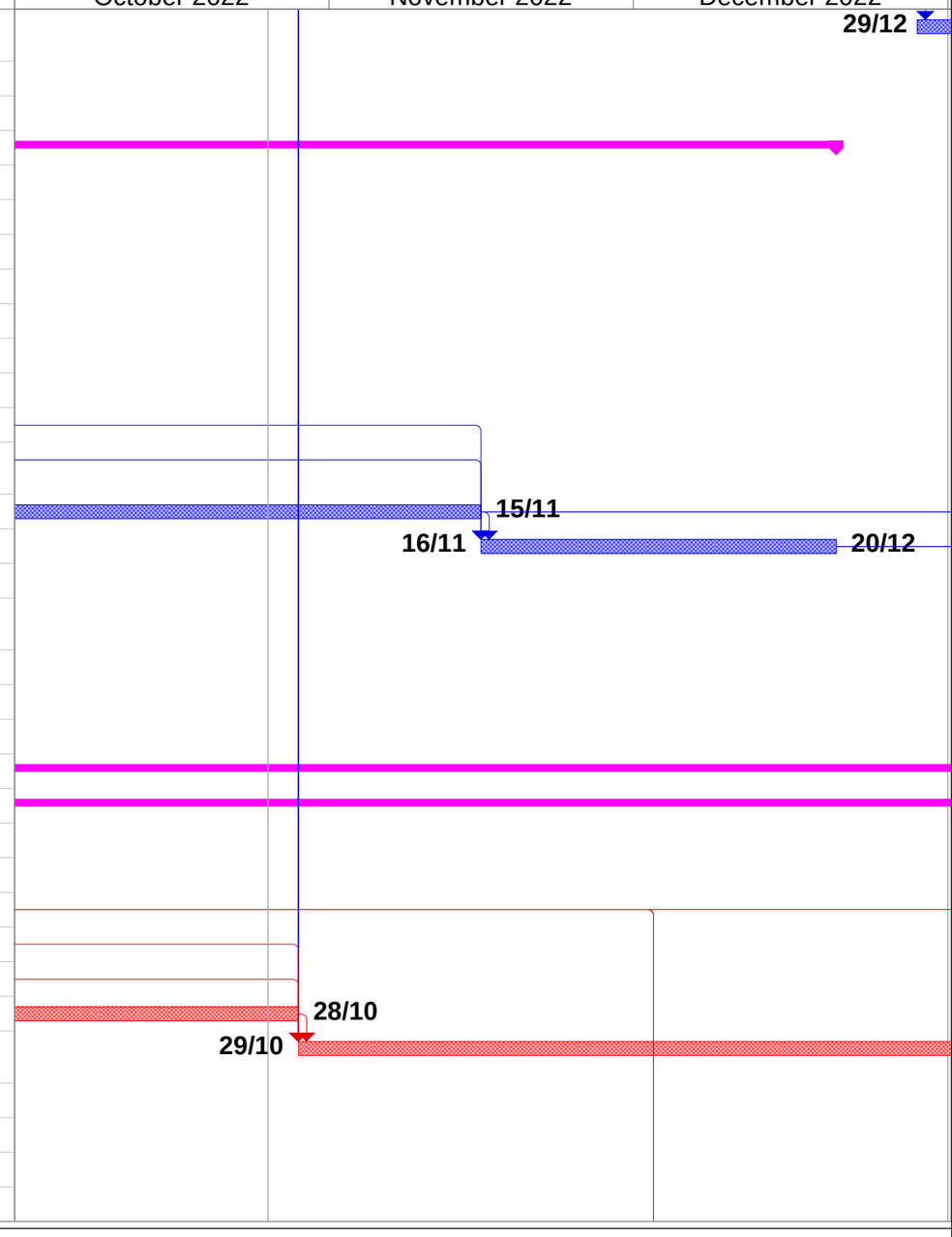


China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

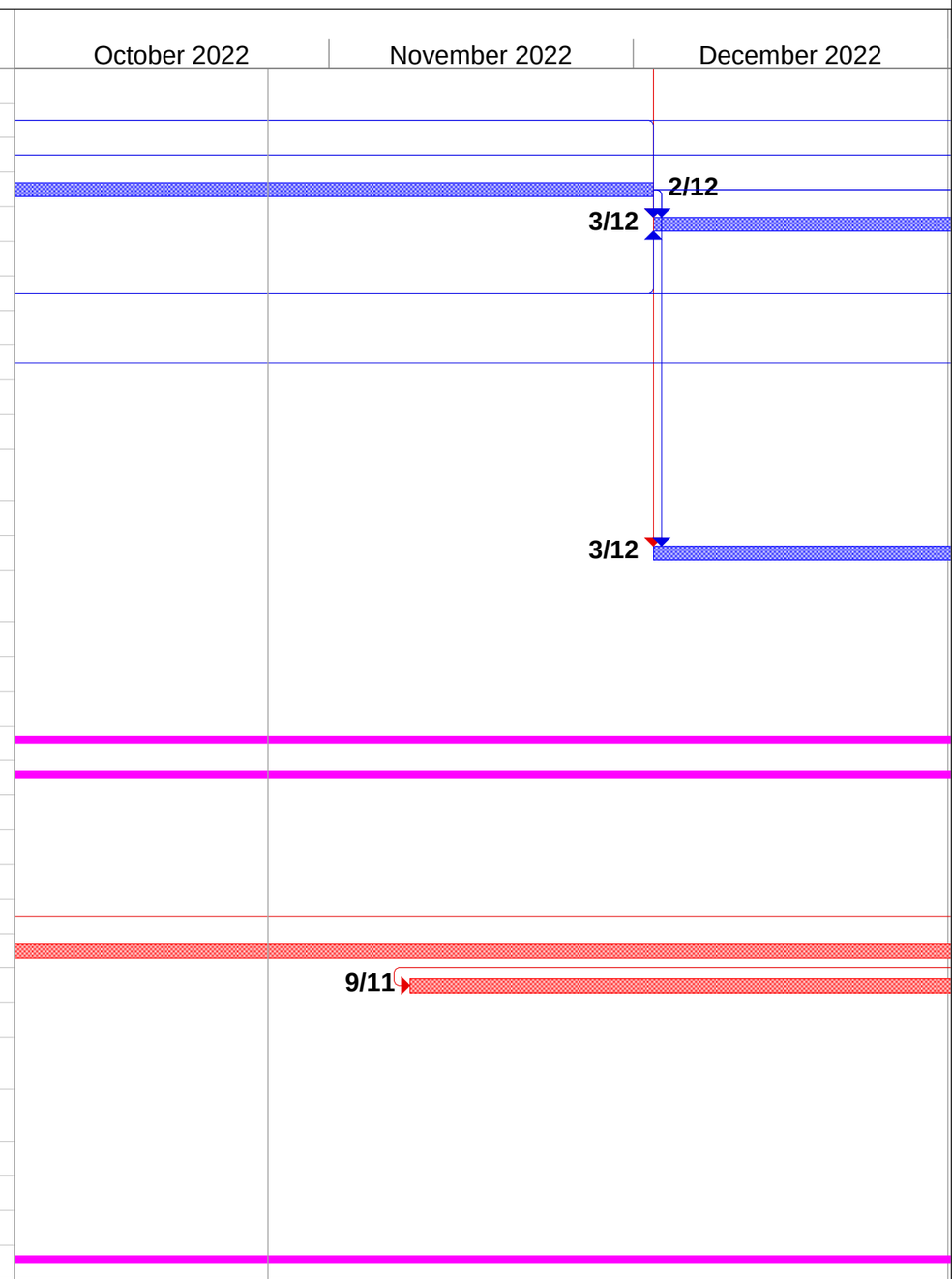
ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
720	Construction of drainage system with cover and catchpits {Access path& Site G-2}	84 days	Thu 29/12/22	Wed 22/3/23	Mon 25/9/23	Sun 17/12/23	719
721	CCTV, testing& commissioning of drainage works	32 days	Thu 23/3/23	Sun 23/4/23	Mon 18/12/...	Thu 18/1/24	720
722	Construction of footpath, pavements, road furniture& road marking et	73 days	Mon 24/4/23	Wed 5/7/23	Fri 19/1/24	Sun 31/3/24	720,721
723	**Portion 14**	**509 days**	**Fri 30/7/21**	**Tue 20/12/22**	**Wed 21/9/22**	**Mon 31/3/25**	
724	Provision of site access [on starting date as per Contract]	7 days	Fri 30/7/21	Thu 5/8/21	Wed 21/9/22	Tue 27/9/22	115
725	Mobilization& Site Clearance	14 days	Fri 6/8/21	Thu 19/8/21	Wed 28/9/22	Tue 11/10/22	724
726	Preparation& submission of MS, Temp., works, associated plans & d	52 days	Fri 20/8/21	Sun 10/10/21	Wed 12/10/...	Fri 2/12/22	725
727	Engineer's AIP of MS, Temp., works, plans& associated docs	22 days	Mon 11/10/21	Mon 1/11/21	Sat 3/12/22	Sat 24/12/22	726
728	Time Risk Allowance	35 days	Tue 2/11/21	Mon 6/12/21	Sun 12/2/23	Sat 18/3/23	727
729	Cutting& filling of slopes to formation level {Site G-2}	108 days	Tue 7/12/21	Thu 24/3/22	Sun 19/3/23	Tue 4/7/23	302,303,728
730	Excavation and Construction of Waterlines for fresh water & flushing	74 days	Fri 25/3/22	Mon 6/6/22	Wed 5/7/23	Sat 16/9/23	729
731	Application for (WW0046: Part IV & V)	30 days	Tue 7/6/22	Wed 6/7/22	Tue 10/10/23	Wed 8/11/23	730
732	Testing and Commissioning of Waterlines for fresh water and flushing water	36 days	Fri 24/6/22	Fri 29/7/22	Wed 4/10/23	Wed 8/11/23	730FS+17 days
733	Construction of pavement footpath	109 days	Sat 30/7/22	Tue 15/11/22	Thu 9/11/23	Sun 25/2/24	732,731
734	Construction of miscellaneous work	35 days	Wed 16/11/22	Tue 20/12/22	Mon 26/2/24	Sun 31/3/24	732,731,733
735	PMI 001 : Additional GI at Portion 14	109 days	Fri 15/10/21	Mon 31/1/22	Fri 13/12/24	Mon 31/3/25	
736	**Section of Works 7AI - Establishment Works for all Landscape Softworks in Section 7A of the Works (DELETED)**	**365 days**	**Wed 5/7/23**	**Thu 4/7/24**	**Mon 1/4/24**	**Mon 31/3/25**	
737	Commencement of Establishment Work for Section 7A	0 days	Wed 5/7/23	Wed 5/7/23	Mon 1/4/24	Mon 1/4/24	722,734,733
738	Establishment Work Duration for Section 7A	365 days	Thu 6/7/23	Thu 4/7/24	Mon 1/4/24	Mon 31/3/25	737
739	Completion of Works in Section 7A	0 days	Thu 4/7/24	Thu 4/7/24	Mon 31/3/25	Mon 31/3/25	738
740	**Section of Works 7B - Portions 13b, 15**	**752 days**	**Sun 27/2/22**	**Tue 19/3/24**	**Fri 11/3/22**	**Mon 31/3/25**	
741	Portion 13b & 15	752 days	**Sun 27/2/22**	**Tue 19/3/24**	Fri 11/3/22	Mon 31/3/25	
742	Provision of site access [212 days after starting date as per Contract]	7 days	Sun 27/2/22	Sat 5/3/22	Tue 25/3/25	Mon 31/3/25	124
743	Deferred possession	52 days	Sun 27/2/22	Tue 19/4/22	Fri 11/3/22	Sun 1/5/22	124SS
744	Mobilization& Site Clearance	21 days	Wed 20/4/22	Tue 10/5/22	Mon 2/5/22	Sun 22/5/22	743
745	Time Risk Allowance	15 days	Wed 11/5/22	Wed 25/5/22	Mon 23/5/22	Mon 6/6/22	744,304
746	Modification of Ext R.W RWA10	36 days	Thu 26/5/22	Thu 30/6/22	Tue 7/6/22	Tue 12/7/22	744,304,745
747	Modification of Ext R.W RWA9	120 days	Fri 1/7/22	Fri 28/10/22	Wed 13/7/22	Wed 9/11/22	744,304,745,746
748	Erection of falsework/formwork, setting up temporary bearings for stressed beams - Elevated Walkway	120 days	Sat 29/10/22	Sat 25/2/23	Thu 10/11/22	Thu 9/3/23	746,308,311,310,309,745,747
749	Construction of Beams - Elevated Walkway	120 days	Sun 26/2/23	Sun 25/6/23	Fri 10/3/23	Fri 7/7/23	748
750	Tendon stressing and grouting of beams - Elevated Walkway	109 days	Mon 26/6/23	Thu 12/10/23	Sat 8/7/23	Tue 24/10/23	749
751	Construction of insitu decking - Elevated Walkway	71 days	Fri 13/10/23	Fri 22/12/23	Wed 25/10/...	Wed 3/1/24	750
752	Lighting and landscaping works - Elevated Walkway	36 days	Sat 23/12/23	Sat 27/1/24	Thu 4/1/24	Thu 8/2/24	750,751



China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
753	Replacement of permanent bearings and M.Js - Elevated Walkway	52 days	Sun 28/1/24	Tue 19/3/24	Fri 9/2/24	Sun 31/3/24	750,751,752,229,232
754	Installation of monitoring instruments	73 days	Wed 11/5/22	Fri 22/7/22	Sun 14/8/22	Tue 25/10/22	744
755	Excavatoin of slope B3	60 days	Sat 23/7/22	Tue 20/9/22	Wed 26/10/...	Sat 24/12/22	744,754,759
756	Construction of slope B3	73 days	Wed 21/9/22	Fri 2/12/22	Sun 25/12/22	Tue 7/3/23	744,754,759,755
757	Excavatoin of slope B4	58 days	Sat 3/12/22	Sun 29/1/23	Wed 8/3/23	Thu 4/5/23	744,754,759,756
758	Construction of slope B4	73 days	Mon 30/1/23	Wed 12/4/23	Fri 5/5/23	Sun 16/7/23	744,754,759,757
759	Construction of Access Road to Area G2	51 days	Wed 11/5/22	Thu 30/6/22	Mon 5/9/22	Tue 25/10/22	744
760	Construction of Drainage work for Access Road to Area G2	72 days	Thu 13/4/23	Fri 23/6/23	Mon 17/7/23	Tue 26/9/23	758
761	Application for (WW0046 Part I & II)	30 days	Sun 7/8/22	Mon 5/9/22	Mon 28/8/23	Tue 26/9/23	289
762	Construction of footpath& pavements & Irrigation System	107 days	Sat 24/6/23	Sun 8/10/23	Wed 27/9/23	Thu 11/1/24	758,757,756,755,760,761
763	Installation of road furniture& road marking etc.	35 days	Sat 26/8/23	Fri 29/9/23	Fri 8/12/23	Thu 11/1/24	758,757,756,755
764	Soft landscape works, soil placement work, irrigation system, t&c & street lighting installation work	50 days	Mon 9/10/23	Mon 27/11/23	Fri 12/1/24	Fri 1/3/24	762,763
765	Application for (WW0046 Part IV & V))	30 days	Tue 28/11/23	Wed 27/12/23	Sat 2/3/24	Sun 31/3/24	764
766	Woodland greening works in Portion 13b	107 days	Sat 3/12/22	Sun 19/3/23	Sat 16/12/23	Sun 31/3/24	744,756
767	**Section of Works 7BI - Establishment Works for all Landscape Softworks in Section 7B of the Works**	**365 days**	**Tue 19/3/24**	**Wed 19/3/25**	**Mon 1/4/24**	**Mon 31/3/25**	
768	Commencement of Establishment Work for Section 7B	0 days	Tue 19/3/24	Tue 19/3/24	Mon 1/4/24	Mon 1/4/24	766,764,753
769	Establishment Work Duration for Section 7B	365 days	Wed 20/3/24	Wed 19/3/25	Mon 1/4/24	Mon 31/3/25	768
770	Completion of Works in Section 7B	0 days	Wed 19/3/25	Wed 19/3/25	Mon 31/3/25	Mon 31/3/25	769
771	**Section of Works 8 - Portion 16**	**767 days**	**Thu 16/6/22**	**Sun 21/7/24**	**Fri 24/2/23**	**Mon 31/3/25**	
772	Portion 16	402 days	**Thu 16/6/22**	**Sat 22/7/23**	Fri 24/2/23	Sun 31/3/24	
773	Provision of site access [321 days after starting date as per Contract]	7 days	Thu 16/6/22	Wed 22/6/22	Fri 24/2/23	Thu 2/3/23	141
774	Mobilization& Site Clearance	15 days	Thu 23/6/22	Thu 7/7/22	Fri 3/3/23	Fri 17/3/23	773
775	Time Risk Allowance	24 days	Fri 8/7/22	Sun 31/7/22	Sat 18/3/23	Mon 10/4/23	774
776	Installation of chain-link fencing	47 days	Mon 1/8/22	Fri 16/9/22	Tue 11/4/23	Sat 27/5/23	774,775
777	Construction of fill slope A7	112 days	Sat 17/9/22	Fri 6/1/23	Sun 28/5/23	Sat 16/9/23	774,775,776
778	Construction of fill slope A8	110 days	Wed 9/11/22	Sun 26/2/23	Thu 20/7/23	Mon 6/11/23	777FS-59 days
779	Construction of slope surface drainage system	96 days	Mon 27/2/23	Fri 2/6/23	Tue 7/11/23	Sat 10/2/24	778,776,777
780	Soft landscaping work, soil placement work, hydroseeding and miscellaneous work	50 days	Sat 3/6/23	Sat 22/7/23	Sun 11/2/24	Sun 31/3/24	779
781	**Section of Works 8A - Establishment Works for all Landscape Softworks in Section 8 of the Works**	**365 days**	**Sat 22/7/23**	**Sun 21/7/24**	**Mon 1/4/24**	**Mon 31/3/25**	
782	Commencement of Establishment Work for Section 8	0 days	Sat 22/7/23	Sat 22/7/23	Mon 1/4/24	Mon 1/4/24	780
783	Establishment Work Duration for Section 8	365 days	Sun 23/7/23	Sun 21/7/24	Mon 1/4/24	Mon 31/3/25	782
784	Completion of Works in Section 8	0 days	Sun 21/7/24	Sun 21/7/24	Mon 31/3/25	Mon 31/3/25	783
785	**Section of Works 9 - Portion 17**	**740 days**	**Sun 27/2/22**	**Thu 7/3/24**	**Wed 23/3/22**	**Mon 31/3/25**	



China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

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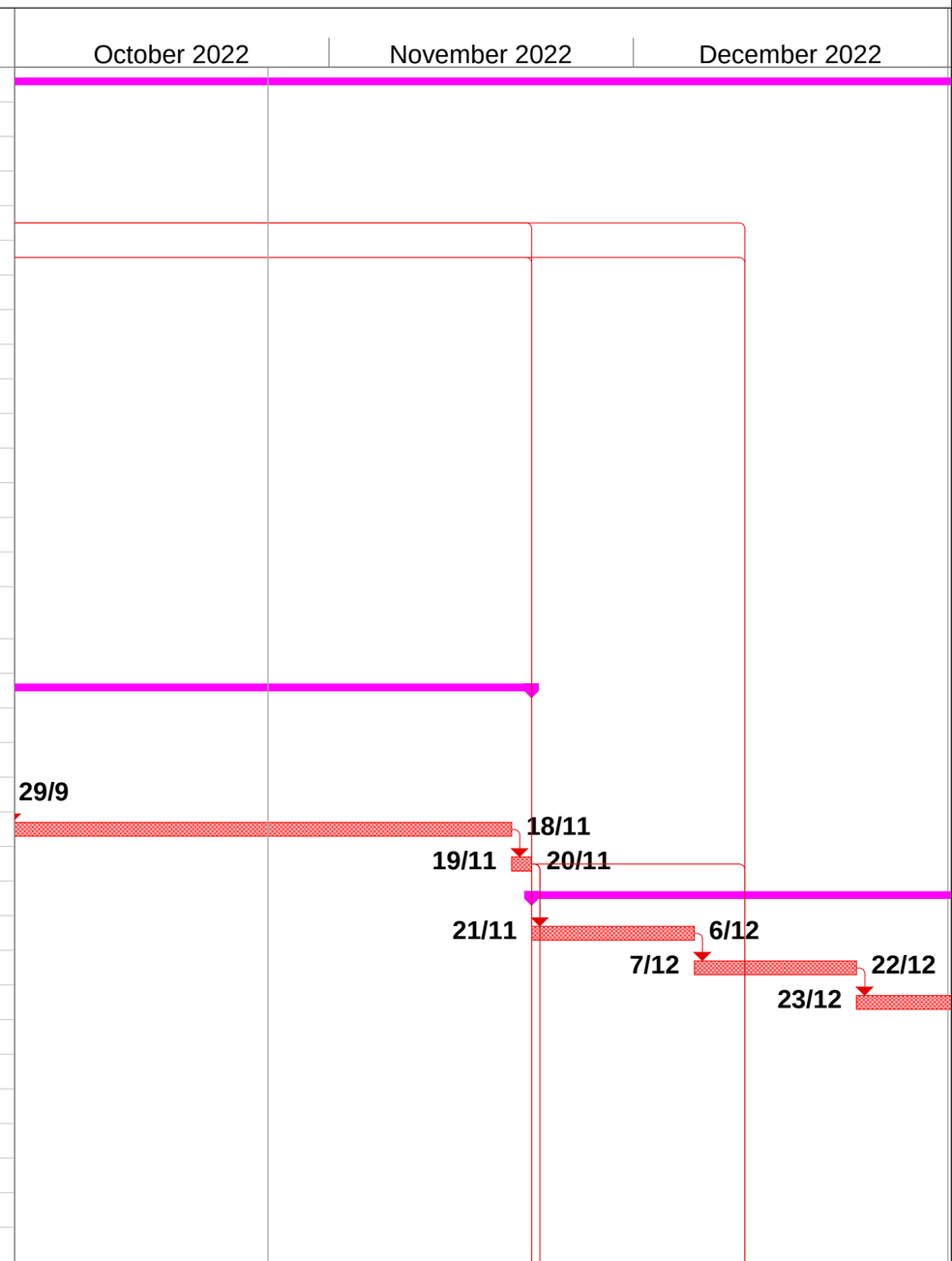
786	**Portion 17**	**740 days**	**Sun 27/2/22**	**Thu 7/3/24**	**Wed 23/3/22**	**Mon 31/3/25**	
787	Provision of site access [212 days after starting date as per Contract]	0 days	Sun 27/2/22	Sun 27/2/22	Mon 31/3/25	Mon 31/3/25	152
788	Deferred possession	30 days	Sun 27/2/22	Mon 28/3/22	Wed 23/3/22	Thu 21/4/22	152SS
789	Slope inspection& assessment work & Tree Survey	23 days	Tue 29/3/22	Wed 20/4/22	Fri 22/4/22	Sat 14/5/22	788
790	Mobilization, access& Site Clearance	15 days	Thu 21/4/22	Thu 5/5/22	Sun 15/5/22	Sun 29/5/22	789
791	Time Risk Allowance	14 days	Fri 6/5/22	Thu 19/5/22	Mon 30/5/22	Sun 12/6/22	789,790
792	**Slope Works at Feature No. 11NE-D/C982 (235m)**	**18 days**	**Fri 20/5/22**	**Mon 6/6/22**	**Mon 13/6/22**	**Thu 30/6/22**	
793	Demolition and removal of disused water pipe and sprinkler syste	15 days	Fri 20/5/22	Fri 3/6/22	Mon 13/6/22	Mon 27/6/22	791,790
794	Installation of display sign for slope registration no. x2	3 days	Sat 4/6/22	Mon 6/6/22	Tue 28/6/22	Thu 30/6/22	793
795	**Slope Works at Feature No. 11NE-D/C1005 (230m)**	**2 days**	**Tue 7/6/22**	**Wed 8/6/22**	**Fri 1/7/22**	**Sat 2/7/22**	
796	Installation of display sign for slope registration no. x2	2 days	Tue 7/6/22	Wed 8/6/22	Fri 1/7/22	Sat 2/7/22	794
797	**Slope Works at Feature No. 11NE-D/C872 (250m)**	**77 days**	**Thu 9/6/22**	**Wed 24/8/22**	**Sun 3/7/22**	**Sat 17/9/22**	
798	Demolition and removal of disused water pipe and sprinkler syste	14 days	Thu 9/6/22	Wed 22/6/22	Sun 3/7/22	Sat 16/7/22	796
799	Filling of void with concrete	8 days	Thu 23/6/22	Thu 30/6/22	Sun 17/7/22	Sun 24/7/22	798
800	Installation of hand railings	60 days	Thu 23/6/22	Sun 21/8/22	Sun 17/7/22	Wed 14/9/22	799SS
801	Installation of non-biodegradable erosion control mat with hydroseeding	40 days	Wed 13/7/22	Sun 21/8/22	Sat 6/8/22	Wed 14/9/22	800FF,799
802	Installation of display sign for slope registration no. x2	3 days	Mon 22/8/22	Wed 24/8/22	Thu 15/9/22	Sat 17/9/22	801
803	**Slope Works at Feature No. 11NE-D/C948 (310m)**	**88 days**	**Thu 25/8/22**	**Sun 20/11/22**	**Sun 18/9/22**	**Wed 14/12...**	
804	Demolition and removal of disused water pipe and sprinkler syste	14 days	Thu 25/8/22	Wed 7/9/22	Sun 18/9/22	Sat 1/10/22	802
805	Construction of concrete berm	14 days	Thu 8/9/22	Wed 21/9/22	Sun 2/10/22	Sat 15/10/22	804
806	Repainting of existing steel maintenance staircase	8 days	Thu 22/9/22	Thu 29/9/22	Sun 16/10/22	Sun 23/10/22	805
807	Construction of wire mesh	50 days	Fri 30/9/22	Fri 18/11/22	Mon 24/10/...	Mon 12/12/...	806
808	Installation of display sign for slope registration no. x2	2 days	Sat 19/11/22	Sun 20/11/22	Tue 13/12/22	Wed 14/12/...	807
809	**Slope Works at Feature No. 11NE-D/C981 (390m)**	**79 days**	**Mon 21/11/22**	**Tue 7/2/23**	**Sun 25/12/...**	**Mon 13/3/23**	
810	Construction of concrete berm	16 days	Mon 21/11/22	Tue 6/12/22	Sun 25/12/22	Mon 9/1/23	808
811	Installation of hand railings	16 days	Wed 7/12/22	Thu 22/12/22	Tue 10/1/23	Wed 25/1/23	810
812	Construction of wire mesh	45 days	Fri 23/12/22	Sun 5/2/23	Thu 26/1/23	Sat 11/3/23	811
813	Installation of display sign for slope registration no. x2	2 days	Mon 6/2/23	Tue 7/2/23	Sun 12/3/23	Mon 13/3/23	812
814	**Slope Works at Feature No. 11NE-D/C949 (603m)**	**132 days**	**Wed 8/2/23**	**Mon 19/6/23**	**Tue 14/3/23**	**Sun 23/7/23**	
815	Demolition and removal of disused water pipe and sprinkler syste	25 days	Wed 8/2/23	Sat 4/3/23	Tue 14/3/23	Fri 7/4/23	813
816	Filling of voids with concrete	15 days	Sun 5/3/23	Sun 19/3/23	Sat 8/4/23	Sat 22/4/23	815
817	Construction of concrete berm	25 days	Mon 20/3/23	Thu 13/4/23	Sun 23/4/23	Wed 17/5/23	816
818	Installation of hand railings	15 days	Fri 14/4/23	Fri 28/4/23	Thu 18/5/23	Thu 1/6/23	817
819	Construction of wire mesh	50 days	Sat 29/4/23	Sat 17/6/23	Fri 2/6/23	Fri 21/7/23	818



China International Water Electric Corp.

Task | Critical Task | Milestone | Summary

China International Water & Electric Corp.

CEDD Contract No. ED/2020/02
Development of Anderson Road Quarry Site - Infrastructure, Greening and Landscape Works
Revised Works Programme : August 2022

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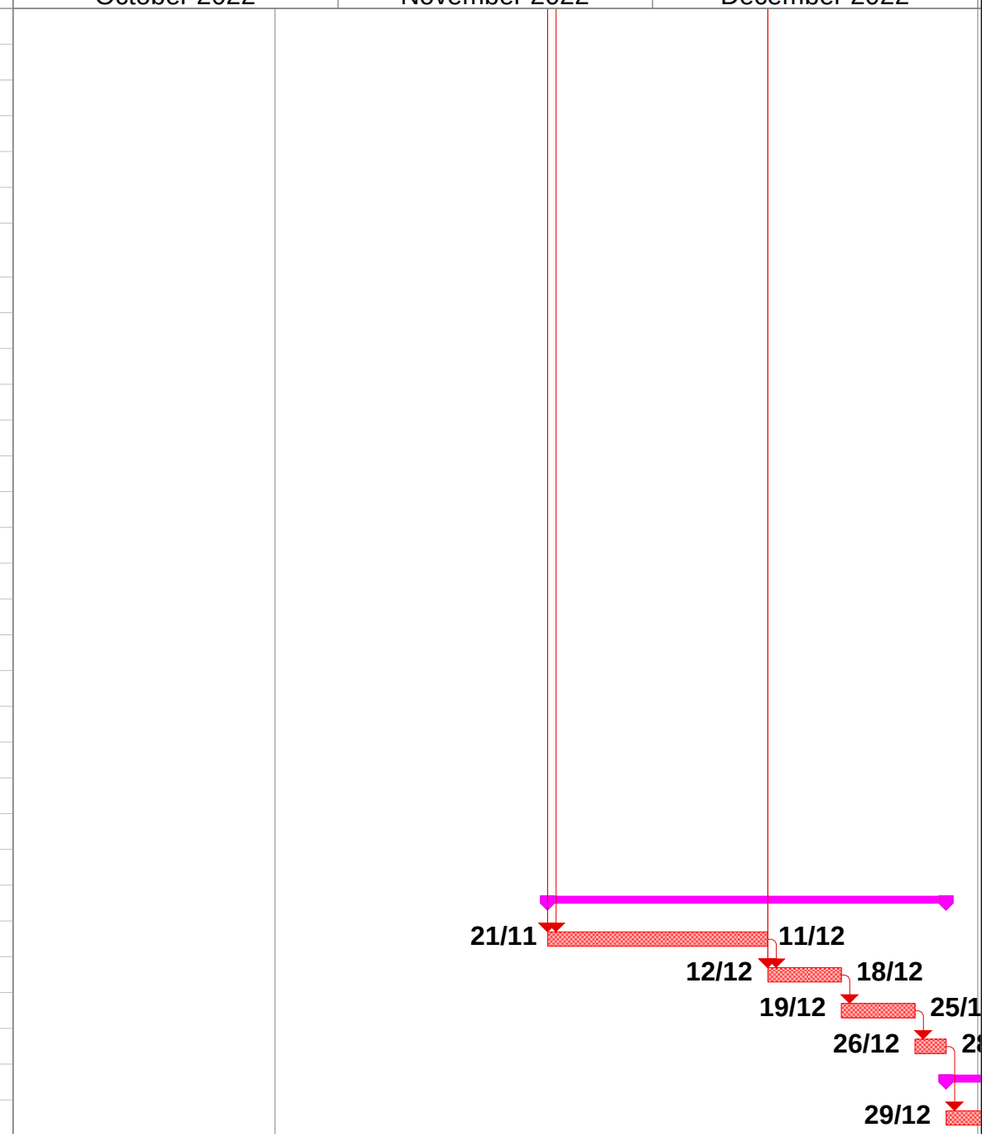
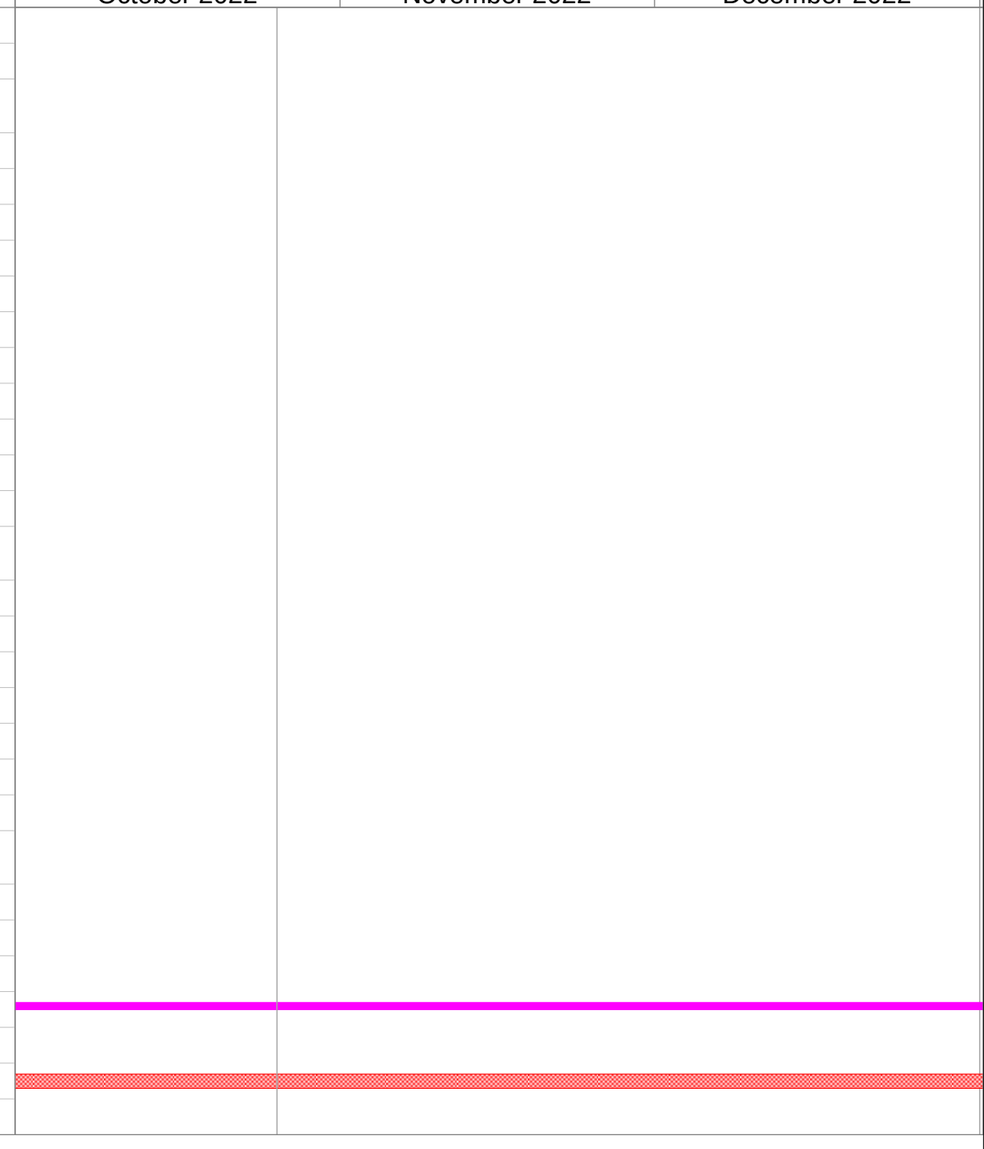
820	Installation of display sign for slope registration no. x2	2 days	Sun 18/6/23	Mon 19/6/23	Sat 22/7/23	Sun 23/7/23	819
821	**Slope Works at Feature No. 11NE-B/C899 (69m)**	**113 days**	**Tue 20/6/23**	**Tue 10/10/23**	**Mon 24/7/23**	**Mon 13/11...**	
822	Demolition and removal of disused water pipe and sprinkler syster	18 days	Tue 20/6/23	Fri 7/7/23	Mon 24/7/23	Thu 10/8/23	820
823	Filling of voids with concrete	16 days	Sat 8/7/23	Sun 23/7/23	Fri 11/8/23	Sat 26/8/23	822
824	Construction of concrete berm	17 days	Mon 24/7/23	Wed 9/8/23	Sun 27/8/23	Tue 12/9/23	823
825	Installation of hand railings	24 days	Thu 10/8/23	Sat 2/9/23	Wed 13/9/23	Fri 6/10/23	824
826	Installation of non-biodegradable erosion control mat with hydroseeding	36 days	Sun 3/9/23	Sun 8/10/23	Sat 7/10/23	Sat 11/11/23	825
827	Installation of display sign for slope registration no. x2	2 days	Mon 9/10/23	Tue 10/10/23	Sun 12/11/23	Mon 13/11/...	826
828	**Slope Works at Feature No. 11NE-D/C1000 (80m)**	**2 days**	**Wed 11/10/23**	**Thu 12/10/23**	**Tue 14/11/...**	**Wed 15/11...**	
829	Installation of display sign for slope registration no. x1	2 days	Wed 11/10/23	Thu 12/10/23	Tue 14/11/23	Wed 15/11/...	827
830	**Slope Works at Feature No. 11NE-D/C989 (270m)**	**3 days**	**Fri 13/10/23**	**Sun 15/10/23**	**Thu 16/11/...**	**Sat 18/11/23**	
831	Installation of display sign for slope registration no. x2	3 days	Fri 13/10/23	Sun 15/10/23	Thu 16/11/23	Sat 18/11/23	829
832	**Slope Works at Feature No. 11NE-D/C983 (215m)**	**23 days**	**Mon 16/10/23**	**Tue 7/11/23**	**Sun 19/11/...**	**Mon 11/12...**	
833	Demolition and removal of disused water pipe and sprinkler syster	7 days	Mon 16/10/23	Sun 22/10/23	Sun 19/11/23	Sat 25/11/23	831
834	Construction of concrete berm	7 days	Mon 23/10/23	Sun 29/10/23	Sun 26/11/23	Sat 2/12/23	833
835	Installation of hand railings	7 days	Mon 30/10/23	Sun 5/11/23	Sun 3/12/23	Sat 9/12/23	834
836	Installation of display sign for slope registration no. x2	2 days	Mon 6/11/23	Tue 7/11/23	Sun 10/12/23	Mon 11/12/...	835
837	**Slope Works at Feature No. 11NE-B/C1013 (340m)**	**111 days**	**Wed 8/11/23**	**Mon 26/2/24**	**Tue 12/12/...**	**Sun 31/3/24**	
838	Demolition and removal of disused water pipe and sprinkler syster	7 days	Wed 8/11/23	Tue 14/11/23	Tue 12/12/23	Mon 18/12/...	836
839	Construction of concrete maintenance staircase with hand railings	34 days	Wed 15/11/23	Mon 18/12/23	Tue 19/12/23	Sun 21/1/24	838
840	Construction of wire mesh	34 days	Tue 19/12/23	Sun 21/1/24	Mon 22/1/24	Sat 24/2/24	839
841	Construction of concrete berm	17 days	Mon 22/1/24	Wed 7/2/24	Sun 25/2/24	Tue 12/3/24	840
842	Installation of hand railings	17 days	Thu 8/2/24	Sat 24/2/24	Wed 13/3/24	Fri 29/3/24	841
843	Installation of display sign for slope registration no. x2	2 days	Sun 25/2/24	Mon 26/2/24	Sat 30/3/24	Sun 31/3/24	842
844	**Slope Works at Feature No. 11NE-B/C1014 (95m)**	**38 days**	**Mon 21/11/22**	**Wed 28/12/22**	**Thu 15/12/...**	**Sat 21/1/23**	
845	Time Risk Allowance	21 days	Mon 21/11/22	Sun 11/12/22	Thu 15/12/22	Wed 4/1/23	791,808,790
846	Demolition and removal of disused water pipe and sprinkler syster	7 days	Mon 12/12/22	Sun 18/12/22	Thu 5/1/23	Wed 11/1/23	791,808,790,845
847	Removal of disused water pump and electricity box	7 days	Mon 19/12/22	Sun 25/12/22	Thu 12/1/23	Wed 18/1/23	846
848	Installation of display sign for slope registration no. x1	3 days	Mon 26/12/22	Wed 28/12/22	Thu 19/1/23	Sat 21/1/23	847
849	**Slope Works at Feature No. 11NE-B/C900 (335m)**	**111 days**	**Thu 29/12/22**	**Tue 18/4/23**	**Sun 22/1/23**	**Fri 12/5/23**	
850	Demolition and removal of disused water pipe and sprinkler syster	17 days	Thu 29/12/22	Sat 14/1/23	Sun 22/1/23	Tue 7/2/23	848
851	Installation of non-biodegradable erosion control mat with hydroseeding	56 days	Sun 15/1/23	Sat 11/3/23	Wed 8/2/23	Tue 4/4/23	850
852	Installation of hand railings	36 days	Sun 12/3/23	Sun 16/4/23	Wed 5/4/23	Wed 10/5/23	851
853	Installation of display sign for slope registration no. x2	2 days	Mon 17/4/23	Tue 18/4/23	Thu 11/5/23	Fri 12/5/23	852



China International Water Electric Corp.

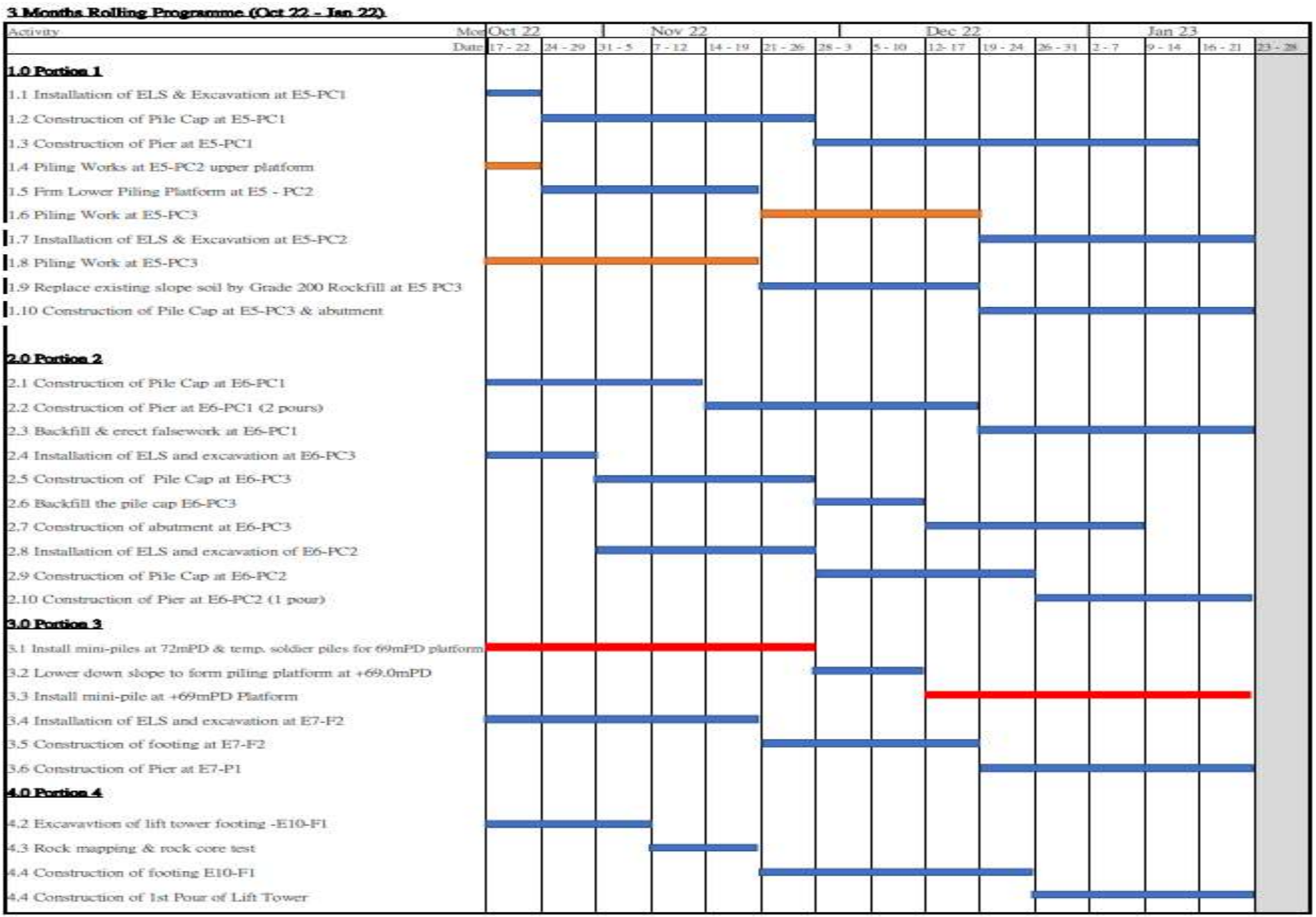
Task | Critical Task | Milestone | Summary

ID	Task Name	Duration	Early Start	Early Finish	Late Start	Late Finish	Predecessors
854	**Slope Works at Feature No. 11NE-B/C901 (290m)**	**107 days**	**Wed 19/4/23**	**Thu 3/8/23**	**Sat 13/5/23**	**Sun 27/8/23**	
855	Filling of void with concrete	16 days	Wed 19/4/23	Thu 4/5/23	Sat 13/5/23	Sun 28/5/23	853
856	Installation of non-biodegradable erosion control mat with hydroseeding	46 days	Fri 5/5/23	Mon 19/6/23	Mon 29/5/23	Thu 13/7/23	855
857	Construction of lockable gate	7 days	Tue 20/6/23	Mon 26/6/23	Fri 14/7/23	Thu 20/7/23	856
858	Installation of hand railings	36 days	Tue 27/6/23	Tue 1/8/23	Fri 21/7/23	Fri 25/8/23	857
859	Installation of display sign for slope registration no. x1	2 days	Wed 2/8/23	Thu 3/8/23	Sat 26/8/23	Sun 27/8/23	858
860	**Slope Works at Feature No. 11NE-B/C902 (360m)**	**217 days**	**Fri 4/8/23**	**Thu 7/3/24**	**Mon 28/8/23**	**Sun 31/3/24**	
861	Filling of void with cement soil	28 days	Fri 4/8/23	Thu 31/8/23	Mon 28/8/23	Sun 24/9/23	859
862	Filling of void with concrete	18 days	Fri 1/9/23	Mon 18/9/23	Mon 25/9/23	Thu 12/10/23	861
863	Construction of concrete berm	18 days	Tue 19/9/23	Fri 6/10/23	Fri 13/10/23	Mon 30/10/...	862
864	Installation of hand railings	18 days	Sat 7/10/23	Tue 24/10/23	Tue 31/10/23	Fri 17/11/23	863
865	Repainting of existing steel maintenance staircase	14 days	Wed 25/10/23	Tue 7/11/23	Sat 18/11/23	Fri 1/12/23	864
866	Installation of display sign for slope registration no. x2	3 days	Wed 8/11/23	Fri 10/11/23	Sat 2/12/23	Mon 4/12/23	865
867	**Slope Works at Feature No. 11NE-B/C903 (105m)**	**32 days**	**Sat 11/11/23**	**Tue 12/12/23**	**Tue 5/12/23**	**Fri 5/1/24**	
868	Installation of non-biodegradable erosion control mat with hydroseeding	30 days	Sat 11/11/23	Sun 10/12/23	Tue 5/12/23	Wed 3/1/24	866
869	Installation of display sign for slope registration no. x1	2 days	Mon 11/12/23	Tue 12/12/23	Thu 4/1/24	Fri 5/1/24	868
870	**Slope Works at Feature No. 11NE-B/C224 (40m)**	**2 days**	**Wed 13/12/23**	**Thu 14/12/23**	**Sat 6/1/24**	**Sun 7/1/24**	
871	Installation of display sign for slope registration no. x1	2 days	Wed 13/12/23	Thu 14/12/23	Sat 6/1/24	Sun 7/1/24	869
872	**Slope Works at Feature No. 11NE-B/C225 (60m)**	**84 days**	**Fri 15/12/23**	**Thu 7/3/24**	**Mon 8/1/24**	**Sun 31/3/24**	
873	Demolition and removal of existing damaged U-channel	22 days	Fri 15/12/23	Fri 5/1/24	Mon 8/1/24	Mon 29/1/24	871
874	Construction of 225 mm U-channel (~60m)	60 days	Sat 6/1/24	Tue 5/3/24	Tue 30/1/24	Fri 29/3/24	873
875	Installation of display sign for slope registration no. x1	2 days	Wed 6/3/24	Thu 7/3/24	Sat 30/3/24	Sun 31/3/24	874
876	**Section of Works 9A - Establishment Works for all Landscape Softworks in Section 9 of the Works**	**365 days**	**Thu 7/3/24**	**Fri 7/3/25**	**Mon 1/4/24**	**Mon 31/3/25**	
877	Commencement of Establishment Work for Section 9	0 days	Thu 7/3/24	Thu 7/3/24	Mon 1/4/24	Mon 1/4/24	875
878	Establishment Work Duration for Section 9	365 days	Fri 8/3/24	Fri 7/3/25	Mon 1/4/24	Mon 31/3/25	877
879	Completion of Works in Section 9	0 days	Fri 7/3/25	Fri 7/3/25	Mon 31/3/25	Mon 31/3/25	878
880	**Section of Works 10 - All Tree Protection and Preservation Works**	**922 days**	**Fri 30/7/21**	**Tue 6/2/24**	**Thu 22/9/22**	**Mon 31/3/25**	
881	Commencement of All Tree Protection and Preservation Work	0 days	Fri 30/7/21	Fri 30/7/21	Thu 22/9/22	Thu 22/9/22	
882	All Tree Protection and Preservation Work Duration for Section 8	922 days	Fri 30/7/21	Tue 6/2/24	Thu 22/9/22	Mon 31/3/25	881
883	Completion of All Tree Protection and Preservation Work	0 days	Tue 6/2/24	Tue 6/2/24	Mon 31/3/25	Mon 31/3/25	882



Contract 5 (NE/2019/02)

Major Activities in Coming 3 Months



Appendix D

Monitoring Locations for Impact Monitoring

Monitoring Locations for Contract 1 (NE/2016/01)

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HVS in AMS-1 for 24-Hour TSP







AMS-1

AMS-1a

AMS-2

AMS-3

Legend

- Study Area
- 500m Assessment Area
- Dust Monitoring Locations

Rev	Description	By	Date
B	SECOND ISSUE	GL	03/14
A	FIRST ISSUE	GL	10/13

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Contract No. and Title

Agreement No. CE 18/2012(CE)

Development of Anderson Road Quarry - Investigation

Drawing title

Locations of Construction Dust Monitoring (Sheet 1 of 3)

Drawing no.		Rev.
227724/E/1045		B
Drawn: GL	Date: 03/14	Checked: TC / Approved: ST
Scale: 1:5000 @A3	Status: PRELIMINARY	

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METRES
1 : 5000

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AMS-3

AMS-4

AMS-5

AMS-6





HVS in AMS-5 for 24-Hour TSP





HVS in AMS-6 for 24-Hour TSP



Legend

- Study Area
- 500m Assessment Area
- Dust Monitoring Locations

N

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METRES
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Rev	Description	By	Date
B	SECOND ISSUE	GL	03/14
A	FIRST ISSUE	GL	10/13

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Drawing title

Locations of Construction Dust Monitoring (Sheet 2 of 3)

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HVS in AMS-1 for 24-Hour TSP







AMS-1

AMS-1a

AMS-2

AMS-3

Legend

- Study Area
- 500m Assessment Area
- Dust Monitoring Locations

Rev	Description	By	Date
B	SECOND ISSUE	GL	03/14
A	FIRST ISSUE	GL	10/13

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Locations of Construction Dust Monitoring (Sheet 1 of 3)

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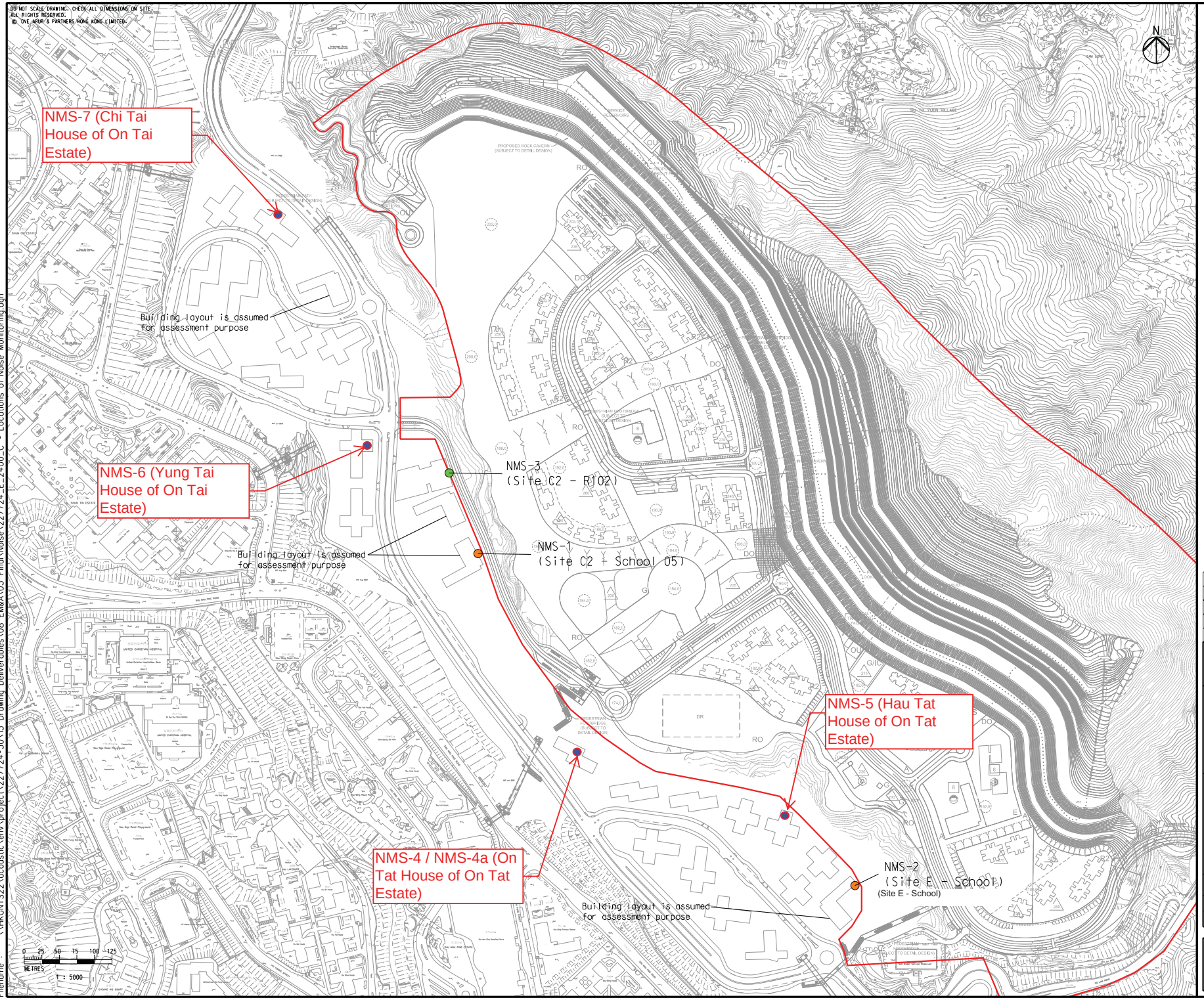

Legend

- Study Area
- Construction Noise Monitoring Location
- Construction and Operational Road Traffic Noise Monitoring Location
- Review Noise monitoring Location

Rev	Description	By	Date
C	THIRD ISSUE	GL	05/14
B	SECOND ISSUE	GL	03/14
A	FIRST ISSUE	GL	10/13

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Contract No. and Title

Agreement No. CE 18/2012(CE)

Development of Anderson Road Quarry - Investigation

Drawing title

Locations of Noise Monitoring

Drawing no.	Rev.
227724/E/2400	C

Drawn	Date	Checked	Approved
GL	05/14	TC	ST

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AMS-3

AMS-4

AMS-5

AMS-6





HVS in AMS-5 for 24-Hour TSP





HVS in AMS-6 for 24-Hour TSP



Legend

- Study Area
- 500m Assessment Area
- Dust Monitoring Locations

N

0 25 50 75 100 125
METRES
1 : 5000

Rev	Description	By	Date
B	SECOND ISSUE	GL	03/14
A	FIRST ISSUE	GL	10/13

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Drawing title

Locations of Construction Dust Monitoring (Sheet 2 of 3)

Drawing no.	Rev.
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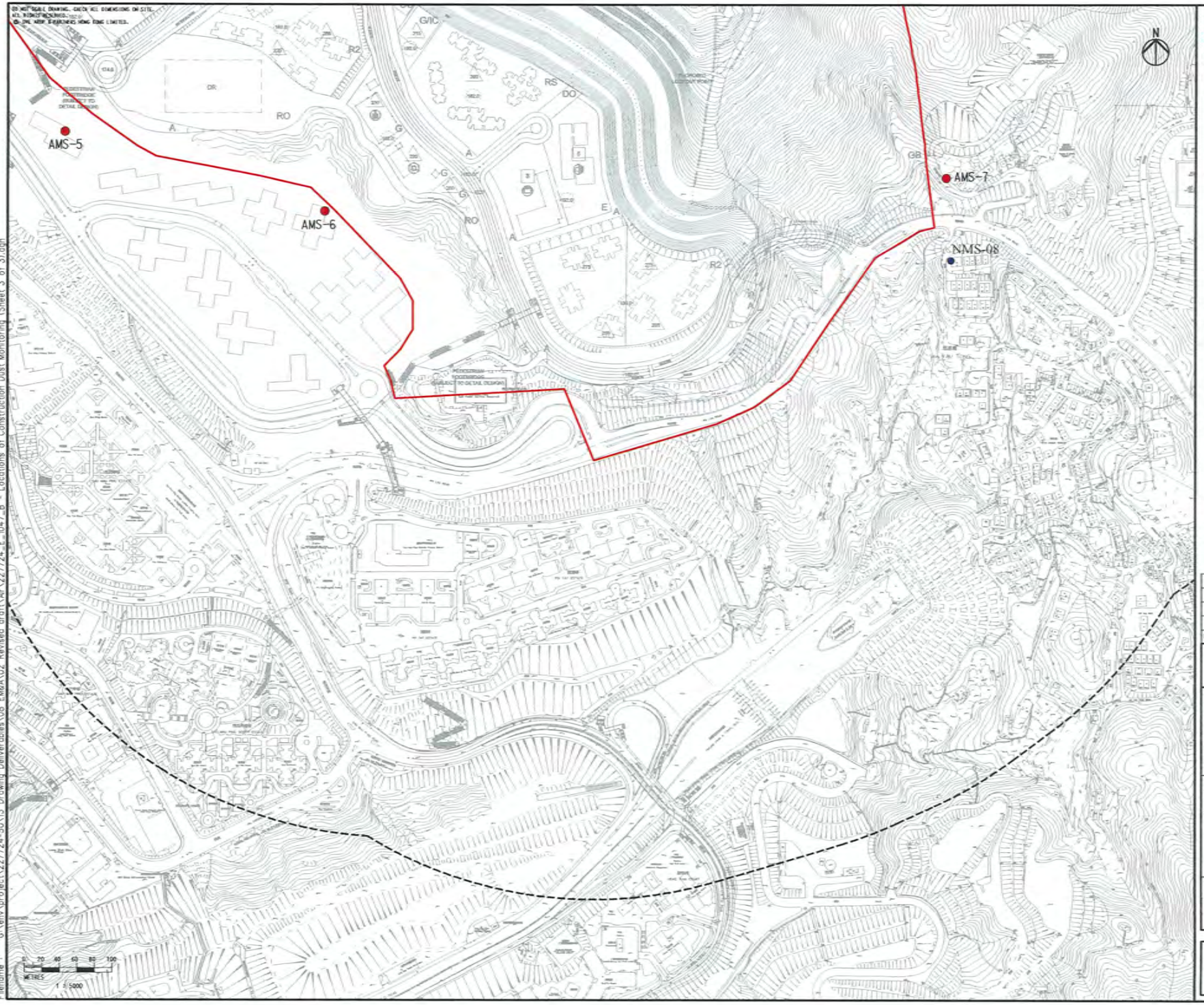

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Development of Anderson Road Quarry - Investigation

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Locations of Construction Dust and Noise Monitoring

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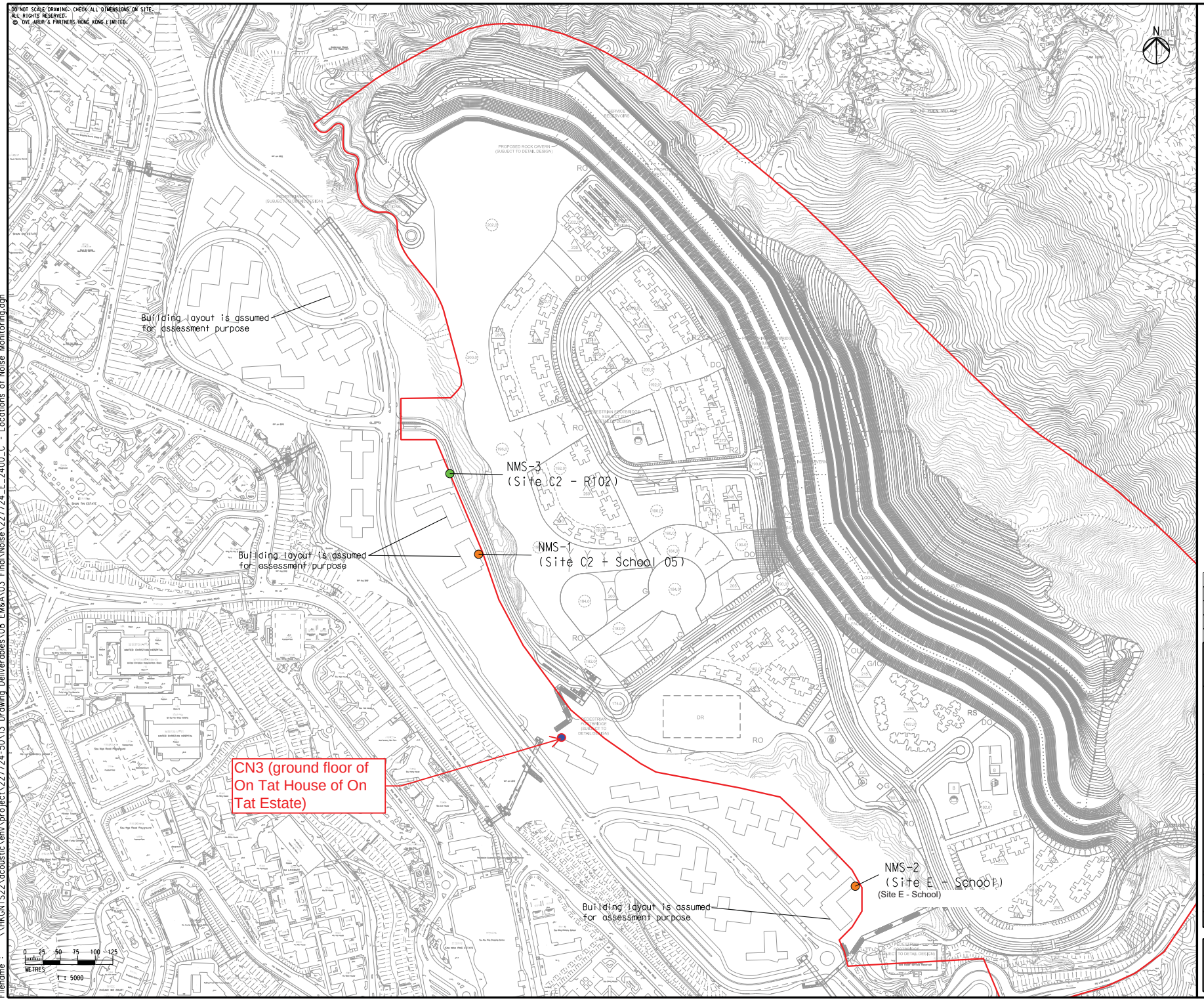
Monitoring Locations for Contract 3 (NE/2017/03)



Legend

- Study Area
- Construction Noise Monitoring Location
- Construction and Operational Road Traffic Noise Monitoring Location
- Noise monitoring Location

Rev	Description	By	Date
C	THIRD ISSUE	GL	05/14
B	SECOND ISSUE	GL	03/14
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Drawing title

Locations of Noise Monitoring

Drawing no.	Rev.
227724/E/2400	C

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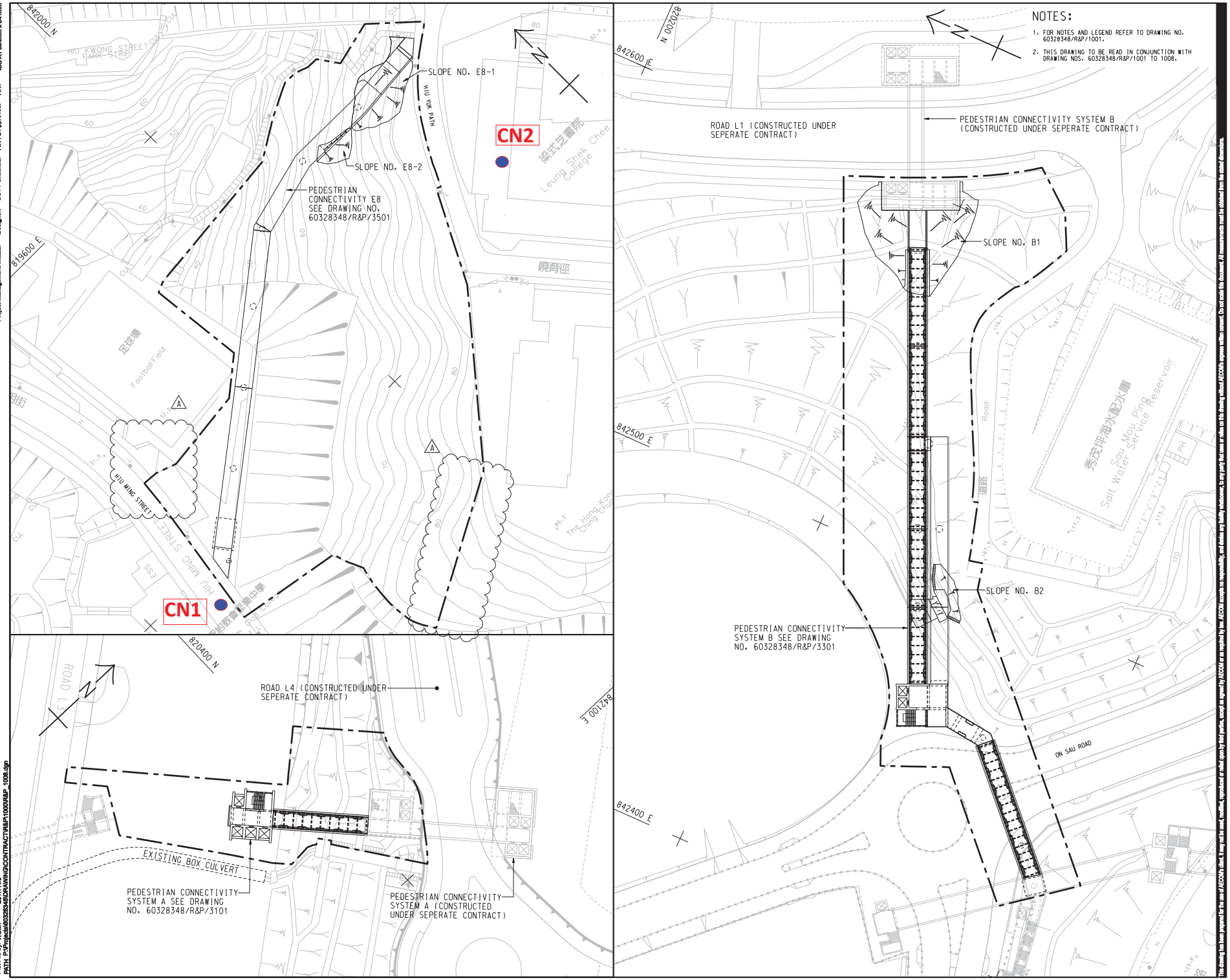

noise monitoring location

AECOM

PROJECT

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - INVESTIGATION, DESIGN AND CONSTRUCTION

CONTRACT TITLE

DEVELOPMENT OF ANDERSON ROAD QUARRY SITE - ROAD IMPROVEMENT WORKS AND PEDESTRIAN CONNECTIVITY FACILITIES WORKS PHASE 2A

CLIENT

土木工程拓展署 Civil Engineering and Development Department

CONSULTANT

AECOM Asia Company Ltd.
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SUB-CONSULTANTS

ISSUE/REVISION

MR	DATE	DESCRIPTION	CHK
A	NOV. 17	TENDER ADDENDUM NO. 1	AWYC
-	OCT. 17	TENDER DRAWING	AWYC

STATUS

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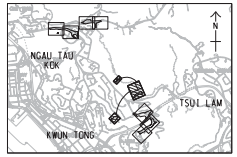
DIMENSION UNIT METRES

KEY PLAN A1 1 : 60000



PROJECT NO. 60328348

CONTRACT NO. NE/2017/03

SHEET TITLE

GENERAL LAYOUT

SHEET 8 OF 8

SHEET NUMBER

60328348/R&P/1008A

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Project Management Initials: Designer: CCYT Checked: AWYC Approved: HKT ISO A1 594mm x 841mm

Appendix E

Calibration Certificate of Monitoring Equipment and HOKLAS-accreditation Certificate of the Testing Laboratory

TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Tan Shan Village No. 5 - 6	Date of Calibration: 29-Jul-22
Location ID : AMS1a	Next Calibration Date: 30-Oct-22
Model:TISCH High Volume Air Sampler TE-5170	Technician: Mr. Fai So

CONDITIONS

Sea Level Pressure (hPa)	1005.9	Corrected Pressure (mm Hg)	754.425
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	1.99838
Model->	TE-5025A	Qstd Intercept ->	-0.00903
Serial # ->	1941		

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.4	6.4	12.8	1.776	51	50.46	Slope = 36.5599
13	5.2	5.2	10.4	1.601	45	44.52	Intercept = -14.8015
10	4	4	8	1.405	35	34.63	Corr. coeff. = 0.9967
7	2.4	2.4	4.8	1.089	26	25.72	
5	1.5	1.5	3	0.862	17	16.82	

Calculations :

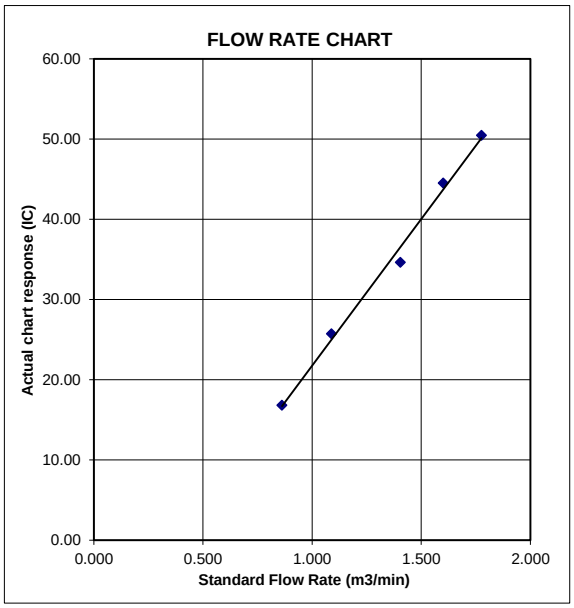
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Oi Tat House	Date of Calibration:	29-Jul-22
Location ID :	AMS 5	Next Calibration Date:	30-Oct-22
Model:TISCH High Volume Air Sampler TE-5170		Technician:	Mr. Fai So

CONDITIONS

Sea Level Pressure (hPa)	1005.9	Corrected Pressure (mm Hg)	754.425
Temperature (ºC)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	1.99838
Model->	TE-5025A	Qstd Intercept ->	-0.00903
Serial # ->	1941		

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.4	6.4	12.8	1.776	56	55.41	Slope = 40.7127
13	5.2	5.2	10.4	1.601	47	46.50	Intercept = -18.6613
10	4.2	4.2	8.4	1.439	37	36.61	Corr. coeff. = 0.9912
7	2.6	2.6	5.2	1.133	29	28.69	
5	1.5	1.5	3	0.862	17	16.82	

Calculations :

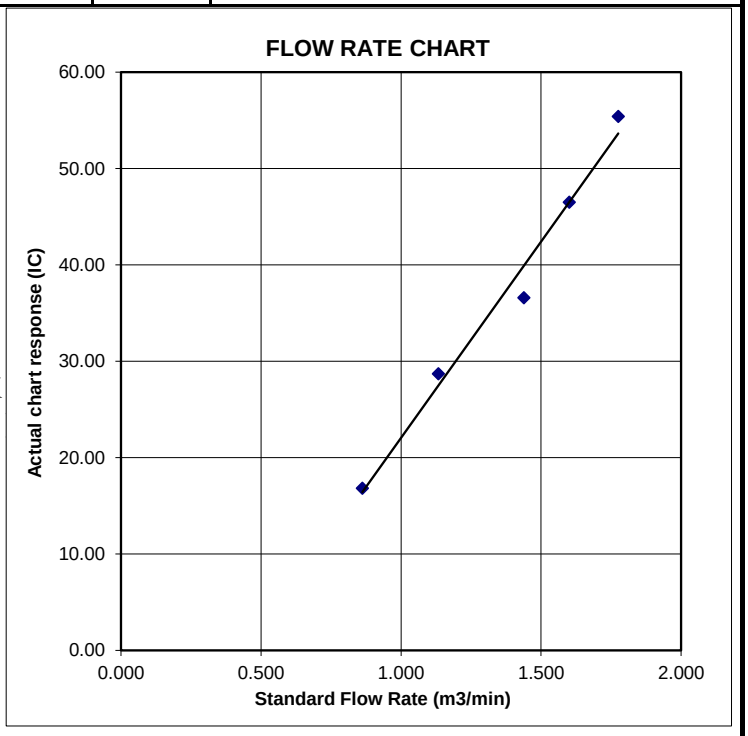
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K
Pstd = actual pressure during calibration (mm Hg

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location :	Hau Tat House	Date of Calibration:	29-Jul-22
Location ID :	AMS 6	Next Calibration Date:	30-Oct-22
Model:TISCH High Volume Air Sampler TE-5170		Technician:	Mr. Fai So

CONDITIONS

Sea Level Pressure (hPa)	1005.9	Corrected Pressure (mm Hg)	754.425
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	1.99838
Model->	TE-5025A	Qstd Intercept ->	-0.00903
Serial # ->	1941		

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.3	6.3	12.6	1.762	53	52.44	Slope = 41.9587
13	5.4	5.4	10.8	1.632	45	46.00	Intercept = -21.6530
10	3.7	3.7	7.4	1.351	35	34.63	Corr. coeff. = 0.9943
7	2.5	2.5	5	1.112	28	27.70	
5	1.5	1.5	3	0.862	13	12.86	

Calculations :

Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]

IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate

IC = corrected chart respones

I = actual chart response

m = calibrator Qstd slope

b = calibrator Qstd intercept

Ta = actual temperature during calibration (deg K

Pstd = actual pressure during calibration (mm Hg

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

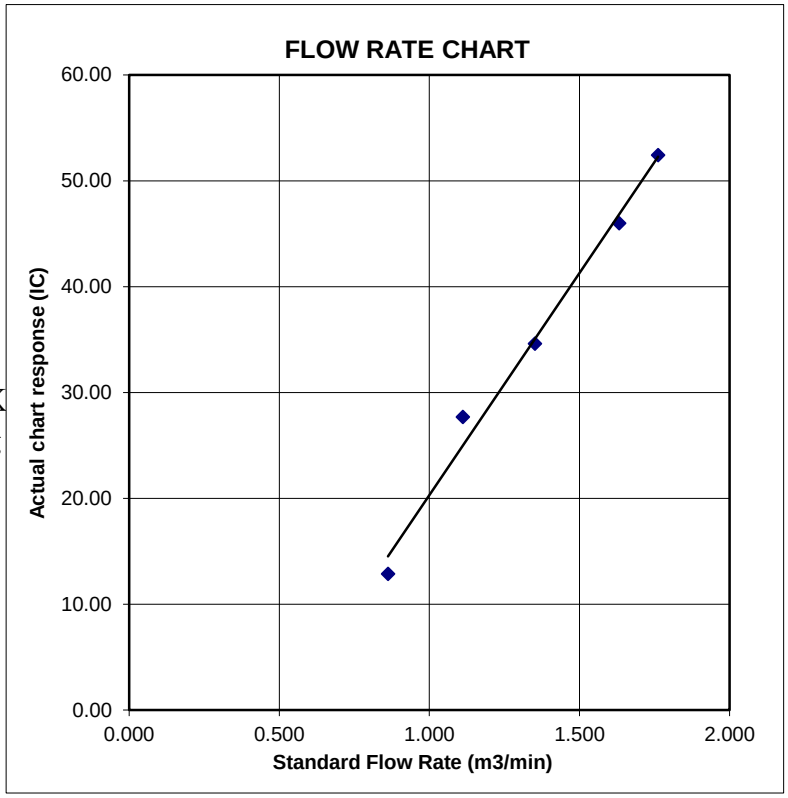
m = sampler slope

b = sampler intercept

I = chart response

Tav = daily average temperature

Pav = daily average pressure



TSP SAMPLER CALIBRATION CALCULATION SPREADSHEET

Location : Ma Yau Tong Village
Location ID : AMS 7
Model:TISCH High Volume Air Sampler TE-5170

Date of Calibration: 29-Jul-22
Next Calibration Date: 30-Oct-22
Technician: Mr. Fai So

CONDITIONS

Sea Level Pressure (hPa)	1005.9	Corrected Pressure (mm Hg)	754.425
Temperature (°C)	29.2	Temperature (K)	302

CALIBRATION ORIFICE

Make->	TISCH	Qstd Slope ->	1.99838
Model->	TE-5025A	Qstd Intercept ->	-0.00903
Serial # ->	1612		

CALIBRATION

Plate No.	H20 (L) (in)	H2O (R) (in)	H20 (in)	Qstd (m3/min)	I (chart)	IC corrected	LINEAR REGRESSION
18	6.5	6.5	13	1.790	56	55.41	Slope = 43.9346
13	5.5	5.5	11	1.647	48	47.49	Intercept = -23.9309
10	3.7	3.7	7.4	1.351	35	34.63	Corr. coeff. = 0.9965
7	2.7	2.7	5.4	1.155	29	28.69	
5	1.9	1.9	3.8	0.970	18	17.81	

Calculations :

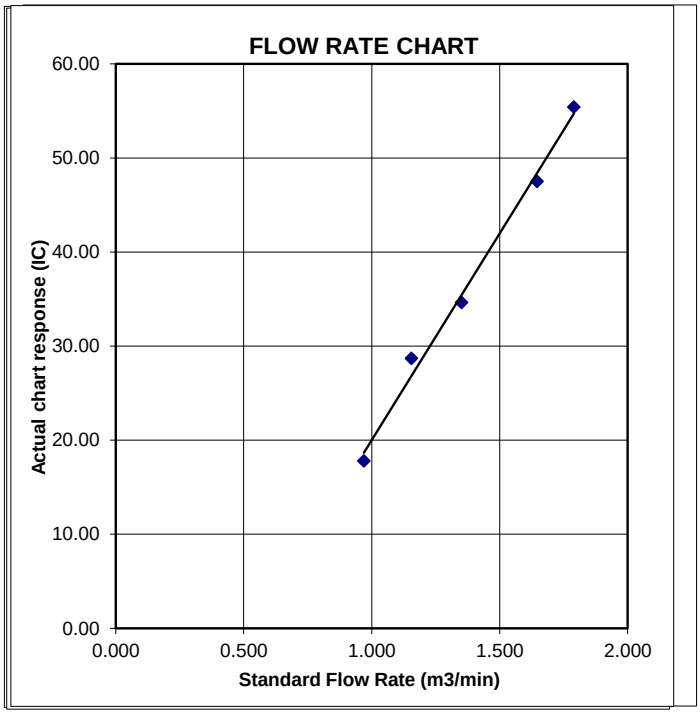
Qstd = 1/m[Sqrt(H20(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart respones
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pstd = actual pressure during calibration (mm Hg)

For subsequent calculation of sampler flow:

1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure



TISCH Environmental

RECALIBRATION DUE DATE:
December 27, 2022

Certificate of Calibration

Calibration Certification Information				
Cal. Date:	December 27, 2021	**Rootsmeter S/N:** 438320	**Ta:** 295	°K
Operator:	Jim Tisch		**Pa:** 740.4	mm Hg
Calibration Model #:	TE-5025A	**Calibrator S/N:** **1612**		

Run	Vol. Init (m3)	Vol. Final (m3)	ΔVol. (m3)	ΔTime (min)	ΔP (mm Hg)	ΔH (in H2O)
1	1	2	1	1.3890	3.2	2.00
2	3	4	1	0.9760	6.4	4.00
3	5	6	1	0.8740	7.9	5.00
4	7	8	1	0.8320	8.8	5.50
5	9	10	1	0.6870	12.7	8.00

Data Tabulation					
Vstd (m3)	Qstd (x-axis)	$\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}$ (y-axis)	Va	Qa (x-axis)	$\sqrt{\Delta H\left(Ta/Pa\right)}$ (y-axis)
0.9799	0.7055	1.4029	0.9957	0.7168	0.8927
0.9756	0.9996	1.9841	0.9914	1.0157	1.2624
0.9736	1.1140	2.2183	0.9893	1.1320	1.4114
0.9724	1.1688	2.3265	0.9881	1.1876	1.4803
0.9673	1.4079	2.8059	0.9828	1.4306	1.7853
QSTD	**m=**	**1.99838**	**QA**	**m=**	**1.25135**
	b=	**-0.00903**		**b=**	**-0.00574**
	r=	**0.99999**		**r=**	**0.99999**

Calculations			
Vstd=	ΔVol((Pa-ΔP)/Pstd)(Tstd/Ta)	**Va=**	ΔVol((Pa-ΔP)/Pa)
Qstd=	Vstd/ΔTime	**Qa=**	Va/ΔTime
For subsequent flow rate calculations:			
Qstd= $1/m\left(\left(\sqrt{\Delta H\left(\frac{Pa}{Pstd}\right)\left(\frac{Tstd}{Ta}\right)}\right)-b\right)$		**Qa=** $1/m\left(\left(\sqrt{\Delta H\left(Ta/Pa\right)}\right)-b\right)$	

Standard Conditions	
Tstd:	298.15 °K
Pstd:	760 mm Hg
Key	
ΔH: calibrator manometer reading (in H2O)	
ΔP: rootsmeter manometer reading (mm Hg)	
Ta: actual absolute temperature (°K)	
Pa: actual barometric pressure (mm Hg)	
b: intercept	
m: slope	

RECALIBRATION

US EPA recommends annual recalibration per 1998 40 Code of Federal Regulations Part 50 to 51, Appendix B to Part 50, Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere, 9.2.17, page 30

Tisch Environmental, Inc.
145 South Miami Avenue
Village of Cleves, OH 45002

www.tisch-env.com
TOLL FREE: (877)263-7610
FAX: (513)467-9009

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

Certificate of Calibration
校正證書

Certificate No. : C221362
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC22-0258) Date of Receipt / 收件日期 : 14 February 2022

Description / 儀器名稱	:	Sound Calibrator (EQ089)
Manufacturer / 製造商	:	Rion
Model No. / 型號	:	NC-75
Serial No. / 編號	:	34680623
Supplied By / 委託者	:	Action-United Environmental Services and Consulting Unit A, 20/F., Gold King Industrial Building, 35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 12 March 2022

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Fluke Everett Service Center, USA
- Agilent Technologies / Keysight Technologies

Tested By 測試 : K C Lee, Engineer

Certified By 核證 : H C Chan, Engineer

Date of Issue 簽發日期 : 16 March 2022

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

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c/o 4/F, 1 Hing On Lane, Tuen Mun, New Territories, Hong Kong
輝創工程有限公司 - 校正及檢測實驗所
c/o 香港新界屯門興安里一號四樓
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輝創工程有限公司
Sun Creation Engineering Limited
Calibration & Testing Laboratory

Certificate of Calibration
校正證書

Certificate No. : C221362
證書編號

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

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

3. Test equipment :

Equipment ID	Description	Certificate No.
CL130	Universal Counter	C213954
CL281	Multifunction Acoustic Calibrator	AV210017
TST150A	Measuring Amplifier	C201309

4. Test procedure : MA100N.

5. Results :

5.1 Sound Level Accuracy

UUT Nominal Value	Measured Value (dB)	Mfr's Spec. (dB)	Uncertainty of Measured Value (dB)
94 dB, 1 kHz	94.0	± 0.25	± 0.2

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	Mfr's Spec.	Uncertainty of Measured Value (Hz)
1	1.000 0	1 kHz ± 0.1 %	± 0.1

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

Note :
Only the original copy or the laboratory's certified true copy is valid.

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

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
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Certificate of Calibration
校正證書

Certificate No. : C221363
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC22-0258) Date of Receipt / 收件日期 : 14 February 2022

Description / 儀器名稱 : Sound Level Meter (EQ067)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-31
Serial No. / 編號 : 00410221
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 12 March 2022

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Fluke Everett Service Center, USA
- Agilent Technologies / Keysight Technologies

Tested By 測試 : K C Lee
Engineer

Certified By 核證 : H C Chan
Engineer

Date of Issue 簽發日期 : 16 March 2022

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
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Certificate of Calibration
校正證書

Certificate No. : C221363
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

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

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C220381
CL281	Multifunction Acoustic Calibrator	AV210017

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L_A	A	Fast	94.00	1	93.8	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 120	L_A	A	Fast	94.00	1	93.8 (Ref.)
				104.00		103.8
				114.00		113.7

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

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 120	L_A	A	Fast	94.00	1	93.8	Ref.
			Slow			93.7	± 0.3

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Certificate No. : C221363
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6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L_A	A	Fast	94.00	63 Hz	67.5	-26.2 ± 1.5
					125 Hz	77.6	-16.1 ± 1.5
					250 Hz	85.1	-8.6 ± 1.4
					500 Hz	90.5	-3.2 ± 1.4
					1 kHz	93.8	Ref.
					2 kHz	95.0	+1.2 ± 1.6
					4 kHz	94.9	+1.0 ± 1.6
					8 kHz	92.7	-1.1 (+2.1 ; -3.1)
					16 kHz	87.4	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Mode	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 120	L_C	C	Fast	94.00	63 Hz	92.8	-0.8 ± 1.5
					125 Hz	93.5	-0.2 ± 1.5
					250 Hz	93.7	0.0 ± 1.4
					500 Hz	93.8	0.0 ± 1.4
					1 kHz	93.7	Ref.
					2 kHz	93.6	-0.2 ± 1.6
					4 kHz	93.1	-0.8 ± 1.6
					8 kHz	90.8	-3.0 (+2.1 ; -3.1)
					16 kHz	85.4	-8.5 (+3.5 ; -17.0)

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Certificate of Calibration
校正證書

Certificate No. : C221363
證書編號

Remarks : - UUT Microphone Model No. : UC-53A & S/N : 322551

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value :

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

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

Note :
Only the original copy or the laboratory's certified true copy is valid.

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Certificate of Calibration
校正證書

Certificate No. : C221365
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC22-0258) Date of Receipt / 收件日期 : 14 February 2022

Description / 儀器名稱 : Sound Level Meter (EQ018)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-52
Serial No. / 編號 : 00809405
Supplied By / 委託者 : Action-United Environmental Services and Consulting
Unit A, 20/F., Gold King Industrial Building,
35-41 Tai Lin Pai Road, Kwai Chung, N.T.

TEST CONDITIONS / 測試條件

Temperature / 溫度 : (23 ± 2)°C Relative Humidity / 相對濕度 : (50 ± 25)%
Line Voltage / 電壓 : ---

TEST SPECIFICATIONS / 測試規範

Calibration check

DATE OF TEST / 測試日期 : 12 March 2022

TEST RESULTS / 測試結果

The results apply to the particular unit-under-test only.
The results do not exceed manufacturer's specification.
The results are detailed in the subsequent page(s).

The test equipment used for calibration are traceable to National Standards via :
- The Government of The Hong Kong Special Administrative Region Standard & Calibration Laboratory
- Fluke Everett Service Center, USA
- Agilent Technologies / Keysight Technologies

Tested By 測試 : K C Lee, Engineer

Certified By 核證 : H C Chan, Engineer

Date of Issue 簽發日期 : 16 March 2022

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Sun Creation Engineering Limited – Calibration & Testing Laboratory
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輝創工程有限公司 - 校正及檢測實驗所
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Certificate of Calibration
校正證書

Certificate No. : C221365
證書編號

1. The unit-under-test (UUT) was allowed to stabilize in the laboratory for over 12 hours, and switched on to warm up for over 10 minutes before the commencement of the test.

2. Self-calibration was performed before the test.

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

4. Test equipment :

Equipment ID	Description	Certificate No.
CL280	40 MHz Arbitrary Waveform Generator	C220381
CL281	Multifunction Acoustic Calibrator	AV210017

5. Test procedure : MA101N.

6. Results :

6.1 Sound Pressure Level

6.1.1 Reference Sound Pressure Level

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	94.0	± 1.1

6.1.2 Linearity

UUT Setting				Applied Value		UUT Reading (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)	
30 - 130	L_A	A	Fast	94.00	1	94.0 (Ref.)
				104.00		104.0
				114.00		114.0

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

6.2 Time Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq. (kHz)		
30 - 130	L_A	A	Fast	94.00	1	94.0	Ref.
			Slow			94.0	± 0.3

The test equipment used for calibration is traceable to the National Standards as specified in this certificate. This certificate shall not be reproduced except in full, without the prior written approval of this laboratory.
本證書所載校正用之測試器材均可溯源至國際標準。局部複印本證書需先獲本實驗所書面批准。

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6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_A	A	Fast	94.00	63 Hz	67.8	-26.2 ± 1.5
					125 Hz	77.9	-16.1 ± 1.5
					250 Hz	85.4	-8.6 ± 1.4
					500 Hz	90.8	-3.2 ± 1.4
					1 kHz	94.0	Ref.
					2 kHz	95.0	+1.2 ± 1.6
					4 kHz	94.7	+1.0 ± 1.6
					8 kHz	92.9	-1.1 (+2.1 ; -3.1)
					16 kHz	85.5	-6.6 (+3.5 ; -17.0)

6.3.2 C-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_C	C	Fast	94.00	63 Hz	93.2	-0.8 ± 1.5
					125 Hz	93.9	-0.2 ± 1.5
					250 Hz	94.0	0.0 ± 1.4
					500 Hz	94.1	0.0 ± 1.4
					1 kHz	94.0	Ref.
					2 kHz	93.6	-0.2 ± 1.6
					4 kHz	92.9	-0.8 ± 1.6
					8 kHz	91.0	-3.0 (+2.1 ; -3.1)
					16 kHz	83.5	-8.5 (+3.5 ; -17.0)

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Remarks : - UUT Microphone Model No. : UC-59 & S/N : 16463

- Mfr's Spec. : IEC 61672 Class 1

- Uncertainties of Applied Value :

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

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

Note :
Only the original copy or the laboratory's certified true copy is valid.

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

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Hong Kong Accreditation Service
香港認可處

Certificate of Accreditation
認可證書

This is to certify that
特此證明

ALS TECHNICHEM (HK) PTY LIMITED

11/F, Chung Shun Knitting Centre, 1-3 Wing Yip Street, Kwai Chung, New Territories, Hong Kong
香港新界葵涌永業街1-3號忠信針織中心11樓

is accredited by the Hong Kong Accreditation Service (HKAS) to ISO/IEC 17025:2017
for performing specific laboratory activities as listed in the scope of accreditation within the test category of
獲香港認可處根據ISO/IEC 17025:2017認可
進行載於認可範圍內下述測試類別中的指定實驗所活動

Environmental Testing
環境測試

This accreditation to ISO/IEC 17025:2017 demonstrates technical competence for a defined scope and the implementation of a management system relevant to laboratory operation (see joint IAF-ILAC-ISO Communiqué).
此項 ISO/IEC 17025:2017 的認可資格證明此實驗所具備指定範疇內所須的技術能力並實施一套與實驗所運作相關的管理體系(見國際認可論壇、國際實驗所認可合作組織及國際標準化組織的聯合公報)。

The common seal of HKAS is affixed hereto by the authority of the HKAS Executive
現經香港認可處執行機關授權在此蓋上香港認可處的印章

SHUM Wai-leung, Executive Administrator
執行幹事 沈偉良
Issue Date : 28 February 2020
簽發日期：二零二零年二月二十八日

Registration Number : HOKLAS 066
註冊號碼：

Date of First Registration : 15 September 1995
首次註冊日期：一九九五年九月十五日

This certificate is issued subject to the terms and conditions laid down by HKAS
本證書按照香港認可處訂立的條款及條件發出

L001934

Appendix F

Event and Action Plan

Event / Action Plan for construction dust

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
Action Level exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC, ER and Contractor; 3. Repeat measurement to confirm finding; and 4. Increase monitoring frequency to daily.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; and 3. Review and advise the ET and ER on the effectiveness of the proposed remedial measures.	1. Notify Contractor.	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Rectify any unacceptable practice and implement remedial measures; and 3. Amend working methods agreed with ER if appropriate.
Action Level exceedance for two or more consecutive samples	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform IEC, ER and Contractor; 3. Advise the ER and Contractor on the effectiveness of the proposed remedial measures; 4. Repeat measurements to confirm findings; 5. Increase monitoring frequency to daily; 6. Discuss with IEC, ER and Contractor on remedial actions required; 7. If exceedance continues, arrange meeting with IEC and ER; and 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET and Contractor on possible remedial measures; 4. Advise the ET and ER on the effectiveness of the proposed remedial measures; and 5. Supervise Implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented.	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 3. Implement the agreed proposals; and 4. Amend proposal if appropriate.
Limit Level exceedance for one sample	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Inform ER, Contractor, IEC and EPD; 3. Repeat measurement to confirm finding; 4. Increase monitoring frequency to daily; and 5. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss with ET, ER and Contractor on possible remedial measures; 4. Advise the ER and ET on the effectiveness of the proposed remedial measures; and 5. Supervise implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; and 3. Supervise and ensure remedial measures properly implemented.	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 4. Implement the agreed proposals; and 5. Amend proposal if appropriate.
Limit Level exceedance for two or more consecutive samples	1. Notify IEC, ER, Contractor and EPD; 2. Identify source; 3. Repeat measurement to confirm findings; 4. Increase monitoring frequency to daily; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Arrange meeting with IEC, Contractor and ER to discuss the remedial actions to be taken; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and 8. If exceedance stops, cease additional monitoring.	1. Check monitoring data submitted by ET; 2. Check Contractor's working method; 3. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 4. Review Contractor's remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and 5. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. In consultation with the ET and IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise and ensure remedial measures properly implemented; and 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Identify source, investigate the causes of exceedance and propose remedial measures; 2. Take immediate action to avoid further exceedance; 3. Submit proposals for remedial actions to ER with a copy to ET and IEC within 3 working days of notification; 4. Implement the agreed proposals; 5. Resubmit proposals if problem still not under control; and 6. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Event and Action Plan for Construction Noise

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
Action Level Exceedance	1. Notify IEC, ER 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; and 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the analysed results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; and 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; and 4. Ensure remedial measures are properly implemented.	1. Submit noise mitigation proposals to IEC and ER; and 2. Implement noise mitigation proposals.
Limit Level Exceedance	1. Identify source; 2. Inform IEC, ER, EPD and Contractor; 3. Repeat measurements to confirm findings; 4. Increase monitoring frequency; 5. Carry out analysis of Contractor's working procedures to determine possible mitigation to be implemented; 6. Inform IEC, ER and EPD the causes and actions taken for the exceedances; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; and 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET, and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly; and 3. Supervise the implementation of remedial measures.	1. Confirm receipt of notification of failure in writing; 2. Notify Contractor; 3. Require Contractor to propose remedial measures for the analysed noise problem; 4. Ensure remedial measures properly implemented; and 5. If exceedance continues, consider what portion of the work is responsible and instruct the Contractor to stop that portion of work until the exceedance is abated.	1. Take immediate action to avoid further exceedance; 2. Submit proposals for remedial actions to IEC within 3 working days of notification; 3. Implement the agreed proposals; 4. Resubmit proposals if problem still not under control; and 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix G

Impact Monitoring Schedule

Impact Monitoring Schedule for the Reporting Period

DATE		NOISE MONITORING (0700 – 1900)	AIR QUALITY MONITORING	
			1-HOUR TSP	24-HOUR TSP
Sat	1-Oct-22			
Sun	2-Oct-22			
Mon	3-Oct-22			✓
Tue	4-Oct-22			
Wed	5-Oct-22	✓	✓	
Thu	6-Oct-22			
Fri	7-Oct-22			
Sat	8-Oct-22			✓
Sun	9-Oct-22			
Mon	10-Oct-22			
Tue	11-Oct-22	✓	✓	
Wed	12-Oct-22			
Thu	13-Oct-22			
Fri	14-Oct-22			✓
Sat	15-Oct-22			
Sun	16-Oct-22			
Mon	17-Oct-22	✓	✓	
Tue	18-Oct-22			
Wed	19-Oct-22			
Thu	20-Oct-22			✓
Fri	21-Oct-22			
Sat	22-Oct-22		✓	
Sun	23-Oct-22			
Mon	24-Oct-22			
Tue	25-Oct-22			
Wed	26-Oct-22			✓
Thu	27-Oct-22			
Fri	28-Oct-22	✓	✓	
Sat	29-Oct-22			
Sun	30-Oct-22			
Mon	31-Oct-22			

✓	Monitoring Day
	Sunday or Public Holiday

Impact Monitoring Schedule for next Reporting Period

DATE		NOISE MONITORING (0700 – 1900)	AIR QUALITY MONITORING	
			1-HOUR TSP	24-HOUR TSP
Tue	1-Nov-22			✓
Wed	2-Nov-22			
Thu	3-Nov-22	✓	✓	
Fri	4-Nov-22			
Sat	5-Nov-22			
Sun	6-Nov-22			
Mon	7-Nov-22			✓
Tue	8-Nov-22			
Wed	9-Nov-22	✓	✓	
Thu	10-Nov-22			
Fri	11-Nov-22			
Sat	12-Nov-22			✓
Sun	13-Nov-22			
Mon	14-Nov-22			
Tue	15-Nov-22	✓	✓	
Wed	16-Nov-22			
Thu	17-Nov-22			
Fri	18-Nov-22			✓
Sat	19-Nov-22			
Sun	20-Nov-22			
Mon	21-Nov-22	✓	✓	
Tue	22-Nov-22			
Wed	23-Nov-22			
Thu	24-Nov-22			✓
Fri	25-Nov-22			
Sat	26-Nov-22		✓	
Sun	27-Nov-22			
Mon	28-Nov-22			
Tue	29-Nov-22			
Wed	30-Nov-22			✓

✓	Monitoring Day
	Sunday or Public Holiday

Appendix H

Database of Monitoring Result

24-HOUR TSP MONITORING RESULT DATABASE

24-hour TSP Monitoring Data for AMS1a

DATE	SAMPLE NUMBER	ELAPSED TIME			CHART READING			AVG TEMP	AVG AIR PRESS	STANDARD FLOW RATE	AIR VOLUME	FILTER WEIGHT (g)		DUST WEIGHT COLLECTED	24-hr TSP
		INITIAL	FINAL	(min)	MIN	MAX	AVG	(℃)	(hPa)	(m^3/min)	(std m^3)	INITIAL	FINAL	(g)	(μg/m^3)
3-Oct-22	28802	25273.87	25297.87	1440	40	41	40.5	29.4	1013.5	1.50	2167	2.6167	2.6678	0.0511	24
8-Oct-22	28660	25297.87	25321.87	1440	40	41	40.5	27.7	1015.4	1.51	2173	2.696	2.7429	0.0469	22
14-Oct-22	28627	25321.87	25345.87	1440	40	41	40.5	26.9	1012.1	1.51	2172	2.7405	2.8122	0.0717	33
20-Oct-22	28760	25345.87	25369.87	1440	40	41	40.5	24.3	1017.5	1.52	2183	2.6388	2.702	0.0632	29
26-Oct-22	28790	25369.87	25393.87	1440	40	41	40.5	23.9	1017.2	1.52	2184	2.666	2.7373	0.0713	33

24-hour TSP Monitoring Data for AMS-5

DATE	SAMPLE NUMBER	ELAPSED TIME			CHART READING			AVG TEMP	AVG AIR PRESS	STANDARD FLOW RATE	AIR VOLUME	FILTER WEIGHT (g)		DUST WEIGHT COLLECTED	24-hr TSP
		INITIAL	FINAL	(min)	MIN	MAX	AVG	(℃)	(hPa)	(m^3/min)	(std m^3)	INITIAL	FINAL	(g)	(μg/m^3)
3-Oct-22	28557	12825.84	12849.84	1440.00	38	39	38.5	29.4	1013.5	1.40	2012	2.7164	2.7582	0.0418	21
8-Oct-22	28584	12849.84	12873.84	1440.00	38	39	38.5	27.7	1015.4	1.40	2017	2.7472	2.8166	0.0694	34
14-Oct-22	28628	12873.84	12897.84	1440.00	38	39	38.5	26.9	1012.1	1.40	2017	2.7427	2.8605	0.1178	58
20-Oct-22	28824	12897.84	12921.84	1440.00	38	39	38.5	24.3	1017.5	1.41	2026	2.7654	2.8855	0.1201	59
26-Oct-22	28787	12921.84	12945.84	1440.00	38	39	38.5	23.9	1017.2	1.41	2027	2.6441	2.7456	0.1015	50

24-hour TSP Monitoring Data for AMS-6

DATE	SAMPLE NUMBER	ELAPSED TIME			CHART READING			AVG TEMP	AVG AIR PRESS	STANDARD FLOW RATE	AIR VOLUME	FILTER WEIGHT (g)		DUST WEIGHT COLLECTED	24-hr TSP
		INITIAL	FINAL	(min)	MIN	MAX	AVG	(℃)	(hPa)	(m^3/min)	(std m^3)	INITIAL	FINAL	(g)	(μg/m^3)
3-Oct-22	28570	18148.69	18172.69	1440.00	40	41	40.5	29.4	1013.5	1.47	2123	2.7333	2.7712	0.0379	18
8-Oct-22	28519	18172.69	18196.69	1440.00	40	41	40.5	27.7	1015.4	1.48	2128	2.6253	2.6955	0.0702	33
14-Oct-22	28820	18196.69	18220.69	1440.00	40	41	40.5	26.9	1012.1	1.48	2128	2.7797	2.9004	0.1207	57
20-Oct-22	28825	18220.69	18244.69	1440.00	40	41	40.5	24.3	1017.5	1.48	2138	2.7766	2.8394	0.0628	29
26-Oct-22	28788	18244.69	18268.69	1440.00	40	41	40.5	23.9	1017.2	1.48	2138	2.6631	2.7537	0.0906	42

24-hour TSP Monitoring Data for AMS-7

DATE	SAMPLE NUMBER	ELAPSED TIME			CHART READING			AVG TEMP	AVG AIR PRESS	STANDARD FLOW RATE	AIR VOLUME	FILTER WEIGHT (g)		DUST WEIGHT COLLECTED	24-hr TSP
		INITIAL	FINAL	(min)	MIN	MAX	AVG	(℃)	(hPa)	(m^3/min)	(std m^3)	INITIAL	FINAL	(g)	(μg/m^3)
3-Oct-22	28801	13002.73	13026.73	1440.00	40	41	40.5	29.4	1013.5	1.46	2102	2.6105	2.6642	0.0537	26
8-Oct-22	28520	13026.73	13050.73	1440.00	40	41	40.5	27.7	1015.4	1.46	2107	2.6583	2.6995	0.0412	20
14-Oct-22	28630	13050.73	13074.73	1440.00	40	41	40.5	26.9	1012.1	1.46	2107	2.73	2.8139	0.0802	38
20-Oct-22	28821	13074.73	13098.73	1440.00	40	41	40.5	24.3	1017.5	1.47	2116	2.7774	2.8651	0.0877	41
26-Oct-22	28789	13098.73	13122.73	1440.00	40	41	40.5	23.9	1017.2	1.47	2117	2.6638	2.7437	0.0799	38

NOISE MONITORING RESULT DATABASE FOR CONTRACT 1

Noise Measurement Results (dB) of NMS2

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30 min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	10:59	63.6	65	58	63.3	65	57	65.8	68	60	62.9	65	58	63.6	65.5	58.5	61.9	63.5	55	64	70
11-Oct-22	11:16	64.8	65	56	64.7	65.5	56	63.8	65	55.5	62.6	65	55	60.3	63	55	63.2	64.5	53	63	70
17-Oct-22	11:13	60.8	63.5	55	62.6	64	55	63.2	65	56	63.8	65	56	62.2	63.5	56	60.1	63	55	62	70
28-Oct-22	10:11	62.3	64.4	57.4	63	64.9	57.9	61.3	62.9	54.4	63	64.4	57.4	62.7	64.4	56.4	65.2	67.4	59.4	63	70

Noise Measurement Results (dB) of NMS3

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	14:32	62.6	65.0	58.0	61.4	63.5	57.5	63.2	65.5	68.0	63.3	65.0	58.0	62.2	63.5	57.5	60.8	65.0	56.5	62	75
11-Oct-22	14:43	60.8	63.0	56.0	62.7	63.5	56.0	61.3	63.0	55.0	62.2	63.5	55.0	62.6	63.5	56.0	61.8	63.0	55.5	62	75
17-Oct-22	14:55	63.2	65.0	56.0	62.6	65.0	55.5	63.4	65.0	56.0	60.6	63.0	56.0	63.3	65.0	56.0	62.8	65.0	55.5	63	75
28-Oct-22	13:02	59.1	61.5	54.5	61.8	63.5	54.5	61.3	63.5	54.0	61.7	63.5	54.5	61.1	63.5	54.0	61.9	63.5	54.5	61	75

Noise Measurement Results (dB) of NMS4a

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	9:02	71.6	73	68	69.2	72.5	66.5	70.1	73	66	68.8	73	66	71.5	73	66	69.4	72.5	65.5	70	75
11-Oct-22	9:13	70.8	73	68	69.9	72.5	66.5	68.6	72.5	65	67.6	72	65	68.2	73	65.5	67.3	71.5	65	69	75
17-Oct-22	9:11	69.6	73	66	70.8	73	66	68.3	72	65	68.6	72	65	67.7	71	63	59.9	72	63	68	75
28-Oct-22	11:29	66.1	67.3	64.4	66.1	67.1	64.6	67.3	69.3	64.3	65.2	66.6	63.7	65.4	66.7	63.8	65.7	67.1	64.1	66	75

Noise Measurement Results (dB) of NMS5

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	10:18	70.6	72.5	65	71.2	72.5	65.5	70.8	72	65	69.2	71	63	72.2	73	66	71.5	72	65	71	75
11-Oct-22	10:20	69.2	72	66	70.1	72	66.5	72.7	73	66.5	68.6	71	65	70.2	71	65	68.3	70.5	65	70	75
17-Oct-22	10:24	70.4	72	65	68.6	72	65	72.2	73	65.5	71.1	73	66	70.6	72	65	68.4	71.5	63	70	75
28-Oct-22	10:53	65.3	68.8	59.8	67.5	72.5	61.8	67.3	69.4	62.9	67.5	72.5	62.9	67.3	70.4	60.7	68.9	72	61.9	67	75

Noise Measurement Results (dB) of NMS6

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	15:11	67.2	68.5	63	68.1	69	65	66.3	68	65	65.8	68.5	63.5	67.1	70	65.5	68.8	70	65	67	75
11-Oct-22	15:21	68.2	70	65	66.4	70	63	67.1	69	63	65.8	69	63	68.3	70	63.5	66.2	68.5	63	67	75
17-Oct-22	15:34	65.6	68.5	62	66.2	69	65	67.1	71	65	69.2	71	65	66.8	70	63.5	65.7	68	63	67	75
28-Oct-22	13:47	65.7	67.9	62.9	67.2	68.9	62.4	65.1	67.4	61.9	67.1	68.9	63.9	65.3	68.9	61.9	67	68.9	63.9	66	75

Noise Measurement Results (dB) of NMS7

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	15:56	68.3	70	65	67.2	69	66	68.8	70	65.5	65.9	68	63	66.4	70	63	65.7	68	62.5	67	75
11-Oct-22	16:02	66.8	70.5	63.5	67.2	70	63	68.6	70.5	63	65.6	69	63	67.7	70	63.5	65.8	68.5	62.5	67	75
17-Oct-22	16:18	66.6	71.5	63.5	68.2	71.5	65	69.4	72	65	65.8	68.5	63	68.3	70	63	66.2	68	62	68	75
28-Oct-22	14:31	61.6	66.9	61.4	66.7	68.4	64.4	64.3	66.4	62.4	69.1	70.9	61.9	67.7	70.4	63.9	66.3	70.4	64.9	67	75

Noise Measurement Results (dB) of NMS8

Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Limit Level dB(A)
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)	Leq, dB(A)	L10, dB(A)	L90, dB(A)		
5-Oct-22	13:01	62.8	65.5	58	63.5	66	58.0	65.4	68	62	63.7	65	59	63.8	65	60	63.2	67	62	64	75
11-Oct-22	13:03	63.6	65.5	60	65.2	68	60	62.8	65	58	63.2	66	58	64.1	66	58.5	65.3	65.5	58.5	64	75
17-Oct-22	13:01	62.6	65	58	63.8	66	60	65.7	67	60	63.6	66	60	62.4	65	58	60.7	63	58	63	75
28-Oct-22	15:49	62.8	65.5	57.5	63.3	66.5	57.5	62.7	65	59	62.5	65.5	57	64.3	67	59	59.9	61.5	57	63	75

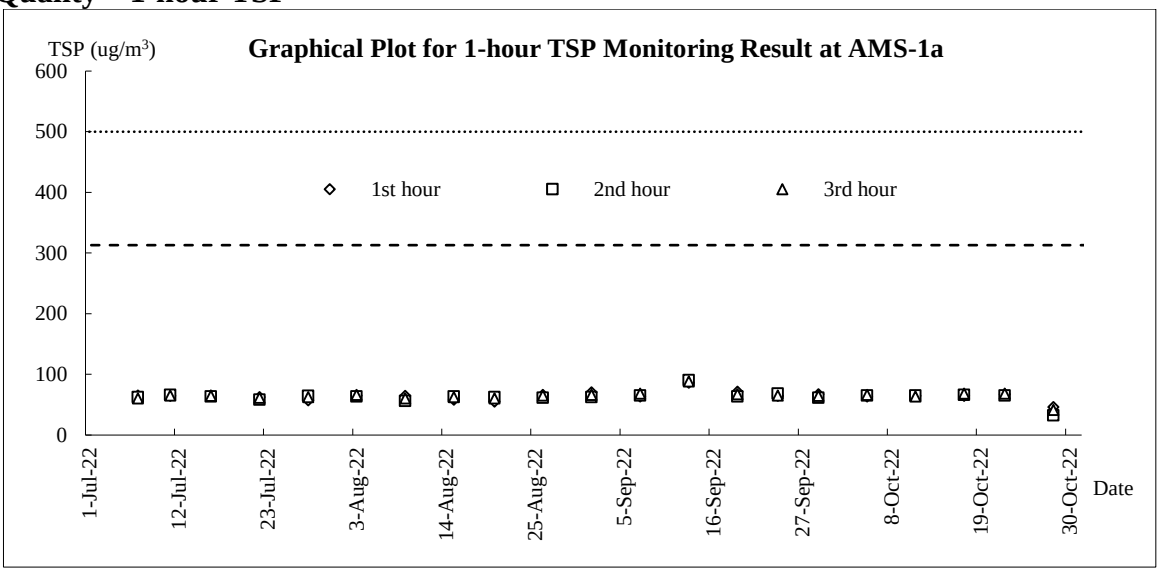
NOISE MONITORING RESULT DATABASE FOR CONTRACT 3

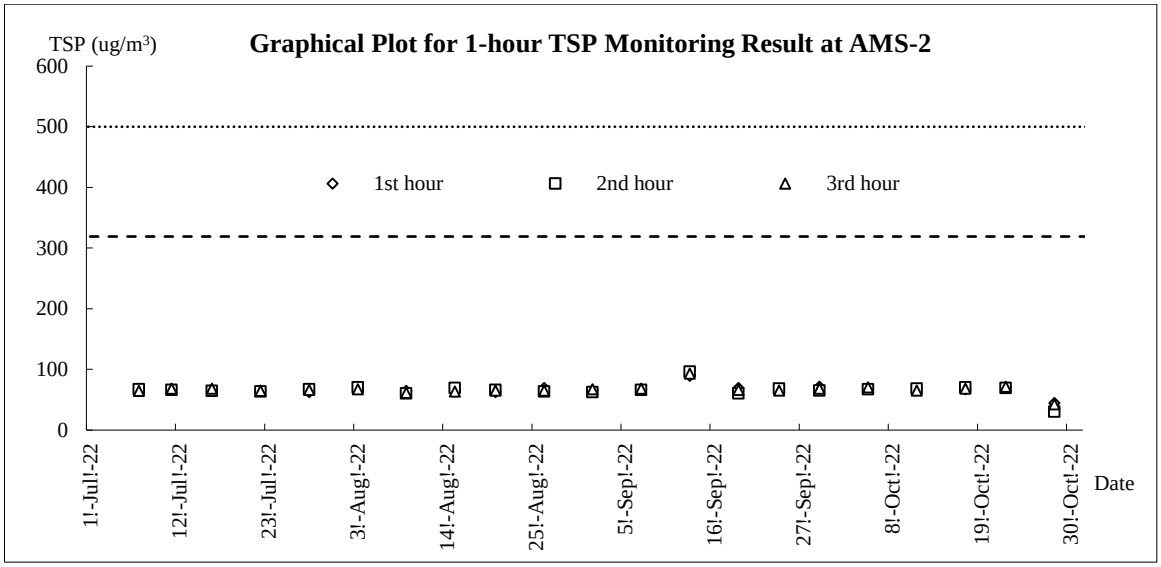
Noise Measurement Results (dB) of CN3																				
Date	**Start Time**	**1st Leq (5min)**			**2nd Leq (5min)**			**3rd Leq (5min)**			**4th Leq (5min)**			**5th Leq (5min)**			**6th Leq (5min)**			**Leq30min, dB(A)**	**Limit Level dB(A)**
		Leq, dB(A)	**L10, dB(A)**	**L90, dB(A)**	**Leq, dB(A)**	**L10, dB(A)**	**L90, dB(A)**	**Leq, dB(A)**	**L10, dB(A)**	**L90, dB(A)**	**Leq, dB(A)**	**L10, dB(A)**	**L90, dB(A)**	**Leq, dB(A)**	**L10, dB(A)**	**L90, dB(A)**	**Leq, dB(A)**	**L10, dB(A)**	**L90, dB(A)**		
5-Oct-22	9:38	65.6	68	60	63.4	65.5	60	63.8	65	60	65.2	65	61	63.7	65	60.5	63.3	65	60	64	75
11-Oct-22	9:52	63.6	66.5	62	65.2	67.5	62.5	65.4	68	63	65.4	67.5	62.5	65.7	67.5	63	66.2	68	63.5	65	75
17-Oct-22	9:44	65.3	67.5	60	65.6	68	60	66.5	68	60.5	65.5	68	61.5	63.8	67	60	65.5	67	60	65	75
28-Oct-22	16:51	66.7	69	64	67.3	69.5	63.5	66.8	68.5	61.5	64.8	66	60.5	66.6	68.5	60.5	67.2	69	63	67	75

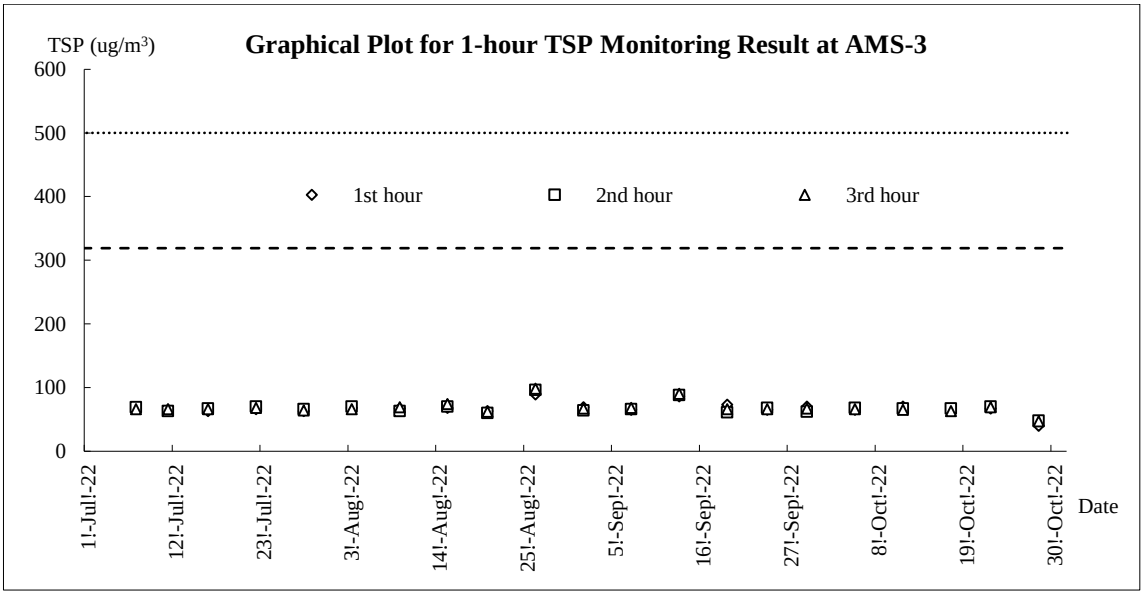
Appendix I

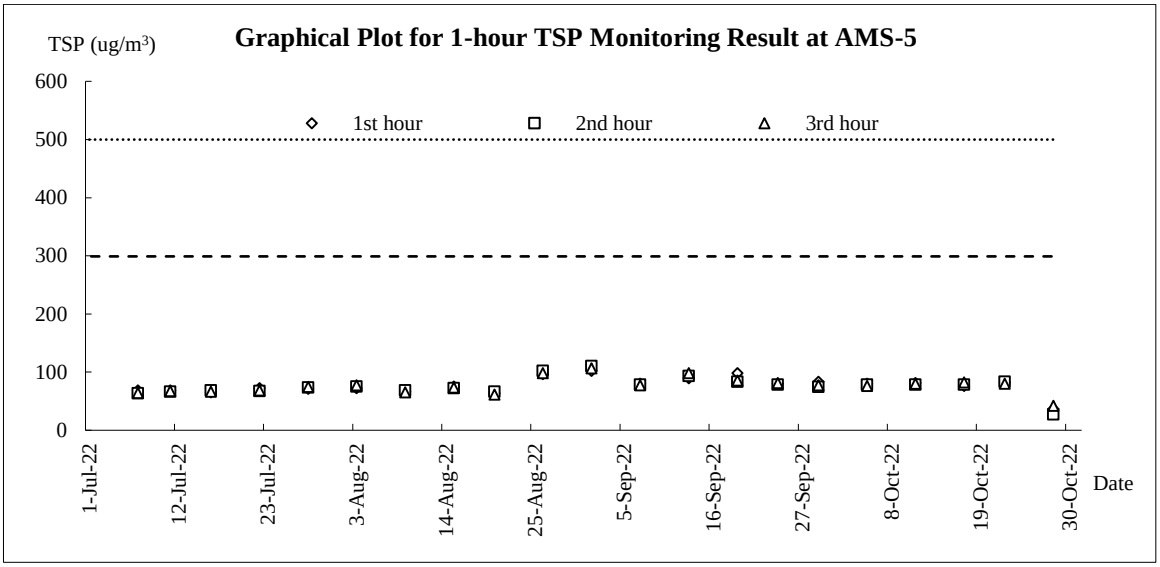
Graphical Plots for Monitoring Result

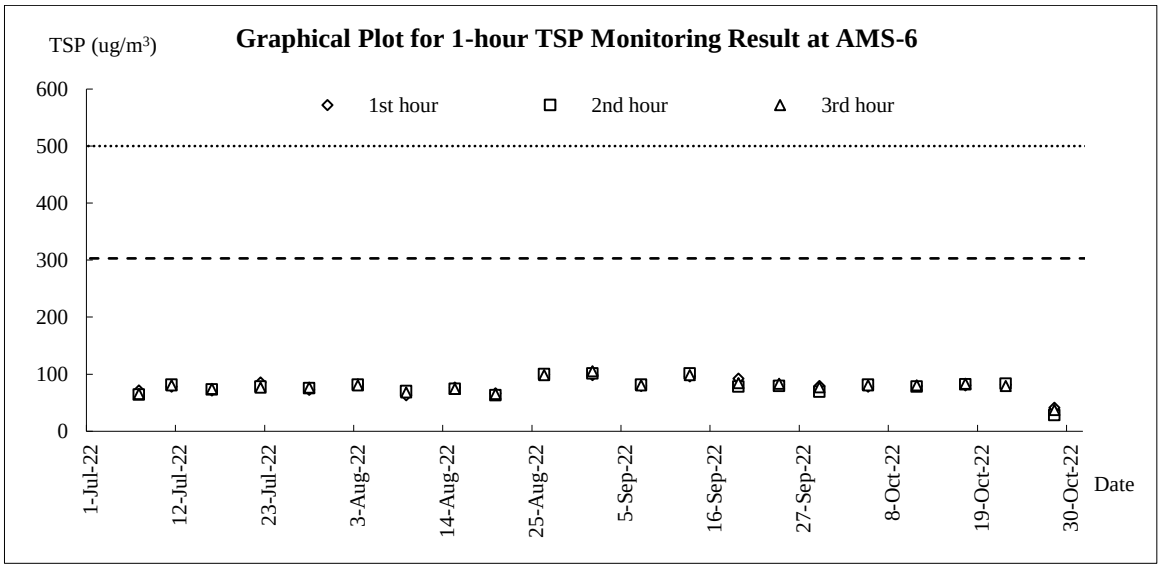
Air Quality – 1-hour TSP

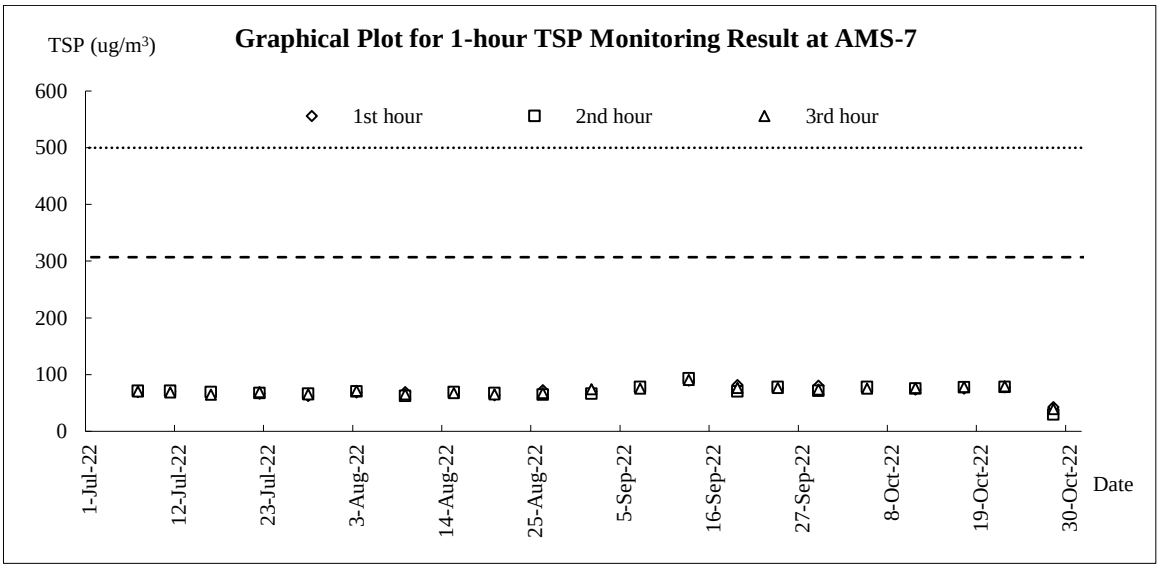




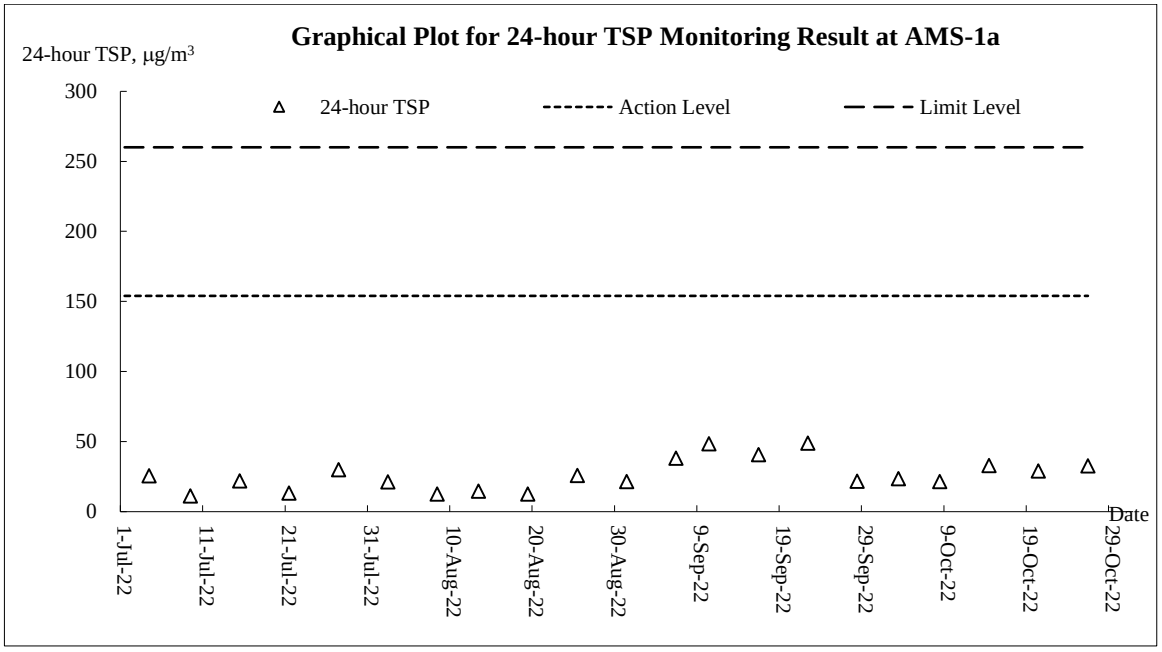


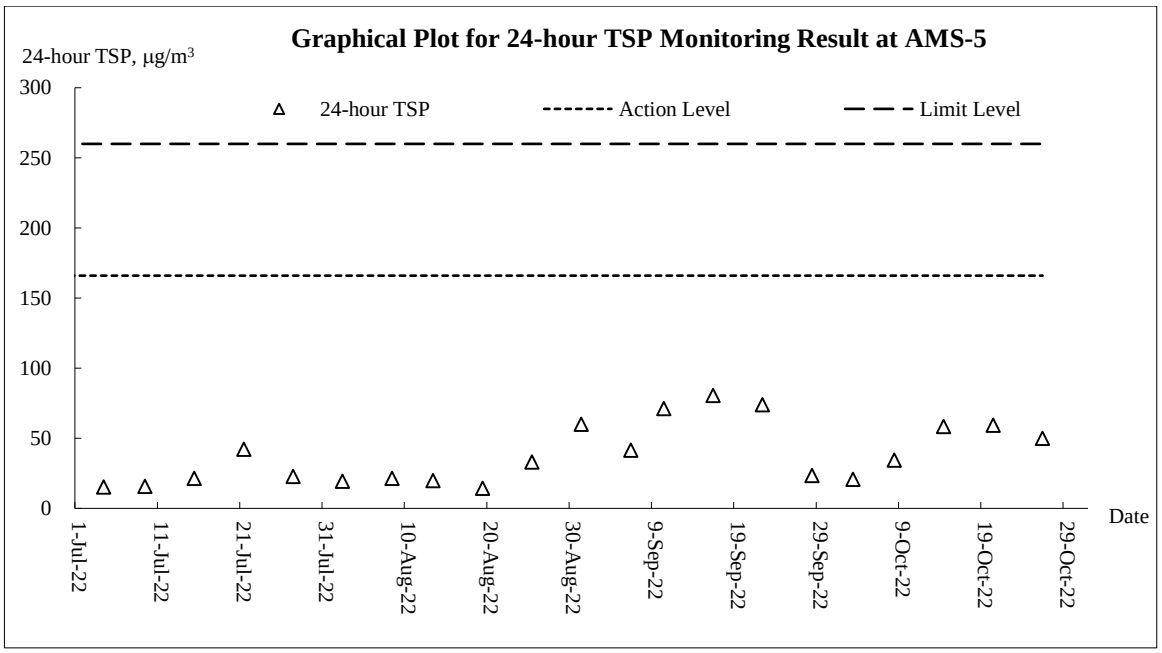

Graphical Plot for 1-hour TSP Monitoring Result at AMS-5
TSP (ug/m3)
1st hour
2nd hour
3rd hour
600
500
400
300
200
100
0
1-Jul-22
12-Jul-22
23-Jul-22
3-Aug-22
14-Aug-22
25-Aug-22
5-Sep-22
16-Sep-22
27-Sep-22
8-Oct-22
19-Oct-22
30-Oct-22
Date

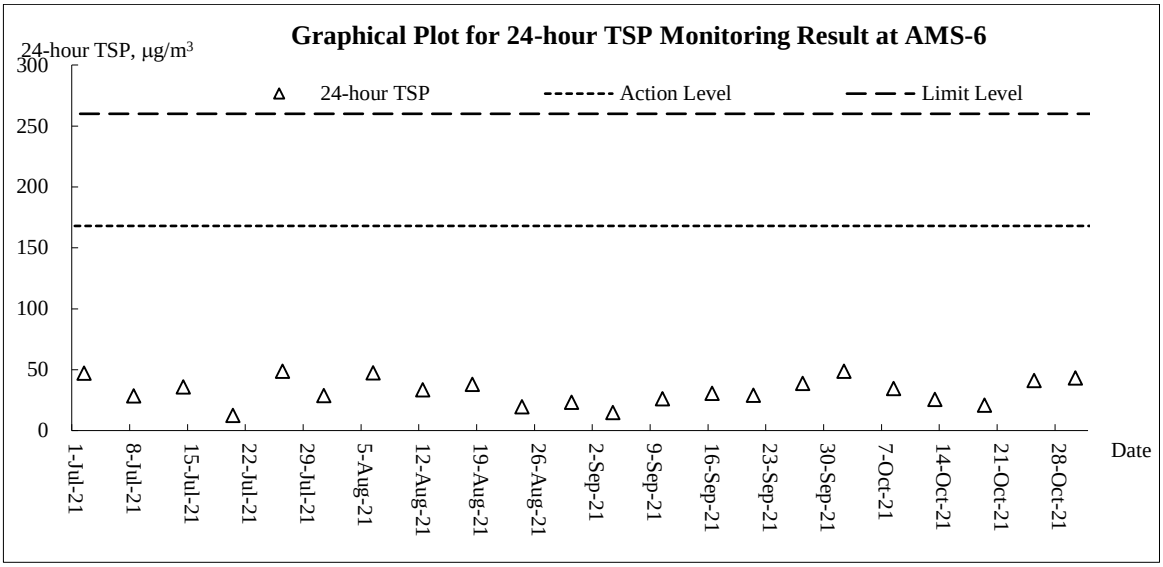

Graphical Plot for 1-hour TSP Monitoring Result at AMS-6
TSP (ug/m3)
1st hour
2nd hour
3rd hour
600
500
400
300
200
100
0
1-Jul-22
12-Jul-22
23-Jul-22
3-Aug-22
14-Aug-22
25-Aug-22
5-Sep-22
16-Sep-22
27-Sep-22
8-Oct-22
19-Oct-22
30-Oct-22
Date

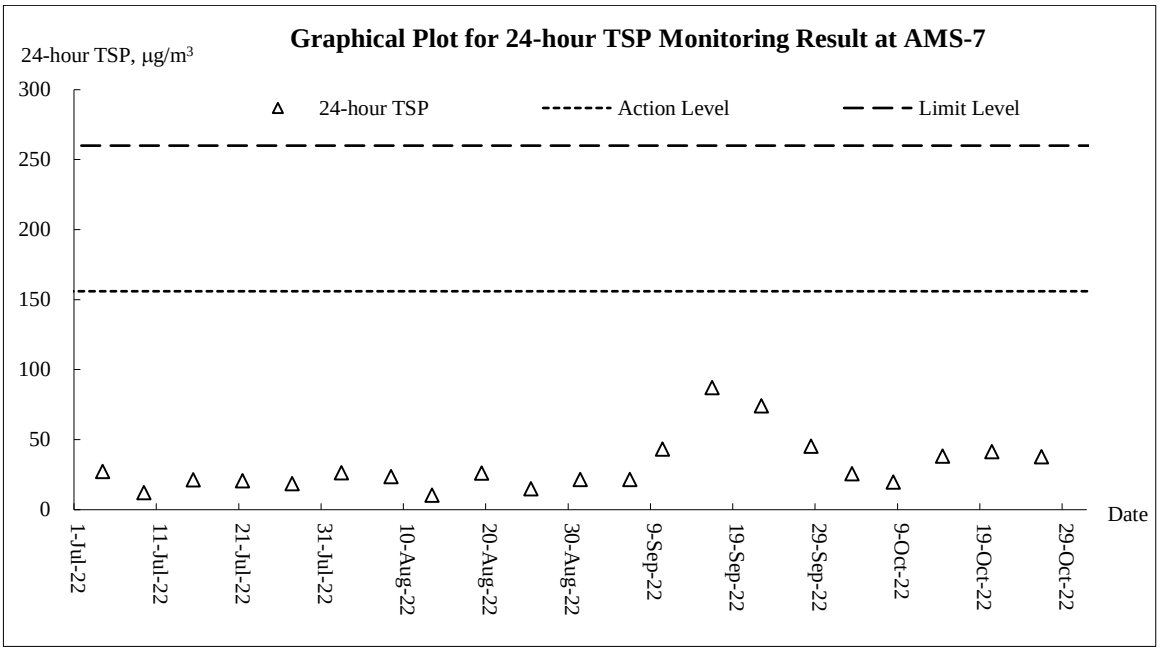

Graphical Plot for 1-hour TSP Monitoring Result at AMS-7
TSP (ug/m3)
1st hour
2nd hour
3rd hour
600
500
400
300
200
100
0
1-Jul-22
12-Jul-22
23-Jul-22
3-Aug-22
14-Aug-22
25-Aug-22
5-Sep-22
16-Sep-22
27-Sep-22
8-Oct-22
19-Oct-22
30-Oct-22
Date

Air Quality – 24-hour TSP

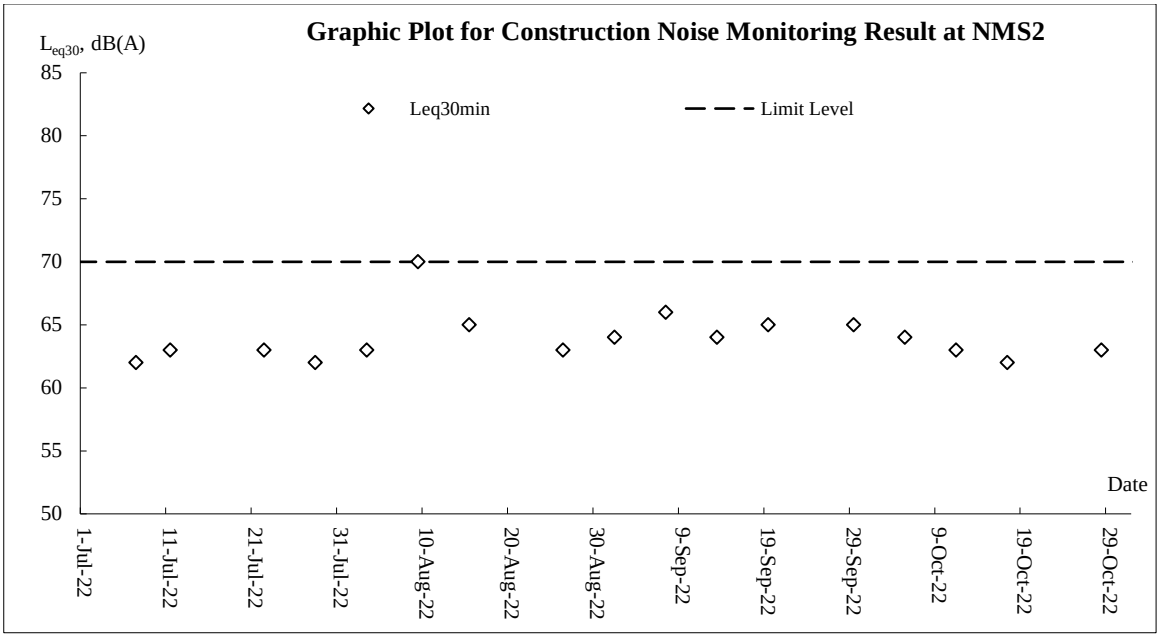





Graphical Plot for 24-hour TSP Monitoring Result at AMS-6
24-hour TSP, μg/m³
24-hour TSP
Action Level
Limit Level
300
250
200
150
100
50
0
1-Jul-21
8-Jul-21
15-Jul-21
22-Jul-21
29-Jul-21
5-Aug-21
12-Aug-21
19-Aug-21
26-Aug-21
2-Sep-21
9-Sep-21
16-Sep-21
23-Sep-21
30-Sep-21
7-Oct-21
14-Oct-21
21-Oct-21
28-Oct-21
Date


Graphical Plot for 24-hour TSP Monitoring Result at AMS-7
24-hour TSP, μg/m³
24-hour TSP
Action Level
Limit Level
300
250
200
150
100
50
0
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
29-Sep-22
9-Oct-22
19-Oct-22
29-Oct-22
Date

Noise


Graphic Plot for Construction Noise Monitoring Result at NMS2
L_{eq30}, dB(A)
Leq30min
Limit Level
85
80
75
70
65
60
55
50
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
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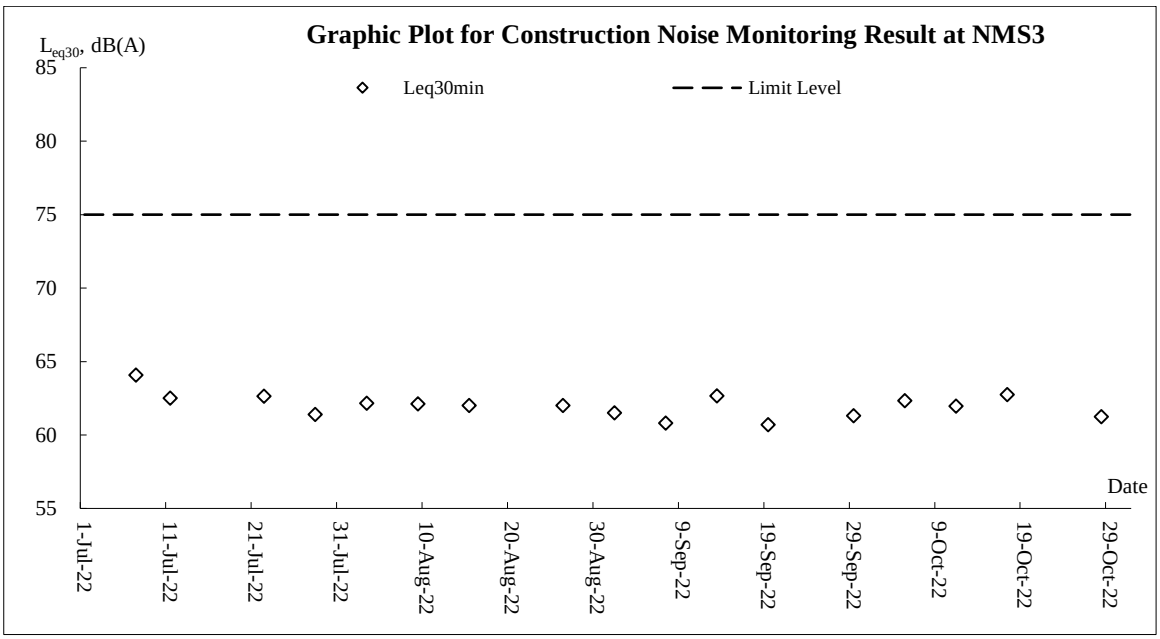
9-Oct-22
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at NMS3
L_{eq30}, dB(A)
Leq30min
Limit Level
85
80
75
70
65
60
55
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
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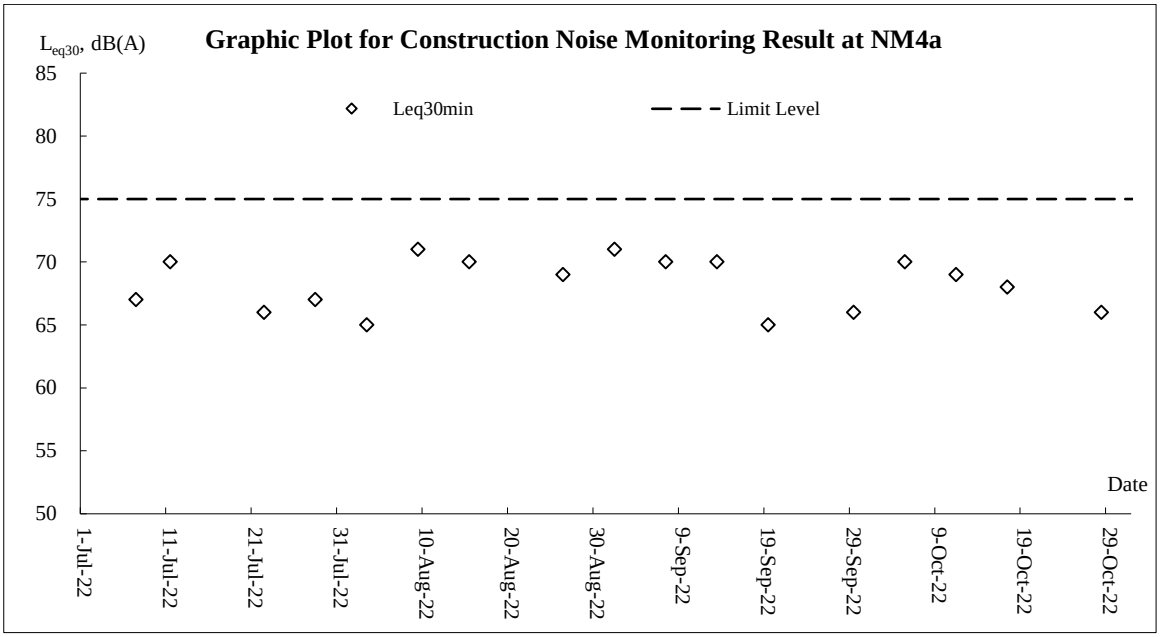
9-Oct-22
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at NM4a
L_{eq30}, dB(A)
Leq30min
Limit Level
85
80
75
70
65
60
55
50
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
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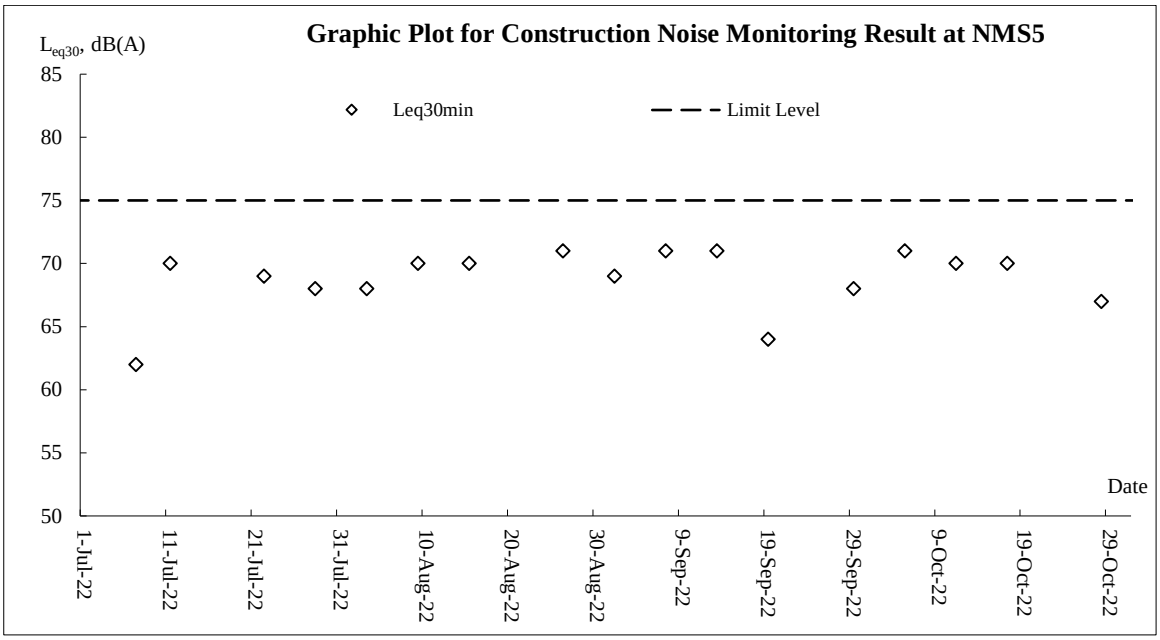
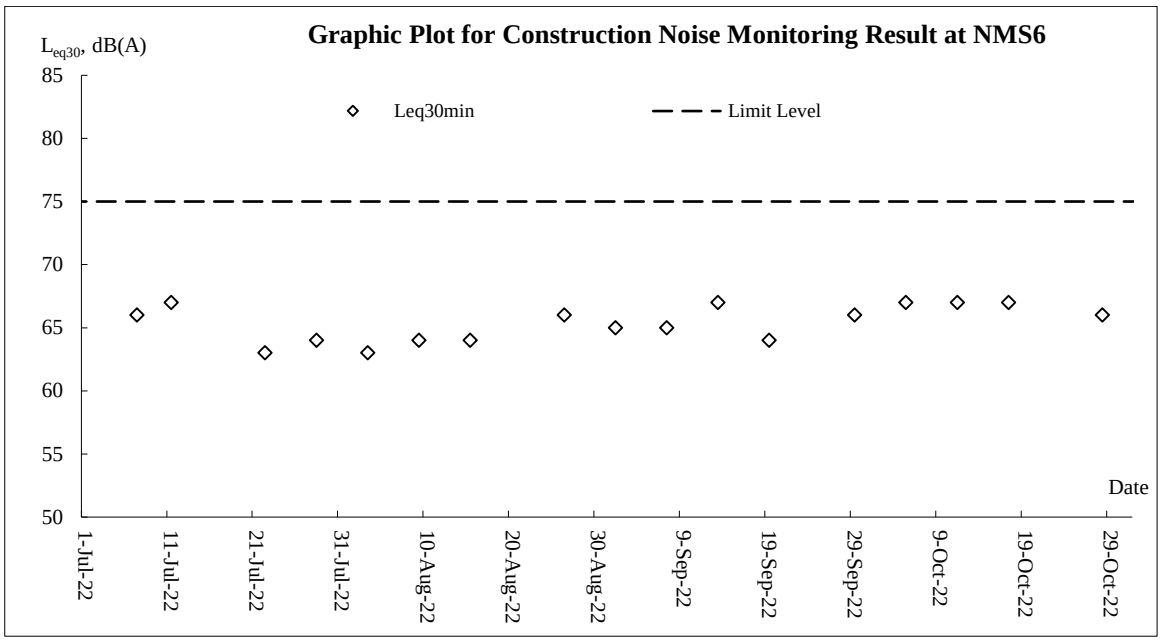
9-Oct-22
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at NMS5
L_{eq30}, dB(A)
Leq30min
Limit Level
85
80
75
70
65
60
55
50
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
29-Sep-22
9-Oct-22
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at NMS6
L_{eq30}, dB(A)
85
80
75
70
65
60
55
50
Leq30min
Limit Level
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
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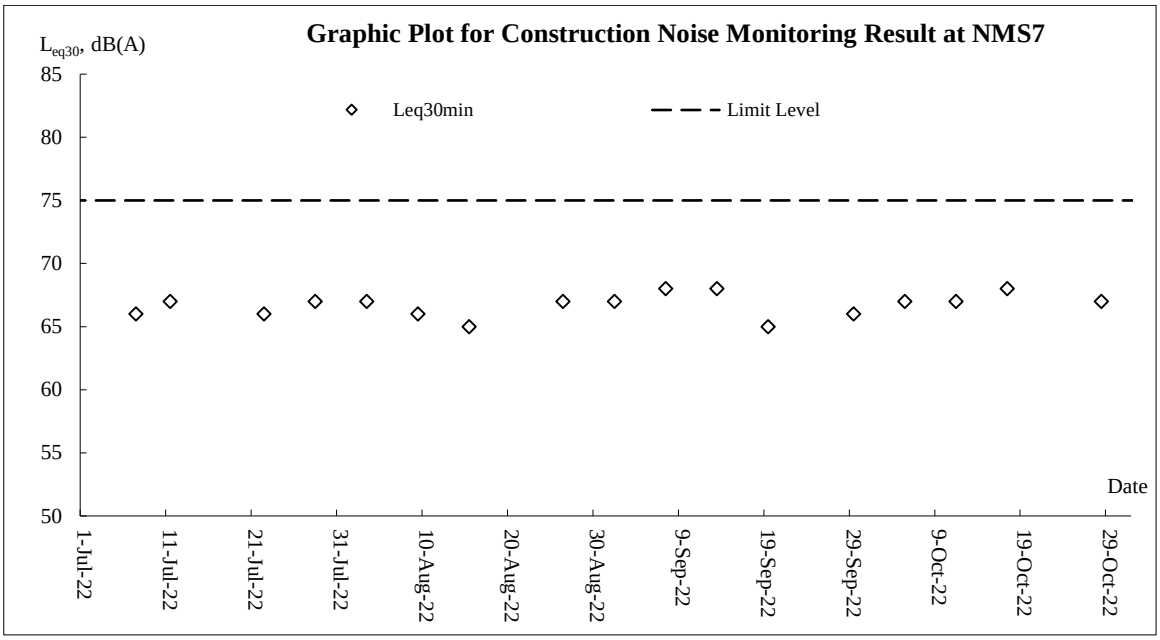
9-Oct-22
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at NMS7
L_{eq30}, dB(A)
85
80
75
70
65
60
55
50
Leq30min
Limit Level
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
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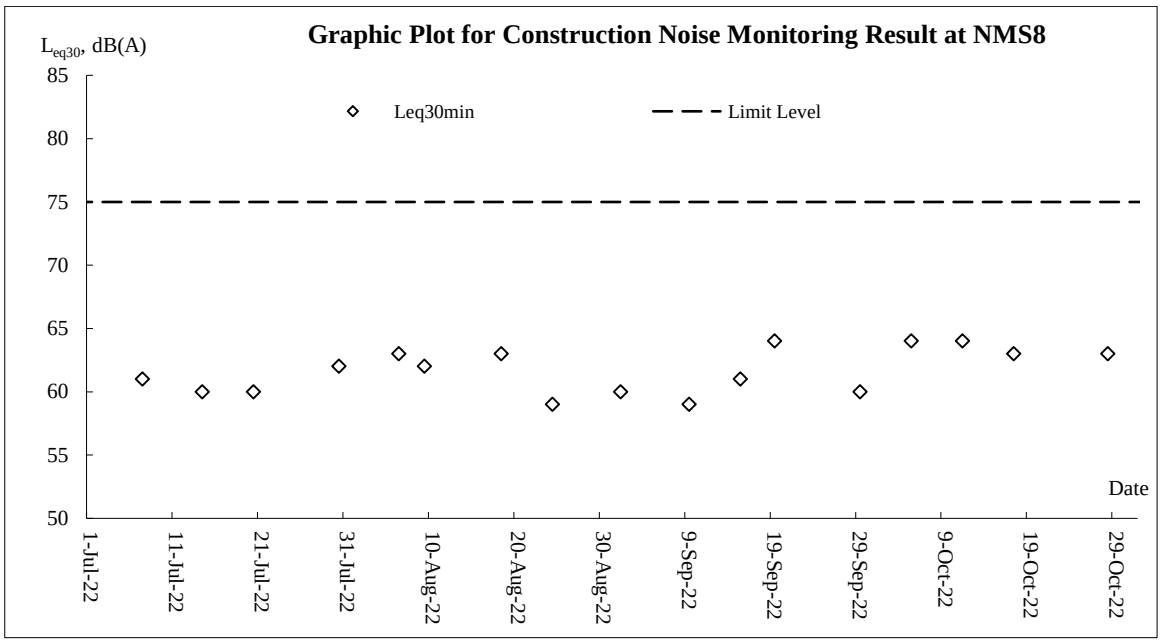
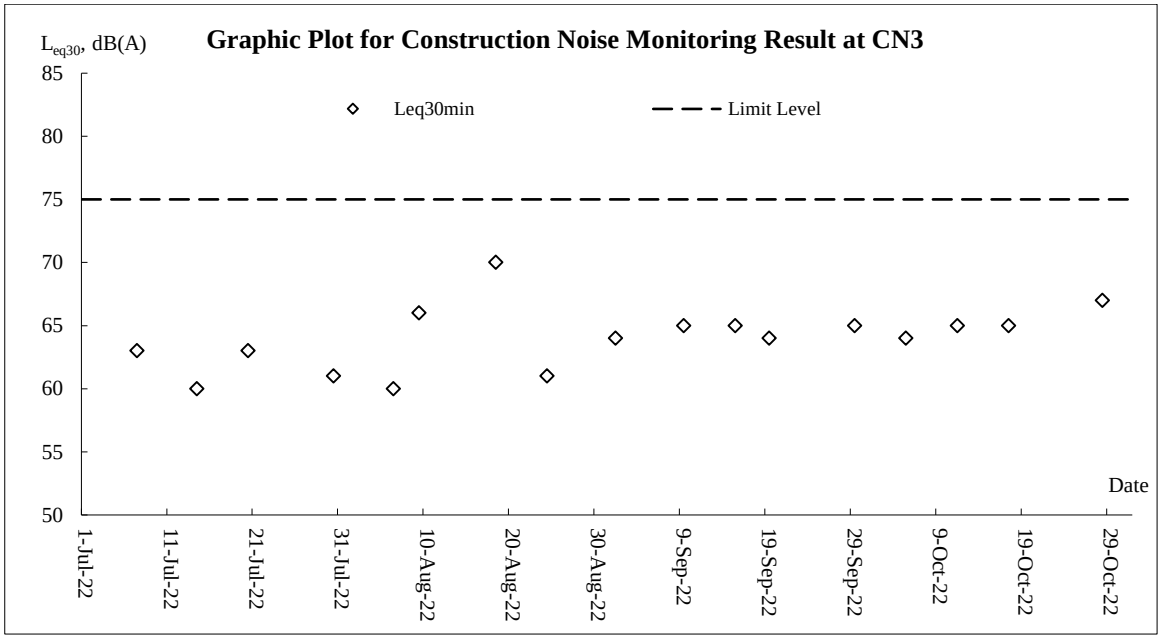
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at NMS8
L_{eq30}, dB(A)
Leq30min
Limit Level
85
80
75
70
65
60
55
50
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
29-Sep-22
9-Oct-22
19-Oct-22
29-Oct-22


Graphic Plot for Construction Noise Monitoring Result at CN3
L_{eq30}, dB(A)
Leq30min
Limit Level
85
80
75
70
65
60
55
50
Date
1-Jul-22
11-Jul-22
21-Jul-22
31-Jul-22
10-Aug-22
20-Aug-22
30-Aug-22
9-Sep-22
19-Sep-22
29-Sep-22
9-Oct-22
19-Oct-22
29-Oct-22

Appendix J

Meteorological Data

Date		Weather	Total Rainfall (mm)	Kwun Tong Station	Kai Tak Station		King's Park Station
				Mean Air Temp. (°C)	Wind Speed (km/h)	Wind Direction	Mean Relative Humidity (%)
1-Oct-22	Sat	Sunny intervals in the afternoon.	2.6	27.5	14.2	E	82.5
2-Oct-22	Sun	Moderate to fresh easterly winds	Trace	28.4	17	E	80.5
3-Oct-22	Mon	Sunny periods and a few showers.	0	28.8	16.5	E	79
4-Oct-22	Tue	Moderate to fresh easterly winds	0	29	11.5	SE	75
5-Oct-22	Wed	Mainly fine apart from one or two showers.	Trace	28.4	17.5	E	73
6-Oct-22	Thu	Moderate to fresh easterly winds,	Trace	28.2	17.5	E	72.5
7-Oct-22	Fri	Moderate to fresh east to northeasterly winds.	22.8	27.9	13.2	E	79.7
8-Oct-22	Sat	Sunny periods in the afternoon.	Trace	26.5	12	E	75
9-Oct-22	Sun	Mainly cloudy with one or two showers tonight	4.8	26.2	14.5	N/NW	63
10-Oct-22	Mon	Mainly fine and very dry.	0	23.3	10.7	N/NE	48
11-Oct-22	Tue	Fine and very dry.	0	22.8	7.5	W/NW	41.7
12-Oct-22	Wed	Sunny and very dry in the afternoon.	0	23.9	8.5	N/NE	47
13-Oct-22	Thu	Mainly fine and dry.	0	25.4	8	N/NE	56.2
14-Oct-22	Fri	Cloudy periods tonight.	0	26.9	11.7	E/SE	60
15-Oct-22	Sat	Moderate to fresh east to northeasterly winds	0	26.6	8	N/NW	59
16-Oct-22	Sun	Fine and dry.	0	27.6	15.7	N/NW	41.5
17-Oct-22	Mon	Mainly cloudy with one or two showers.	Trace	27.5	15	N/NW	40.5
18-Oct-22	Tue	Cloudy with occasional rain.	19.7	20.9	22	N/NE	61.2
19-Oct-22	Wed	Sunny periods. Dry during the day.	0	22.1	13.2	E/SE	62.5
20-Oct-22	Thu	Sunny periods. Fresh easterly winds	0	23.3	17.5	E	63
21-Oct-22	Fri	Fine. Dry in the afternoon.	0	24.5	12.5	E/SE	65
22-Oct-22	Sat	Moderate to fresh east to northeasterly winds.	Trace	25.8	7	E/SE	64.9
23-Oct-22	Sun	Moderate to fresh easterly winds	0	26.4	13.7	E	61.5
24-Oct-22	Mon	Mainly fine and dry.	0	24.6	18.7	E	67.5
25-Oct-22	Tue	Fine and dry	0	22.9	21	E/SE	58.7
26-Oct-22	Wed	Fine. Dry in the afternoon.	0	23.1	16.7	E/SE	60
27-Oct-22	Thu	Fine and dry. Moderate easterly winds	0	24	Maintenance	Maintenance	66.2
28-Oct-22	Fri	Fine and dry. Moderate east to northeasterly winds	0	25.3	9	E/SE	62.5
29-Oct-22	Sat	Moderate east to northeasterly winds, fresh offshore.	0	25.1	8.7	E/SE	64.7
30-Oct-22	Sun	Dry with sunny periods.	0	24.7	13.2	N	51.5
31-Oct-22	Mon	Fresh northerly winds, strong offshore	0	24.5	20	N	46.7

Appendix K

Waste Flow Table

Monthly Summary Waste Flow Table for 2022 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract (see Note 6)	Reused in other Projects (see Note 8)	Disposed as Public Fill	Imported Fill	Metals (see Note 9)	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste (see Note 5)	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	2.871	0.000	2.517	0.000	0.354	0.000	0.000	0.000	0.015	0.000	0.082
Feb	1.372	0.000	1.187	0.000	0.185	0.000	0.000	0.000	0.000	0.000	0.102
Mar	2.226	0.000	1.128	0.000	1.099	0.000	0.000	0.000	0.000	0.000	0.075
Apr	8.798	0.000	3.728	4.288	0.782	0.000	0.000	0.791	0.000	0.000	0.160
May	3.665	0.000	0.000	3.081	0.584	0.000	0.000	0.813	0.000	0.000	0.123
Jun	12.282	13.582	0.000	11.784	0.498	0.000	0.004	0.000	0.007	0.000	0.081
Sub-total	31.214	13.582	8.560	19.153	3.501	0.000	0.004	1.604	0.022	0.000	0.623
Jul	9.504	0.000	0.000	9.473	0.031	0.000	0.004	0.000	0.007	0.000	0.107
Aug	11.236	0.107	0.000	10.294	0.941	0.000	0.003	0.000	0.009	0.000	0.133
Sep	15.716	0.000	0.000	14.996	0.720	0.000	0.003	0.000	0.009	0.000	0.192
Oct	24.468	0.000	0.000	23.920	0.548	0.000	0.000	0.000	0.000	0.000	0.069
Nov	0.000										
Dec	0.000										
Total	92.137	13.689	8.560	77.836	5.741	0.000	0.014	1.604	0.046	0.000	1.125

Notes:

(1) The performance targets are given in PS Clause 1.119 (14).

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

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material and waste will be collected by recycler for recycling.

(4) Use the conversion factor, density of general refuse (1 t/m^3) and inert C&D materials (2 t/m^3).

(5) Use the conversion factor for chemical waste (0.88kg/L).

(6) Assume a dump truck delivers 7.5 m^3 material in 1 trip.

(7) The cut-off date of this summary is 20th of each month.

(8) The Inert C&D materials of reused in other Projects including glass materials.

(9) The C&D waste generation of metal including rechargable battery recycling.

Remarks: refer to Rock and AHM Record (Z:\04 SUPPORT WORK FOLDERS\F. ENVIRONMENTAL\4 - Implementation and Operation\4.4 - Documentation and its Control\11 - WFT, ULSD & Timber\Waste Flow Table\2017-07)

Name of Department : CEDD Contract No. : NE/2016/05

Monthly Summary Waste Flow Table for 2022 (year)

[PS Clause 1.129]

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock & Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemicals Waste	Others, e.g. general refuse
	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 m^3)
Jan	0.02	0	0	0	0.02	0	0	0	0	0	0.05
Feb	0.01	0	0	0	0.01	0	0	0	0	0	0.05
Mar	0.02	0	0	0	0.02	0	0	0	0	0	0.01
Apr	0.02	0	0	0	0.02	0	0	0	0	0	0.01
May	0.04	0	0	0	0.04	0	0	0	0	0	0.03
June	0.13	0	0	0	0.13	0	0	00	0	0	0.02
Sub-total	0.24	0	0	0	0.24	0	0	0	0	0	0.17
July	0.15	0	0	0	0.15	0	0	0	0	0	0.02
Aug	0.04	0	0	0	0.04	0	0	0	0	0	0.02
Sept	0.06	0	0	0	0.06	0	0	0	0	0	0.06
Oct	0	0	0	0	0	0	0	0	0	0	0.04
Nov											
Dec											
Total	0.49	0	0	0	0.49	0	0	0	0	0	0.31

Notes: (1) The performance targets are given in PS Clause 6.14
(2) The waste flow table shall also include C&D materials that are specified in the Contract to be imported for use at the Site.
(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material.
(4) The Contractor shall also submit the latest forecast of the total amount of C&D materials expected to be generated from the Works. Together with a breakdown of the nature where the total amount of C&D materials expected to be generated from the Works is equal to or exceeding 50,000 m^3.

Monthly Summary Waste Flow Table for 2022 (year)

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract (see Note 6)	Reused in other Projects (see Note 6)	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste (see Note 5)	Others, e.g. general refuse
	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000m^3)	(in '000 kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m^3)
Jan	1.587	0.000	0.441	0.000	1.146	0.000	0.003	0.000	0.003	0.000	0.052
Feb	1.039	0.000	0.200	0.000	0.839	0.000	0.000	0.000	1.694	0.000	0.016
Mar	1.261	0.000	0.090	0.000	1.171	0.000	0.000	0.000	0.434	0.000	0.041
Apr	1.200	0.000	0.460	0.000	0.740	0.000	0.002	0.099	0.523	0.000	0.015
May	1.087	0.000	0.094	0.000	0.993	0.000	0.000	0.000	1.456	0.070	0.033
Jun	0.976	0.000	0.014	0.265	0.697	0.000	0.000	0.000	0.602	0.000	0.026
Sub-total	7.149	0.000	1.299	0.265	5.586	0.000	0.005	0.099	4.712	0.070	0.183
Jul	1.594	0.000	0.067	0.495	1.032	0.000	0.000	0.000	1.778	0.000	0.027
Aug	1.913	0.000	0.187	0.954	0.772	0.000	0.002	0.092	1.601	0.000	0.025
Sep	2.045	0.000	0.570	0.221	1.254	0.420	0.000	0.000	0.000	0.000	0.041
Oct	1.374	0.000	0.015	0.472	0.886	0.000	0.000	0.000	1.204	0.000	0.047
Nov											
Dec											
Total	14.075	0.000	2.138	2.408	9.530	0.420	0.007	0.191	9.295	0.070	0.322

Notes:

(1) The performance targets are given in PS Clause 1.129 (4).

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

(3) Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material and waste will be collected by recycler for recycling.

(4) Use the conversion factor, density of general refuse (1 t/m^3) and inert C&D materials (2 t/m^3).

(5) Use the conversion factor for chemical waste (0.88kg/L).

(6) Assume a dump truck delivers 7.5 m^3 material in 1 trip.

Contract No.: ED/2020/02

Monthly Summary Waste Flow Table

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantities of C&D Wastes Generated Monthly				
	Total Quantity of Materials Generated	Hard Rock, Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 3)	Chemical Waste	Others, e.g. general refuse
	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 m^3)*
2021 Total	**608.254**	**394.831**	**0.000**	**0.000**	**213.423**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**0.044**
2022											
Jan	25.019	0.000	0.000	0.000	25.019	0.000	0.000	0.000	0.000	0.000	0.019
Feb	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.015
Mar	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.031
Apr	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.014
May	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.002
June	0.795	0.000	0.000	0.795	0.000	0.000	0.000	0.000	0.000	0.000	0.000
July	0.000	0.000	0.000	0.000	478.700	0.000	0.000	0.000	0.000	0.000	0.000
Aug	175.620	0.000	0.000	0.000	175.620	0.000	0.000	0.000	0.000	0.000	10.340
Sep	389.520	0.000	0.000	0.000	389.520	0.000	0.000	0.000	0.000	0.000	0.000
Oct	561.180	0.000	0.000	0.000	561.180	0.000	0.000	0.000	0.000	0.000	0.000
Nov#	0.000	0.000	0.000	0.000	200.000#	0.000	0.000	0.000	0.000	0.000	0.000
Dec	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Accumulated Total (2021-2022)	**1760.388**	**394.831**	**0.000**	**0.795**	**1843.462**	**0.000**	**0.000**	**0.000**	**0.000**	**0.000**	**10.465**

*Remarks: Conversion factor for general refuse, 1 tonne = $2m^3$

#Remarks: Estimation for next month

Name of Department : CEDD Contract No. : ED/2019/02

Monthly Summary Waste Flow Table for 2022 (year)

Month	Annual Quantities of Inert C&D Materials Generated Monthly						Annual Quantities of C&D Materials Generated Monthly				
	Total Quantity Generated	Hard Rock & Large Broken Concrete	Reused in the Contract	Reused in other Projects	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging	Plastics (see Note 2)	Chemicals Waste	Others, e.g. general refuse
	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 m^3)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 kg)	(in '000 m^3)
Jan	0.18	0.18	0	0	0.18	0	0	0	0	0	0.02
Feb	0.02	0.02	0	0	0.02	0	0	0	0	0	0
Mar	0.31	0.31	0	0	0.31	0	0	0	0	0	0.01
Apr	0.162	0.162	0	0	0.162	0	0	0	0	0	0.009
May	0.279	0.279	0	0	0.279	0	0	0	0	0	0.008
June	0.039	0.039	0	0	0.039	0	0	0	0	0	0.006
Sub-total	0.990	0.990	0	0	0.990	0	0	0	0	0	0.053
July	0.028	0.028	0	0	0.028	0	0	0	0	0	0.003
Aug	0.152	0.152	0	0	0.152	0	0	0	0	0	0.016
Sept	0.665	0.665	0	0	0.665	0	0	0	0	0	0
Oct	0.381	0.374	0.007	0	0.374	0	0	0	0	0	0.044
Nov	---	---	---	---	---	---	---	---	---	---	---
Dec	---	---	---	---	---	---	---	---	---	---	---
Total	2.216	2.209	0.007	0	2.209	0	0	0	0	0	0.116

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

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

Appendix L

Implementation Schedule for Environmental Mitigation Measures

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
Dust Impact (Contraction Phase)									
S4.7.2 to S4.7.5	Mitigation measures in form of regular watering under a good site practice should be adopted. Watering once per hour on exposed worksites and haul road is proposed to achieve dust removal efficiency of 91.7%. While the above watering frequencies are to be followed, the extent of watering may vary depending on actual site conditions but should be sufficient to maintain an equivalent intensity of no less than 1.75 L/m^2 to achieve the respective dust removal efficiencies.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	V	V	V	V	V
S4.7.6	The Contractor shall follow the procedures and requirements given in the Air Pollution Control (Construction ion Dust) Regulation.	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	V	V	V	V	V
S4.7.6	Following dust suppression measures should also be incorporated by the Contractor to control the dust nuisance throughout the construction phase: • Any excavated or stockpile of dusty material should be covered entirely by impervious sheeting or sprayed with water to maintain the entire surface wet and then removed or backfilled or reinstated where practicable within 24 hours of the excavation or unloading; • Any dusty materials remaining after a stockpile is removed should be wet ted with water and cleared from the surface of roads; • A stockpile of dusty material should not be extend beyond the pedestrian barriers, fencing or traffic cones; • The load of dusty materials on a vehicle leaving a construction ion site should be covered entirely by impervious sheeting to ensure that the dusty materials do not leak from the vehicle; • Where practicable, vehicle washing facilities with high pressure water jet should be provided at every discernible or designated vehicle exit point. The area where vehicle washing takes place and the road sect ion between the washing facilities and the exit point should be paved with concrete, bituminous materials or hardcores; • When there are open excavation and reinstatement	Minimize dust impact at the nearby sensitive receivers	Contractor	All construction sites	@	@	@	@	@

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	works, hoarding of not less than 2.4m high should be provided as far as practicable along the site boundary with provision for public crossing. Good site practice shall also be adopted by the Contractor to ensure the conditions of the hoardings are properly maintained throughout the construction ion period. • The port ion of any road leading only to construction ion site that is within 30m of a vehicle entrance or exit should be kept clear of dusty materials; • Surfaces where any pneumatic or power-driven drilling, cutting, polishing or other mechanical breaking operation takes place should be sprayed with water or a dust suppression chemical continuously; • Any area that involves demolition activities should be sprayed with water or a dust suppression chemical immediately prior to, during and immediately after the activities so as to maintain the entire surface wet ; • Where a scaffolding is erected around the perimeter of a building under construction, effective dust screens, sheeting or netting should be provided to enclose the scaffolding from the ground floor level of the building, or a canopy should be provided from the first floor level up to the highest level of the scaffolding; • Any skip hoist for material transport should be totally enclosed by impervious sheeting; • Every stock of more than 20 bags of cement or dry pulverised fuel ash (PFA) should be covered entirely by impervious sheeting or placed in an area sheltered on the top and the 3 sides; • Cement or dry PFA delivered in bulk should be stored in a closed silo fit ted with an audible high level alarm which is interlocked with the material filling line and no overfilling is allowed; and • Exposed earth should be properly treated by compact ion, turfing, hydroseeding, vegetation planting or sealing with latex, vinyl, bitumen,								

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	shortcrete or other suitable surface stabiliser within six months after the last construction activity on the construction site or part of the construction site where the exposed earth lies.								
S4.7.7	Implement regular dust monitoring under EM&A programme during the Construction phase.	Control construction airborne noise	Selected Representative dust monitoring station	All construction sites where practicable	V	N/A	V	N/A	N/A
Noise Impact (Contraction Phase)									
S5.6.9	Implement the following good site management practices: • only well-maintained plant should be operated on-site and plant should be serviced regularly during the construction ion programme; • machines and plant (such as trucks, cranes) that may be in intermittent use should be shut down between work periods or should be throttled down to a minimum; • plant known to emit noise strongly in one direct ion, where possible, be orientated so that the noise is directed away from nearby NSRs; • silencers or mufflers on construction ion equipment should be properly fit ted and maintained during the construction ion works; • mobile plant should be sited as far away from NSRs as possible and practicable; and • material stockpiles, mobile container site office and other structures should be effectively utilised, where practicable, to screen noise from on-site construction activities.	Control construction ion airborne noise	Contractor	All construction sites where practicable	@	V	V	@	@
S5.6.11 to S5.6.13	Use of " Quiet " Plant and Working Methods.	Reduce the noise levels of plant items	Contractor	All construction sites where practicable	V	N/A	N/A	N/A	N/A
S5.6.14	Install temporary site hoarding (approx 2.5m high) located on the site boundaries between noisy construction activities and NSRs. The conditions of the hoardings shall be properly maintained throughout the construction period.	Reduce the construction ion noise levels at low-level zone of NSRs through partial screening.	Contractor	All construction sites where practicable	V	V	V	V	V
S5.6.15 to S5.6.18	Install movable noise barriers, full enclosure and acoustic mat, screen the noisy plants including air compressor and generator.	Screen the noisy plant items to be used at all construction sites	Contractor	All construction ion sites where practicable	V	V	N/A	V	N/A
S5.6.19	Sequencing operation of construction plants equipment.	Operate sequentially	Contractor	All construction	V	V	N/A	N/A	N/A

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
		within the same work site to reduce the construction airborne noise		ion sites where practicable					
S5.6.34	Implement temporary noise barrier along Road L4.	Further reduce the construction ion airborne noise	Contractor	Road L4 of ARQ	N/A	N/A	N/A	N/A	N/A
S5.6.35	Implement a noise monitoring under EM&A programme.	Monitor the construction noise levels at the selected representative locations	Contractor	Selected Representative Noise monitoring stations	V	N/A	V	N/A	N/A
B	**Water Quality Impact (Contraction Phase)**								
S6.6.3	Construction Runoff In accordance with the Practice Note for Professional Persons on Construction ion Site Drainage, Environmental Protect ion Department , 1994 (ProPECC PN 1/94), best management practices should be implemented as far as practicable as below: • At the start of site establishment , perimeter cut -off drains to direct off-site water around the site should be constructed with internal drainage works. Channels (both temporary and permanent drainage pipes and culverts), earth bunds or sand bag barriers should be provided on site to direct stormwater to silt removal facilities. • Diversion of natural stormwater should be provided as far as possible. The design of temporary on-site drainage should prevent runoff going through site surface, construction machinery and equipment in order to avoid or minimize polluted runoff. Sediment at ion tanks with sufficient capacity, constructed from preformed individual cells of approximately 6 to 8 m^3 capacities, are recommended as a general mitigation measure which can be used for set t ling surface runoff prior to disposal. The system capacity shall be flexible and able to handle multiple inputs from a variety of sources and suited to applications where the influent is pumped.	Control construction runoff	Contractor	All construction sites	@	@	@	@	V

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	• The dikes or embankments for flood protect ion should be implemented around the boundaries of earthwork areas. Temporary ditches should be provided to facilitate the runoff discharge into an appropriate watercourse, through a silt /sediment t rap. The silt /sediment t raps should be incorporated in the permanent drainage channels to enhance deposit ion rates. • The design of efficient silt removal facilities should be based on the guidelines in Appendix A1 of ProPECC PN 1/94. The detailed design of the sand/silt traps should be undertaken by the contractor prior to the commencement of construction ion. • Construction works should be programmed to minimize surface excavation works during the rainy seasons (April to September). All exposed earth areas should be completed and vegetated as soon as possible after earthworks have been completed. If excavation of soil cannot be avoided during the rainy season, or at any time of year when rainstorms are likely, exposed slope surfaces should be covered by tarpaulin or other means. • All drainage facilities and erosion and sediment control structures should be regularly inspected and maintained to ensure proper and efficient operation at all times and particularly following rainstorms. Deposited silt and grit should be removed regularly and disposed of by spreading evenly over stable, vegetated areas. • Measures should be taken to minimise the ingress of site drainage into excavations. If the excavation of trenches in wet periods is necessary, it should be dug and backfilled in short sect ions wherever practicable. Water pumped out from trenches or foundation excavations should be discharged into storm drains via silt removal facilities. • All open stockpiles of construction ion materials (for example, aggregates, sand and fill material) of should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to								

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	prevent the washing away of construction ion materials, soil, silt or debris into any drainage system. • Manholes (including newly constructed ones) should always be adequately covered and temporarily sealed so as to prevent silt, construction ion materials or debris being washed into the drainage system and storm runoff being directed into foul sewers. • Precautions to be taken at any time of year when rainstorms are likely, act ions to be taken when a rainstorm is imminent or forecasted, and act ions to be taken during or after rainstorms are summarized in Appendix A2 of ***ProPECC PN 1/94***. Particular attention should be paid to the control of silty surface runoff during storm events. • All vehicles and plant should be cleaned before leaving a construction ion site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facilities should be provided at every construction ion site exit where practicable. Wash-water should have sand and silt settled out and removed at least on a weekly basis to ensure the continued efficiency of the process. The sect ion of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient back all toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and rains. • Oil interceptors should be provided in the drainage system downstream of any oil/fuel pollution sources. The oil interceptors should be emptied and cleaned regularly to prevent the release of oil and grease into the storm water drainage system after accidental spillage. A bypass should be provided for the oil interceptors to prevent flushing during heavy rain. • Construction ion solid waste, debris and rubbish on site should be collected, handled and disposed of properly to avoid water quality impacts.								

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	• All fuel tanks and storage areas should be provided with locks and sited on sealed areas, within bun ds of a capacity equal to 110% of the storage capacity of the largest tank to prevent spilled fuel oils from reaching water sensitive receivers nearby. • Regular environmental audit on the construction site should be carried out in order to prevent any malpractices. Not ices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the rivers.								
S6.6.6 and 6.6.7	<u>Sewage from Workforce</u> • Portable chemical toilets should be provided for handling the construction sewage generated by the workforce. Assume that the capacity of the chemical toilets would be 0.4m3 and suck up twice a day under normal practices, around 45 chemical toilets would be required for the whole site at peak hour. And it should be noted that under normal construction periods, less chemical toilets would be needed. In addition, the total number of the chemical toilets would be subject to later detailed design, the capacity of the chemical toilets, and contractor's site practices. Nevertheless, a licensed contractor should be employed to provide appropriate and adequate portable toilets to cater around 37.5 m3/day sewage and be responsible for appropriate disposal and maintenance. Since portable chemical toilets will be provided, no adverse water quality impact from the workforce sewage is anticipated. • Notices should be posted at conspicuous locations to remind the workers not to discharge any sewage or wastewater into the nearby environment during the construction ion phase of the Project . Regular environmental audit on the construction ion site should be conducted in order to provide an effective control of any malpractices and achieve continual improvement of environmental performance on site. It is anticipated that sewage generation during the construction phase of the Project would not cause	Handling of site sewage	Contractor	All construction sites	V	V	V	V	V

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	water quality impact after undertaking all required measure								
S6.6.8 and 6.6.9	Accidental Spillage To prevent accidental spillage of chemicals, proper storage and handling facilities should be provided. All the tanks, containers and storage area should be bunded and the locations should be locked as far as possible from the sensitive watercourse and storm drains. The Contractor is required to register as a chemical waste producer if chemical wastes would be generated from the construction ion activities. Storage of chemical waste arising from the construction ion activities should be well managed with suitable labels an d warnings while disposal of those chemical wastes should be comply with the requirement states in Waste Disposal Ordinance (Cap 354) as well as Waste Disposal (Chemical Waste) (General) Regulations.	Prevention of accidental spillage	Contractor	All construction sites	@	V	V	V	V
S6.6.11-S6.6.14	Groundwater from Contaminated Area The Contractor should apply for a discharge licence under the WPCO through the Regional Office of EPD for groundwater discharge. Prior to the excavation works within these potentially contaminated areas, the groundwater quality should be reviewed during the process of discharge license application. The compliancy to the TM-DSS and the existence of prohibited substance should be confirmed after further SI. If the review results indicated that the groundwater to be generated from the excavation works would be contaminated, the contaminated groundwater should be either properly treated in compliance with TMDSS or properly recharged into the ground. If wastewater treatment is deployed, the wastewater treatment unit shall deploy suitable treatment process (e.g. oil interceptor / activated carbon) to reduce the pollution level to an acceptable standard and remove any prohibited substances (e.g. Petroleum Carbon Ranges (PCRs)). All treated effluent from wastewater treatment plant shall meet the requirements as stated in TM-DSS and should be	Minimize contaminated groundwater impacts	Contractor	All construction sites	N/A	N/A	N/A	N/A	N/A

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	discharged into the foul sewers. If groundwater recharging wells are deployed, recharging wells should be installed as appropriate for recharging the contaminated groundwater back into the ground. The recharging wells should be selected at places where the groundwater quality will not be affected by the recharge operation as indicated in the Sect ion 2.3 of TM-DSS. The baseline groundwater quality shall be determined prior to the select ion of the recharge wells, and submit a working plan (including the laboratory analytical results showing the quality of groundwater at the proposed recharge location(s) as well as the pollutant levels of groundwater to be recharged) to EPD for agreement . Pollution levels of groundwater to be recharged shall not be higher than pollutant levels of ambient groundwater at the recharge well. Prior to recharge, any prohibited substances such as PCRs should be removed as necessary by installing the petrol interceptor.								
	Waste Management (Contraction Phase)								
S8.5.2	<u>Good Site Practice</u> The following good site practices are recommended throughout the construction ion activities: • nomination of an approved personnel, such as a site manager, to be responsible for the implementation of good site practices, arrangements for collect ion and effective disposal to an appropriate facility, of all wastes generated at the site; • training of site personnel in site cleanliness, appropriate waste management procedures and concepts of waste reduction, reuse and recycling; • provision of sufficient waste disposal points and regular collect ion for disposal; • appropriate measures to minimize windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; • regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors;	Minimize waste generation during construction	Contractor	All construction sites	V	@	V	@	V
S8.5.2 (6)	The contractor should submit a Waste Management Plan	Minimize waste	Contractor	All construction	V	V	V	女	V

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	(WMP) as part of the Environmental Management Plan (EMP) in accordance with the ***ETWB TC(W) No. 19/2005*** for construction ion phase. The EMP should be submit ted to the Engineer for approval. Mitigation measures proposed in the EIA Report and the EM&A Manual should be adopted.	generation during construction		sites					
S8.5.3	<u>Waste Reduction Measures</u> Waste reduction is best achieved at the planning and design phase, as well as by ensuring the implementation of good site practices. The following recommendations are proposed to achieve reduction: • segregate and store different types of waste in different containers, skip or stockpiles to enhance reuse or recycling o materials and their proper disposal; • proper storage and site practices to minimize the potential for damage and contamination of construction ion materials; • plan and stock construction ion materials carefully to minimize amount of waste generated and avoid unnecessary generation of waste; • sort out demolition debris and excavated materials from demolition works to recover reusable/recyclable port ions (i.e. soil, broken concrete, metal etc.); • provide training to workers on the importance of appropriate waste management procedures, including waste reduction, reuse and recycling.	Reduce waste generation	Contractor	All construction sites where practicable	V	V	V	V	V
S8.5.5	<u>Storage of Waste</u> The following recommendation should be implemented to minimize the impacts: • waste such as soil should be handled and stored well to ensure secure containment ; • stockpiling area should be provided with covers and water spraying system to prevent materials from wind-blown or being washed away; • different locations should be designated to stockpile each material to enhance reuse;	Minimize waste impacts from storage	Contractor Contractor	All construction sites	V	V	V	V	V
S8.5.6	<u>Collection and Transportation of Waste</u> The following recommendation should be implemented to minimize the impacts:	Minimize waste impacts from storage	Contractor	All construction sites	V	@	V	@	@

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	• remove waste in timely manner; • employ the trucks with cover or enclosed containers for waste • transportation; • obtain relevant waste disposal permits from the appropriate authorities; and • disposal of waste should be done at licensed waste disposal facilities.								
S8.5.8	Excavated and C&D Material Wherever practicable, C&D materials should be segregated from other wastes to avoid contamination and ensure acceptability at public filling areas or reclamation sites. The following mitigation measures should be implemented in handling the excavated and C&D materials: • maintain temporary stockpiles and reuse excavated fill material for backfilling; • carry out on-site sorting; • make provisions in the Contract documents to allow and promote the use of recycled aggregates where appropriate; • implement a recording system for the amount of waste generated, recycled and disposed of for checking; The recommended C&D materials handling should include: • On-site sorting of C&D materials • Reuse of C&D materials • Use of Standard Formwork and Planning of Construction Materials purchasing • Provision of wheel wash facilities	Minimize waste impacts from excavated and C&D materials	Contractor	All construction sites	V	V	V	V	V
S8.5.15	Contaminated Soil As a precaution, it is recommended that standard good site practice should be implemented during the construction phase to minimize any potential exposure to contaminated soils or groundwater. The details of mitigation measures to minimize the potential environmental implications arising from the handling of contaminated materials refer to Land Contamination Section.	Remediate contaminated soil	Contractor	All construction sites where applicable	V	V	N/A	N/A	N/A
S8.5.17	Chemical Waste	Control the chemical	Contractor	All construction	V	V	V	V	V

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	• If chemical wastes are produced at the construction ion site, the Contractors should register with EPD as chemical waste producer. Chemical wastes should be stored in appropriate containers and collected by a licensed chemical waste Contractor. Chemical wastes (e.g. spent lubricant oil) should be recycled at an appropriate facility as far as possible, while the chemical waste that cannot be recycled should be disposed of at either the Chemical Waste Treatment Cent re, or another licensed facility, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	waste and ensure proper storage, handling and disposal.		sites					
S8.5.18	<u>General Waste</u> • General refuse should be stored in enclosed bins separately from construction and chemical wastes. Recycling bins should also be placed to encourage recycling. • Preferably enclosed and covered areas should be provided for general refuse collect ion and routine cleaning for these areas should also be implemented to keep areas clean. • A reputable waste collector should be employed to remove general refuse on a daily basis.	Minimize production of the general refuse and avoid odour, pest and litter impacts	Contractor	All construction sites	@	V	V	V	@
S8.5.19	<u>Sewage</u> • The WMP should document the locations and number of portable chemical toilets depending on the number of workers, land availability, site condition and activities. • Regularly collect ion by licensed collectors should be arranged to minimize potential environmental impacts.	Minimize production of sewage impacts	Contractor	All construction sites	V	V	V	V	V
Ecology (Contraction Phase)									
S. 10.7.2 to 10.7.6	Re-provision of Wooded Area for ecological function at the future Quarry Park.	Compensate for the loss of three woodland patches of a total area of about 1.13ha.	Contractor/ Detailed Design Consultant (qualified botanist / horticulturist / Certified Arborist to supervise the planting).	Northern part of the proposed Quarry Park.	N/A	N/A	N/A	N/A	N/A

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
.10.7.10	Construction phase in situ mitigation measures to minimize impacts on hydrological condition and water quality of hillside watercourses include: • Temporary sewerage and drainage will be designed and installed to collect wastewater and prevent it from entering nearby watercourses; • Proper locations well away from nearby watercourses will be used for temporary storage of materials (i.e. equipment , fill materials, chemicals and fuel) and temporary stockpile of construction debris and spoil, and these will be identified before commencement of works; • To prevent muddy water entering nearby watercourses, work sites close to nearby watercourses will be isolated, using such items as sandbags or silt curtains with lead edge at bot tom and properly supported props. Other protective measures will also be taken to ensure that no pollution or siltation occurs to the water gathering grounds of the works site; • Stockpiling of construction materials, if necessary, will be properly covered and located away from nearby watercourses; • Erection of temporary geotextile silt fences will be carried out around earth-moving works to trap any sediments and prevent them from entering watercourses; • Construction debris and spoil will be covered and/or properly disposed as soon as possible to avoid being washed into nearby watercourses; • Exposed soil will be covered as quickly as possible following format ion works, followed, where appropriate, by covering with biodegradable geotextile blanket for erosion control purposes; • Where appropriate, earth-bunding will be carried out of areas where soils have been disturbed or where vegetation has been cleared, to ensure that surface runoff will not move soils off-site; • Construction ion effluent, site run-off and sewage will be probably collected and/or treated. Wastewater from any construction ion site will be	Minimize impacts on Hydrological condition and water quality of hillside watercourses.	Contractor	All construction sites	V	N/A	V	V	N/A

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
	minimised via the following in descending order: reuse, recycling and treatment ; • Proper locations for discharge out lets of wastewater treatment facilities well away from sensitive receivers will be identified and used; • Silt traps will be installed at points where drainage from the site enters local watercourses; • Appropriate sanitary facilities for on-site workers will be provided; • The site boundary will be clearly marked and any works beyond the boundary strictly prohibited, and • Regular water monitoring and site audit will be carried out at suitable points. If the monitoring and audit results show that pollution occurs, adequate measures including temporary cessation of works will be considered.								
S.10.7.11	Implement an emergency contingency plan during the construction phase and the plan will include, but not be limited to, the following: • Potential emergency situations; • Chemicals or hazardous materials used on-site (and their location); • Emergency response team; • Emergency response procedures; • List of emergency telephone hot lines; • Locations and types of emergency response equipment , and • Training plan and testing for effectiveness.	Minimize impacts on Hydrological condition and water quality of hillside watercourses.	Contractor	All construction sites	N/A	N/A	N/A	N/A	N/A
Landscape and visual (Contraction Phase)									
S11.14.23, Table 11.9, CM1 [4]	All existing trees to be retained shall be carefully protected during construction.	Avoid disturbance and protection of the existing trees	Detailed Design Consultant /	The whole project area where applicable	V	V	@	V	@
S11.14.23, Table 11.9, CM2 [3]	Tree Transplantation - Should removal of trees be unavoidable due to construction impacts, trees will be transplanted or felled. Detailed transplanting proposal will be submit ted to relevant government departments for approval in accordance with **LAO GN No. 7/2007**, ***ETWB TCW No. 29/2004*** and ***10/2013***. Final locations of transplanted trees shall be agreed prior to commencement of the work.	Minimize landscape impact and retention of landscape resources	Detailed Design Consultant /	Onsite where possible. Otherwise consider offsite locations	*	N/A	N/A	V	V

EM&A Ref.	Recommended Mitigation Measures	Objectives of the Recommended Measures & Main Concern to Address	Who to implement the measures?	Location of the measure	Implementation Status				
					Contract 1	Contract 2	Contract 3	Contract 4	Contract 5
S11.14.23, Table 11.9, CM3 [4]	Control of operation night -time glare with well-planned lighting operation system to minimize potential glare impact to adjacent VSRs	Minimize glare impact to adjacent VSRs	Contractor/ CEDD	The whole project area where applicable	V	V	@	V	N/A
S11.14.23, Table 11.9, CM [4]	Erection of decorative screen hoarding.	Minimize visual impact	Contractor/ CEDD	The whole project area where applicable	N/A	N/A	N/A	N/A	N/A
S11.14.23, Table 11.9, CM5 [2]	Minimise disturbance and limitation of run-off – temporary structures and construction works should be planned with care to minimize disturbance to adjacent landscape, vegetation, natural stream habitats.	Minimize visual impact	Contractor/ CEDD	The whole project area where applicable	V	V	V	V	N/A

Legend: V = implemented; x = not implemented; @ = partially implemented; * = pending to be implemented; N/A = not applicable

Appendix M

Complaint Log

Appendix M1 Cumulative Complaint and Summons/ prosecution

Reporting Month	Number of Complaints in Reporting Month	Number of Summons/ Prosecution in Reporting Month
March 2017	1	0
April 2017	0	0
May 2017	0	0
June 2017	2	0
July 2017	3	0
August 2017	3	0
September 2017	4	0
October 2017	2	0
November 2017	3	0
December 2017	3	0
January 2018	1	0
February 2018	4	0
March 2018	0	0
April 2018	2	0
May 2018	1	0
June 2018	1	0
July 2018	0	0
August 2018	1	0
September 2018	1	0
October 2018	1	0
November 2018	3	0
December 2018	2	0
January 2019	2	0
February 2019	3	0
March 2019	1	0
April 2019	0	0
May 2019	0	0
June 2019	1	0
July 2019	1	0
August 2019	1	0
September 2019	0	0
October 2019	1	0
November 2019	4	0
December 2019	0	0
January 2020	0	0
February 2020	0	0
March 2020	4	0
April 2020	1	0
May 2020	1	0
June 2020	1	0
July 2020	0	0
August 2020	0	0
September 2020	0	0
October 2020	0	0
November 2020	1	0
December 2020	2	0
January 2021	1	0
February 2021	0	0
March 2021	2	0

April 2021	**1**	0
May 2021	0	0
June 2021	**1**	0
July 2021	**1**	0
August 2021	0	0
September 2021	**2**	0
October 2021	**0**	0
November 2021	**0**	0
December 2021	**0**	0
January 2022	**0**	0
February 2022	**0**	0
March 2022	**1**	0
April 2022	**1**	0
May 2022	**3**	0
June 2022	**2**	0
July 2022	**0**	0
August 2022	**2**	0
September 2022	**1**	0
October 2022	**1**	0
Overall Total	**81**	**0**

Appendix M2 Complaint Log

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
1	23-Mar-17	8-Jun-17	On Tat Estate	Resident of On Tat Estate	Construction noise	SPRO hotline	NA	A resident living in On Tat House reported that some night works with noise and flashing caused nuisance to nearby resident after 11:00 pm on 23 March 2017.	According the incident report conducted by the CWSTVJV, demobilization of crawler crane was undertaken on 23 March 2017 11pm and it is TD requirement to carry out demobilization of heavy machine at nighttime. It is considered this complaint was a single incident and would not be happened again in future.	no comment by IEC on 11 Oct 2017	TCS00864/16/300/F0087
2	28-Jul-17	28-Jul-17	38/F of Yin Tat House (賢達樓), On Tat Estate	Resident of On Tat Estate	Construction noise	SPRO hotline	NA	Mr. Hsu received a complaint from a resident living in the flat on 38/F of Yin Tat House (賢達樓), On Tat Estate. The resident complained about the noise level of our works during daytime.	Noise monitoring by Contractor was conducted in Yin Tat House, On Tat Estate, at around 2 pm on 28-Jul-2017. Another noise monitoring was carried out by ET (AUES) and representatives of AECOM and JV in the presence of the complainant in her flat at 10 am on 1-Aug-2017 and was witnessed by Mr. Hsu. No exceedance of noise was recorded. The complainant was satisfied about the monitoring results.	no comment by IEC on 9 Aug 2017	TCS00864/16/300/F0060
3	29-Aug-17	29-Aug-17	Shing Tat House 24/F	Resident of On Tat Estate	Construction noise	SPRO hotline	NA	Mr. Hsu Yau Wai (Tel no.9519 5663) reported that he received complaint from a resident (Ms Cheng) living at Shing Tat House 24/F Room 22 about the noise generated from our site	Noise monitoring was carried out by ET (AUES) and representatives of AECOM and JV in the presence of the complainant in her flat at 3pm on 30-Aug-2017. No exceedance of noise was recorded. The complainant was satisfied about the monitoring results.	no comment by IEC on 8 Sep 2017	TCS00864/16/300/F0081

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								this week. The noise heard was mainly rock breaking noise from our site.			
4	21-Jun-17	29-Aug-17	Tat Yan House, Po Tat Estate	Resident of Po Tat Estate	Construction noise	EPD	EPD (ref.N08/RE/00019373-17)	day time construciton noise of breakers (8am to 6pm)	Since these two complaints were forwarded by CEDD to ET on 31 August 2017 which way after the complaint dates. Investigation would be conducted based on the site information by the Contractor of Contract 1 - NE/2016/01 (CWSTVJV) as well as the observation during weekly site inspection carried out ET during June 2017. In our investigation, CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident and the working hour 08:00 to 18:00 did not breach any legal requirement. To eliminate the inconvenience caused to the nearby resident CWSTVJV was advised to further enhance the noise mitigation measures as appropriately.	no comment by IEC on 3 Nov 2017	TCS00864/16/300/F0093
5	22-Jun-17	29-Aug-17	Tat Yan House, Po Tat Estate	Resident of Po Tat Estate	Dust & Construction noise	EPD	EPD (ref. N08/RE/0001942 8-17)	Day time construction noise of breakers (8AM to 6PM). Requested to delay the operating hour of breakers to 10AM or 11AM			TCS00864/16/300/F0093

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
6	15-Jul-17	29-Aug-17	Tat Yi House, Po Tat Estate	Resident of Po Tat Estate	Construction noise	EPD	EPD (ref.N08/RE/00022479-17)	Construction noise	CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident and the working hour 08:00 to 18:00 did not breach any legal requirement. To eliminate the inconvenience caused to the nearby resident, CWSTVJV was advised to further enhance the noise mitigation measures as appropriately.	no comment by IEC on 3 Nov 2017	TCS00864/16/300/F0094
7	28-Jul-17	29-Aug-17	Anderson Road	unknown	Dust	EPD	EPD (ref.N08/RE/00023986-17)	Poor control on dust emission at Anderson Road Construction Site	CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident and status of the implementation of dust mitigation measures was considered effective based on the site observation.	no comment by IEC on 15 Nov 2017	TCS00864/16/300/F0097
8	2-Aug-17	29-Aug-17	Chun Tat House, On Tat Estate	Resident of On Tat Estate	Construction noise	EPD	EPD (ref.N08/RE/00024557-17)	Day time construction noise of breakers (8AM to 6PM)	CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in August 2017, there were no breaches of EM&A requirement. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should further enhance the noise mitigation measures as appropriately. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 15 Nov 2017	TCS00864/16/300/F0098

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
9	19-Sep-17	19-Sep-17	Sau Mau Ping Estate Sau Nga House	Resident of Sau Mau Ping Estate	Construction noise	SPRO hotline	NA	The complainant is living at Sau Mau Ping Estate Sau Nga House (秀雅樓) 38/F. He complained about the noise nuisance recently from August to September especially during night time after 12:00 am, even in Saturdays and Sundays. The noise nuisance caused a great disturbance to him. He made a request to conduct investigation about the source of the noise during night time.	ET has conducted an ad-hoc noise measurement for Leq (30min) on the rooftop of 秀雅樓 and 秀義樓 in the afternoon of 22 September 2017. (Photo 1 & 2) During the course of noise measurement, construction activities such as excavation and breaking were conducted in the Quarry Site. The measurement results taken at both 秀雅樓 and 秀義樓 were 63dB(A) which below the Limit Level under the EM&A Programme.	no comment by IEC on 18 Oct 2017	TCS00864/16/300/F0088
10	21-Sep-17	13-Oct-17	Sau Mau Ping Estate Sau Nga House and Sau Yee House	Resident of Sau Mau Ping Estate	Construction noise	EPD	EPD (ref.N08/RE/00031074-17)	On 21 September 2017, the same complaint further reported that the noise can be heard at both Sau Yee House and Sau Nga House even in daytime and he strongly requested the Contractor to follow up the case immediately.	ET has conducted an ad-hoc noise measurement for Leq (30min) on the rooftop of 秀雅樓 and 秀義樓 in the afternoon of 22 September 2017. (Photo 1 & 2) During the course of noise measurement, construction activities such as excavation and breaking were conducted in the Quarry Site. The measurement results taken at both 秀雅樓 and 秀義樓 were 63dB(A) which below the Limit Level under the EM&A Programme.		TCS00864/16/300/F0088

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
11	27-Sep-17	13-Oct-17	Chun Tat House, On Tat Estate	Resident of On Tat Estate	Construction noise	EPD	EPD (ref.N08/RE/00029489-17)	The complainant questioned why there were 6 to 7 breakers operating in the monring but only 1 operating in the afternoon. He requested to shift the operation of the breakers to afternoon.	CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in September and October 2017, there were no breaches of EM&A requirement. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should properly maintain the noise mitigation measures as appropriate. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 30 Nov 2017	TCS00864/16/300/F01106
12	3-Oct-17	13-Oct-17	Chun Tat House, On Tat Estate	Resident of On Tat Estate	Construction noise	EPD	EPD (ref. N08/RE/00032407-17)	Day time construction noise, the complainant requested using less breaker at one time, erecting taller noise barrier to cover the equipment. In addition, the complainant would like to know the construction schedule whether there will be more breaking activities in near future			TCS00864/16/300/F01106
13	25-Oct-17	26-Oct-17	Tat Kwai House, Po Tat Estate	Resident of Po Tat Estate	Dust	EPD	NA	投訴安達臣道地盤的泥車落泥，令他達貴樓的住所受到大塵影響，要求跟進及回覆	Investigation revealed that CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident. Nevertheless, based on the observation during site inspection on 31 October 2017, CWSTVJV was advised to enhance the dust mitigation measures particularly during dry	no comment by IEC on 15 Nov 2017	TCS00864/16/300/F0100

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									season.		
14	6-Nov-17	7-Nov-17	Chun Tat House, On Tat Estate	Resident of On Tat Estate	Noise	EPD	NA	安達邨俊達樓居民投訴石礦場地盤又再於早上 07:45 開始傳出機器不停掘石的噪音(幾乎每日在 08:00-19:00 進行工程)，已持續一年，他全家人受到滋擾。	Ad-hoc noise measurement was conducted by ET at rooftop of Chun Tat House in the morning of 20 November 2017 and measurement result was below the Limit Level under the EM&A Programme. CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 30 Nov 2017	TCS00864/16/300/F0109
15	13-Nov-17	14-Nov-17	Chi Tai House, On Tai Estate	Mr. Lam Wai	light pollution and noise	SPRO hotline	NA	1. 智泰樓面向安達臣地盤方向，有照射燈深夜時分仍然常開，影響居民正常睡眠質素，照成一定的精神壓力。 2. 隔音布未固定，大風吹過發出極大的聲浪	To ease the concern by the complaint, CWSTVJV has adjusted the lights to the orientation pointing the ground and that to minimise the nuisance. For the maintenance of noise barrier, CWSTVJV has immediately fixed the noise barrier nearest to On Tai Estate and prolonged the cover area of the noise barrier to reduce the noise impact to the public.	no comment by IEC on 24 Nov 2017	TCS00864/16/300/F0104

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16	1-Nov-17	14-Nov-17	Shing Tat House, On Tat Estate	Resident of Po Tat Estate	Noise	EPD	NA	居住於安達邨誠達樓高層的投訴人投訴由早上八時半至下午六時聽到搽鐵噪音。	As advised by the Contractor, the works that most likely induced the iron hammering noise to Shing Tat House shall be the rock breaking works to the hard rock of the Southeastern side of the Underground Stormwater Retention Tank. CWSTVJV had already deployed the acoustic mat as noise barrier at the site boundary near Shing Tat House. To enhance the noise mitigation measures, CWSTVJV deployed an acoustic mat as noise barrier for the breaking work in order to reduce construction noise affecting the upper floor of On Tat Estate Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 13 Dec 2017	TCS00864/16/300/F0110
17	25-Aug-17	26-Oct-17	Sau Yee House, Sau Mau Ping Estate	Resident of Sau Mau Ping Estate	Construction Noise	EPD	EPD (ref.N08/RE/00027738-17)	Night time construction noise of hammering (around 12AM)	As advised by CWSTVJV, there was a CNP (GW-RE0763-17) in force for the subject site for operation of generator and electric submersible water pump for the wastewater treatment plant and it is considered that abovementioned PMEs should not generate significant noise. Moreover, it is confirmed by CWSTVJV and checked against the site diary that no construction activities were carried out after 19:00 at the	no comment by IEC on 14 Dec 2017	TCS00864/16/300/F0114

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									subject site. Therefore, the complaint about noise nuisance during night time should not be related to the Project.		
18	12-Sep-17	26-Oct-17	Chun Tat House, On Tat Estate	Resident of On Tat Estate	Construction Noise	EPD	EPD (ref. N08/RE/0002948 9-17)	Day time construction noise of breakers (8AM to 5PM)	Noise mitigation measures were implemented to reduce the noise impact to the nearby resident. According to the impact noise monitoring result in September 2017, there were no breaches of EM&A requirement. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 10 Jan 2018	TCS00864/16/300/F01117
19	15-Dec-17	21-Dec-17	Sau Yee House	Resident of Sau Mau Ping Estate	Construction Noise	EPD	NA	Resident of Sau Yee House complained suspected construction noise from Anderson Construction Site at restricted hour (7pm to 7am).	It is confirmed by CWSTVJV and checked against the site diary that no construction activities were carried out after 19:00 at the subject site. Therefore, the complaint about noise nuisance during night time should not be related to the Project.	no comment by IEC on 10 Jan 2018	TCS00864/16/300/F01118
20	20-Dec-17	21-Dec-17	On Tat Estate	Resident of On Tat Estate	Dust	EPD	NA	Resident of On Tat Estate complained that the traffic of construction vehicles generated dust problem and arouse air pollution to On Tat Estate. 投訴安達臣道信和地盤水車已經壞了十多天，一直無灑水，四周非常大	CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident. It is considered that the complaint was an isolated case due to malfunction of water tanker and CWSTVJV has promptly rectified the deficiency. As advised by CWSTVJV, another water tanker will be deployed in mid-January 2018 to enhance the	no comment by IEC on 25 Jan 2018	TCS00864/16/300/F01121

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								塵。 投訴人住於安達邨，投訴安達臣道石礦場有大地盤，地盤大車工作時間不停出入揚起沙塵，吹到安達邨，影響空氣環境，要求部門到場視察。	dust suppression measures throughout the construction site.		
21	28-Dec-17	10-Jan-18	Sau Yee House	Resident of Sau Mau Ping Estate	Construction Noise	CE's office	NA	日間及凌晨均聽到轟隆聲的噪音及震動，懷疑是由附近工程引起*Thomas 先生表示居於秀茂坪邨秀義樓，指附近的安達臣道一個由土木工程拓展署管轄的石礦場不時於非允許時段(即晚上七時後至翌日早上)發出疑似打地基的轟轟聲巨響，最近一次就是今早(28/12)凌晨五時多再次聽到石礦場傳來聲響，將 Thomas 先生吵醒，懷疑有人刻意在無人監管下施工，更表示曾向環保署及土木工程署作出投訴，但環保署表示巡查後無發現在非允許時段有工程進行，而土木工程署則	ET has conducted an ad-hoc noise measurement for Leq (30min) in the complainant's flat in the monitoring of 17 January 2018.It was noted that the complainant's flat is not in direct line of sight to the Anderson Road Quarry Site. The measurement noise result was below the Limit Level under the EM&A Programme. Moroever, it is confirmed by CWSTVJV and checked against the site diary that no construction activities were carried out during restricted hour at the subject site. Therefore, the complaint about noise nuisance during restricted hour should not be related to the Project.	no comment by IEC on 8 Feb 2018	TCS00864/16/300/F0129

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								表示晚上七時後不會再進行工程。Thomas 指石礦場經常在晚上八至十二時，或凌晨時份發出巨響，對附近居民已造成很大的滋擾，要求相關部門儘快作出跟進及回覆。			
22	15-Jan-18	15-Jan-18	Chun Tat House	Resident of Chun Tat House of On Tat Estate, 40/F	Construction Noise	SPRO mobile	NA	She is irritated by the construction noise of breaking rock for a long time and strongly requested to know exactly when will be the completion date of the breaking rock part of works opposite to Chun Tat House. She said we should do more on the mitigation measures because our site is very close to the residents nearby.	CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in January 2018, there were no breaches of EM&A requirement. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should properly maintain the noise mitigation measures as appropriate. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 8 Feb 2018	TCS00864/16/300/F0130

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23	1-Feb-18	2-Feb-18	Chi Tai House On Tai Estate	Resident of On Tai Estate (referred by Mr. Lam Wai)	Construction Noise	SPRO hotline	NA	"智泰對出，白天噪音過大，可否加裝隔音板?高層受影響"	the Environmental Team has conducted an ad-hoc noise measurement for Leq(30min) at the corridor of 22/F of Chi Tai House on 2 February 2018 facing the construction site. The measurement noise result was 65dB(A) which below the Limit Level under the EM&A Programme. In our investigation, CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. According to the impact noise monitoring result obtained in January 2018, there were no breaches of EM&A requirement.	no comment by IEC on 22 Feb 2018	TCS00864/16/300/F0137
24	1-Feb-18	2-Feb-18	Shing Tat House On Tat Estate	Resident of Shing Tat House (referred by Mr. Hsu Yau Wai)	Construction Noise	SPRO hotline	NA	Mr. Hsu reported that some disturbing noise was heard after 6:00 pm from the site near Shing Tat House of On Tat Estate.	AECOM has liaised with Mr. Hsu on 2 February 2018 for the complaint matter and he reported to AECOM that the noise was generated until 7:00 pm on 1 February 2018. 3. As advised by Contractor of Contract 1, breaking works at USRT area which opposite to Shing Tat House was only carried out from 8:00 to 18:00. However, rock breaking at System A was extended to 19:00 on 1 February 2018. As noise mitigation measures, noise barriers were erected for the works area. Further to the complaint case, CWSTVJV would seek for other quiet work method such as using drilling	no comment by IEC on 28 Feb 2018	TCS00864/16/300/F0140

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									machine to reduce noise level and speed up the rock breaking process, so that to reduce the noise intensity level and the duration of exposure.		
25	28-Feb-18	28-Feb-18	Shing Tat House On Tat Estate	Resident of Shing Tat House	Construction Noise	EPD	NA	安達邨誠達樓居民, 投訴人是返夜班, 一年半以來長期受對出地盤日間掾石仔噪音滋擾, 由於單位與地盤太近, 堅持環保署跟進及回覆如何處理及減低噪音, 他亦要求知道何日完工.	Breaking works at Underground Stormwater Retention Tank area which opposite to Shing Tat House was carried out from 8:00 to 18:00. The Contractor has implemented noise mitigation measures to reduce the noise impact to the nearby resident. It was advised that the rock breaking works shall tentatively be completed by end of April and it is believe that the noise impact should be minimized. Since the works were carried out within the non-restricted hours and noise monitoring noise were within acceptable level, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 19 Mar 2018	TCS00864/16/300/F0143
26	11-Apr-18	12-Apr-18	Him Tat House On Tat Estate	Resident of Him Tat House	Construction Noise	SPRO mobile	NA	Mr. Hui Yau Wai reported that the noise irritation was becoming more severe recently and asked about the completion date of the works close to Him Tat House. The resident suspected that the noise comes from piling works	In our investigation, since construction noise was generating from other construction site next to Him Tat House, it is considered that the complaint is due to cumulative noise generated by both construction sites. However, CWSTVJV should properly provide the noise mitigation measures at works area in System B to minimize the noise impact to the resident nearby.	no comment by IEC on 7 May 2018	TCS00864/16/300/F0160b

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								nearby.	As advised by CWSTVJV on 20 April 2018, noise barrier was being erected at works area in System B as noise mitigation measures. According to the site photo, it is considered that the coverage of noise barrier is not sufficient and CWSTVJV should enhance the measure as far as practicable. The implementation of noise mitigation measures will be kept in view in subsequent site inspection.		
27	25-Apr-18	7-May-18	Junction of Hiu Kwong Street and Hiu Ming Street	A school but name of school not disclosed	Construction Noise	EPD	NA	This case is considered as an enquiry and no investigation is required under the EM&A Programme.			
28	18-May-18	24-May-18	Anderson Road Quarry Site	Undisclosed	Construction Noise	EPD	NA	投訴人指安達臣道石礦場地盤(NE/2016/01)在入夜 19:00 後仍見到有長臂喉工程車在運作,及持續產生大噪音及閃燈, 非常擾民。	As advised by CWSTVJV and confirmed by RE/AECOM, there were no construction activities carried out after 19:00 and concreting was completed before 19:00. It is concluded that the retracting process is not a general construction work using Powered Mechanical Equipment and complaint was an isolated case due to misunderstanding of the site operation. To prevent similar incidents in future,	no comment by IEC on 30 July 2018	TCS00864/16/300/F0174b

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									CWSTVJV has recommended several mitigation measures.		
29	25-Jun-18	19-Jul-18	Pedestrian Connectively E8 under Contract 3	Kwun Tong DC member Ms. So Lai-chun	Waste Management	CEDD	NA	A public complaint was referred from CEDD on 4 July 2018 regarding accumulation of dead leaves and branches found at slope (GLA-TNK 2458) near Hiu Yuk Path on 25 June 2018. The complainant requested the relevant department to clear the leaves and branch asap	CW-CMGC-JV has immediately clear the dead leaves and maintain the site cleanliness. Since the construction work has not yet commenced and the dead leaves and overgrown branches were not related project works, it is considered that the complaint is not valid the project.	no comment by IEC on 24 Sep 2018	TCS00864/16/300/F0189b
30	22-Aug-18	29-Aug-18	Hong Wah Court	Resident of Hong Wah Court	Construction Noise	1823 Hotline	NA	吳先生於 2018 年 8 月 22 日致電 1823 熱線投訴，指馬游塘區堆填區往將軍澳方向行車入口因配合項目需要而進行移除山坡工程，但其鑽地鑿石的噪音嚴重影響藍田康雅苑*居民，要求有關部門跟進。 *註: 投訴人於 2018 年 8 月 27 日更正指受影響屋苑應為藍田康華苑。	to reduce the inconvenience caused to the nearby resident, Kwan On should properly maintain the noise mitigation measures as appropriate, such as maintain good site practice including intermittent use of machine and plant and Sequencing operation of construction plant equipment. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 7 Sep 2018	TCS00864/16/300/F0196a

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31	28-Aug-18	31-Jul-18	Anderson Road Quarry Site	Undisclosed	Construction Noise	EPD	NA	安達邨誠達樓後面地盤，2 月 26 日晚，晚上 7 時後，還在落石屎，相片拍攝時間大概晚上 9 時半，一直至晚上十一時五十分還有工程車在地盤行駛。影響居民休息。	According to the site diary which countersigned by RE, there was no concreting work carried out after 18:00 and the construction activities conducted during restricted hours with valid CNP were completed at 23:00. It is considered that the complaint was not valid to the Project. Nevertheless, CWSTVJV was reminded that in case of any work activities need to be carried out during restricted hours, CWSTVJV should strictly follow the requirements specified in the valid CNP.	no comment by IEC on 10 Oct 2018	TCS00864/16/300/F0197a
32	6-Sep-18	7-Sep-18	Tsui Yeung House	Resident of Tsui Yeung House	Construction Noise	Verbal	NA	Mr. CHENG Keung-fung complained that the contractor has conducted the noisy works such as rock excavation beyond the normal hours.	Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. As advised by Kwan On, the rock breaking works shall tentatively be completed by end of December 2018 and the mitigation measures will implemented continuously during slope construction work and the slope construction will be carried out within the working hours at Portion 2. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 22 Oct 2018	TCS00864/16/300/F0201

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33	24-Oct-18	25-Oct-18	E3	Kwun Tong DC member Ms. So Lai-chun	Construction Noise	Whatsapp Message	NA	KTDC member, Ms. Ann So, complaining the noise of the breaker at E3	As advised by the Contractor, the acoustic material wrapped on the breaker was worn-out on 24 October 2018 and replacement of new acoustic materials has been installed on the breaker immediately on 25 October 2018. The rock breaking works shall tentatively be completed to the road level in the middle of November 2018 and the mitigation measures will implemented continuously during slope construction work and the slope construction will be carried out within the working hours at Portion 2. It is considered the complaint was an isolate case.	no comment by IEC on 23 Nov 2018	TCS00864/16/300/F0209a
34	12-Nov-18	13-Nov-18	Anderson Road Quarry Site	Resident of Ching Tat House(referredby Mr. Hui Yau Wai)	Construction Noise	SPRO Hotline	NA	Mr. Hui reported that he received complaint from a resident living in Ching Tat House about noise nuisance recently. Mr. Hui asked if project team can arrange some noise monitoring to check the noise level at the concerned flat or the same level at Ching Tat House.	The SPRO contacted Mr. Hiu and explained to him about the purpose and benefits of the tunnel to the residents nearby and the expected date of completion of the tunnel will be earlier than 2020. Moreover, the noise mitigation measures had implemented to reduce the noise level effectively and the work progress will be closely updated to nearby stakeholders to enhance communication. Mr. Hiu satisfied with the reply from SPRO and he agreed that the proposed noise monitoring in Ching Tat House was not needed. Since the works were	no comment by IEC on 12 Dec 2018	TCS00864/16/300/F0222a

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									conducted within approved normal hours with implementation of noise mitigation measures, there were no breaches of legislative requirement.		
35	14-Nov-18	14-Nov-18	Anderson Road Quarry Site	Undisclosed	Light and Noise	EPD	NA	凌晨 1 時，地盤仍有大光燈正射民居和機器移動聲音，影響附近居民睡眠及違反環保條例。	CWSTVJV immediately adjusted the angle and brightness of the lighting to minimize the nuisance to the resident nearby. In response to the complaint, CWSTVJV immediate carried out remedial action to minimize the nuisance to the public. It was considered that complaint for noise generated by machine moving was an isolated case. CWSTVJV was reminded to closely monitor the plant use and sequence of night work and do not to violate CNP conditions.	no comment by IEC on 3 Jan 2019	TCS00864/16/300/F0223a
36	13-Nov-18	14-Nov-18	Anderson Road Quarry Site	Undisclosed	Noise and dust	1823	NA	Complainant requested to postpone the starting time of construction work at project site and also to solve the problem of construction noise and dust.	In our investigation, acoustic barrier and site hoarding were in place along the works area. No noticeable noise and dust impact was observed during the site inspection. As advised by CWSTVJV, the normal working hour of the construction site is 8am to 6pm and there were no violation of the relevant regulations. The senior public relation officer contacted the complainant Ms. Ma on 26 November 2018 to explain the site situation and she was satisfied with the reply. Investigation Report has been	no comment by IEC on 18 Feb 2019	TCS00864/16/300/F0224

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									completed by ET without comment from IEC.		
37	9-Dec-18	12-Dec-18	Anderson Road Quarry Site	Undisclosed	Construction noise	1823	2-492790730 5	1823 has referred a case to CEDD on 10 December 2018, which the complainant complained that construction noise was generated from project site on Sunday and was affecting the resident at Hau Tat House, On Tat Estate. The complainant requested follow up action from related department as soon as possible.	In our investigation based on the information provided by CWSTVJV, there was no site activities undertaken at site access road as concerned by the complainant. The construction work carried out on Sunday was fully compliance with the CNP requirement. In response to the complaint, CWSTVJV was reminded to closely monitor the plant use and sequence of night work and do not to violate CNP conditions.	no comment by IEC on 10 Jan 2019	TCS00864/16/300/F0230a
38	19-Dec-18	27-Dec-18	Anderson Road Quarry Site	Undisclosed	Construction noise	1823	2-494807412 7	1823 has referred a case to CEDD on 27 December 2018, which the complainant complained that noise barriers near the round-about at On Sau Road were not enough, and construction noise generated from the project site was affecting the resident at Ming Tai House, On Tai Estate. The complainant	Joint site inspection was carried out on 3 January 2019 the status of implemented mitigation measures provided by CWSTVJV was inspected. It was observed that noise mitigation measures including temporary noise barrier, acoustic mat and wrapped by acoustic materials are implemented on site. However, CWSTVJV was advised to extend the coverage of noise barrier as far as practicable and fully enclose the concerned works area which has been completed on 15 January 2019. Since the works were	no comment by IEC on 31 Jan 2019	TCS00864/16/300/F0237a

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								requested follow up actions from related department as soon as possible.	carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.		
39	24-Jan-19	29-Jan-19	Anderson Road Quarry Site	Undisclosed	wastewater	Referred from DSD	NA	DSD has referred a case to CEDD on 24 January 2019 regarding suspended illegal discharge of cementitious slurry from construction site of Development of ARQ Site to nearby Public Stormwater Drainage System.	In our investigation, the concerned catchpit and U-channel mainly received the runoff from Po Lam Road as well as the discharge from the Anderson Road Quarry Site. It is suspected that the mud and silt found on the downstream has been accumulated over time particularly by rainstorm as well as routine discharge from construction site. As remedial action, CWSTVJV immediately clean the affected area where accessible. Nevertheless, in order to protection the watercourse at downstream of the construction site, CWSTVJV has some enhancement measures.	no comment by IEC on 29 Mar 2019	TCS00864/16/300/F0248a
40	30-Jan-19	30-Jan-19	Anderson Road Quarry Site	Undisclosed	noise	SPRO hotline	NA	A public complaint was received by SPRO hotline on 30 January 2019 regarding the construction noise near Ma Yau Tong Village and requested to add noise barrier as soon as possible.	In our investigation, CWSTVJV had provided the noise mitigation measures to minimize the noise impact to the resident nearby. The impact monitoring result obtained at Ma Yau Tong Village revealed that the construction noise were within acceptable level. Since the works were conducted within approved normal hours with implementation of noise and dust mitigation measures,	no comment by IEC on 15 Mar 2019	TCS00864/16/300/F0249a

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
									there were no breaches of legislative requirement.		
41	15-Feb-19	25-Feb-19	Anderson Road Quarry Site	Undisclosed	noise	1823	2-49480 74127	1823 has referred a case to CEDD on 15 February 2019, which the complainant complained about the construction noise generated from the CEDD site near 法源寺 (Ma Yau Tong Village). The complainant requested for the details of works and the completion date, the complainant also requested CEDD to use other construction methods in order to re	In response to the complainant, CWSTVJV has proposed alterative quiet work method to alleviate the noise impact to the public. They will schedule the noisy activities to be carried out after 10am as far as practicable to minimize the impact to resident nearby, given that not affecting the site progress. Moreover, the coverage of acoustic barriers will be extended in view of the works programme.	no comment by IEC on 29 Mar 2019	TCS00864/16/300/F0251a
42	21-Feb-19	25-Feb-19	Anderson Road Quarry Site	Undisclosed	noise	EPD	NA	The resident from Sau Hong House complained that the noise from the Anderson Road Quarry construction site has gotten worse. In addition, sometimes even after midnight there are noise coming from the site. With the echo produces from the environment, this is not	In our investigation, CWSTVJV has implemented noise mitigation measures to reduce the noise impact to the nearby resident. However, to eliminate the inconvenience caused to the nearby resident, CWSTVJV should properly maintain the noise mitigation measures as appropriate, such as maintain good site practices such as intermittent use of machine and plant and Sequencing operation of construction plant equipment. Since	no comment by IEC on 28 Mar 2019	TCS00864/16/300/F0250

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								helping at all. Really a big disturbance to the residence in the area. The complainant suspecting the sound proof measure has lessen as time goes. Follow action is requested.	the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.erway by ET.		
43	21-Feb-19	26-Feb-19	Anderson Road Quarry Site	Undisclosed	noise	received by DEVB and referred to CEDD	NA	A public complaint was received by DEVB and referred to CEDD on 25 February 2019 regarding on the noise generated from the construction works of the Anderson Road Quarry Site affecting a local resident residing at the Anderson Road Squatter Area	Additional acoustic mat has been erected in front of the Squatter Area to minimize the noise impact. Noise mitigation measures such as acoustic barriers erected along the works area and breaker head wrapped with acoustic material were implemented continually. Alterative quiet work method was adopted such as drilling the hard rock before the breaking work to reduce the breaking duration. In our investigation, CWSTVJV had enhanced the noise mitigation measures to ease the complainant's concerns. CWSTVJV will continually implement the noise mitigation measures to reduce to noise impact to the public.	no comment by IEC on 29 Mar 2019	TCS00864/16/300/F0252a

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44	1-Mar-19	26-Feb-19	E3 of Contract 2	Undisclosed	noise	CEDD	NA	A complaint is forwarded by CEDD which was received by KTDC member Mr CHENG Keung Fung from the residents of Tsui Yeung House(翠楊樓) about the noise nuisance generated and the working time up to 7:00 pm from the rock excavation of E3 lift tower. Follow up action is requested.	The representative of the engineering team explained to Mr. Cheng about the project's details and concerned site was being constructed for the future pedestrian connection facilities. The related stone drilling process is expected to be completed in mid-April to end of April 2019. Mr. Cheng was satisfied with the rapid response from CEDD and the engineering team. In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Since the works were carried out within the non-restricted hours, it is considered that the works under the project did not breach the Noise Control Ordinance.	no comment by IEC on 6 May 2019	TCS00864/16/300/F0264
45	16-Jun-19	18-Jun-19	Anderson Road Quarry Site	Undisclosed	noise	EPD	NA	EPD referred a case to CEDD on 17 June 2019 regarding the construction noise heard at On Tat Estate on Sunday.	The Contractor explained that general cleaning by water jet was carried out in the construction site on the concerned day. Since the work did not involve the use of Powered Mechanical Equipment (PME), it would not violate the noise control ordinance. The Investigation report is underway by ET.	no comment by IEC on 21 August 2019	TCS00864/16/300/F0301a

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46	12-Jul-19	15-Jul-19	Anderson Road Quarry Site	Undisclosed	dust	EPD	NA	On 12 July 2019, a complaint was received by EPD regarding the dust impact to the residents at Po Tat Estate and On Tat Estate due to the dust emission at Anderson Road Quarry site.	In our investigation, CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident and status of implementation of dust mitigation measures was considered effective based on the site observation. Moreover, there was mostly rainy day throughout June and July 2019 in typical rainy season in Hong Kong and the dust impact was considered not significant in addition to the dust mitigation measures implemented provided by the Contractor. Nevertheless, the ET will closely monitor the environmental performance and dust mitigation measures in subsequent site inspection. The IR is under reviewed by IEC.	no comment by IEC on 12 August 2019	TCS00864/16/300/F0292b
47	6-Aug-19	14-Aug-19	Work Area Portion 2 E3 (Slope of Hiu Ming Street opposite of Tsui Yeung House)	翠屏(北)邨物業服務辦事處	Noise	1823	NA	A public complaint was received by 1823 on 6 August 2019 relating to the noise generated from construction work at the lift tower site (Slope E3) at Hui Ming Street from the residents of Tsui Yeung House. The complainant expressed that the construction works has been	In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. It is concluded that the complaint was valid to the contract. As the works were carried out within the non-restricted hours, it is	no comment by IEC on 16 Sep 2019	TCS00864/16/300/F0310a

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								undertaken for 2 years and generated construction noise from 8am every day, which causing serious nuisance to the nearby residents.	considered that the works under the contract did not breach the Noise Control Ordinance.		
48	15-Oct-19	18-Oct-19	Work Area Portion 6 (Tseung Kwan O Tunnel Bus-Bus Interchange Pedestrian Connectivity Facilities E12)	Mr. Ng	Noise	1823	NA	A public complaint was received by 1823 on 15 October 2019 relating to the noise generated from construction work at Tseung Kwan O Tunnel Bus to Bus Interchange Pedestrian Connectivity Facilities E12. The complainant expressed that the construction noise was generated from breaking work at 8:20 am without noise mitigation measure, which causing nuisance to the nearby residents.	In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.	no comment by IEC on 13 Nov 2019	TCS00864/16/300/F0326a

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49	5-Nov-19	11-Nov-19	Work Area Portion 2&3 (lift tower construction work at Hiu Kwong Street)	NA	Noise	EPD	NA	A public complaint was received by EPD relating to the noise generated from breaking work of lift tower construction work at Hiu Kwong Street (Portion 2&3).	In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.	no comment by IEC on 27 Dec 2019	TCS00864/16/300/F0332a
50	7-Nov-19	11-Nov-19	Work Area Portion 6	Mr. Cheng	Noise	EPD	NA	寶達邨居民鄭先生，表示將軍澳隧道出口工程，日間噪音嚴重，8:30-17:00，幾部幾同時開動，而且無防音欄，之前是有，現要求環保署向對方反映改善	In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided to reduce to noise nuisance to the public. As the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation	no comment by IEC on 27 Dec 2019	TCS00864/16/300/F0333a

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									measures as far as practicable as recommended in the EM&A Programme.		
51	10-Nov-19	12-Nov-19	Underpass	Undisclosed	Noise	EPD	NA	On 10 November 2019 投訴人為馬游塘村居民，自本年初寶林路開展掘隧道工程，每天噪音不斷，由 8 至 6，由於欠缺遮擋，聲音直向 4 至 22 號村屋，將來通車，相信噪音不只 8-6，現懇請環保署為本村居民正式評估，並向政府提出村民困擾，考慮盡快設置隔音屏。 On 11 November 2019 寶琳路近馬游塘村開掘隧道的工程地盤每日 8am-6pm 發出噪音，欠缺遮擋，聲音影響馬游塘村 4-22 號村屋。希望政府部門 1.調查地盤有否違規 2.實施減音措施以減低對附近居民的滋擾	In our investigation, CWSTVJV had implemented the noise mitigation measures to reduce to noise impact to the public. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. For the complainant's concern on the operation noise after commencement of the project, it is out of the scope of the EM&A programme and the relevant department will follow up the concern.	no comment by IEC on 30 Dec 2019	TCS00864/16/300/F0337

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52	11-Nov-19	20-Nov-19	Construction site near on Tai Estate Ancillary Facilities Building on On Sau Road	Mr. Wong (resident of Yung Tai House of On Tai Estate)	Noise	1823	ref. 2-59763 03183	黃先生投訴安秀道安泰邨服務設施大樓附近掘路工程已持續數年還未完成，並投訴其經常發出噪音滋擾，要求部門跟進。 On 22 November 2019, the project hotline received a call from the same complainant reported on the noise nuisance near On Sau Road and On Yan Street. He suggested to speed up the noise making works by intensely concentrate the excavation works during day time. No intermittence is suggested in order to speed up the works and to avoid waste of manpower.	In our investigation, CWSTVJV had implemented the noise mitigation measures to reduce to noise impact to the public. However, in response to the complaint, the Contractor was advised to enhance the performance of the temporary noise barriers such as increase the coverage of the noise barrier. Since the works were conducted within normal working hours with implementation of noise mitigation measures, there were no breaches of legislative requirement.	no comment by IEC on 27 Dec 2019	TCS00864/16/300/F0338a
53	5-Mar-20	6-Mar-20	Tunnel work of Anderson Road Quarry Site (the Underpass)	Resident of On Tat Estate	Noise	EPD	NA	本人是安達邨居民，隧道工程在安達臣的工程，施工至今嘈音間中改善，最近又有嘈音出現，仲係重低音，希望能加裝隔音設備，工程不知何時將嘈音減至最	In our investigation, CWSTVJV had implemented the noise mitigation measures to reduce to noise impact to the public. In response to the complaint, CWSTVJV had immediately installed a layer of acoustic mat at boundary of System A. Since the works were conducted within	no comment by IEC on 1 Apr 2020	TCS00864/16/300/F0357a

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								低 。1. A public complaint was received by EPD on 5 March 2020 regarding the construction noise generated from the tunnel work of the subject site. The complainant mentioned that the noise from construction was improved before but it became serious recently.	approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement.		
54	4-Mar-20	17-Mar-20	Near Hiu Ming Street Playground (E8)	Undisclosed	Noise	1823	ref. 3-6283237171	投訴人投訴有關秀茂坪邨秀安樓附近有兩個地盤 ， 地盤由星期一至五，每天早上約 9AM-5 PM 持續不斷發出強烈的嘈音， 投訴人表示地盤是在曉明街藍球場旁邊的位置(投訴人未能告知確實街號) ，因此要求部門盡快回覆及告知有關情況。 A public complaint was received by 1823 on 4 March 2020 regarding the construction noise. The complainant mentioned that there	In our investigation, CW-CMGCJV had implemented the noise mitigation measures for the works at upper section of E8 near Hiu Yuk Path and no noise impact was observed and anticipated in Hiu Ming Street based on the site activities and our inspection record. It is considered that the complaint is likely related to another construction site located near Hiu Ming Street Playground and not caused by the works under the Project. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement.	no comment by IEC on 15 Apr 2020	TCS00864/16/300/F0359a

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								were two construction sites near Hiu Ming Street Playground generated construction noise continuously during 9AM to 5PM on weekdays.			
55	23-Mar-20	23-Mar-20	Near Lin Tak Road (E11)	Undisclosed	Water Quality	Project hotline	NA	藍田居民梁先生反映在將軍澳道往連德道天橋的大彎位，其中有一個車輛出入口每日早上八時左右不時有泥水從地盤流出路面，估計泥水是清洗工程車輛所致，令梁先生的車輛每次駛經時被濺濕及弄污，請問有何措施改善問題？ A public complaint was received by project hotline on 23 March 2020 regarding overflow of muddy water from the construction site. The complainant mentioned that muddy water came out from site entrance, which spotted on his car, at 8am every morning.	In our investigation, the wheel washing facilities at site exit of E11 is one of the dust quality mitigation measures conducted by CW-CMGCJV and corresponding measure was implemented to prevent overflow of wastewater out of the site. In our recent site inspection, no outflow of muddy water from the site was observed and the condition of concerned Lin Tak Road was satisfactory. It is considered that the complaint was unlikely due to the project.	no comment by IEC on 15 Apr 2020	TCS00864/16/300/F0360a

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56	17-Mar-20	19-Mar-20	Anderson Road Quarry Site	Resident of Yan Tat House	Noise	Project hotline	NA	許有為區議員接獲安達邨仁達樓 2613 室居民反映，安達臣道石礦場發展用地工程噪音持續兩年，要求工程團隊下周派員到有關單位視察，並採取可行的噪音緩解措施。許有為區議員要求陪同視察。 A public complaint was received by hotline on 17 March 2020 regarding the construction noise generated from the Anderson Road Quarry Site. The complainant mentioned that the construction noise generated from the Anderson Road Quarry Site had been continued for two years.	In our investigation, CW-CMGCJV has implemented noise mitigation measures to reduce the noise impact and nuisance to the public. However, to eliminate the inconvenience caused to the nearby residents, CW-CMGCJV was advised to further adopt good practices on mitigating construction noise to reduce the noise impact to the nearby residents. 5. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, CW-CMGCJV was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.	no comment by IEC on 11 May 2020	TCS00864/16/300/F0361a
57	1-Apr-20	20-Apr-20	Work Area Portion 2	Undisclosed	Noise	1823	NA	觀塘秀茂坪紀念公園傍及曉明街的地盤，共兩個地盤，是地政總署管轄的。投訴人表示已被工程噪音滋擾了兩年多；另外投訴人得知完	In our investigation, Kwan On has implemented noise mitigation measures to reduce the noise impact to the nearby resident. Nevertheless, since the construction site is close to the residential area, adequate noise mitigation measures shall be provided	no comment by IEC on 7 May 2020	TCS00864/16/300/F0366a

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								工時間要到2021年, 投訴人不明白為何工程頭尾要 3 年多時間. 要求地政總署直接以電郵回覆工程長的原因及有沒有措施解決地盤發出的噪音。 A public complaint was received by 1823 on 1 April 2020 and subsequently transmitted to Environmental Team (ET) on 20 April 2020, regarding the noise nuisance generated from the construction site in Hui Ming Street. The complainant concerned about the slow progress and implementation of noise mitigation measures to alleviate the noise impact arising from the construction work.	to reduce to noise nuisance to the public. It is concluded that the complaint was valid to the contract. However, as the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Kwan On was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.		

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58	11-May-20	12-May-20	Work Area Portion 2	Undisclosed	Noise	Project hotline	NA	陳先生住於翠楊樓 17 樓，投訴對面鑽石工程產生噪音對母親健康構成影響，現查詢完工日期、噪音監控標準及措施。 A public complaint was received by Project Hotline on 11 May 2020 regarding the noise generated from rock breaking work from a construction site opposite to Tsui Yeung House, which affecting his mother's health. The complainant enquired about the completion date of construction work, construction noise level standard and implementation of noise mitigation measures on site.	In our investigation, Kwan On has enhanced the noise mitigation measures to reduce the noise impact to the nearby resident. Based on the noise measurement result, the construction noise was reduced to acceptable level after the additional noise mitigation measures in place. Nevertheless, Kwan On was reminded to continually implement the noise mitigation measures as far as practicable in the remaining work. The performance of noise mitigation measures will keep in view by ET in subsequent site inspection	no comment by IEC on 28 May 2020	TCS00864/16/300/F0370a

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59	18-Jun-20	23-Jun-20	Anderson Road Quarry Site, System B	Undisclosed	Noise	EPD	NA	A public complaint was received by EPD on 18 June 2020 regarding the noise generated from rock breaking by machinery before 7pm from construction site near Hau Tat House. The complainant understood that the Contractor could carry out construction works, other than percussive piling, before 7pm under the CNP and hoped that the Contractor could arrange the noisy construction works to be carried out before 6pm. According to the information provided by the complainant, it is suspected complaint location would be Anderson Road Quarry Site, System B.	In our investigation, the Contractor has implemented noise mitigation measures to reduce the noise impact and nuisance to the public. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, the Contractor was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme	no comment by IEC on 17 July 2020	TCS00864/16/300/F0391a

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59#	23-Jul-20	24-Jul-20	Anderson Road Quarry Site near On Tat Estate	Undisclosed	Noise	EPD	NA	A public complaint was received by EPD on 23 July 2020 regarding the construction noise generated from the use of PME at Anderson Road Quarry Site near On Tat Estate at 6:30am (restricted hours). He/ she requested relevant department to follow up.	In our investigation, CWSTVJV had restricted the use of PME before 7am. There was no construction work and use of PME during the restricted hours. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement. Nevertheless, as the construction site is close to the residential area, CWSTVJV was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme	no comment by IEC on 25 August 2020	TCS00864/ 16/300/F04 01
60	14-Nov-20	18-Nov-20	Near Hiu Ming Street Playground (E8)	Undisclosed	Noise	1823	NA	A public complaint was received by 1823 on 14 November 2020 regarding the construction noise. The complainant mentioned that there was piling works at Hiu Ming Street Playground, generating huge noise during 9AM to 10AM on 14 November 2020. He/she requested relevant department to follow up	In our investigation, there was no noise impact was observed and anticipated in Hiu Ming Street based on the site activities and our inspection record. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement	no comment by IEC on 4 January 2021	TCS00864/ 16/300/F04 24

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61	4-Dec-20	7-Dec-20	Opposite to On Tai Estate – lower portion of Road L4	Undisclosed	Dust	EPD	NA	A public complaint was received by EPD on 4 December 2020 regarding the dust impact. The complainant mentioned that the construction site opposite to On Tai Estate had dust emission problem due to lack of water spraying. He/she requested relevant department to follow up	In our investigation, CWSTVJV has implemented dust mitigation measures to eliminate the inconvenience caused to the nearby resident. In view of the potential traffic dust impact and implementation of dust mitigation measures, it is considered that the complaint was not valid to the Project	no comment by IEC on 4 January 2021	TCS00864/16/300/F0434
62	3-Dec-20	7-Dec-20	Ma Yau Tong Village (East Portal)	Undisclosed	Noise and dust	1823 & EPD	3-6574141017	A public complaint was received by 1823 and EPD on 14 November 2020 regarding the construction dust and noise impact arising from the project. There were acoustic mats erected on the slope of East Portal, however, the complainant enquired about effectiveness of the noise barriers with dozens of 15 cm "X"-shaped cuts. Moreover, there was lack of water sprinkling on the site and fugitive	In our investigation, CWSTVJV had provided the dust and noise mitigation measures to minimize the dust and noise impact to the resident nearby. To response the concern from the complainant, as enhancement noise measure, the Contractor extended the noise barrier to encircle noisy activity. Since the works were conducted within approved normal hours with implementation of noise and dust mitigation measures, there were no breaches of legislative requirement	no comment by IEC on 4 January 2021	TCS00864/16/300/F0435

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								dust was blowing to the village			
63	7-Jan-21	7-Jan-21	System B	Resident of Yan Tat House	Noise	Project hotline	NA	A public complaint was referred by district Councillor Mr. HSU Yau-wai and received by project hotline on 7 January 2021 regarding the construction noise. The complainant mentioned that the construction site next to SKH St. John's Tsang Shiu Tim Primary School generated noise problem and she requested relevant department to follow up.	In our investigation, the Contractor has implemented noise mitigation measures to reduce the noise impact and nuisance to the public.6. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, the Contractor was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.	no comment by IEC on 19 July 2021	TCS00864/16/300/F0441
64	18-Mar-21	18-Mar-21	Anderson Road Quarry Site (between On Tat Estate and On Tai Estate)	Undisclosed	Noise	1823 & EPD	NA	A public complaint was received by 1823 and referred by EPD on 18 March 2021 regarding the construction noise generated from construction works at Anderson Road Quarry Site between On Tat Estate and On Tai Estate. The complainant expressed that construction works	In our investigation, CWSTVJV had restricted the use of PME before 7am. There was no construction work and use of PME during the restricted hours and there should not be any non-compliance of Noise Control Ordinance. Nevertheless, as the construction site is close to the residential area, CWSTVJV was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme	no comment by IEC on 1 April 2021	TCS00864/16/300/F0454

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								of the site started from 6:45am everyday which causing noise disturbance to the nearby resident and he/ she requested relevant department to follow up			
65	1-Apr-21	1-Apr-21	Construction site near SKH St. John's Tsang Shiu Tim Primary School (System B under Contract 3)	Undisclosed	Noise	EPD	NA	A complaint was received by EPD and referred to CEDD on 1 April 2021 regarding the construction noise. The complainant mentioned that piling work was conducted at construction site near SKH St. John's Tsang Shiu Tim Primary School in recent week which generated noise problem. Moreover, there were no noise mitigation measures provided in the construction site	In our investigation, the Contractor has implemented noise mitigation measures to reduce the noise impact and nuisance to the public. Since the works were carried out within the non-restricted hours, it is considered that the works under the contract did not breach the Noise Control Ordinance. Moreover, the Contractor has adopted noise mitigation measures to minimise noise impact to the public. Since the construction site is close to the residential area, the Contractor was reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme	no comment by IEC on 19 July 2021	TCS00864/ 16/300/F0458a
66	28-Mar-21	30-Mar-21	Anderson Road Quarry Site (between On Tat Estate and	Resident of Tai Fung House of On	Noise	EPD	K13/RE/ 00007086-21	A public complaint was received by EPD on 28 March 2021 regarding the construction noise generated from construction works at	In our investigation, CWSTVJV had followed that CNP for work during restricted hour and there should not be any non-compliance of Noise Control Ordinance. Nevertheless, some site areas had been handed over to other	no comment by IEC on 22 April 2021	TCS00864/ 16/300/F0459

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			On Tai Estate)	Tai Estate				Anderson Road Quarry Site until 9pm on Monday to Saturday. Moreover, the complaint concerned about the construction noise heard on 28 March 2021 which was a Sunday.	contract and construction noise generated from others is not controlled by the project. As a reminder, CWSTVJV should implement the mitigation measures as far as practicable as recommended in the EM&A Programme.		
67	11-Jun-21	11-Jun-21	Anderson Road Quarry Site	Resident of Chi Tat House, On Tai Estate	Noise	EPD	EPD Ref.: 13208-21	A public complaint was received by EPD on 11 June 2021 and complained about noise nuisance from multiple construction sites on Anderson Road Quarry Site. The complainant stated that there were noise nuisances from different construction sites from 0800 am to 1800 pm from Monday to Saturday without adequate noise mitigation measures. On 17 June 2021, the complainant added that the noise was generated from rock breaking works in front of Chi Tai House (not from the housing sites near the	6. In our investigation, CWSTVJV had implemented the noise mitigation measures to reduce to noise impact to the public. In response to the complaint, CWSTVJV had immediately installed a layer of acoustic barrier at boundary of concern works area. Since the works were conducted within approved normal hours with implementation of noise mitigation measures, there were no violation of legislative requirement.	no comment by IEC on 19 July 2021	TCS00864/16/300/F0478a

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								Tai Sheung Tok slope) and no mitigation measure was implemented for the rock breaking works.			
68	20&21/June/21	23-Jul-21	Anderson Road Quarry Site	DSD	Water Quality	EPD	EPD Ref.: 13208-21	EPD received complaints from DSD on 20 and 21 July 2021 concerning about discharge of muddy water as found on Po Lam Road and at the drainage facility near Tin Hau temple.	In our investigation, CWSTVJV had implemented the water quality mitigation measures to minimise the impact arising from the construction site. In view of the site condition and inclement weather condition on the complaint days, it is considered that the complaints raised by DSD were unlikely due to the C1 Project. Nevertheless, CWSTVJV was advised to closely monitor the discharge quality to avoid non-compliance of water quality happened in the construction site. Moreover, to cope with the adverse weather condition in wet season, CWSTVJV should regularly review the drainage plan as needed.	no comment by IEC on 6 August 2021	TCS00864/16/300/F0485b
69	14&16/Sep/21	15-Sep-21	Anderson Road Quarry Site	DSD	Water Quality	EPD	NA	EPD received complaints from DSD on 14 Sep 2021 and 16 Sep 2021 concerning about discharge of muddy water as found at the catchpit SCH4003250 near Po	In our investigation, CWSTVJV had implemented the water quality mitigation measures to minimise the impact arising from the construction site. However, there were incidents of seepage of silty water at Q2 and Q3 and rectified actions were undertaken immediately. Having investigated, the incidents were considered very short	no comment by IEC on 6 October 2021	

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								Lam Road and catchpit SSH4001400 near Po Tat Tin Hau Temple.	term and would not generate large amount of muddy water. In view of the inclement weather condition and there were other major sources, it is considered that the complaints raised by DSD were not fully contributed byC1 Project. Nevertheless, CWSTVJV was advised to closely monitor the discharge quality to avoid non-compliance of water quality happened in the construction site. Moreover, to cope with the adverse weather condition in wet season, CWSTVJV should regularly review the drainage plan as needed.		
70	23/Sep/21	29-Sep-21	Anderson Road Quarry Site	CEDD & EPD	Noise	CEDD &EPD		A public complaint was referred by 1823 to both CEDD and EPD on 23 September 2021. The complainant stated that the construction works at Anderson Road Quarry Site started before 7am, which generated construction noise and affecting the upper floor resident of On Tat Estate. EPD have contacted the	Our investigation revealed that there was no construction works under the Project undertaken during the concerned period by the complainant, and there were other concurrent contracts on Anderson Road Quarry Site and the contribution noise may be related to others. Therefore, it is considered that the noise complaint was unlikely to be related to the works under the Project. Nevertheless, CWSTVJV was reminded to properly maintain the noise mitigation measures as far as	No comment by IEC on 15 November 2021	

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								complainant and clarify that the concerned about construction dust and daytime construction noise after 7am.	practicable considering the construction site is relatively close to residential area.		
71	30/Mar/22	12/Apr/22	Anderson Road Quarry Site	DSD	Water Quality	DSD		EPD received complaint from DSD on 28 March 2022 concerning about siltation and discharge of muddy water observed at the public drainage system at catchpit SSH4001400 near Tin Hau Temple and the site discharge points at Po Lam Road on 28 March 2022	In our investigation, the Contractor had implemented the water quality mitigation measures to minimise the impact arising from the construction site. Based on the investigation findings, it is considered that the complaint was likely caused by the interfacing contractors under rainy days and not due to the works under the Project.	No comment by IEC on 19 April 2022	TCS00864/16/300/F05 40
72	14/Apr/22	25/Apr/22	Anderson Road Quarry Site	DSD	Water Quality	DSD		DSD carried out site inspection at site discharge point at Po Lam Road on 12 April 2022 and observed discharge of muddy water at public drainage system. The case was then referred to CEDD and EPD to investigate the source of the muddy water discharge.	In our investigation, the Contractor had implemented the water quality mitigation measures to minimise the impact arising from the construction site. Based on the investigation findings, it is considered that the complaint was likely caused by the interfacing contractors and not due to the works under the Project.	No comment by IEC on 16 May 2022	TCS00864/16/300/F05 41
73	11/May/	25/May/	Anderson	DSD	Water	DSD		EPD received complaint	Based on the above findings and	No	TCS00864/

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
	2022	2022	Road Quarry Site		Quality			from DSD on 11 May 2022 concerning about muddy water observed entering Tsui Ping River, with similar situation observed at Tin Hau Temple and Po Lam Road.	successive heavy rainstorm on 11 to 13 May 2022, it is considered the muddy water found in the concerned catchpit SSH4001400 near Tin Hau Temple and Po Lam Road on 11 to 13 May 2022 were likely caused by impact of rainstorm and partially contributed by the interfacing contractors at Sites R2-9 & R2-10.	comment by IEC on 13 June 2022	16/300/F559
74	17/May/2022	30/May/2022	Anderson Road Quarry Site	DSD	Water Quality	DSD		EPD received complaint from DSD on 14 and 16 May 2022 concerning about muddy water observed entering Tsui Ping River.	Heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project.	No comment by IEC on 13 June 2022	TCS00864/16/300/F562a
75	27/May/2022	9/Jun/2022	Anderson Road Quarry Site	DSD	Water Quality	DSD		EPD received complaint from DSD on 27 May 2022 concerning about muddy water observed entering Tsui Ping River, with similar situation observed at Tin Hau Temple and Po Lam Road.	Heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project.	No comment by IEC on 13 June 2022	TCS00864/16/300/F563
76	6, 7, 8/Jun/202	7, 8, 9/Jun/202	Anderson Road	DSD	Water Quality	DSD		On 6 June 2022, DSD	As a matter of fact, heavy rain led to large amount of storm runoff from roads	Sent to EPD on	TCS00864/16/300/F56

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
	2	2	Quarry Site					informed that dirty water with bad odour was observed entering Tsui Ping River this morning at the upstream near junction of Kai Lim Road and Tsui Ping Road. The situation has persisted over 50 mins. Furthermore, muddy water was observed entering Tsui Ping River, with similar situation at Tin Hau Temple and Po Lam Road (山渠) on 6, 7 and 8 June 2022.	and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project.	21 June 2022	5
77	14/Jun/2022	15/Jun/2022	Anderson Road Quarry Site	DSD	Water Quality	DSD		DSD concerning muddy water discharge found at Tin Hau Temple and Po Lam Road on 14 June pm.	As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. Besides, there were several construction sites at upstream of Tsui Ping River. It is considered that complaint mainly related to the interfacing contractor(s) and unlikely to have been caused by the project.	Sent to EPD on 29 June 2022	TCS00864/16/300/F566
78	8/Aug/2022	8/Aug/2022	Anderson Road	DSD	Water Quality	DSD		DSD advised EPD that muddy water was	As a matter of fact, heavy rain led to large amount of storm runoff from	No comment	TCS00864/16/300/F58

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
			Quarry Site					observed entering Tsui Ping River in the morning of 8 August 2022, with similar situation at Tin Hau Temple and Po Lam Road	roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. No muddy water discharge was evident in the morning or afternoon of 8 August 2022. It is therefore considered that the muddy water discharge observed by DSD in the morning of 8 August 2022 was unlikely to have been caused by the ARQ contracts of C1 or C4.	by IEC on 19 September 2022	0
79	12/Aug/2022	12/Aug/2022	Anderson Road Quarry Site	DSD	Water Quality	DSD		DSD advised EPD that muddy water was observed entering Tsui Ping River in the morning of 12 August 2022, with similar situation at Tin Hau Temple and Po Lam Road (山渠).	As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. No muddy water discharge was evident in the morning of 12 August 2022. It is therefore considered that the muddy water discharge observed by DSD in the morning of 12 August 2022 was unlikely to have been caused by the ARQ contracts of C1 or C4.	No comment by IEC on 19 September 2022	TCS00864/16/300/F581
80	29&30/Sep/2022	29/Sep/2022&3 Oct 2022	Anderson Road Quarry (ARQ) Site	DSD	Water Quality	DSD		DSD's complaint was made to EPD who requested CEDD in the same respective mornings to handle and investigate in accordance with the	As a matter of fact, heavy rain led to large amount of storm runoff from roads and landscape into the public drainage system, which deteriorated the water quality in the drainage system. No muddy water discharge from ARQ	Sent to EPD on 18 October 2022	TCS00864/16/300/F593

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								procedure in EM&A Manual.	Site was evident in the morning of 29 and 30 September 2022. It is therefore considered that the muddy water discharge observed by DSD in the morning of 29 and 30 September was unlikely to have been caused by the ARQ contracts of C1 or C4. During wet season, the Contractor was strongly reminded to implement adequate water quality mitigation measures to minimise the impact arising from the construction site. The Contractor should closely monitor the discharge quality from the Site to avoid non-compliance. The ET will pay special attention on water quality mitigation measures implementation on site through regular site inspection, and give advice on remedial action when necessary. Incidentally, it is noted that Site R2-9 has kept discharging muddy water to downstream manhole D310. Record photos of the manhole dated 6, 7 and 8 October 2022 are enclosed for reference.		
81	18/Oct/2022	20/Oct/2022	Anderson Road Quarry (ARQ) Site	DSD	Dust Quality	Referred by 1823 to EPD		A public complaint was referred by 1823 to EPD on 18 October 2022, regarding the dust	In our investigation, both the Contractors had implemented dust mitigation measures to reduce to potential impact to the public.	Sent to EPD on 3 November 2022	TCS00864/16/300/F596

Log ref.	Date of Complaint	Date of Received by ET	Complaint Location	Complainant	Complaint nature	Channel	Ref. no.	Complaint details	Follow up action	Log ref.	Date of Complaint
								problem generated from the construction site in Anderson Road near On Tai Estate due to typhoon signal no. 3. EPD contacted the complainant who was a resident of Shing Tai House, On Tai Estate. The complainant expressed concern about the construction dust generated from Anderson Road Quarry (ARQ) site and requested the site to step up dust suppression measures.	However, in particular during dry season, Contract 4 was reminded to enhance the dust suppressive measures as far as practicable. As there were no air monitoring results exceeding the limit level, it is considered that the dust mitigation measures implemented were effective in suppressing the fugitive dust. Nevertheless, as the construction site is close to the residential area, both the Contractors were reminded to implement the mitigation measures as far as practicable as recommended in the EM&A Programme.		

Appendix N

Implementation Status for Water Quality Mitigation Measures

Water Quality Mitigation Measure



Paving for exposed slope to reduce dust dispersion & mitigate the silty runoff generation at Q1.



Impermeable cover for slope at System A.



Q1. Wastewater treatment facility 30 cu.m Sedimentation Tank + AquaSed of 15 cu.m per hour + WETSEP



Q4. Wastewater treatment facility Temporary Water Reservoir 150 cu.m + AquaSed of 60 cu.m per hour



Q6: Wastewater treatment facility 24 cu. m.



Q7. Wastewater treatment facility 30 cu.m Sedimentation Tank + AquaSed of 60 cu.m per hour



Q9. Two nos. of 30 cu.m Sedimentation Tank + AquaSed of 60 cu.m per hour