JOB NO.: TCS01062/19

EPD CONTRACT NO. EP/SP/86/15
ORGANIC WASTE TREATMENT FACILITIES PHASE 2

MONTHLY ENVIRONMENTAL MONITORING AND AUDIT REPORT (FEBRUARY 2023)

PREPARED FOR

AJA JOINT VENTURE

Date	Reference No.	Prepared By	Certified By
7 March 2023	TCS01062/19/600/R0297v2		
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Version	Date	Remarks
1	7 March 2023	First Submission
2	7 March 2023	Amended as per ER's and IEC's comments

Your ref TCS1062/19/300/L0298
Our ref 271491/02-09/RC/VH/NL-5081
File ref 02-09

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Attn: Mr. Chris Leung

8 March 2023

Dear Sir

Contract No. EP/SP/86/15
Organic Waste Treatment Facilities Phase 2
Monthly Environmental Monitoring & Audit Report (February 2023)

Referring to your letter referenced above dated 7 March 2023, pursuant to Permit Condition 3.4 of the Environmental Permit No.EP-01/460/2013/A and Further Environmental Permit No.FEP-01/460/2013/A, we hereby verify that the report ref. no. TCS01062/19/600/R0297v2 complied in general with the requirements as set out in the EM&A Manual.

Should you have any queries, please contact the undersigned at 2268 3437.

Yours faithfully

Ricky Chui
Independent Environmental Checker

cc EPD – Ms. Winnie Chu, Mr. K. H. To, Mr. Sunny Chiu, Mr. Jason Tsang
Mr. Julian Lam Mr. W.W. Lau, Mr. Peter Wong, Mr. Gilbert Wong
Mr. David Ng
AECOM – Mr. Desmond Ng, Mr. Ben Tsang, Mr. Philip Cheung
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Mr. W.W. Tong, Ms. Rachel Zu
AJA JV – Ms. Tso So Fong, Mr. Tse Man Kit, Mr. Salinda Palipana
Ms. Beth Biddle, Mr. Gabriel Wong
AUES – Mr. T.W. Tam, Mr. Martin Li

EXECUTIVE SUMMARY

ES01 Environmental Protection Department (hereinafter referred as "EPD") is the Project Proponent for the Project *"Organic Waste Treatment Facilities Phase 2"* (hereinafter referred as "the Project"). The Project is a Designated Project to be implemented under Environmental Permit No. EP-460/2013 (hereinafter referred as "the EP"). In accordance with the Works Contract requirements, the Contractor shall take over the responsibility of the EP. Based on the requirement, Further Environmental Permit FEP-01/460/2013/A (hereinafter referred as "the FEP") was applied by AJA Joint Venture (hereinafter referred as "AJAJV").

ES02 Action-United Environmental Services & Consulting (hereinafter referred as "AUES") was employed as Environmental Team (hereinafter referred as "ET") to implement monitoring programmes and as well as the associated duties.

ES03 This is the monthly EM&A report presenting the environmental monitoring results and inspection findings for the reporting period from **1 to 28 February 2023** (hereinafter 'the Reporting Period').

ENVIRONMENTAL MONITORING AND AUDIT ACTIVITIES

ES04 Environmental monitoring activities under the EM&A program in this Reporting Period are summarized in the following table.

Table ES-1 Summary of Environmental Monitoring Activities Undertaken in the Reporting Period

Issues	Environmental Monitoring Parameters / Inspection	Sessions
Construction Noise	Leq (30min) Daytime	12
	Leq (5min) restricted hours 19:00-07:00 including public holidays and Sundays	32
Inspection / Audit	ET Regular Environmental Site Inspection	4

BREACH OF ACTION AND LIMIT (A/L) LEVELS

ES05 No construction noise monitoring exceedance was recorded in this Reporting Period. The statistics of environmental exceedance and investigation of exceedance are summarized in the following table.

Table ES-2 Summary of Environmental Monitoring Parameter Exceedance in the Reporting Period

Environmental Issues	Monitoring Parameters	Action Level	Limit Level	Event & Action	
				Investigation Results	Corrective Actions
Construction Noise	Leq_{30min} Daytime	0	0	NA	NA
	Leq_{5min} Restricted hour	0	0	NA	NA

SITE INSPECTION

ES06 In the Reporting Period, weekly joint site inspections to evaluate the site environmental performance had been carried out by the representative of the Consultants, Independent Environmental Checker (IEC), ET and the Contractor on ***1st, 8th, 15th and 22nd February 2023***. No non-compliance was recorded during the site inspections.

ENVIRONMENTAL COMPLAINT

ES07 No environmental complaint was recorded in this Reporting Period for the Project. The statistics of environmental complaint are summarized in the following table.

Table ES-3 Summary of Environmental Complaint Records in the Reporting Period

Reporting Period	Environmental Complaint Statistics			Related with the Works Contract
	Frequency	Cumulative	Complaint Nature	
1 – 28 February 2023	0	7	NA	NA

NOTIFICATION OF SUMMONS AND SUCCESSFUL PROSECUTIONS

ES08 No environmental summons or prosecutions was received in this Reporting Period for the Project. The statistics of environmental summons or prosecutions are summarized in the following tables.

Table ES-4 Summary of Environmental Summons Records in the Reporting Period

Reporting Period	Environmental Summons Statistics			Related with the Works Contract
	Frequency	Cumulative	Complaint Nature	
1 – 28 February 2023	0	0	NA	NA

Table ES-5 Summary of Environmental Prosecutions Records in the Reporting Period

Reporting Period	Environmental Prosecution Statistics			Related with the Works Contract
	Frequency	Cumulative	Complaint Nature	
1 – 28 February 2023	0	0	NA	NA

REPORTING CHANGE

ES09 No reporting change was made in this Reporting Period.

FUTURE KEY ISSUES

ES10 Construction noise would be a key environmental issue during construction work of the Project. Noise mitigation measures such as using quiet plants and noise barriers should be implemented in accordance with the EM&A requirement.

ES11 Dust suppression measures such as water spraying and cover dusty stockpile with impervious sheet should be implemented properly to reduce the dust impact generated by the construction activities during windy season.

ES12 In addition, all effluent discharge from the construction site shall fulfill the discharge licence stipulation.

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1. INTRODUCTION

1.1 PROJECT BACKGROUND

1.1.1 Environmental Protection Department (hereinafter referred as "EPD") is the Project Proponent for the Project *"Organic Waste Treatment Facilities Phase 2"* (hereinafter referred as "the Project"). The Project is a Designated Project to be implemented under Environmental Permit No. FEP-460/2013 (hereinafter referred as "the EP"). The major construction work of the Project included:

(i) Demolition and removal of the existing above ground structures of the Sha Ling Livestock Waste Composting Plant (SLCP);
(ii) Construction of superstructure for an administration building and enclosed waste reception area;
(iii) Installation of treatment facilities including waste pre-treatment equipment, digesters, biogas holding tanks, granulator/granulation building, wastewater treatment, air treatment systems; and
(iv) Facilities for biogas processing, utilization and transmission;

1.1.2 AJA Joint Venture (hereinafter referred as "AJAJV") has been awarded the *EPD Contract No. EP/SP/86/15 "Organic Waste Treatment Facilities Phase 2"*. In accordance with the Works Contract requirements, AJAJV shall take over the responsibility of the EP. Based on the requirement, Further Environmental Permit application was submitted by AJAJV to EPD on 10 September 2019 and granted on 2 October 2019. A variation of Further Environmental Permit was granted on 14 September 2020. The Further Environmental Permit is named as FEP-01/460/2013/A (hereinafter referred as "the FEP").

1.1.3 According to the approved Environmental Monitoring and Audit Manual (hereinafter referred as "the EM&A Manual"), AJAJV employed Action-United Environmental Services & Consulting (hereinafter referred as "AUES") as Environmental Team (hereinafter referred as "ET") to implement monitoring programme and as well as the associated duties.

1.1.4 According to the EM&A Manual, construction noise was identified as the only key environmental issue during the construction phase of the Project and it is required to carry out construction noise monitoring throughout the construction phase. Furthermore, baseline noise monitoring as part of the EM&A programmes shall be conducted prior to the commencement of the construction works under the Project. Thus, baseline noise monitoring was conducted by ET from ***25 September 2019*** to ***8 October 2019.*** The baseline monitoring report compiled by the ET was verified by Independent Environmental Checker (hereinafter the "IEC') and was submitted to EPD on 19th November 2019 for endorsement.

1.1.5 The Project works was commenced on ***3rd December 2019***. This is the **39th** EM&A monthly report presenting the construction noise monitoring results and site inspection findings from **1st to 28th February 2023** (hereinafter the "Reporting Period").

1.2 REPORT STRUCTURE

1.2.1 The Monthly Environmental Monitoring and Audit (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	*Construction Noise Monitoring*
Section 5	*Waste Management*
Section 6	*Site Inspections*
Section 7	*Environmental Complaints and Non-Compliance*
Section 8	*Implementation Status of Mitigation Measures*
Section 9	*Conclusions and Recommendations*

2. PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS

2.1 PROJECT ORGANIZATION AND CONSTRUCTION PROGRESS

2.1.1 Organization structure and contact details of relevant parties with respect to on-site environmental management are shown in ***Appendix B***. The responsibilities of respective parties are:

Engineer or Engineers Representative (ER)

2.1.2 The ER is responsible for overseeing the construction works and for ensuring that the works are undertaken by the Contractor in accordance with the specification and contract requirements. The duties and responsibilities of the ER with respect to EM&A include:

- to monitor the Contractor's compliance with Contract Specifications, including the effective implementation and operation of the environmental mitigation measures;
- to employ an Independent Environmental Checker (IEC) to audit the results of the EM&A works carried out by the Environmental Team (ET);
- to monitor Contractors', ET's and IEC's compliance with the requirements in the Environmental Permit (EP) and EM&A Manual;
- to facilitate ET's implementation of the EM&A programme;
- participate in joint site inspection by the ET and IEC;
- to oversee the implementation of the agreed Event / Action Plan in the event of any exceedance; and,
- to adhere to the procedures for carrying out complaint investigation.

The Contractor

2.1.3 The Contractor should report to the ER. The duties and responsibilities of the Contractor include:

- to comply with the relevant contract conditions and specifications on environmental protection;
- to employ an ET to undertake monitoring, laboratory analysis and reporting of EM&A;
- to facilitate ET's monitoring and site inspection activities;
- to participate in the site inspections undertaken by the ET and IEC, and undertake any corrective actions;
- to provide information / advice to the ET regarding works programme and activities which may contribute to the generation of adverse environmental impacts;
- to submit proposals on mitigation measures in case of exceedance of Action and Limit levels in accordance with the Event / Action Plans;
- to implement measures to reduce impact where Action and Limit levels are exceeded; and,
- to adhere to the procedures for carrying out complaint investigation.

Environmental Team (ET)

2.1.4 The ET will be led and managed by the ET Leader. ET Leader should have relevant professional qualifications in environmental control and possess at least 7 years of experience in EM&A. Suitably qualified staff should be included in the ET, and resources for the implementation of the EM&A programme should be allocated in the time under the Contract, to enable fulfilment of the Project's EM&A requirements as specified in the EM&A Manual during construction of the Project. The ET should report to Project Proponent and the duties should include:

- to monitor and audit various environmental parameters as required in this EM&A Manual;
- to analyse the environmental monitoring and audit data, review the success of EM&A programme and the adequacy of mitigation measures implemented, confirm the validity of the EIA predictions and identify any adverse environmental impacts arising;
- to monitor compliance with conditions in the EP, environmental protection, pollution prevention and control regulations and contract specifications;
- to audit environmental conditions on site;
- to report on the environmental monitoring and audit results to EPD, the ER, the IEC and Contractor or their delegated representatives;

- to recommend suitable mitigation measures to the Contractor in the case of exceedance of Action and Limit levels in accordance with the Event and Action Plans;
- to liaise with the IEC on all environmental performance matters, and ensure timely submission of all relevant EM&A pro forma for IEC's approval;
- to provide advice to the Contractor on environmental improvement, awareness and enhancement matters, etc on site;
- to adhere to the procedures for carrying out complaint investigation;
- to prepare reports on the environmental monitoring data and the site environmental conditions;
- to submit the EM&A report to Director of Environmental Protection (DEP) timely;
- to review proposals of mitigation measures from the Contractor in case of exceedance of Action and Limit levels, in accordance with Event and Action Plan; and,
- to carry out site inspection to investigate and audit the Contractor's site practice, equipment and work methodologies with respect to pollution control and mitigation measures.

Independent Environmental Checker (IEC)

2.1.5 The IEC is empowered to audit the environmental performance of construction, but is independent from the management of construction works. As such, the IEC should not be in any way an associated body of the Contractor or the ET for the Project. The IEC should be a person who has relevant professional qualifications in environmental control and at least 7 years' experience in EM&A and environmental management. The duties and responsibilities of the IEC are:

- to provide proactive advice to the ER on EM&A matters related to the project;
- to review and verify the monitoring data and all submissions in connection with the EP and EM&A Manual submitted by the ET;
- to arrange and conduct regular, at least monthly site inspections of the works during the construction phase, and to carry out ad hoc inspections if significant environmental problems are identified;
- to check compliance with the agreed Event / Action Plan in the event of any exceedance;
- to check compliance with the procedures for carrying out complaint investigation;
- to check the effectiveness of corrective measures;
- to feedback audit results to the ET by signing off relevant EM&A pro forma;
- to check that mitigation measures are effectively implemented;
- to report the works conducted, and the findings, recommendations and improvements of the site inspections, after reviewing ET's and Contractor's works, to the ER on a monthly basis;
- to verify the investigation result of the environmental complaint cases and the effectiveness of corrective measures;
- to verify EM&A report that has been certified by ET leader; and,
- to audit EIA recommendations and requirements against the status of implementation of environmental mitigation measures on site.

2.2 CONSTRUCTION PROGRESS

2.2.1 3-month rolling construction program of the Project is enclosed in ***Appendix D***; and the major construction activities undertaken in the Reporting Period is presented as below:

- AD Tanks – AD1 and AD3 Roof slab works
- Footbridge – Piers construction work in-progress
- Sitewide underground utilities work – at retaining wall in front of Admin Building and at Portion 1, 3.1, 3.2, 4.2, 5.2 & 6.1.

2.3 SUMMARY OF ENVIRONMENTAL SUBMISSIONS

2.3.1 Summary of the relevant permits, licenses, and/or notifications on environmental protection for the Project of contract 1 are presented in ***Tables 2-1***.

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

Item	Description	License/Permit Status			
		Permit no./ account no./ Ref. no.	Valid Period		Status
			From	To	
1	Notification pursuant to Air pollution Control (Construction Dust) Regulation	Application No. 448863	9 Sep 2019	NA	Valid
2	Chemical Waste Producer Registration	Ref. No. 5211-641-A2957-01	9 Oct 2019	NA	Valid
3	Water Pollution Control Ordinance - Discharge License	Application No. 448913	--	--	Application made on 10 Sep 2019
4	Waste Disposal Regulation - Billing Account for Disposal of Construction Waste	Account No. 7035307	2 Oct 2019	NA	Valid
5	Further Environmental Permit	FEP-01/460/2013/A	14 Sep 2020	NA	Valid
6	Construction Noise Permit	GW-RN1254-22	6 Jan 2023	5 Apr 2023	Valid
7	Waste Water Discharge License	WT00035196-2019	20 Mar 2020	31 Mar 2025	Valid

3. SUMMARY OF IMPACT MONITORING REQUIREMENTS

3.1 MONITORING PARAMETERS

3.1.1 According to Environmental Monitoring and Audit requirements set out in the Approved EM&A manual, construction noise was identified as the only key environmental issues during the construction phase of the Project.

3.1.2 The construction noise monitoring requirement stated in the approved EM&A Manual is summarized in ***Table 3-1.***

Table 3-1 Summary of EM&A Requirements

Environmental Issue	Parameters
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. • Leq(5min) if construction works are extended to restricted hours 19:00-07:00 including public holidays and Sundays

3.2 MONITORING LOCATIONS

3.2.1 According to the EM&A Manual Section 4.2.3, four (4) designated noise sensitive receivers (NSR) were recommended as construction noise monitoring stations. Since two of the designated monitoring locations N2 and N3 were found not accessible, alternative monitoring locations N2a and N3a were therefore proposed for the noise monitoring and were approved by EPD on 1 June 2021. Details of the locations for construction noise monitoring in the Reporting Period is listed in ***Table 3-2*** and showed in ***Appendix C.***

Table 3-2 Impact Monitoring Stations – Construction Noise

ID	Location
N1	Village House No. 308, Sha Ling
N2a	Village House No. 318, Sha Ling
N3a	Village House No. 261, Sha Ling
N4	Village House in Sha Ling

3.3 MONITORING FREQUENCY AND PERIOD

3.3.1 Noise monitoring shall be conducted at the all available designated monitoring stations or alternative locations. The monitoring frequency shall depend on scale of the construction activities. According to EM&A manual, regular noise monitoring should be carried out once a week when noise generating activities are underway and the monitoring requirement is presented below:

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

3.3.2 If construction works are extended to restricted hours 19:00-07:00 in normal working days (Monday to Saturday), and 00:00-24:00 during public holidays including Sunday, additional weekly impact monitoring should be carried out during the respective restricted hour periods. $Leq_{(5min)}$ measurements should be employed during the restricted hours.

3.4 MONITORING EQUIPMENT

3.4.1 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}.

3.4.2 Equipment used for construction noise monitoring is listed in ***Table 3-3***.

Table 3-3 Construction Noise Monitoring Equipment

Equipment	Model
Integrating Sound Level Meter	Rion NL-52
Calibrator	Rion NC-73
Portable Wind Speed Indicator	Anemometer AZ Instrument 8908 Wind Speed Indicator

3.5 MONITORING METHODOLOGY

3.5.1 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.

3.5.2 The sound level meter will be mounted 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.

3.5.3 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.

3.5.4 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.

3.5.5 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. Calibration certificates of all the noise monitoring equipment used for the impact monitoring program will be provided in each EM&A Monthly Report.

3.6 ACTION/LIMIT (A/L) LEVELS

3.6.1 Action and Limit levels for construction noise as stipulated in the approved Environmental Monitoring and Audit Manual are listed in ***Tables 3-4***.

Table 3-4 Action and Limit Levels for Construction Noise

Monitoring Location	Action Level	Limit Level in dB(A)
Time Period:	**0700-1900 hours on normal weekdays**	
N1	When one or more documented complaints are received	***75*** dB(A)
N2a		
N3a		
N4		
Time Period:	**19:00-07:00 in normal working days (Monday to Saturday), and 00:00-24:00 during public holidays including Sunday**	
N1	When one or more documented complaints are received	***60*** dB(A)
N2a		
N3a		
N4		

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 should be followed.

3.6.2 Should non-compliance of the environmental quality criteria occur, remedial actions will be triggered according to the Event and Action Plan presented in ***Appendix E.***

3.7 DATA MANAGEMENT AND DATA QA/QC CONTROL

3.7.1 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 be input into a computerized database properly maintained by the ET.

4. CONSTRUCTION NOISE MONITORING

4.1 GENERAL

4.1.1 In the Reporting Period, construction noise monitoring was performed at monitoring location N1, N2a, N3a and N4. Additional weekly noise monitoring during restricted hours were also performed due to construction works were carried out during public holiday including Sunday. The noise monitoring schedule is presented in ***Appendix F***.

4.1.2 Valid calibration certificates of monitoring equipment are shown in ***Appendix G*** and the construction noise monitoring results are summarized in the following sub-sections.

4.2 RESULTS OF NOISE MONITORING

4.2.1 ***12*** sessions of daytime construction noise monitoring and ***32*** sessions of additional weekly monitoring during restricted hours were performed at the agreed monitoring locations in the reporting period. Since the noise measurement was made under free field condition, a façade correction of +3dB(A) was added according to acoustical principles and EPD guidelines. For the approved alternative monitoring locations N2a and N3a, an additional distance correction of +1 dB(A) and +3 dB(A) respectively were applied. The daytime noise monitoring results are summarized in ***Table 4-1 to Table 4-4*** and the noise monitoring result during restricted hours are summarized in ***Table 4-5 to Table 4-8.*** The detailed noise monitoring data are presented in ***Appendix H*** and the relevant graphical plots are shown in ***Appendix I***.

Table 4-1 Daytime Construction Noise Impact Monitoring Results at N1

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			$L_{eq30min}$
6-Feb-23	9:05	9:35	61.3
17-Feb-23	13:02	13:32	66.6
23-Feb-23	10:28	10:58	63.4

Table 4-2 Daytime Construction Noise Impact Monitoring Results at N2a

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			$L_{eq30min}$
6-Feb-23	9:40	10:10	58.3
17-Feb-23	13:38	14:08	60.4
23-Feb-23	9:49	10:19	54.1

Table 4-3 Daytime Construction Noise Impact Monitoring Results at N3a

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			$L_{eq30min}$
6-Feb-23	11:05	11:35	64.9
17-Feb-23	15:19	15:49	73.1
23-Feb-23	11:12	11:42	67.3

Table 4-4 Daytime Construction Noise Impact Monitoring Results at N4

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			$L_{eq30min}$
6-Feb-23	10:20	10:50	61.7
17-Feb-23	14:23	14:53	68.9
23-Feb-23	9:12	9:42	65.5

Table 4-5 Additional Noise Impact Monitoring Results during Restricted Hours at N1

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			L_{eq5min}
1-Feb-23	20:03	20:08	51.8
5-Feb-23	9:46	9:51	47.3
9-Feb-23	20:07	20:12	55.6
12-Feb-23	9:57	10:02	42.1

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			L_{eq5min}
16-Feb-23	20:04	20:09	51.5
19-Feb-23	9:51	9:56	43.3
23-Feb-23	20:12	20:17	49.5
26-Feb-23	9:49	9:54	53.3

Table 4-6 Additional Noise Impact Monitoring Results during Restricted Hours at N2a

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			L_{eq5min}
1-Feb-23	19:32	19:37	48.0
5-Feb-23	9:19	9:24	48.2
9-Feb-23	19:39	19:44	49.9
12-Feb-23	9:24	9:29	55.7
16-Feb-23	19:33	19:38	48.3
19-Feb-23	9:19	9:24	49.2
23-Feb-23	19:34	19:39	50.7
26-Feb-23	9:26	9:31	51.2

Table 4-7 Additional Noise Impact Monitoring Results during Restricted Hours at N3a

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			L_{eq5min}
1-Feb-23	20:24	20:29	54.0
5-Feb-23	11:05	11:10	54.0
9-Feb-23	20:37	20:42	59.4
12-Feb-23	10:45	10:50	51.3
16-Feb-23	20:26	20:31	55.0
19-Feb-23	11:08	11:13	49.3
23-Feb-23	20:38	20:43	55.5
26-Feb-23	11:12	11:17	51.3

Table 4-8 Additional Noise Impact Monitoring Results during Restricted Hours at N4

Date	Time of Starting	Time of Finishing	Measurement Result (dB(A))
			L_{eq5min}
1-Feb-23	19:10	19:15	50.0
5-Feb-23	10:22	10:27	49.8
9-Feb-23	19:10	19:15	49.2
12-Feb-23	10:17	10:22	41.5
16-Feb-23	19:10	19:15	50.3
19-Feb-23	10:32	10:37	43.5
23-Feb-23	19:11	19:16	51.8
26-Feb-23	10:26	10:31	45.2

4.2.2 As shown in ***Table 4-1 to 4-4***, all the measured results during normal daytime were below 75dB(A) of the acceptance criteria. In addition, all the measured results during restricted hours shown in ***Table 4-5 to 4-8*** were below 60 dB(A) of the acceptance criteria as set out in Technical Memorandum on Noise from Construction Work other than Percussive Piling.

4.2.3 No adverse weather condition which may affect the monitoring result was encountered during the course of noise monitoring in the reporting period. Furthermore, no documented noise complaint is received, indicating no exceedance of Action Level.

5. WASTE MANAGEMENT

5.1 GENERAL WASTE MANAGEMENT

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

5.2 RECORDS OF WASTE QUANTITIES

5.2.1 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.

5.2.2 The quantities of waste for disposal in this Reporting Period are summarized in ***Tables 5-1*** and ***5-2***.

Table 5-1 Summary of Quantities of Inert C&D Materials

Type of Waste	Quantity	Disposal Location
C&D Materials (Inert) ('000m^3)	0.932	-
Reused in this Contract (Inert) ('000m^3)	0	-
Reused in other Projects (Inert) ('000m^3)	0	-
Disposal as Public Fill (Inert) ('000m^3)	0.932	TM38

Table 5-2 Summary of Quantities of C&D Wastes

Type of Waste	Quantity	Disposal Location
Recycled Metal ('000kg)	0	-
Recycled Paper / Cardboard Packing ('000kg)	0	-
Recycled Plastic ('000kg)	0	-
Chemical Wastes ('000kg)	0	-
General Refuses ('000m^3)	0.059	NENT

6. Site Inspection

6.1 REQUIREMENTS

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

6.2 FINDINGS / DEFICIENCIES DURING THE REPORTING PERIOD

6.2.1 In the Reporting Period, joint site inspection for the Project to evaluate site environmental performance was carried out by the ER, IEC representative, ET and the Contractor on **1, 8, 15 and 22 February 2023**. No non-compliance was noted.

6.2.2 The findings / deficiencies of the Project observed during the weekly site inspection are listed in ***Table 6-1***.

Table 6-1 Site Observations during the Weekly Inspection

Date	Findings / Deficiencies	Follow-Up Status
1 February 2023	• The Contractor should place oil drums inside drip tray within site area. • The Contractor was reminded to cover stockpiles properly within site area.	Oil drums were removed from site area. Reminder only.
8 February 2023	• The Contractor was reminded to cover stockpiles properly within site area.	Reminder only.
15 February 2023	• The Contractor was advised to cover open stockpiles properly within site area.	Open stockpiles was covered with tarpaulin sheet.
22 February 2023	• No adverse environmental issue was observed.	NA

7. Environmental Complaint, Notifications of Summons and Successful Prosecutions

7.1 Environmental Complaint, Summons and Prosecution

7.1.1 In the Reporting Period, no environmental complaint, summons and prosecution under the EM&A Programme was lodged for the project. The statistical summary table of environmental complaint is presented in ***Tables 7-1, 7-2*** and ***7-3***.

Table 7-1 Statistical Summary of Environmental Complaints

Reporting Period	Environmental Complaint Statistics		
	Frequency	Cumulative	Complaint Nature
1 – 28 February 2023	0	7	NA

Table 7-2 Statistical Summary of Notification of Summons

Reporting Period	Environmental Summons Statistics		
	Frequency	Cumulative	Summons Nature
1 – 28 February 2023	0	0	NA

Table 7-3 Statistical Summary of Successful Prosecutions

Reporting Period	Environmental Prosecution Statistics		
	Frequency	Cumulative	Prosecution Nature
1 – 28 February 2023	0	0	NA

8. Environmental Mitigation Implementation Schedule

8.1 General Requirements

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

8.1.2 AJAJV had been implementing the required environmental mitigation measures according to the Environmental Monitoring and Audit Manual subject to the site condition. Environmental mitigation measures generally implemented by AJAJV in this Reporting Period are summarized in ***Table 8-1***.

Table 8-1 Environmental Mitigation Measures

Issues	Environmental Mitigation Measures
Water Quality	• Any wastewater generated was appropriately treated by treatment facilities; • Drainage channels were provided to convey run-off into the treatment facilities; and • Drainage systems were regularly and adequately maintained.
Air Quality	• Regular watering to reduce dust emissions from all exposed site surface, particularly during dry weather; • Frequent watering for particularly dusty construction areas and areas close to air sensitive receivers; • Cover all excavated or stockpile of dusty material by impervious sheeting or sprayed with water to maintain the entire surface wet; • Public roads around the site entrance/exit had been kept clean and free from dust; and • Tarpaulin covering of any dusty materials on a vehicle leaving the site.
Noise	• Good site practices to limit noise emissions at the sources; • Use of quite plant and working methods; • Use of site hoarding or other mass materials as noise barrier to screen noise at ground level of NSRs; • Use of shrouds/temporary noise barriers to screen noise from relatively static PMEs; • Alternative use of plant items within one worksite, where practicable.
Waste Management	• Any excavated material should be reused on site as far as possible to minimize off-site disposal. Scrap metals or abandoned equipment should be recycled if possible; • Waste arising should be kept to a minimum and be handled, transported and disposed of in a suitable manner; • Trip ticket system for the disposal of C&D materials to any designed public filling facility and/or landfill was implemented; and • Chemical waste shall be handled in accordance with the Code of Practice on the Packaging, Handling and Storage of Chemical Wastes.
General	• The site was generally kept tidy and clean.

8.2 Tentative Construction Activities in the Coming Month

8.2.1 Tentative construction activities to be undertaken in **March 2023** should be included:

- Granulation Building – Finishing of Pre E&M installation ABWF at CHP Area
- Reception Building – Installation of Skylight
- AD Tanks – Mass fill tank at AD1 and AD3; Installation of steel stair tower at AD4
- Footbridge – ABWF
- Sitewide underground utilities work –at Portion 1, 2, 3, 4, 5, 6 & 7.
- Master Meter Room – Structure construction work
- Weighbridge/Guard House – ABWF

9. Conclusions and Recommendations

9.1 CONCLUSIONS

9.1.1 This is the monthly EM&A report presenting the monitoring results and inspection findings for the reporting period from **1 to 28 February 2023**.

9.1.2 In the Reporting Period, no construction noise limit level exceedance during daytime and restricted hours was recorded. In addition, no noise complaint (which is an Action Level exceedance) was received by the Project Consultant, EPD and the Contractors.

9.1.3 In this Reporting Period, joint site inspection to evaluate the site environmental performance for the Project was carried out by the ER, IEC representative, ET and Contractor on **1, 8, 15 and 22 February 2023.** No non-compliance was noted during the site inspection.

9.1.4 No documented complaint, notification of summons or successful prosecution was received under the Project.

9.2 RECOMMENDATIONS

9.2.1 Construction noise should be a key environmental impact during the works. The noise mitigation measures such as use of quiet plants or temporary noise barrier installation at the construction noise predominated area should be implemented in accordance with the EM&A requirement and the latest CNP.

9.2.2 Dust suppression measures such as water spraying and cover dusty stockpile with impervious sheet should be implemented properly to reduce the dust impact generated by the construction activities during windy season.

9.2.3 In addition, all effluent discharge shall be ensured to fulfill the discharge licence stipulation.

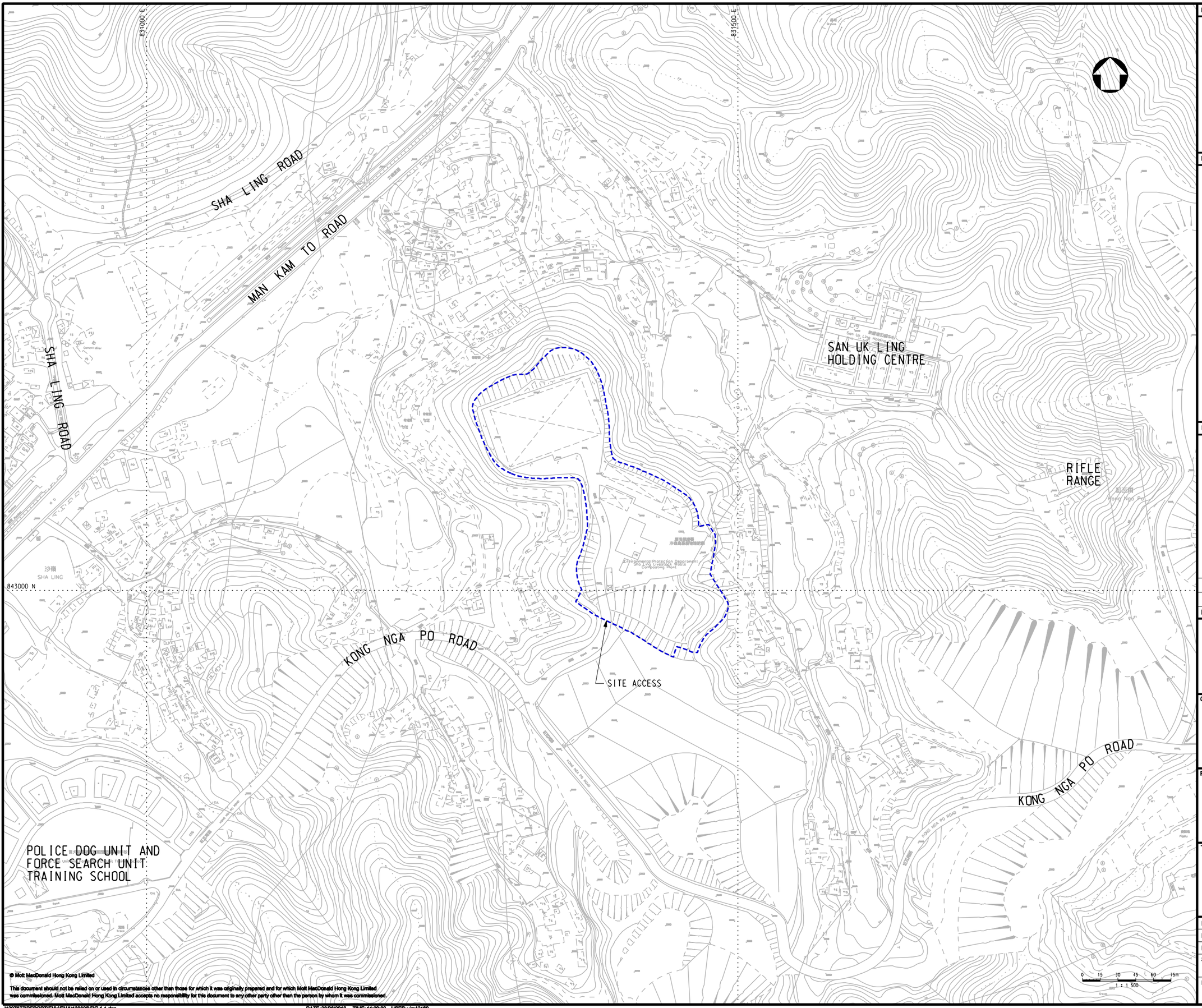
9.2.4 All the trees proposed to be retained in-situ should be properly preserved and protected during the construction works. Tree Preservation and Protection Works for these retained trees shall follow Section 3 and 26 of CEDD's General Specification for Engineering Works and Section 26 of Contract Specification Part B.

9.2.5 Trees to be felled shall be in accordance with the Tree Preservation and Removal Proposal (TPRP) to be approved by relevant approval authority.

9.2.6 Contract Specification Part B Section 1.78 "Waste Management" and DEVB's "Guidelines on Yard Waste Reduction and Treatment" should be referred before tree removal and plan the necessary arrangement.

Appendix A

Layout plan of the Project



Notes

Key to symbols

PROPOSED SITE AREA

Reference drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
P2	JUN 13	MING	GENERAL REVISION	MR	AFK
P1	DEC 12	MING	FIRST ISSUE	MR	AFK

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20/F Two Landmark East
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W www.mottmac.com.hk

Client

Environmental Protection Department
The Government of the Hong Kong
Special Administrative Region

Project

AGREEMENT NO. CE34/2011(EP)
DEVELOPMENT OF ORGANIC WASTE TREATMENT FACILITIES PHASE 2 - FEASIBILITY STUDY

Title

LOCATION OF THE PROJECT

Designed	HY		Eng check	AT	
Drawn	MING		Coordination	AT	
Dwg check	HY		Approved	AFK	
Scale at A1	1:1500	Status	PRE	Rev	P2

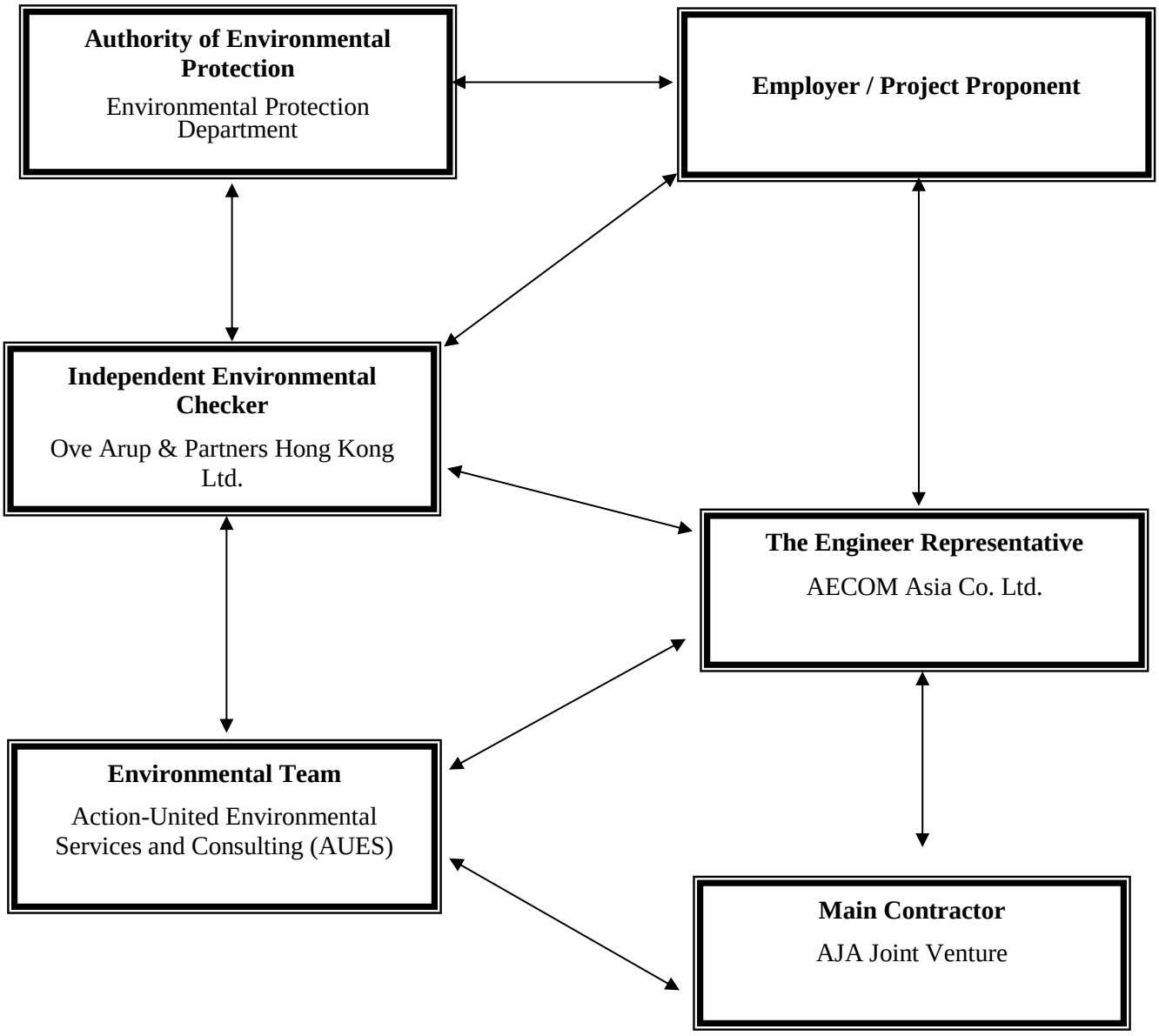
Drawing Number

FIGURE 1.1

Appendix B

Organization Chart

Project Organization Chart



Contact Details of Key Personnel for the Project

Organization	Project Role	Name of Key Staff	Tel No.	Fax No.
EPD	Project Proponent	Sunny Chiu	3151 7209	3528 0492
AECOM	Resident Engineer	Terrence Lam	5579 5239	3010 8507
AECOM	Resident Engineer	Ivan Yung	5723 7750	3010 8507
ARUP	Independent Environmental Checker	Ricky Chui	2268 3437	2268 3380
ARUP	Engineer (Safety, Environment and Planning)	Edmond Tang	3447 6181	2268 3955
AJAJV	Project Manager	Victor Wu	2862 5013	2862 5013
AJAJV	Construction Manager	Chris Leung	9210 7116	9210 7116
AJAJV	Project Environmental Manager	Samuel Tsui	9455 5865	6114 9590
AJAJV	Assistant Environmental Officer	Lee Yuk Lun	6416 5061	6114 9590
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
AUES	Environmental Consultant	Martin Li	2959 6059	2959 6079

Legend:

EPD (Employer) – Environmental Protection Department

AECOM (Engineer Representative) – AECOM Asia Co. Ltd.

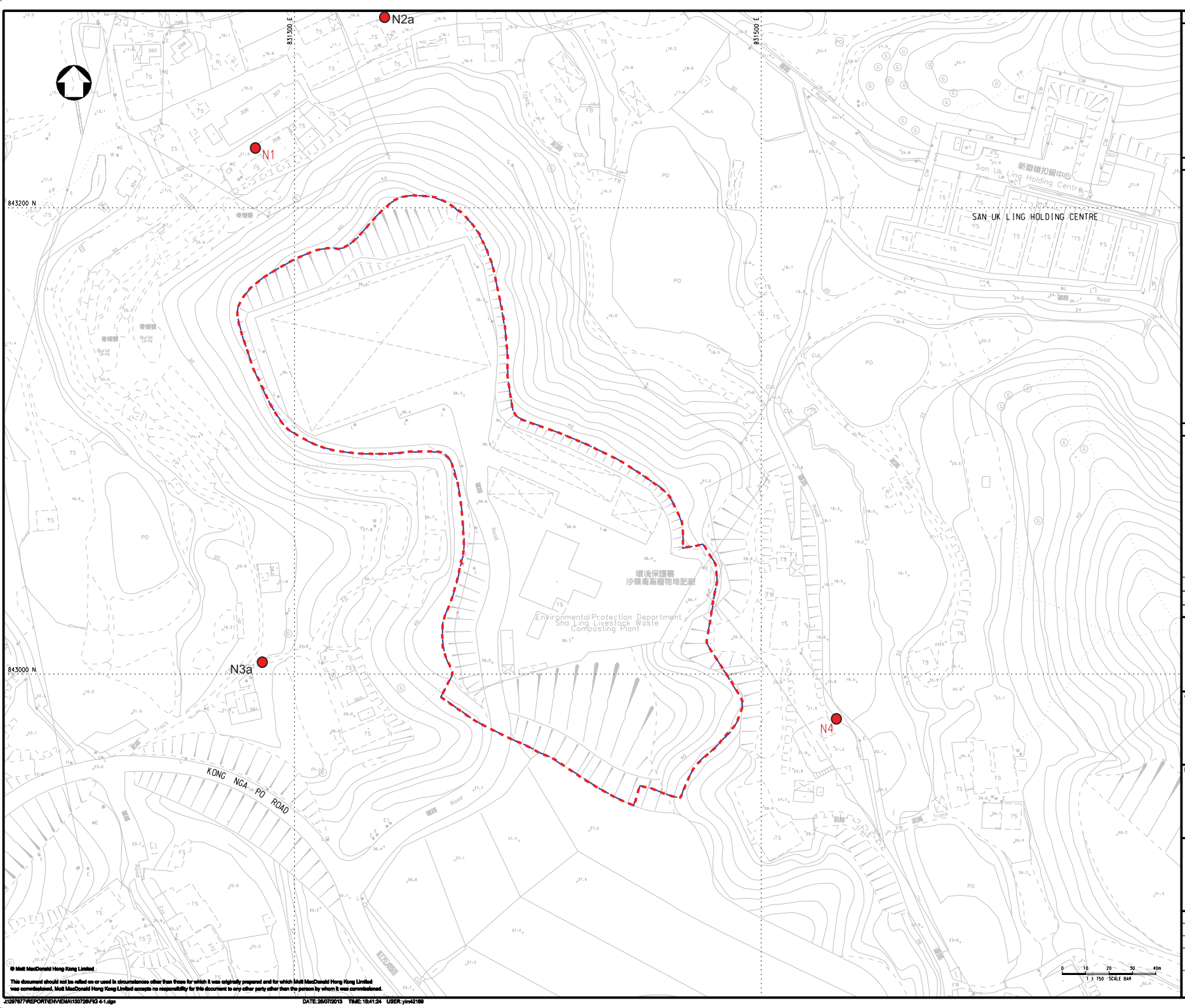
AJAJV (Main Contractor) – AJA Joint Venture

ARUP (IEC) – Ove Arup & Partners Hong Kong Ltd.

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

Appendix C

Monitoring Locations for Impact Monitoring



Notes

Key to symbols

- Construction Site Boundary
- Noise Monitoring Station

Reference drawings

Rev	Date	Drawn	Description	Ch'k'd	App'd
P2	JUL 13	MING	GENERAL REVISION	AM	AFK
P1	DEC 12	MING	FIRST ISSUE	SC	AFK

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Client

Environmental Protection Department
The Government of the Hong Kong
Special Administrative Region

Project

AGREEMENT NO. CE34/2011(EP)
DEVELOPMENT OF ORGANIC WASTE TREATMENT FACILITIES PHASE 2 - FEASIBILITY STUDY

Title

PROPOSED LOCATIONS OF CONSTRUCTION NOISE MONITORING STATIONS

Designed	SC		Eng check	AT	
Drawn	MING		Coordination	AT	
Dwg check	EY		Approved	AFK	
Scale at A1	1:750	Status	PRE	Rev	P2

Drawing Number

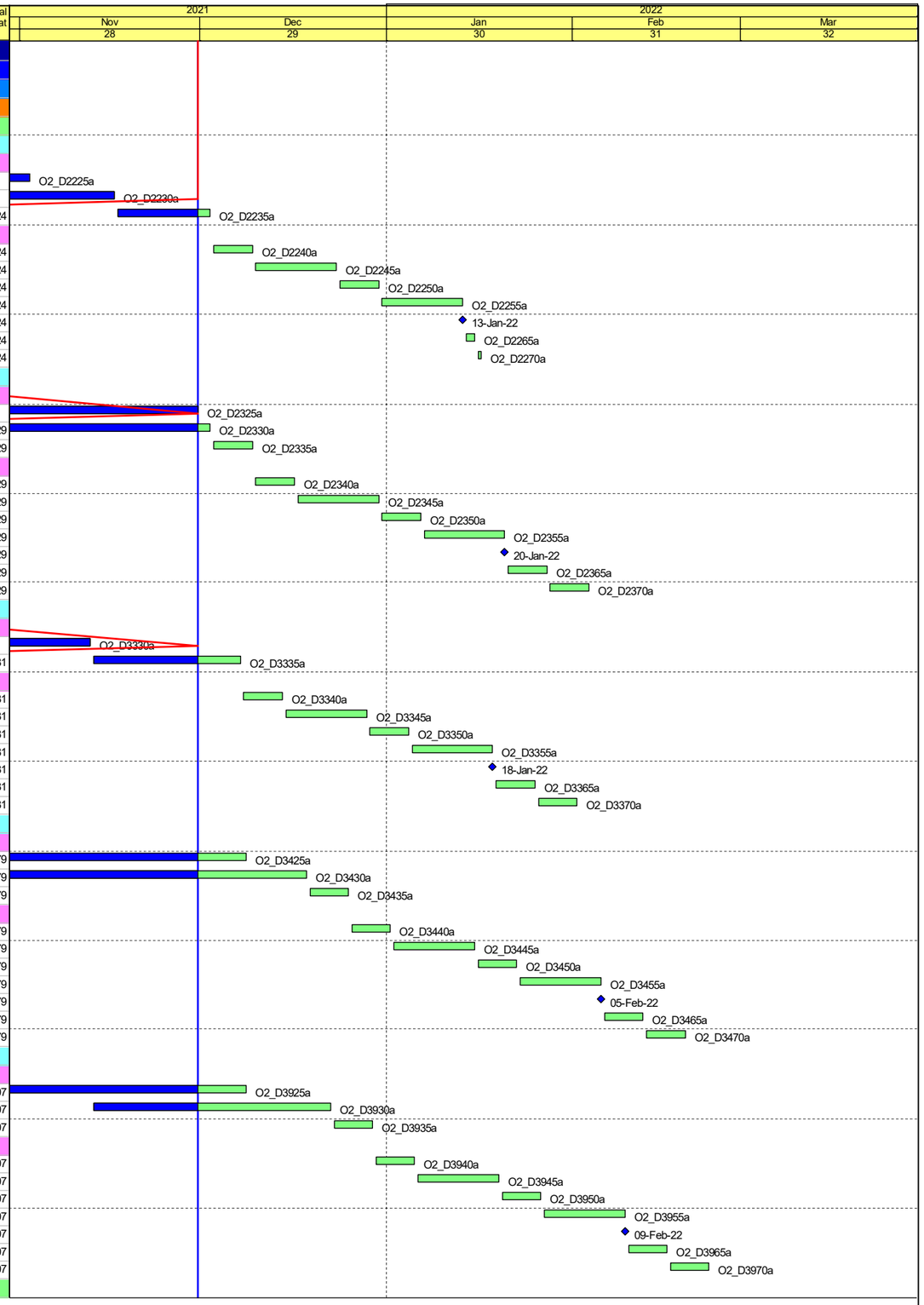
FIGURE 4.1

J:\297677\REPORTIENVIEIA\130729\Fig 4-1.dgn DATE: 26/07/2013 TIME: 18:41:24 USER: yimi42169

Appendix D

3-Month Rolling Construction Programme

Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
Contract No. EP/SP/86/15 - ORGANIC RESOURCE RECOVERY CENTRE, PHASE 2							
DESIGN							
PERMANENT WORKS DESIGN							
C. DETAILED DESIGN SUBMISSION							
C1 - ARCHITECTURAL DESIGN REPORT & DRAWING SUBMISSION							
C1.1 - RECEPTION BUILDING - ARCHITECTURAL WORKS							
IC CHECKING & CERTIFICATION							
O2_D2225a	Submit further information for the re-submitted ADR for Reception Building to IC (Clause 5.4.3.9, Specs Part A)	222	31-Dec-20	09-Aug-21	31-Dec-20 A	02-Nov-21 A	
O2_D2230a	IC Certify ADR for Reception Building (Clause 5.4.3.9, Specs Part A)	132	14-Apr-21	23-Aug-21	14-Apr-21 A	16-Nov-21 A	
O2_D2235a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	2	24-Aug-21	25-Aug-21	17-Nov-21 A	02-Dec-21	24
EMPLOYER's CONSENT							
O2_D2240a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	26-Aug-21	01-Sep-21	03-Dec-21	09-Dec-21	24
O2_D2245a	ER Comment on the submitted ADR for Reception Building (Clause 5.4.3.17.c, Specs Part A)	14	02-Sep-21	15-Sep-21	10-Dec-21	23-Dec-21	24
O2_D2250a	Submit further information for the submitted ADR for Reception Building to ER (Clause 5.4.3.19, Specs Part A)	7	16-Sep-21	22-Sep-21	24-Dec-21	30-Dec-21	24
O2_D2255a	ER Comment on the re-submitted ADR for Reception Building (Clause 5.4.3.17.a, Specs Part A	14	23-Sep-21	06-Oct-21	31-Dec-21	13-Jan-22	24
O2_D2260a	ER Consented ADR for Reception Building (Clause 5.4.3.17.a, Specs Part A)	0		06-Oct-21		13-Jan-22	24
O2_D2265a	Submit Two Complete Sets ADR for Reception Building to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	2	07-Oct-21	08-Oct-21	14-Jan-22	15-Jan-22	24
O2_D2270a	Design Registered - ADR for Reception Building	1	09-Oct-21	09-Oct-21	16-Jan-22	16-Jan-22	24
C1.2 - GRANULATION BUILDING - ARCHITECTURAL WORKS							
IC CHECKING & CERTIFICATION							
O2_D2325a	Submit further information for the re-submitted ADR for Granulation Building to IC (Clause 5.4.3.9, Specs Part A)	148	11-Mar-21	05-Aug-21	11-Mar-21 A	30-Nov-21 A	
O2_D2330a	IC Certify ADR for Granulation Building (Clause 5.4.3.9, Specs Part A)	72	09-Jun-21	19-Aug-21	09-Jun-21 A	02-Dec-21	29
O2_D2335a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	20-Aug-21	26-Aug-21	03-Dec-21	09-Dec-21	29
EMPLOYER's CONSENT							
O2_D2340a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	27-Aug-21	02-Sep-21	10-Dec-21	16-Dec-21	29
O2_D2345a	ER Comment on the submitted ADR for Granulation Building (Clause 5.4.3.17.c, Specs Part A)	14	03-Sep-21	16-Sep-21	17-Dec-21	30-Dec-21	29
O2_D2350a	Submit further information for the submitted ADR for Granulation Building to ER (Clause 5.4.3.19, Specs Part A)	7	17-Sep-21	23-Sep-21	31-Dec-21	06-Jan-22	29
O2_D2355a	ER Comment on the re-submitted ADR for Granulation Building (Clause 5.4.3.17.a, Specs Part A)	14	24-Sep-21	07-Oct-21	07-Jan-22	20-Jan-22	29
O2_D2360a	ER Consented ADR for Granulation Building (Clause 5.4.3.17.a, Specs Part A)	0		07-Oct-21		20-Jan-22	29
O2_D2365a	Submit Two Complete Sets ADR for Granulation Building to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	08-Oct-21	14-Oct-21	21-Jan-22	27-Jan-22	29
O2_D2370a	Design Registered - ADR for Granulation Building	7	15-Oct-21	21-Oct-21	28-Jan-22	03-Feb-22	29
C1.3 - FOOTBRIDGE/WALKWAY - ARCHITECTURAL WORKS							
IC CHECKING & CERTIFICATION							
O2_D3330a	IC Certify ADR for Footbridge Building (Clause 5.4.3.9, Specs Part A)	107	30-Apr-21	14-Aug-21	30-Apr-21 A	12-Nov-21 A	
O2_D3335a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	15-Aug-21	21-Aug-21	13-Nov-21 A	07-Dec-21	281
EMPLOYER's CONSENT							
O2_D3340a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	22-Aug-21	28-Aug-21	08-Dec-21	14-Dec-21	281
O2_D3345a	ER Comment on the submitted ADR for Footbridge Building (Clause 5.4.3.17.c, Specs Part A)	14	29-Aug-21	11-Sep-21	15-Dec-21	28-Dec-21	281
O2_D3350a	Submit further information for the submitted ADR for Footbridge Building to ER (Clause 5.4.3.19, Specs Part A)	7	12-Sep-21	18-Sep-21	29-Dec-21	04-Jan-22	281
O2_D3355a	ER Comment on the re-submitted ADR for Footbridge Building (Clause 5.4.3.17.a, Specs Part A)	14	19-Sep-21	02-Oct-21	05-Jan-22	18-Jan-22	281
O2_D3360a	ER Consented ADR for Footbridge Building (Clause 5.4.3.17.a, Specs Part A)	0		02-Oct-21		18-Jan-22	281
O2_D3365a	Submit Two Complete Sets ADR for Footbridge Building to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	03-Oct-21	09-Oct-21	19-Jan-22	25-Jan-22	281
O2_D3370a	Design Registered - ADR for Footbridge Building	7	10-Oct-21	16-Oct-21	26-Jan-22	01-Feb-22	281
C1.4 - PUMP HOUSE - ARCHITECTURAL WORKS							
IC CHECKING & CERTIFICATION							
O2_D3425a	Submit further information for the re-submitted ADR for Pump House to IC (Clause 5.4.3.9, Specs Part A)	206	14-Jan-21	07-Aug-21	14-Jan-21 A	08-Dec-21	279
O2_D3430a	IC Certify ADR for Pump House (Clause 5.4.3.9, Specs Part A)	14	08-Aug-21	21-Aug-21	05-Aug-21 A	18-Dec-21	279
O2_D3435a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	22-Aug-21	28-Aug-21	19-Dec-21	25-Dec-21	279
EMPLOYER's CONSENT							
O2_D3440a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	29-Aug-21	04-Sep-21	26-Dec-21	01-Jan-22	279
O2_D3445a	ER Comment on the submitted ADR for Pump House (Clause 5.4.3.17.c, Specs Part A)	14	05-Sep-21	18-Sep-21	02-Jan-22	15-Jan-22	279
O2_D3450a	Submit further information for the submitted ADR for Pump House to ER (Clause 5.4.3.19, Specs Part A)	7	19-Sep-21	25-Sep-21	16-Jan-22	22-Jan-22	279
O2_D3455a	ER Comment on the re-submitted ADR for Pump House (Clause 5.4.3.17.a, Specs Part A)	14	26-Sep-21	09-Oct-21	23-Jan-22	05-Feb-22	279
O2_D3460a	ER Consented ADR for Pump House (Clause 5.4.3.17.a, Specs Part A)	0		09-Oct-21		05-Feb-22	279
O2_D3465a	Submit Two Complete Sets ADR for Pump House to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	10-Oct-21	16-Oct-21	06-Feb-22	12-Feb-22	279
O2_D3470a	Design Registered - ADR for Pump House	7	17-Oct-21	23-Oct-21	13-Feb-22	19-Feb-22	279
C1.7 - ANCILLIARY FACILITIES - ARCHITECTURAL WORKS							
IC CHECKING & CERTIFICATION							
O2_D3925a	Submit further information for the re-submitted ADR for Ancillary Facilities to IC (Clause 5.4.3.9, Specs Part A)	267	14-Nov-20	07-Aug-21	14-Nov-20 A	08-Dec-21	107
O2_D3930a	IC Certify ADR for Ancillary Facilities (Clause 5.4.3.9, Specs Part A)	14	08-Aug-21	21-Aug-21	13-Nov-21 A	22-Dec-21	107
O2_D3935a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	22-Aug-21	28-Aug-21	23-Dec-21	29-Dec-21	107
EMPLOYER's CONSENT							
O2_D3940a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	29-Aug-21	04-Sep-21	30-Dec-21	05-Jan-22	107
O2_D3945a	ER Comment on the submitted ADR for Ancillary Facilities (Clause 5.4.3.17.c, Specs Part A)	14	05-Sep-21	18-Sep-21	06-Jan-22	19-Jan-22	107
O2_D3950a	Submit further information for the submitted ADR for Ancillary Facilities to ER (Clause 5.4.3.19, Specs Part A)	7	19-Sep-21	25-Sep-21	20-Jan-22	26-Jan-22	107
O2_D3955a	ER Comment on the re-submitted ADR for Ancillary Facilities (Clause 5.4.3.17.a, Specs Part A)	14	26-Sep-21	09-Oct-21	27-Jan-22	09-Feb-22	107
O2_D3960a	ER Consented ADR for Ancillary Facilities (Clause 5.4.3.17.a, Specs Part A)	0		09-Oct-21		09-Feb-22	107
O2_D3965a	Submit Two Complete Sets ADR for Ancillary Facilities to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	10-Oct-21	16-Oct-21	10-Feb-22	16-Feb-22	107
O2_D3970a	Design Registered - ADR for Ancillary Facilities	7	17-Oct-21	23-Oct-21	17-Feb-22	23-Feb-22	107
C2 - LANDSCAPING DESIGN REPORT (INCL. IRRIGATION DESIGN) & DRAWING SUBMISSION							



AJA JOINT VENTURE

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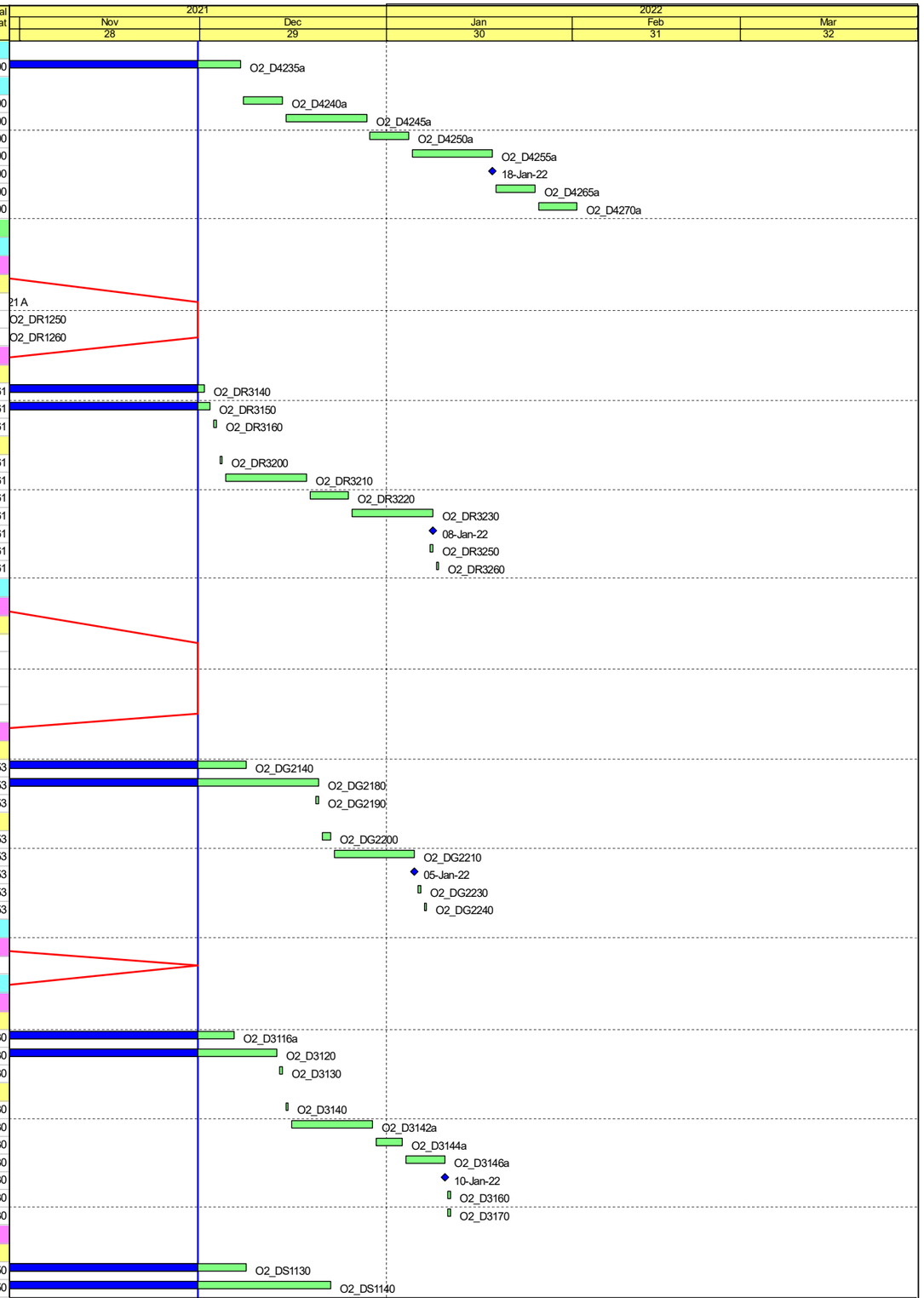
Layout: ORRC2_WP_2021_3M
Task filter: TASK filters: 3MK, 3MN, 3MRP.
Date Printed: 22-Dec-21

Remaining Work
Remaining Work (Critical)
Actual Work
Level of Effort
Primary Baseline
Baseline Milestone
Start Milestone

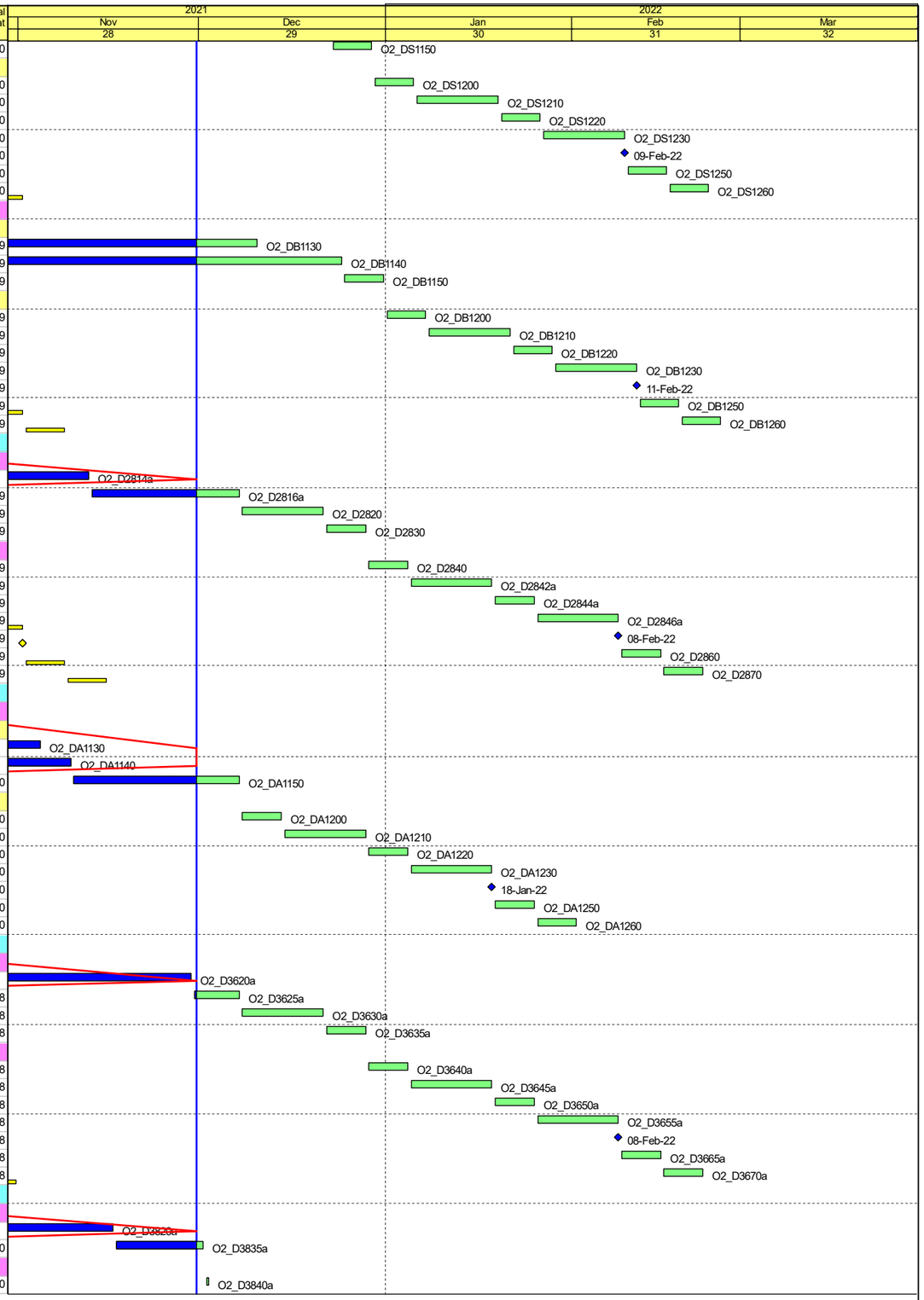
Contract No. EP/SP/86/15
Organic Waste Treatment Facilities, Phase 2
Works Programme 3rd Issue
3-Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-21			

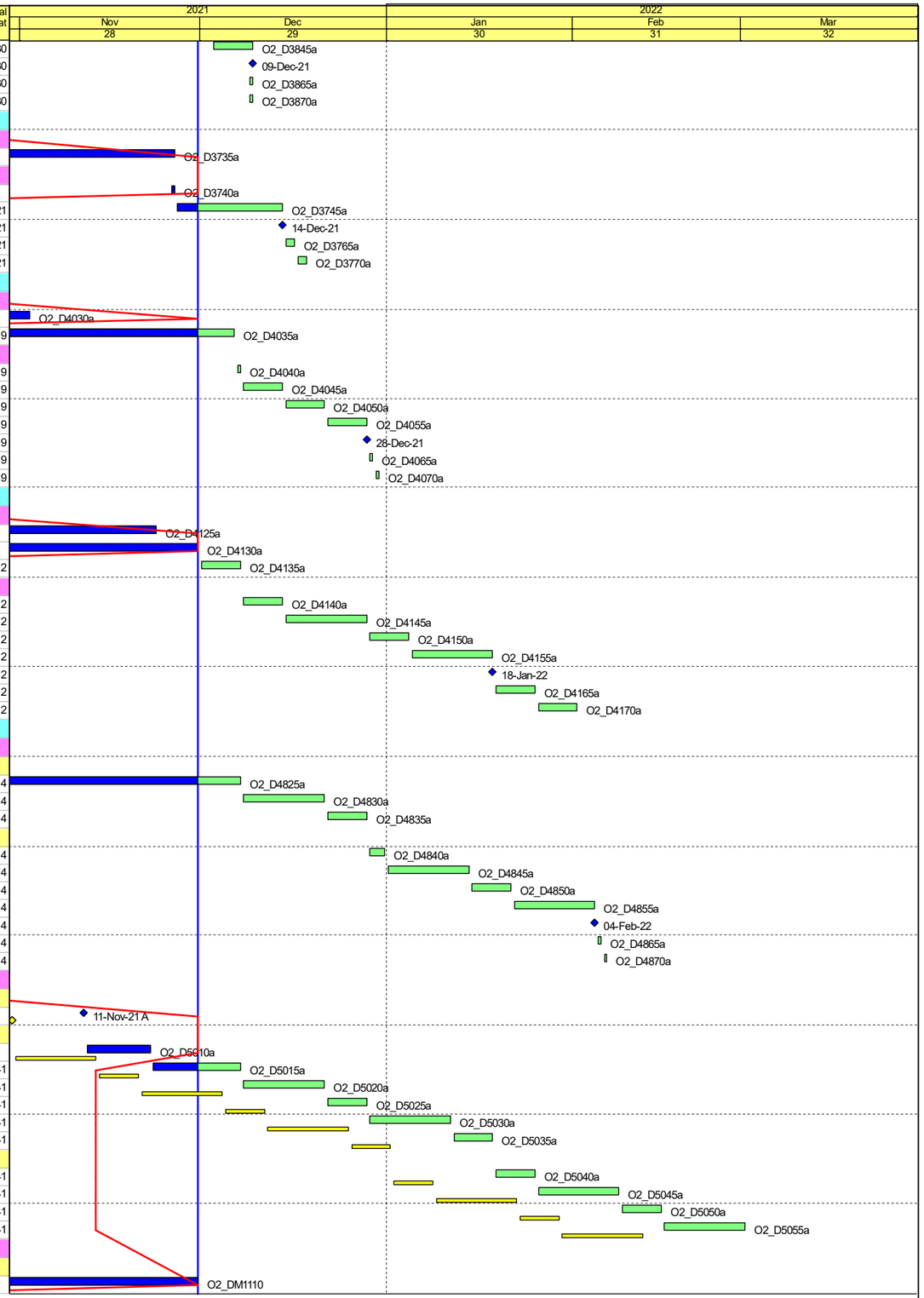
Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
IC CHECKING & CERTIFICATION							
O2_D4235a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	148	13-Mar-21	07-Aug-21	13-Mar-21 A	07-Dec-21	100
EMPLOYER's CONSENT							
O2_D4240a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	08-Aug-21	14-Aug-21	08-Dec-21	14-Dec-21	100
O2_D4245a	ER Comment on the submitted Landscaping (Clause 5.4.3.17.c, Specs Part A)	14	15-Aug-21	28-Aug-21	15-Dec-21	28-Dec-21	100
O2_D4250a	Submit further information for the submitted Landscaping to ER (Clause 5.4.3.19, Specs Part A)	7	29-Aug-21	04-Sep-21	29-Dec-21	04-Jan-22	100
O2_D4255a	ER Comment on the re-submitted Landscaping (Clause 5.4.3.17.a, Specs Part A)	14	05-Sep-21	18-Sep-21	05-Jan-22	18-Jan-22	100
O2_D4260a	ER Consented Landscaping (Clause 5.4.3.17.a, Specs Part A)	0		18-Sep-21		18-Jan-22	100
O2_D4265a	Submit Two Complete Sets Landscaping to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	19-Sep-21	25-Sep-21	19-Jan-22	25-Jan-22	100
O2_D4270a	Design Registered - Landscaping	7	26-Sep-21	02-Oct-21	26-Jan-22	01-Feb-22	100
C3 - CIVIL AND STRUCTURE DESIGN REPORT, CALCULATIONS, SPECIFICATIONS & DRAWING SUBMISSION							
C3.2 - RECEPTION BUILDING - SUPERSTRUCTURE							
C3.2(ii) - RECEPTION BUILDING - SUPERSTRUCTURE (Ground Floor including Staircase R-ST-1 to R-ST-4)							
EMPLOYER's CONSENT							
O2_DR1240	ER Consented Reception Building - Superstructure	0		03-Sep-21		22-Oct-21 A	
O2_DR1250	Submit Two Complete Sets Reception Bldg - Superstructure to IC, ER for Register Design	1	03-Sep-21	03-Sep-21	23-Oct-21 A	28-Oct-21 A	
O2_DR1260	Design Registered - Reception Building - Superstructure (G/F ind R-ST-1 to R-ST-4)	1	04-Sep-21	04-Sep-21	28-Oct-21 A	28-Oct-21 A	
C3.2(iv) - RECEPTION BUILDING - SUPERSTRUCTURE (1/F to Top Roof Floor)							
IC CHECKING & CERTIFICATION							
O2_DR3140	Submit further information for the re-submitted Reception Building - Superstructure to IC	123	07-May-21	06-Sep-21	07-May-21 A	01-Dec-21	61
O2_DR3150	IC Certify Reception Building - Superstructure	90	23-Jun-21	20-Sep-21	23-Jun-21 A	02-Dec-21	61
O2_DR3160	Obtain Design Check Certificate & Method of Construction Check Certificate	1	21-Sep-21	21-Sep-21	03-Dec-21	03-Dec-21	61
EMPLOYER's CONSENT							
O2_DR3200	Submit Design Check Certificate & Method of Construction Check Certificate to ER	1	22-Sep-21	22-Sep-21	04-Dec-21	04-Dec-21	61
O2_DR3210	ER Comment on the submitted Reception Building - Superstructure	14	23-Sep-21	06-Oct-21	05-Dec-21	18-Dec-21	61
O2_DR3220	Submit further information for the submitted Reception Building - Superstructure	7	07-Oct-21	13-Oct-21	19-Dec-21	25-Dec-21	61
O2_DR3230	ER Comment on the re-submitted Reception Building - Superstructure	14	14-Oct-21	27-Oct-21	26-Dec-21	08-Jan-22	61
O2_DR3240	ER Consented Reception Building - Superstructure	0		27-Oct-21		08-Jan-22	61
O2_DR3250	Submit Two Complete Sets Reception Bldg - Superstructure to IC, ER for Register Design	1	27-Oct-21	27-Oct-21	08-Jan-22	08-Jan-22	61
O2_DR3260	Design Registered - Reception Building - Superstructure (1/F to Top Toof Floor)	1	28-Oct-21	28-Oct-21	09-Jan-22	09-Jan-22	61
C3.4 - GRANULATION BUILDING - SUPERSTRUCTURE							
C3.4(ii) - GRANULATION BUILDING - SUPERSTRUCTURE (G/F Beam & Slab to M/F Soffit)							
EMPLOYER's CONSENT							
O2_DG1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER	1	03-Aug-21	03-Aug-21	05-Oct-21 A	05-Oct-21 A	
O2_DG1210	ER Comment on the submitted Granulation Building - Superstructure	5	04-Aug-21	17-Aug-21	06-Oct-21 A	08-Oct-21 A	
O2_DG1220	ER Consented Granulation Building - Superstructure	0		17-Aug-21		08-Oct-21 A	
O2_DG1230	Submit Two Complete Sets Granulation Bldg - Superstructure to IC, ER for Register Design	1	18-Aug-21	18-Aug-21	09-Oct-21 A	15-Oct-21 A	
O2_DG1240	Design Registered - Granulation Building - Superstructure (G/F Beam & Slab to M/F Soffit)	1	18-Aug-21	18-Aug-21	15-Oct-21 A	15-Oct-21 A	
C3.4(iii) - GRANULATION BUILDING - SUPERSTRUCTURE (M/F Beam & Slab to Upper Roof Level)							
IC CHECKING & CERTIFICATION							
O2_DG2140	Submit further information for the re-submitted Granulation Bldg - Superstructure to IC (Clause 5.4.3.9, Specs Part A)	105	29-Apr-21	11-Aug-21	29-Apr-21 A	08-Dec-21	53
O2_DG2180	IC Certify Granulation Building - Superstructure (Clause 5.4.3.9, Specs Part A)	114	01-May-21	22-Aug-21	01-May-21 A	20-Dec-21	53
O2_DG2190	Obtain Design Check Certificate & Method of Construction Check Certificate (5.4.3.11 & 5.4.3.12, Specs Part A)	1	22-Aug-21	22-Aug-21	20-Dec-21	20-Dec-21	53
EMPLOYER's CONSENT							
O2_DG2200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	2	23-Aug-21	24-Aug-21	21-Dec-21	22-Dec-21	53
O2_DG2210	ER Comment on the submitted Granulation Building - Superstructure (Clause 5.4.3.17.c, Specs Part A)	14	25-Aug-21	07-Sep-21	23-Dec-21	05-Jan-22	53
O2_DG2220	ER Consented Granulation Building - Superstructure (Clause 5.4.3.17.a, Specs Part A)	0		07-Sep-21		05-Jan-22	53
O2_DG2230	Submit Two Complete Sets Granulation Bldg - Superstructure to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	1	08-Sep-21	08-Sep-21	06-Jan-22	06-Jan-22	53
O2_DG2240	Design Registered - Granulation Building - Superstructure (M/F Beam & Slab to Upper Roof Level)	1	09-Sep-21	09-Sep-21	07-Jan-22	07-Jan-22	53
C3.5 - FOOTBRIDGE - FOUNDATION							
EMPLOYER's CONSENT							
O2_D3070	Design Registered - Footbridge - Footing	1	31-Aug-21	31-Aug-21	30-Sep-21 A	30-Sep-21 A	
C3.6 - FOOTBRIDGE - SUPERSTRUCTURE							
C3.6a - FOOTBRIDGE - SUPERSTRUCTURE (for RC Pier)							
IC CHECKING & CERTIFICATION							
O2_D3116a	Submit further information for the re-submitted Footbridge - Superstructure to IC (Clause 5.4.3.9, Specs Part A)	367	08-Aug-20	09-Aug-21	08-Aug-20 A	06-Dec-21	30
O2_D3120	IC Certify Footbridge - Superstructure (Clause 5.4.3.9, Specs Part A)	7	10-Aug-21	16-Aug-21	21-Jul-21 A	13-Dec-21	30
O2_D3130	Obtain Design Check Certificate & Method of Construction Check Certificate (5.4.3.11 & 5.4.3.12, Specs Part A)	1	17-Aug-21	17-Aug-21	14-Dec-21	14-Dec-21	30
EMPLOYER's CONSENT							
O2_D3140	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	1	18-Aug-21	18-Aug-21	15-Dec-21	15-Dec-21	30
O2_D3142a	ER Comment on the submitted Footbridge - Superstructure (Clause 5.4.3.17.c, Specs Part A)	14	19-Aug-21	01-Sep-21	16-Dec-21	29-Dec-21	30
O2_D3144a	Submit further information for the submitted Footbridge - Superstructure to ER (Clause 5.4.3.19, Specs Part A)	5	02-Sep-21	06-Sep-21	30-Dec-21	03-Jan-22	30
O2_D3146a	ER Comment on the re-submitted Footbridge - Superstructure (Clause 5.4.3.17.a, Specs Part A)	7	07-Sep-21	13-Sep-21	04-Jan-22	10-Jan-22	30
O2_D3150	ER Consented Footbridge - Superstructure (Clause 5.4.3.17.a, Specs Part A)	0		13-Sep-21		10-Jan-22	30
O2_D3160	Submit Two Complete Sets Footbridge - Superstructure to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	1	14-Sep-21	14-Sep-21	11-Jan-22	11-Jan-22	30
O2_D3170	Design Registered - Footbridge - Superstructure (for RC Pier)	1	14-Sep-21	14-Sep-21	11-Jan-22	11-Jan-22	30
C3.6b - FOOTBRIDGE - SUPERSTRUCTURE (for Steel Bridge)							
IC CHECKING & CERTIFICATION							
O2_DS1130	Submit further information for the re-submitted Footbridge - Superstructure to IC (for Steel Bridge)	374	08-Aug-20	16-Aug-21	08-Aug-20 A	08-Dec-21	50
O2_DS1140	IC Certify Footbridge - Superstructure (for Steel Bridge)	14	17-Aug-21	30-Aug-21	21-Jul-21 A	22-Dec-21	50



Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_DS1150	Obtain Design Check Certificate & Method of Construction Check Certificate (for Steel Bridge)	7	31-Aug-21	06-Sep-21	23-Dec-21	29-Dec-21	50
EMPLOYER's CONSENT							
O2_DS1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (for Steel Bridge)	7	07-Sep-21	13-Sep-21	30-Dec-21	05-Jan-22	50
O2_DS1210	ER Comment on the submitted Footbridge - Superstructure (for Steel Bridge)	14	14-Sep-21	27-Sep-21	06-Jan-22	19-Jan-22	50
O2_DS1220	Submit further information for the submitted Footbridge - Superstructure to ER (for Steel Bridge)	7	28-Sep-21	04-Oct-21	20-Jan-22	26-Jan-22	50
O2_DS1230	ER Comment on the re-submitted Footbridge - Superstructure (for Steel Bridge)	14	05-Oct-21	18-Oct-21	27-Jan-22	09-Feb-22	50
O2_DS1240	ER Consented Footbridge - Superstructure (for Steel Bridge)	0		18-Oct-21		09-Feb-22	50
O2_DS1250	Submit Two Complete Sets Footbridge - Superstructure to IC, ER for Register Design (for Steel Bridge)	7	19-Oct-21	25-Oct-21	10-Feb-22	16-Feb-22	50
O2_DS1260	Design Registered - Footbridge - Superstructure (for Steel Bridge)	7	26-Oct-21	01-Nov-21	17-Feb-22	23-Feb-22	50
C3.6c - FOOTBRIDGE - SUPERSTRUCTURE (for Bearing)							
IC CHECKING & CERTIFICATION							
O2_DB1130	Submit further information for the re-submitted Footbridge - Superstructure to IC (for Bearing)	381	08-Aug-20	23-Aug-21	08-Aug-20 A	10-Dec-21	89
O2_DB1140	IC Certify Footbridge - Superstructure (for Bearing)	14	24-Aug-21	06-Sep-21	21-Jul-21 A	24-Dec-21	89
O2_DB1150	Obtain Design Check Certificate & Method of Construction Check Certificate (for Bearing)	7	07-Sep-21	13-Sep-21	25-Dec-21	31-Dec-21	89
EMPLOYER's CONSENT							
O2_DB1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (for Bearing)	7	14-Sep-21	20-Sep-21	01-Jan-22	07-Jan-22	89
O2_DB1210	ER Comment on the submitted Footbridge - Superstructure (for Bearing)	14	21-Sep-21	04-Oct-21	08-Jan-22	21-Jan-22	89
O2_DB1220	Submit further information for the submitted Footbridge - Superstructure to ER (for Bearing)	7	05-Oct-21	11-Oct-21	22-Jan-22	28-Jan-22	89
O2_DB1230	ER Comment on the re-submitted Footbridge - Superstructure (for Bearing)	14	12-Oct-21	25-Oct-21	29-Jan-22	11-Feb-22	89
O2_DB1240	ER Consented Footbridge - Superstructure (for Bearing)	0		25-Oct-21		11-Feb-22	89
O2_DB1250	Submit Two Complete Sets Footbridge - Superstructure to IC, ER for Register Design (for Bearing)	7	26-Oct-21	01-Nov-21	12-Feb-22	18-Feb-22	89
O2_DB1260	Design Registered - Footbridge - Superstructure (for Bearing)	7	02-Nov-21	08-Nov-21	19-Feb-22	25-Feb-22	89
C3.8 - PUMP HOUSE - SUPERSTRUCTURE							
IC CHECKING & CERTIFICATION							
O2_D2814a	IC Comment on the re-submitted Pump House - Superstructure (Clause 5.4.3.9, Specs Part A)	14	10-Aug-21	23-Aug-21	28-Oct-21 A	12-Nov-21 A	
O2_D2816a	Submit further information for the re-submitted Pump House - Superstructure to IC (Clause 5.4.3.9, Specs Part A)	7	24-Aug-21	30-Aug-21	13-Nov-21 A	07-Dec-21	29
O2_D2820	IC Certify Pump House - Superstructure (Clause 5.4.3.9, Specs Part A)	14	31-Aug-21	13-Sep-21	08-Dec-21	21-Dec-21	29
O2_D2830	Obtain Design Check Certificate & Method of Construction Check Certificate (5.4.3.11 & 5.4.3.12, Specs Part A)	7	14-Sep-21	20-Sep-21	22-Dec-21	28-Dec-21	29
EMPLOYER's CONSENT							
O2_D2840	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	21-Sep-21	27-Sep-21	29-Dec-21	04-Jan-22	29
O2_D2842a	ER Comment on the submitted Pump House - Superstructure (Clause 5.4.3.17.c, Specs Part A)	14	28-Sep-21	11-Oct-21	05-Jan-22	18-Jan-22	29
O2_D2844a	Submit further information for the submitted Pump House - Superstructure to ER (Clause 5.4.3.19, Specs Part A)	7	12-Oct-21	18-Oct-21	19-Jan-22	25-Jan-22	29
O2_D2846a	ER Comment on the re-submitted Pump House - Superstructure (Clause 5.4.3.17.a, Specs Part A)	14	19-Oct-21	01-Nov-21	26-Jan-22	08-Feb-22	29
O2_D2850	ER Consented Pump House - Superstructure (Clause 5.4.3.17.a, Specs Part A)	0		01-Nov-21		08-Feb-22	29
O2_D2860	Submit Two Complete Sets Pump House - Superstructure to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	02-Nov-21	08-Nov-21	09-Feb-22	15-Feb-22	29
O2_D2870	Design Registered - Pump House - Superstructure	7	09-Nov-21	15-Nov-21	16-Feb-22	22-Feb-22	29
C3.10 - AD TANKS & BOUNDARY WALL							
C3.10(ii) - AD TANKS - SUPERSTRUCTURE & ARCHITECTURAL (Roof)							
IC CHECKING & CERTIFICATION							
O2_DA1130	Submit further information for the re-submitted AD Tanks - Superstructure (Roof)	232	19-Dec-20	07-Aug-21	19-Dec-20 A	04-Nov-21 A	
O2_DA1140	IC Certify AD Tanks - Superstructure (Roof)	235	30-Dec-20	21-Aug-21	30-Dec-20 A	09-Nov-21 A	
O2_DA1150	Obtain Design Check Certificate & Method of Construction Check Certificate AD Tanks - Superstructure (Roof)	7	22-Aug-21	28-Aug-21	10-Nov-21 A	07-Dec-21	80
EMPLOYER's CONSENT							
O2_DA1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER AD Tanks - Superstructure (Roof)	7	29-Aug-21	04-Sep-21	08-Dec-21	14-Dec-21	80
O2_DA1210	ER Comment on the submitted AD Tanks - Superstructure (Roof)	14	05-Sep-21	18-Sep-21	15-Dec-21	28-Dec-21	80
O2_DA1220	Submit further information for the submitted Footbridge - Superstructure to ER (for Bearing)	7	19-Sep-21	25-Sep-21	29-Dec-21	04-Jan-22	80
O2_DA1230	ER Comment on the re-submitted Footbridge - Superstructure (for Bearing)	14	26-Sep-21	09-Oct-21	05-Jan-22	18-Jan-22	80
O2_DA1240	ER Consented AD Tanks - Superstructure (Roof)	0		09-Oct-21		18-Jan-22	80
O2_DA1250	Submit Two Complete Sets AD Tanks - Superstructure to IC, ER for Register Design (Roof)	7	10-Oct-21	16-Oct-21	19-Jan-22	25-Jan-22	80
O2_DA1260	Design Registered - AD Tanks - Superstructure (Roof)	7	17-Oct-21	23-Oct-21	26-Jan-22	01-Feb-22	80
C3.12 - TANK WALKWAYS - SUPERSTRUCTURE							
IC CHECKING & CERTIFICATION							
O2_D3620a	IC Comment on the re-submitted Tanks Walkways - Superstructure (Clause 5.4.3.9, Specs Part A)	52	18-Jun-21	08-Aug-21	18-Jun-21 A	29-Nov-21 A	
O2_D3625a	Submit further information for the re-submitted Tanks Walkways - Superstructure to IC (Clause 5.4.3.9, Specs Part A)	7	09-Aug-21	15-Aug-21	30-Nov-21 A	07-Dec-21	278
O2_D3630a	IC Certify Tanks Walkways - Superstructure (Clause 5.4.3.9, Specs Part A)	14	16-Aug-21	29-Aug-21	08-Dec-21	21-Dec-21	278
O2_D3635a	Obtain Design Check Certificate & Method of Construction Check Certificate (5.4.3.11 & 5.4.3.12, Specs Part A)	7	30-Aug-21	05-Sep-21	22-Dec-21	28-Dec-21	278
EMPLOYER's CONSENT							
O2_D3640a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	06-Sep-21	12-Sep-21	29-Dec-21	04-Jan-22	278
O2_D3645a	ER Comment on the submitted Tanks Walkways - Superstructure (Clause 5.4.3.17.c, Specs Part A)	14	13-Sep-21	26-Sep-21	05-Jan-22	18-Jan-22	278
O2_D3650a	Submit further information for the submitted Tanks Walkways - Superstructure to ER (Clause 5.4.3.19, Specs Part A)	7	27-Sep-21	03-Oct-21	19-Jan-22	25-Jan-22	278
O2_D3655a	ER Comment on the re-submitted Tanks Walkways - Superstructure (Clause 5.4.3.17.a, Specs Part A)	14	04-Oct-21	17-Oct-21	26-Jan-22	08-Feb-22	278
O2_D3660a	ER Consented Tanks Walkways - Superstructure (Clause 5.4.3.17.a, Specs Part A)	0		17-Oct-21		08-Feb-22	278
O2_D3665a	Submit Two Complete Sets Tanks Walkways - Superstructure to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	18-Oct-21	24-Oct-21	09-Feb-22	15-Feb-22	278
O2_D3670a	Design Registered - Tanks Walkways - Superstructure	7	25-Oct-21	31-Oct-21	16-Feb-22	22-Feb-22	278
C3.15 - DRAINAGE WORKS DESIGN							
IC CHECKING & CERTIFICATION							
O2_D3820a	IC Certify Drainage Works Design (Clause 5.4.3.9, Specs Part A)	7	09-Aug-21	22-Aug-21	17-Aug-21 A	16-Nov-21 A	
O2_D3835a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	1	23-Aug-21	23-Aug-21	17-Nov-21 A	01-Dec-21	30
EMPLOYER's CONSENT							
O2_D3840a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	1	24-Aug-21	24-Aug-21	02-Dec-21	02-Dec-21	30



Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_D3845a	ER Comment on the submitted Drainage Works Design (Clause 5.4.3.17.c, Specs Part A)	7	25-Aug-21	31-Aug-21	03-Dec-21	09-Dec-21	30
O2_D3860a	ER Consented Drainage Works Design (Clause 5.4.3.17.a, Specs Part A)	0		31-Aug-21		09-Dec-21	30
O2_D3865a	Submit Two Complete Sets Drainage Works Design to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	1	31-Aug-21	31-Aug-21	09-Dec-21	09-Dec-21	30
O2_D3870a	Design Registered - Drainage Works Design	1	31-Aug-21	31-Aug-21	09-Dec-21	09-Dec-21	30
C3.16 - SEWERAGE WORKS DESIGN							
IC CHECKING & CERTIFICATION							
O2_D3735a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	24	15-Jul-21	07-Aug-21	15-Jul-21 A	26-Nov-21 A	
EMPLOYER's CONSENT							
O2_D3740a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	1	08-Aug-21	08-Aug-21	26-Nov-21 A	26-Nov-21 A	
O2_D3745a	ER Comment on the submitted Sewerage Works Design (Clause 5.4.3.17.c, Specs Part A)	14	09-Aug-21	22-Aug-21	27-Nov-21 A	14-Dec-21	21
O2_D3760a	ER Consented Sewerage Works Design (Clause 5.4.3.17.a, Specs Part A)	0		22-Aug-21		14-Dec-21	21
O2_D3765a	Submit Two Complete Sets Sewerage Works Design to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	2	23-Aug-21	24-Aug-21	15-Dec-21	16-Dec-21	21
O2_D3770a	Design Registered - Sewerage Works Design	2	25-Aug-21	26-Aug-21	17-Dec-21	18-Dec-21	21
C3.17 - WATERWORKS DESIGN							
IC CHECKING & CERTIFICATION							
O2_D4030a	IC Certify Waterworks Design (Clause 5.4.3.9, Specs Part A)	52	05-Jun-21	26-Jul-21	05-Jun-21 A	02-Nov-21 A	
O2_D4035a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	12	27-Jul-21	07-Aug-21	27-Jul-21 A	06-Dec-21	9
EMPLOYER's CONSENT							
O2_D4040a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	1	08-Aug-21	08-Aug-21	07-Dec-21	07-Dec-21	9
O2_D4045a	ER Comment on the submitted Waterworks Design (Clause 5.4.3.17.c, Specs Part A)	7	09-Aug-21	15-Aug-21	08-Dec-21	14-Dec-21	9
O2_D4050a	Submit further information for the submitted Waterworks Design to ER (Clause 5.4.3.19, Specs Part A)	7	16-Aug-21	22-Aug-21	15-Dec-21	21-Dec-21	9
O2_D4055a	ER Comment on the re-submitted Waterworks Design (Clause 5.4.3.17.a, Specs Part A)	7	23-Aug-21	29-Aug-21	22-Dec-21	28-Dec-21	9
O2_D4060a	ER Consented Waterworks Design (Clause 5.4.3.17.a, Specs Part A)	0		29-Aug-21		28-Dec-21	9
O2_D4065a	Submit Two Complete Sets Waterworks Design to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	1	30-Aug-21	30-Aug-21	29-Dec-21	29-Dec-21	9
O2_D4070a	Design Registered - Waterworks Design	1	31-Aug-21	31-Aug-21	30-Dec-21	30-Dec-21	9
C3.18 - DESIGN FOR ROADWORKS AND STREET FURNITURES							
IC CHECKING & CERTIFICATION							
O2_D4125a	Submit further information for the re-submitted Roadworks and Street Furnitures to IC (Clause 5.4.3.9, Specs Part A)	263	18-Nov-20	07-Aug-21	18-Nov-20 A	23-Nov-21 A	
O2_D4130a	IC Certify Roadworks and Street Furnitures (Clause 5.4.3.9, Specs Part A)	107	30-Apr-21	14-Aug-21	30-Apr-21 A	30-Nov-21 A	
O2_D4135a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	15-Aug-21	21-Aug-21	01-Dec-21	07-Dec-21	212
EMPLOYER's CONSENT							
O2_D4140a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	22-Aug-21	28-Aug-21	08-Dec-21	14-Dec-21	212
O2_D4145a	ER Comment on the submitted Roadworks and Street Furnitures (Clause 5.4.3.17.c, Specs Part A)	14	29-Aug-21	11-Sep-21	15-Dec-21	28-Dec-21	212
O2_D4150a	Submit further information for the submitted Roadworks and Street Furnitures to ER (Clause 5.4.3.19, Specs Part A)	7	12-Sep-21	18-Sep-21	29-Dec-21	04-Jan-22	212
O2_D4155a	ER Comment on the re-submitted Roadworks and Street Furnitures (Clause 5.4.3.17.a, Specs Part A)	14	19-Sep-21	02-Oct-21	05-Jan-22	18-Jan-22	212
O2_D4160a	ER Consented Roadworks and Street Furnitures (Clause 5.4.3.17.a, Specs Part A)	0		02-Oct-21		18-Jan-22	212
O2_D4165a	Submit Two Complete Sets Roadworks and Street Furnitures to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	03-Oct-21	09-Oct-21	19-Jan-22	25-Jan-22	212
O2_D4170a	Design Registered - Roadworks and Street Furnitures	7	10-Oct-21	16-Oct-21	26-Jan-22	01-Feb-22	212
C3.19 - ANCILLIARY FACILITIES							
C3.19b - WEIGHBRIDGE CONTROL CENTER & WEIGHBRIDGE							
IC CHECKING & CERTIFICATION							
O2_D4825a	Submit further information for the re-submitted WBCC & WB to IC (Clause 5.4.3.9, Specs Part A)	7	15-Aug-21	21-Aug-21	13-Aug-21 A	07-Dec-21	14
O2_D4830a	IC Certify Weighbridge Control Center & Weighbridge (Clause 5.4.3.9, Specs Part A)	14	22-Aug-21	04-Sep-21	08-Dec-21	21-Dec-21	14
O2_D4835a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	05-Sep-21	11-Sep-21	22-Dec-21	28-Dec-21	14
EMPLOYER's CONSENT							
O2_D4840a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	3	12-Sep-21	14-Sep-21	29-Dec-21	31-Dec-21	14
O2_D4845a	ER Comment on the submitted Weighbridge Control Center & Weighbridge (Clause 5.4.3.17.c, Specs Part A)	14	15-Sep-21	28-Sep-21	01-Jan-22	14-Jan-22	14
O2_D4850a	Submit further information for the submitted WBCC & WB to ER (Clause 5.4.3.19, Specs Part A)	7	29-Sep-21	05-Oct-21	15-Jan-22	21-Jan-22	14
O2_D4855a	ER Comment on the re-submitted Weighbridge Control Center & Weighbridge (Clause 5.4.3.17.a, Specs Part A)	14	06-Oct-21	19-Oct-21	22-Jan-22	04-Feb-22	14
O2_D4860a	ER Consented Weighbridge Control Center & Weighbridge (Clause 5.4.3.17.a, Specs Part A)	0		19-Oct-21		04-Feb-22	14
O2_D4865a	Submit Two Complete Sets WBCC & WB to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	1	20-Oct-21	20-Oct-21	05-Feb-22	05-Feb-22	14
O2_D4870a	Design Registered - Weighbridge Control Center & Weighbridge	1	21-Oct-21	21-Oct-21	06-Feb-22	06-Feb-22	14
C3.19d - BOUNDARY FENCE							
SUBMISSION							
O2_D5000a	Boundary Fence (Clause 5.4.3.9, Specs Part A)	0		30-Oct-21		11-Nov-21 A	
IC CHECKING & CERTIFICATION							
O2_D5010a	IC Comment on the submitted Boundary Fence (Clause 5.4.3.9, Specs Part A)	14	31-Oct-21	13-Nov-21	12-Nov-21 A	22-Nov-21 A	
O2_D5015a	Submit further information for the submitted Boundary Fence to IC (Clause 5.4.3.9, Specs Part A)	7	14-Nov-21	20-Nov-21	23-Nov-21 A	07-Dec-21	241
O2_D5020a	IC Comment on the re-submitted Boundary Fence (Clause 5.4.3.9, Specs Part A)	14	21-Nov-21	04-Dec-21	08-Dec-21	21-Dec-21	241
O2_D5025a	Submit further information for the re-submitted Boundary Fence to IC (Clause 5.4.3.9, Specs Part A)	7	05-Dec-21	11-Dec-21	22-Dec-21	28-Dec-21	241
O2_D5030a	IC Certify Boundary Fence (Clause 5.4.3.9, Specs Part A)	14	12-Dec-21	25-Dec-21	29-Dec-21	11-Jan-22	241
O2_D5035a	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	26-Dec-21	01-Jan-22	12-Jan-22	18-Jan-22	241
EMPLOYER's CONSENT							
O2_D5040a	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	02-Jan-22	08-Jan-22	19-Jan-22	25-Jan-22	241
O2_D5045a	ER Comment on the submitted Boundary Fence (Clause 5.4.3.17.c, Specs Part A)	14	09-Jan-22	22-Jan-22	26-Jan-22	08-Feb-22	241
O2_D5050a	Submit further information for the submitted Boundary Fence to ER (Clause 5.4.3.19, Specs Part A)	7	23-Jan-22	29-Jan-22	09-Feb-22	15-Feb-22	241
O2_D5055a	ER Comment on the re-submitted Boundary Fence (Clause 5.4.3.17.a, Specs Part A)	14	30-Jan-22	12-Feb-22	16-Feb-22	01-Mar-22	241
C3.19e - MASTER METER ROOM							
IC CHECKING & CERTIFICATION							
O2_DM1110	Submit further information for the submitted Master Meter Room to IC (Clause 5.4.3.9, Specs Part A)	7	10-Aug-21	16-Aug-21	10-Aug-21 A	30-Nov-21 A	



AJA JOINT VENTURE

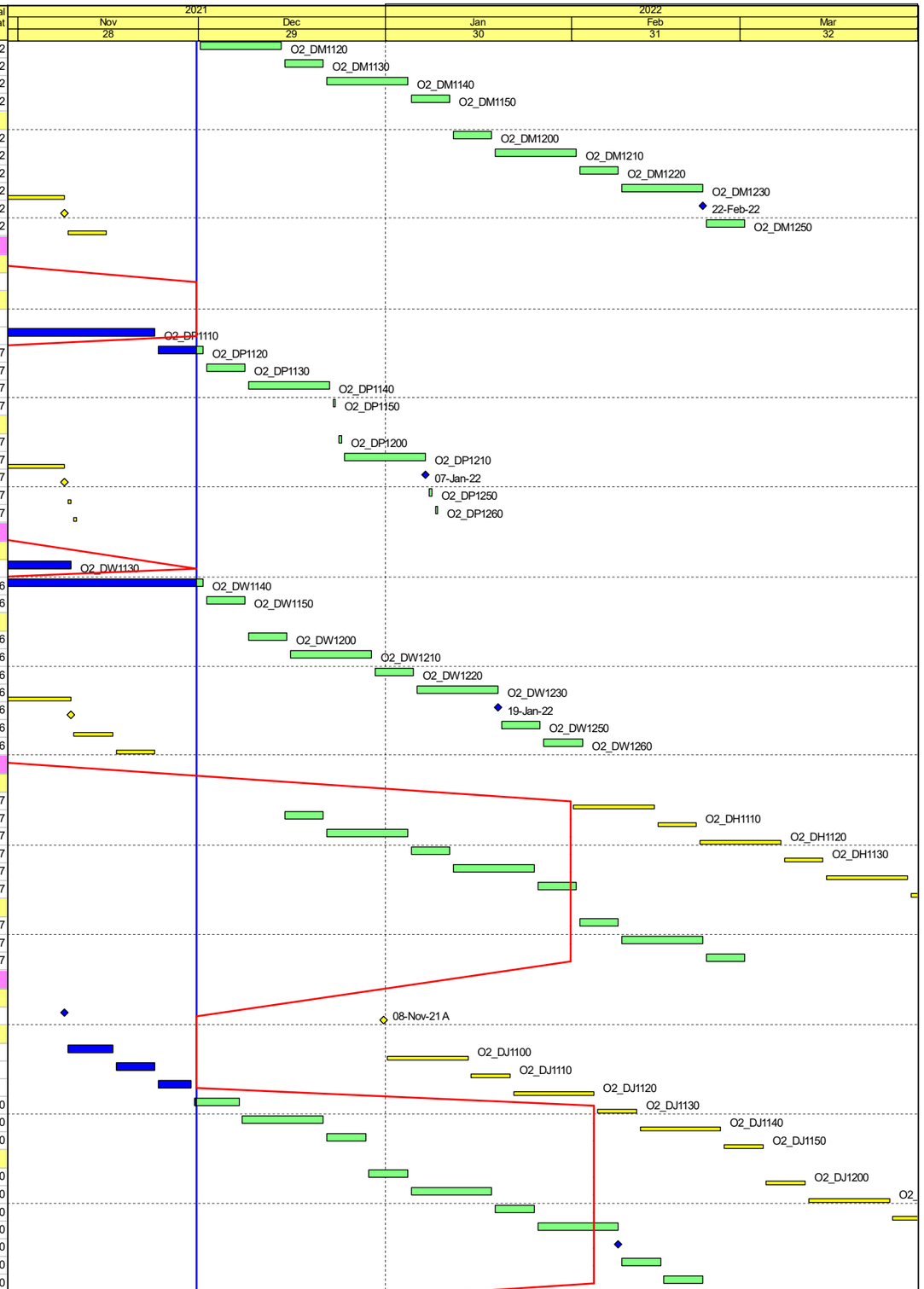
File Name: WP_04.2021-3M.11 R2c
Layout: ORRC2_WP_2021_3M
Task filter: TASK filters: 3MK, 3MN, 3MRP.
Date Printed: 22-Dec-21

Remaining Work
Remaining Work (Critical)
Actual Work
Level of Effort
Primary Baseline
Baseline Milestone
Start Milestone

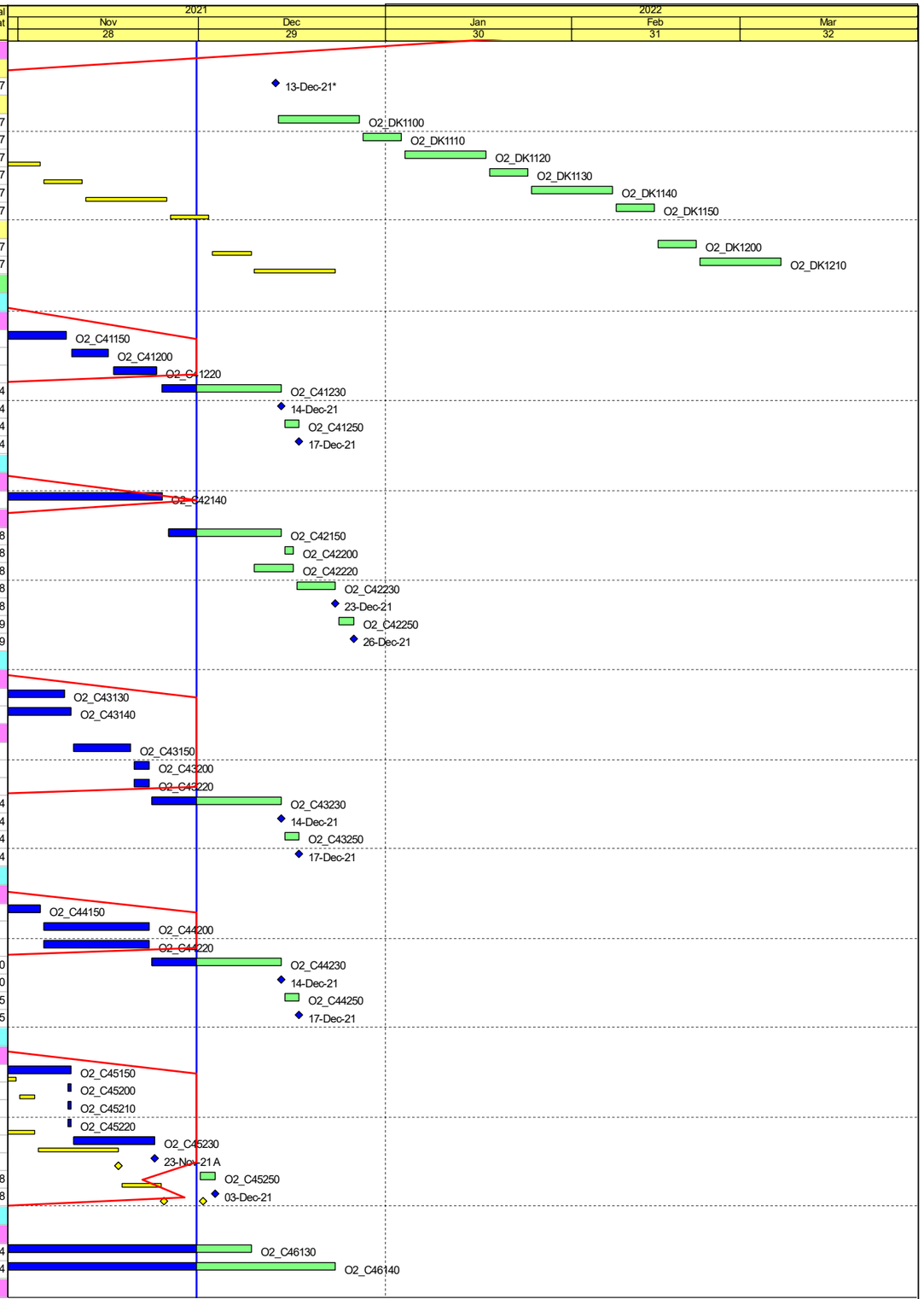
Contract No. EP/SP/86/15
Organic Waste Treatment Facilities, Phase 2
Works Programme 3rd Issue
3-Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-21			

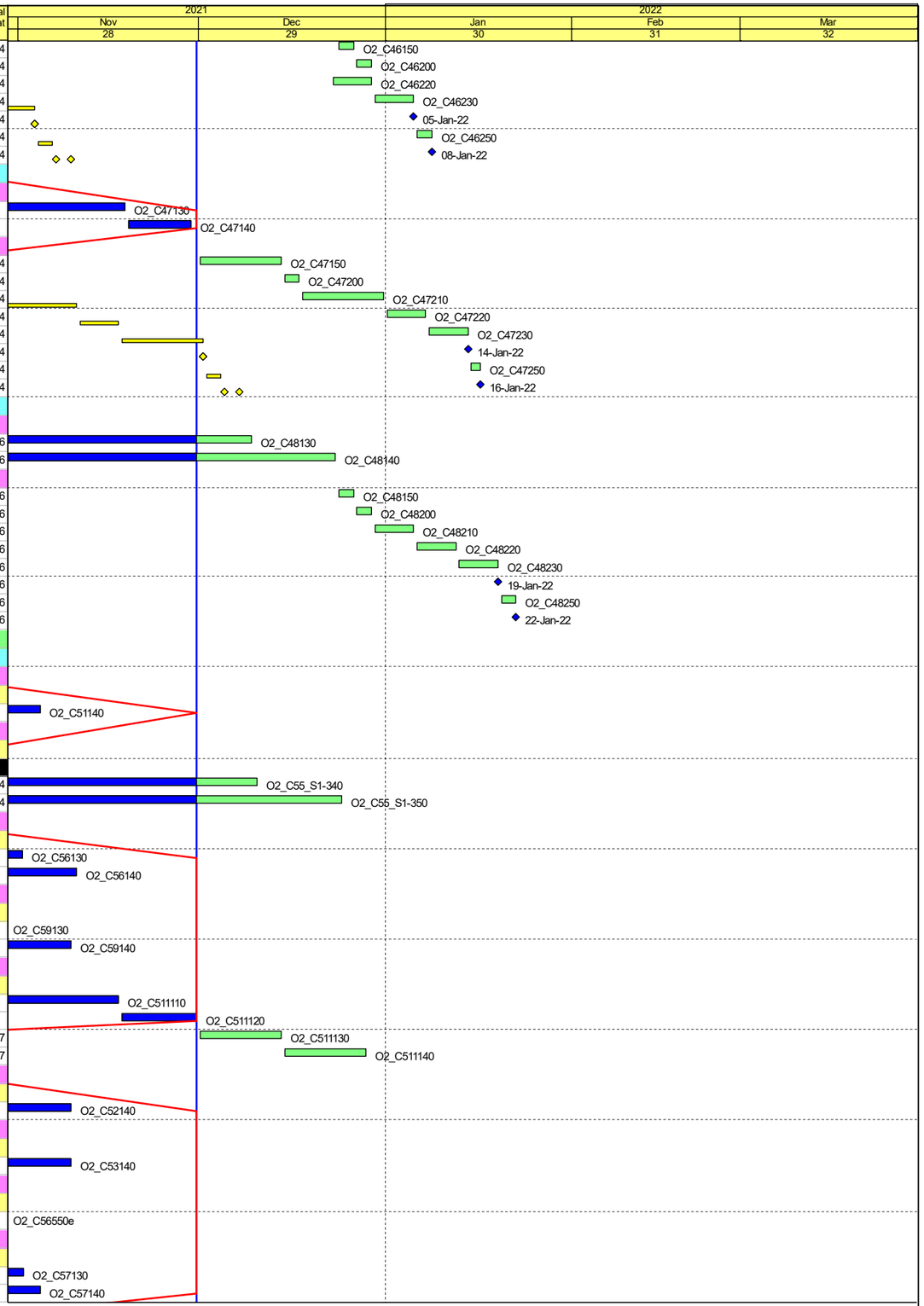
Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_DM1120	IC Comment on the re-submitted Master Meter Room (Clause 5.4.3.9, Specs Part A)	14	17-Aug-21	30-Aug-21	01-Dec-21	14-Dec-21	132
O2_DM1130	Submit further information for the re-submitted Master Meter Room to IC (Clause 5.4.3.9, Specs Part A)	7	31-Aug-21	06-Sep-21	15-Dec-21	21-Dec-21	132
O2_DM1140	IC Certify Master Meter Room (Clause 5.4.3.9, Specs Part A)	14	07-Sep-21	20-Sep-21	22-Dec-21	04-Jan-22	132
O2_DM1150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	21-Sep-21	27-Sep-21	05-Jan-22	11-Jan-22	132
EMPLOYER's CONSENT							
O2_DM1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	28-Sep-21	04-Oct-21	12-Jan-22	18-Jan-22	132
O2_DM1210	ER Comment on the submitted Master Meter Room (Clause 5.4.3.17.c, Specs Part A)	14	05-Oct-21	18-Oct-21	19-Jan-22	01-Feb-22	132
O2_DM1220	Submit further information for the submitted Master Meter Room to ER (Clause 5.4.3.19, Specs Part A)	7	19-Oct-21	25-Oct-21	02-Feb-22	08-Feb-22	132
O2_DM1230	ER Comment on the re-submitted Master Meter Room (Clause 5.4.3.17.a, Specs Part A)	14	26-Oct-21	08-Nov-21	09-Feb-22	22-Feb-22	132
O2_DM1240	ER Consented Master Meter Room (Clause 5.4.3.17.a, Specs Part A)	0		08-Nov-21		22-Feb-22	132
O2_DM1250	Submit Two Complete Sets Master Meter Room to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	09-Nov-21	15-Nov-21	23-Feb-22	01-Mar-22	132
C3.19f - FOOTING FOR BIO GAS PRECONDITION UNIT							
SUBMISSION							
O2_DP1000	Footing for Biogas Precondition Unit (Clause 5.4.3.9, Specs Part A)	0		28-Aug-21		30-Sep-21 A	
IC CHECKING & CERTIFICATION							
O2_DP1100	IC Comment on the submitted Footing for Biogas Precondition Unit (Clause 5.4.3.9, Specs Part A)	14	29-Aug-21	11-Sep-21	01-Oct-21 A	11-Oct-21 A	
O2_DP1110	Submit further information for the submitted Footing for Biogas Precondition Unit to IC (Clause 5.4.3.9, Specs Part A)	7	12-Sep-21	18-Sep-21	12-Oct-21 A	23-Nov-21 A	
O2_DP1120	IC Comment on the re-submitted Footing for Biogas Precondition Unit (Clause 5.4.3.9, Specs Part A)	14	19-Sep-21	02-Oct-21	24-Nov-21 A	01-Dec-21	127
O2_DP1130	Submit further information for the re-submitted Footing for BPU to IC (Clause 5.4.3.9, Specs Part A)	7	03-Oct-21	09-Oct-21	02-Dec-21	08-Dec-21	127
O2_DP1140	IC Certify Footing for Biogas Precondition Unit (Clause 5.4.3.9, Specs Part A)	14	10-Oct-21	23-Oct-21	09-Dec-21	22-Dec-21	127
O2_DP1150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	1	24-Oct-21	24-Oct-21	23-Dec-21	23-Dec-21	127
EMPLOYER's CONSENT							
O2_DP1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	1	25-Oct-21	25-Oct-21	24-Dec-21	24-Dec-21	127
O2_DP1210	ER Comment on the submitted Footing for Biogas Precondition Unit (Clause 5.4.3.17.c, Specs Part A)	14	26-Oct-21	08-Nov-21	25-Dec-21	07-Jan-22	127
O2_DP1240	ER Consented Footing for Biogas Precondition Unit (Clause 5.4.3.17.a, Specs Part A)	0		08-Nov-21		07-Jan-22	127
O2_DP1250	Submit Two Complete Sets Footing for BPU to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	1	09-Nov-21	09-Nov-21	08-Jan-22	08-Jan-22	127
O2_DP1260	Design Registered - Footing for Biogas Precondition Unit	1	10-Nov-21	10-Nov-21	09-Jan-22	09-Jan-22	127
C3.19g - RETAINING WALL (AT RECEPTION BUILDING ENTRANCE)							
IC CHECKING & CERTIFICATION							
O2_DW1130	Submit further information for the re-submitted Retaining Wall to IC (Clause 5.4.3.9, Specs Part A)	7	01-Sep-21	07-Sep-21	08-Sep-21 A	09-Nov-21 A	
O2_DW1140	IC Certify Retaining Wall (Clause 5.4.3.9, Specs Part A)	14	08-Sep-21	21-Sep-21	27-Oct-21 A	01-Dec-21	166
O2_DW1150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	22-Sep-21	28-Sep-21	02-Dec-21	08-Dec-21	166
EMPLOYER's CONSENT							
O2_DW1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	29-Sep-21	05-Oct-21	09-Dec-21	15-Dec-21	166
O2_DW1210	ER Comment on the submitted Retaining Wall (Clause 5.4.3. 17.c, Specs Part A)	14	06-Oct-21	19-Oct-21	16-Dec-21	29-Dec-21	166
O2_DW1220	Submit further information for the submitted Retaining Wall to ER (Clause 5.4.3. 19, Specs Part A)	7	20-Oct-21	26-Oct-21	30-Dec-21	05-Jan-22	166
O2_DW1230	ER Comment on the re-submitted Retaining Wall (Clause 5.4.3.17.a, Specs Part A)	14	27-Oct-21	09-Nov-21	06-Jan-22	19-Jan-22	166
O2_DW1240	ER Consented Retaining Wall (Clause 5.4.3.17.a, Specs Part A)	0		09-Nov-21		19-Jan-22	166
O2_DW1250	Submit Two Complete Sets Retaining Wall to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	10-Nov-21	16-Nov-21	20-Jan-22	26-Jan-22	166
O2_DW1260	Design Registered - Retaining Wall	7	17-Nov-21	23-Nov-21	27-Jan-22	02-Feb-22	166
C3.19h - MECHANICAL ENTRANCE GATE (FOUNDATION & POST)							
IC CHECKING & CERTIFICATION							
O2_DH1100	IC Comment on the submitted Mechanical Entrance Gate (Clause 5.4.3.9, Specs Part A)	14	01-Feb-22	14-Feb-22	25-Nov-22 A	14-Dec-21	227
O2_DH1110	Submit further information for the submitted Mechanical Entrance Gate to IC (Clause 5.4.3.9, Specs Part A)	7	15-Feb-22	21-Feb-22	15-Dec-21	21-Dec-21	227
O2_DH1120	IC Comment on the re-submitted Mechanical Entrance Gate (Clause 5.4.3.9, Specs Part A)	14	22-Feb-22	07-Mar-22	22-Dec-21	04-Jan-22	227
O2_DH1130	Submit further information for the re-submitted Mechanical Entrance Gate to IC (Clause 5.4.3.9, Specs Part A)	7	08-Mar-22	14-Mar-22	05-Jan-22	11-Jan-22	227
O2_DH1140	IC Certify Mechanical Entrance Gate (Clause 5.4.3.9, Specs Part A)	14	15-Mar-22	28-Mar-22	12-Jan-22	25-Jan-22	227
O2_DH1150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	29-Mar-22	04-Apr-22	26-Jan-22	01-Feb-22	227
EMPLOYER's CONSENT							
O2_DH1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	05-Apr-22	11-Apr-22	02-Feb-22	08-Feb-22	227
O2_DH1210	ER Comment on the submitted Mechanical Entrance Gate (Clause 5.4.3.17.c, Specs Part A)	14	12-Apr-22	25-Apr-22	09-Feb-22	22-Feb-22	227
O2_DH1220	Submit further information for the submitted Mechanical Entrance Gate to ER (Clause 5.4.3.19, Specs Part A)	7	26-Apr-22	02-May-22	23-Feb-22	01-Mar-22	227
C3.19j - COVERED CARPARK (FOUNDATION & STRUCTURE)							
SUBMISSION							
O2_DJ1000	Covered Carpark (Clause 5.4.3.9, Specs Part A)	0		31-Dec-21		08-Nov-21 A	
IC CHECKING & CERTIFICATION							
O2_DJ1100	IC Comment on the submitted Covered Carpark (Clause 5.4.3.9, Specs Part A)	14	01-Jan-22	14-Jan-22	09-Nov-21 A	16-Nov-21 A	
O2_DJ1110	Submit further information for the submitted Covered Carpark to IC (Clause 5.4.3.9, Specs Part A)	7	15-Jan-22	21-Jan-22	17-Nov-21 A	23-Nov-21 A	
O2_DJ1120	IC Comment on the re-submitted Covered Carpark (Clause 5.4.3.9, Specs Part A)	14	22-Jan-22	04-Feb-22	24-Nov-21 A	29-Nov-21 A	
O2_DJ1130	Submit further information for the re-submitted Covered Carpark to IC (Clause 5.4.3.9, Specs Part A)	7	05-Feb-22	11-Feb-22	30-Nov-21 A	07-Dec-21	240
O2_DJ1140	IC Certify Covered Carpark (Clause 5.4.3.9, Specs Part A)	14	12-Feb-22	25-Feb-22	08-Dec-21	21-Dec-21	240
O2_DJ1150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	26-Feb-22	04-Mar-22	22-Dec-21	28-Dec-21	240
EMPLOYER's CONSENT							
O2_DJ1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	05-Mar-22	11-Mar-22	29-Dec-21	04-Jan-22	240
O2_DJ1210	ER Comment on the submitted Covered Carpark (Clause 5.4.3.17.c, Specs Part A)	14	12-Mar-22	25-Mar-22	05-Jan-22	18-Jan-22	240
O2_DJ1220	Submit further information for the submitted Covered Carpark to ER (Clause 5.4.3.19, Specs Part A)	7	26-Mar-22	01-Apr-22	19-Jan-22	25-Jan-22	240
O2_DJ1230	ER Comment on the re-submitted Covered Carpark (Clause 5.4.3.17.a, Specs Part A)	14	02-Apr-22	15-Apr-22	26-Jan-22	08-Feb-22	240
O2_DJ1240	ER Consented Covered Carpark (Clause 5.4.3.17.a, Specs Part A)	0		15-Apr-22		08-Feb-22	240
O2_DJ1250	Submit Two Complete Sets Covered Carpark to IC, ER for Register Design (Clause 5.4.3.22, Specs Part A)	7	16-Apr-22	22-Apr-22	09-Feb-22	15-Feb-22	240
O2_DJ1260	Design Registered - Covered Carpark	7	23-Apr-22	29-Apr-22	16-Feb-22	22-Feb-22	240



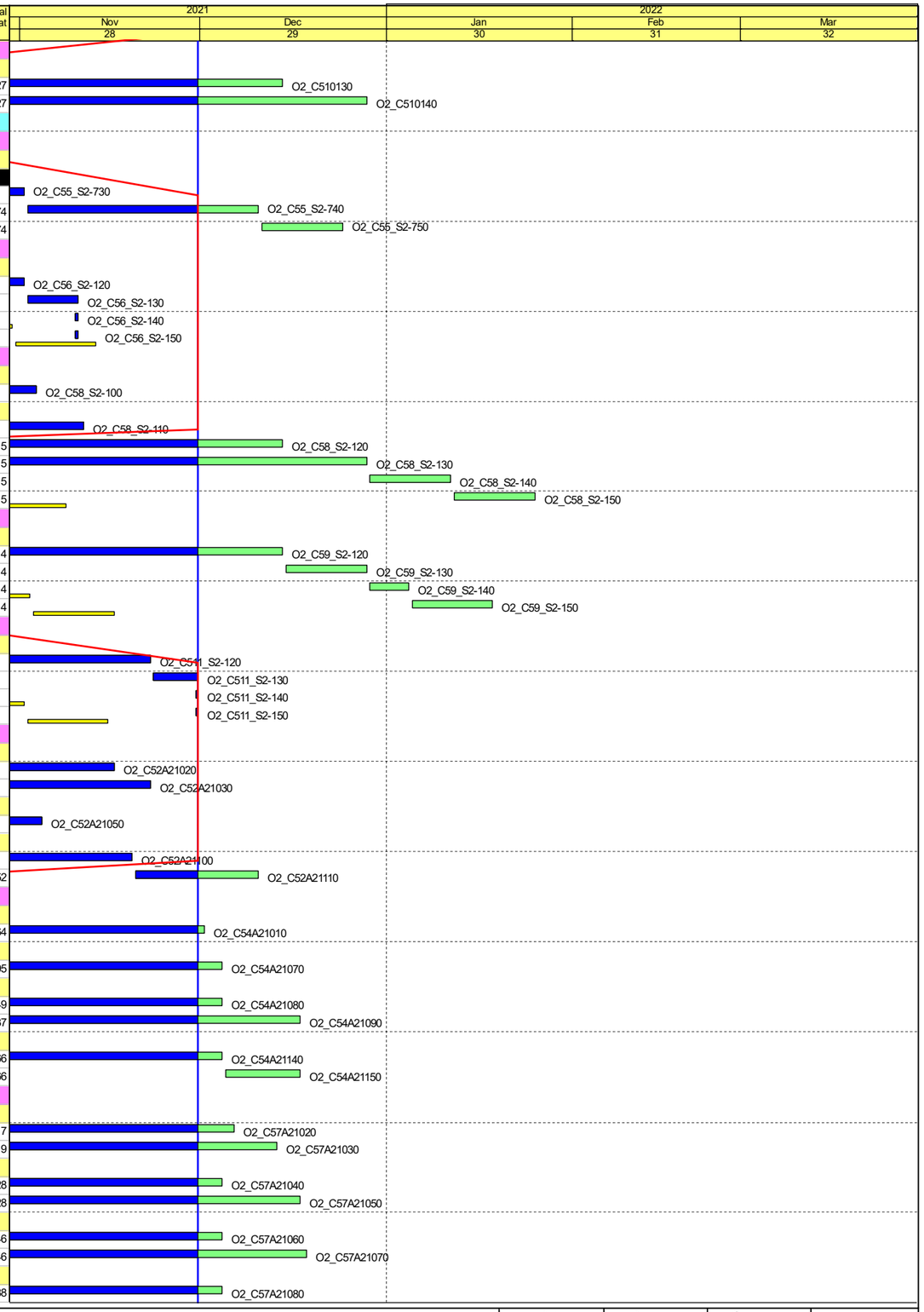
Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
C3.19k - WATER PIPE SUPPORT (ALONG ACCESS ROAD)							
SUBMISSION							
O2_DK1000	Water Pipe Support (Clause 5.4.3.9, Specs Part A)	0		30-Sep-21		13-Dec-21*	37
IC CHECKING & CERTIFICATION							
O2_DK1100	IC Comment on the submitted Water Pipe Support (Clause 5.4.3.9, Specs Part A)	14	01-Oct-21	14-Oct-21	14-Dec-21	27-Dec-21	37
O2_DK1110	Submit further information for the submitted Water Pipe Supportm to IC (Clause 5.4.3.9, Specs Part A)	7	15-Oct-21	21-Oct-21	28-Dec-21	03-Jan-22	37
O2_DK1120	IC Comment on the re-submitted Water Pipe Support (Clause 5.4.3.9, Specs Part A)	14	22-Oct-21	04-Nov-21	04-Jan-22	17-Jan-22	37
O2_DK1130	Submit further information for the re-submitted Water Pipe Support to IC (Clause 5.4.3.9, Specs Part A)	7	05-Nov-21	11-Nov-21	18-Jan-22	24-Jan-22	37
O2_DK1140	IC Certify Water Pipe Support (Clause 5.4.3.9, Specs Part A)	14	12-Nov-21	25-Nov-21	25-Jan-22	07-Feb-22	37
O2_DK1150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs Part A)	7	26-Nov-21	02-Dec-21	08-Feb-22	14-Feb-22	37
EMPLOYER's CONSENT							
O2_DK1200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs Part A)	7	03-Dec-21	09-Dec-21	15-Feb-22	21-Feb-22	37
O2_DK1210	ER Comment on the submitted Water Pipe Support (Clause 5.4.3.17.c, Specs Part A)	14	10-Dec-21	23-Dec-21	22-Feb-22	07-Mar-22	37
C4 - BUILDING SERVICES							
C4.1 - BS- ELECTRICAL SERVICES							
EMPLOYER's CONSENT							
O2_C41150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	120	18-May-21	14-Sep-21	18-May-21 A	09-Nov-21 A	
O2_C41200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	15-Sep-21	17-Sep-21	10-Nov-21 A	16-Nov-21 A	
O2_C41220	Submit further information for the submitted Electrical Services to ER (Clause 5.4.3.19, Specs A)	7	18-Sep-21	24-Sep-21	17-Nov-21 A	24-Nov-21 A	
O2_C41230	ER Comment on the re-submitted Electrical Services (Clause 5.4.3.17.a, Specs A)	14	25-Sep-21	01-Oct-21	25-Nov-21 A	14-Dec-21	34
O2_C41240	ER Consented Electrical Services (Clause 5.4.3.17.a, Specs A)	0		01-Oct-21		14-Dec-21	34
O2_C41250	Submit Two Complete Sets Electrical Services to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	02-Oct-21	04-Oct-21	15-Dec-21	17-Dec-21	34
O2_C41260	Design Registered - Electrical Services	0		07-Oct-21		17-Dec-21	34
C4.2 - BS- MECHANICAL VENTILATION & AIR-CONDITIONING							
IC CHECKING & CERTIFICATION							
O2_C42140	IC Certify Mechanical Ventilation & Air-Conditioning (Clause 5.4.3.9, Specs A)	259	30-Dec-20	14-Sep-21	30-Dec-20 A	25-Nov-21 A	
EMPLOYER's CONSENT							
O2_C42150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	15-Sep-21	17-Sep-21	26-Nov-21 A	14-Dec-21	8
O2_C42200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	2	18-Sep-21	20-Sep-21	15-Dec-21	16-Dec-21	8
O2_C42220	Submit further information for the submitted Mechanical Ventilation & Air-Conditioning to ER (Clause 5.4.3.19, Specs A)	7	14-Sep-21	20-Sep-21	10-Dec-21	16-Dec-21	8
O2_C42230	ER Comment on the re-submitted Mechanical Ventilation & Air-Conditioning (Clause 5.4.3.17.a, Specs A)	7	21-Sep-21	04-Oct-21	17-Dec-21	23-Dec-21	8
O2_C42240	ER Consented Mechanical Ventilation & Air-Conditioning (Clause 5.4.3.17.a, Specs A)	0		04-Oct-21		23-Dec-21	8
O2_C42250	Submit Two Complete Sets Mech Ventilation & Air-Conditioning to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	05-Oct-21	07-Oct-21	24-Dec-21	26-Dec-21	29
O2_C42260	Design Registered - Mechanical Ventilation & Air-Conditioning	0		10-Oct-21		26-Dec-21	29
C4.3 - BS- FIRE SERVICES							
IC CHECKING & CERTIFICATION							
O2_C43130	Submit further information for the re-submitted Fire Services to IC (Clause 5.4.3.9, Specs A)	413	14-Jul-20	30-Aug-21	14-Jul-20 A	08-Nov-21 A	
O2_C43140	IC Certify Fire Services (Clause 5.4.3.9, Specs A)	342	30-Sep-20	06-Sep-21	30-Sep-20 A	09-Nov-21 A	
EMPLOYER's CONSENT							
O2_C43150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	07-Sep-21	09-Sep-21	10-Nov-21 A	19-Nov-21 A	
O2_C43200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	10-Sep-21	12-Sep-21	20-Nov-21 A	22-Nov-21 A	
O2_C43220	Submit further information for the submitted Fire Services to ER (Clause 5.4.3.19, Specs A)	7	06-Sep-21	12-Sep-21	20-Nov-21 A	22-Nov-21 A	
O2_C43230	ER Comment on the re-submitted Fire Services (Clause 5.4.3.17.a, Specs A)	14	13-Sep-21	19-Sep-21	23-Nov-21 A	14-Dec-21	14
O2_C43240	ER Consented Fire Services (Clause 5.4.3.17.a, Specs A)	0		19-Sep-21		14-Dec-21	14
O2_C43250	Submit Two Complete Sets Fire Services to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	20-Sep-21	22-Sep-21	15-Dec-21	17-Dec-21	14
O2_C43260	Design Registered - Fire Services	0		25-Sep-21		17-Dec-21	14
C4.4 - BS- PLUMBING & DRAINAGE							
EMPLOYER's CONSENT							
O2_C44150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	114	24-May-21	14-Sep-21	24-May-21 A	04-Nov-21 A	
O2_C44200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	15-Sep-21	17-Sep-21	05-Nov-21 A	22-Nov-21 A	
O2_C44220	Submit further information for the submitted Plumbing & Drainage to ER (Clause 5.4.3.19, Specs A)	7	11-Sep-21	17-Sep-21	05-Nov-21 A	22-Nov-21 A	
O2_C44230	ER Comment on the re-submitted Plumbing & Drainage (Clause 5.4.3.17.a, Specs A)	7	18-Sep-21	24-Sep-21	23-Nov-21 A	14-Dec-21	20
O2_C44240	ER Consented Plumbing & Drainage (Clause 5.4.3.17.a, Specs A)	0		24-Sep-21		14-Dec-21	20
O2_C44250	Submit Two Complete Sets Plumbing & Drainage to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	25-Sep-21	27-Sep-21	15-Dec-21	17-Dec-21	35
O2_C44260	Design Registered - Plumbing & Drainage	0		30-Sep-21		17-Dec-21	35
C4.5 - AUTOMATIC IRRIGATION SYSTEM							
EMPLOYER's CONSENT							
O2_C45150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	7	29-Oct-21	31-Oct-21	21-Oct-21 A	09-Nov-21 A	
O2_C45200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	01-Nov-21	03-Nov-21	09-Nov-21 A	09-Nov-21 A	
O2_C45210	ER Comment on the submitted Automatic Irrigation System (Clause 5.4.3.17.c, Specs A)	0	31-Dec-20	06-Feb-21	09-Nov-21 A	09-Nov-21 A	
O2_C45220	Submit further information for the submitted Automatic Irrigation System to ER (Clause 5.4.3.19, Specs A)	0	28-Oct-21	03-Nov-21	09-Nov-21 A	09-Nov-21 A	
O2_C45230	ER Comment on the re-submitted Automatic Irrigation System (Clause 5.4.3.17.a, Specs A)	7	04-Nov-21	17-Nov-21	10-Nov-21 A	23-Nov-21 A	
O2_C45240	ER Consented Automatic Irrigation System (Clause 5.4.3.17.a, Specs A)	0		17-Nov-21		23-Nov-21 A	
O2_C45250	Submit Two Complete Sets Automatic Irrigation System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	18-Nov-21	24-Nov-21	01-Dec-21	03-Dec-21	318
O2_C45260	Design Registered - Automatic Irrigation System	0		01-Dec-21		03-Dec-21	318
C4.6 - BS- ELV (INCLUDING CCTV, PA, BMS, SECURITY, ETC.)							
IC CHECKING & CERTIFICATION							
O2_C46130	Submit further information for the re-submitted ELV to IC (Clause 5.4.3.9, Specs A)	130	16-Jan-21	25-May-21	16-Jan-21 A	09-Dec-21	44
O2_C46140	IC Certify ELV (Clause 5.4.3.9, Specs A)	197	01-Apr-21	14-Oct-21	01-Apr-21 A	23-Dec-21	44
EMPLOYER's CONSENT							



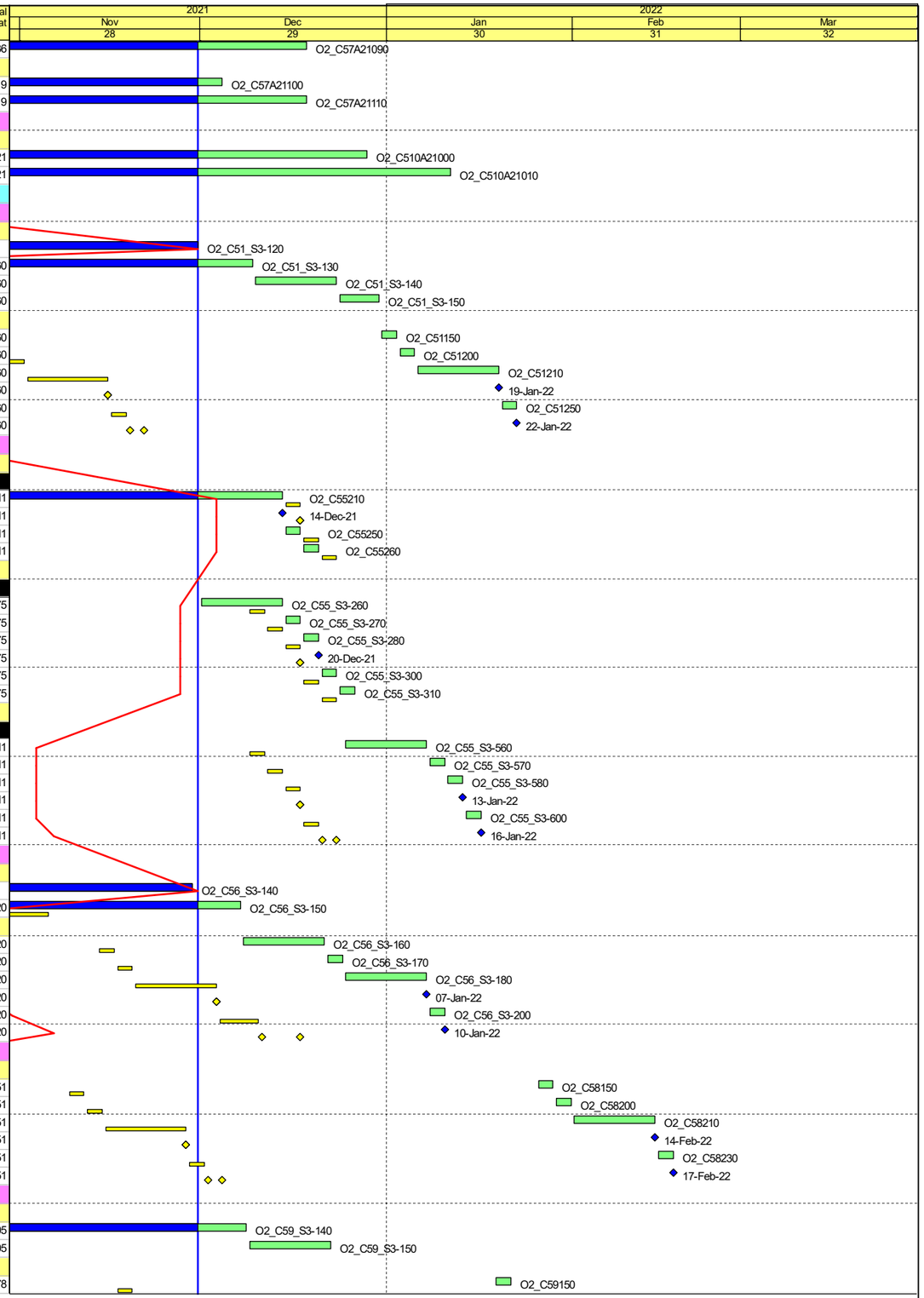
Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_C46150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	15-Oct-21	17-Oct-21	24-Dec-21	26-Dec-21	44
O2_C46200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	18-Oct-21	20-Oct-21	27-Dec-21	29-Dec-21	44
O2_C46220	Submit further information for the submitted ELV to ER (Clause 5.4.3.19, Specs A)	7	14-Oct-21	20-Oct-21	23-Dec-21	29-Dec-21	44
O2_C46230	ER Comment on the re-submitted ELV (Clause 5.4.3.17.a, Specs A)	7	21-Oct-21	03-Nov-21	30-Dec-21	05-Jan-22	44
O2_C46240	ER Consented ELV (Clause 5.4.3.17.a, Specs A)	0		03-Nov-21		05-Jan-22	44
O2_C46250	Submit Two Complete Sets ELV to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	04-Nov-21	06-Nov-21	06-Jan-22	08-Jan-22	44
O2_C46260	Design Registered - ELV	0		09-Nov-21		08-Jan-22	44
C4.7 - SURPLUS ENERGY EXPORT SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C47130	Submit further information for the re-submitted Surplus Energy Export System to IC (Clause 5.4.3.9, Specs A)	7	24-Sep-21	07-Oct-21	12-Oct-21 A	18-Nov-21 A	
O2_C47140	IC Certify Surplus Energy Export System (Clause 5.4.3.9, Specs A)	7	08-Oct-21	21-Oct-21	19-Nov-21 A	29-Nov-21 A	
EMPLOYER's CONSENT							
O2_C47150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	14	22-Oct-21	24-Oct-21	01-Dec-21	14-Dec-21	34
O2_C47200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	25-Oct-21	27-Oct-21	15-Dec-21	17-Dec-21	34
O2_C47210	ER Comment on the submitted Surplus Energy Export System (Clause 5.4.3.17.c, Specs A)	14	28-Oct-21	10-Nov-21	18-Dec-21	31-Dec-21	34
O2_C47220	Submit further information for the submitted Surplus Energy Export System to ER (Clause 5.4.3.19, Specs A)	7	11-Nov-21	17-Nov-21	01-Jan-22	07-Jan-22	34
O2_C47230	ER Comment on the re-submitted Surplus Energy Export System (Clause 5.4.3.17.a, Specs A)	7	18-Nov-21	01-Dec-21	08-Jan-22	14-Jan-22	34
O2_C47240	ER Consented Surplus Energy Export System (Clause 5.4.3.17.a, Specs A)	0		01-Dec-21		14-Jan-22	34
O2_C47250	Submit Two Complete Sets Surplus Energy Export System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	2	02-Dec-21	04-Dec-21	15-Jan-22	16-Jan-22	34
O2_C47260	Design Registered - Surplus Energy Export System	0		07-Dec-21		16-Jan-22	34
C4.8 - LIFT							
IC CHECKING & CERTIFICATION							
O2_C48130	Submit further information for the re-submitted Lift to IC (Clause 5.4.3.9, Specs A)	185	11-Nov-20	14-May-21	11-Nov-20 A	09-Dec-21	6
O2_C48140	IC Certify Lift (Clause 5.4.3.9, Specs A)	202	10-Feb-21	30-Aug-21	10-Feb-21 A	23-Dec-21	6
EMPLOYER's CONSENT							
O2_C48150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	31-Aug-21	02-Sep-21	24-Dec-21	26-Dec-21	6
O2_C48200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	03-Sep-21	05-Sep-21	27-Dec-21	29-Dec-21	6
O2_C48210	ER Comment on the submitted Lift (Clause 5.4.3.17.c, Specs A)	7	06-Sep-21	12-Sep-21	30-Dec-21	05-Jan-22	6
O2_C48220	Submit further information for the submitted Lift to ER (Clause 5.4.3.19, Specs A)	7	13-Sep-21	19-Sep-21	06-Jan-22	12-Jan-22	6
O2_C48230	ER Comment on the re-submitted Lift (Clause 5.4.3.17.a, Specs A)	7	20-Sep-21	26-Sep-21	13-Jan-22	19-Jan-22	6
O2_C48240	ER Consented Lift (Clause 5.4.3.17.a, Specs A)	0		26-Sep-21		19-Jan-22	6
O2_C48250	Submit Two Complete Sets Lift to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	27-Sep-21	29-Sep-21	20-Jan-22	22-Jan-22	6
O2_C48260	Design Registered - Lift	0		02-Oct-21		22-Jan-22	6
C5 - E&M PROCESS							
STAGE 1 SUBMISSIONS (Process Design)							
C5.1 - STAGE 1 - WASTE ARRIVAL AND EXIT (WEIGHBRIDGE, TRUCK WASHING, TRAFFIC CONTROL)							
IC CHECKING & CERTIFICATION							
O2_C51140	IC Certify Waste Arrival and Exit (Clause 5.4.3.9, Specs A)	14	13-Oct-21	26-Oct-21	30-Sep-21 A	04-Nov-21 A	
C5.5 - STAGE 1 - BIOGAS CLEANING & STORAGE SYSTEM AND FLARE							
C5.5.7 - STAGE 1 - FLARE							
IC CHECKING & CERTIFICATION							
O2_C55_S1-34	Submit further information for the re-submitted Flare to IC (Clause 5.4.3.9, Specs A)	155	28-Apr-21	29-Sep-21	28-Apr-21 A	10-Dec-21	14
O2_C55_S1-35	IC Certify Flare (Clause 5.4.3.9, Specs A)	14	30-Sep-21	13-Oct-21	23-Oct-21 A	24-Dec-21	14
C5.6.2, 3 & 4 - STAGE 1 - CHP							
IC CHECKING & CERTIFICATION							
O2_C56130	Submit further information for the re-submitted CHP to IC (Clause 5.4.3.9, Specs A)	418	08-Aug-20	29-Sep-21	08-Aug-20 A	01-Nov-21 A	
O2_C56140	IC Certify CHP (Clause 5.4.3.9, Specs A)	148	12-May-21	06-Oct-21	12-May-21 A	10-Nov-21 A	
C5.9 - STAGE 1 - CENTRALISED AIR POLLUTION CONTROL SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C59130	Submit further information for the re-submitted CAPC System to IC (Clause 5.4.3.9, Specs A)	35	29-Sep-21	08-Oct-21	12-Oct-21 A	29-Oct-21 A	
O2_C59140	IC Certify CAPC System (Clause 5.4.3.9, Specs A)	14	09-Oct-21	22-Oct-21	22-Oct-21 A	09-Nov-21 A	
C5.11 - STAGE 1 - ELECTRICAL WORKS (PROCESS)							
IC CHECKING & CERTIFICATION							
O2_C511110	Submit further information for the submitted Electrical Works to IC (Clause 5.4.3.9, Specs A)	442	30-Jun-20	14-Sep-21	30-Jun-20 A	17-Nov-21 A	
O2_C511120	IC Comment on the re-submitted Electrical Works (Clause 5.4.3.9, Specs A)	14	15-Sep-21	28-Sep-21	18-Nov-21 A	30-Nov-21 A	
O2_C511130	Submit further information for the re-submitted Electrical Works to IC (Clause 5.4.3.9, Specs A)	14	29-Sep-21	12-Oct-21	01-Dec-21	14-Dec-21	37
O2_C511140	IC Certify Electrical Works (Clause 5.4.3.9, Specs A)	14	13-Oct-21	26-Oct-21	15-Dec-21	28-Dec-21	37
C5.2 - STAGE 1 - WASTE RECEIVING, STORAGE AND FEEDING SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C52140	IC Certify Waste Receiving, Storage & Feeding System (Clause 5.4.3.9, Specs A)	188	10-Mar-21	13-Sep-21	10-Mar-21 A	09-Nov-21 A	
C5.3 - STAGE 1 - PRE-TREATMENT SYSTEM (HAMMER MILL, LIQUID STORAGE, CONVEYORS)							
IC CHECKING & CERTIFICATION							
O2_C53140	IC Certify Pre-Treatment System (Clause 5.4.3.9, Specs A)	188	10-Mar-21	13-Sep-21	10-Mar-21 A	09-Nov-21 A	
C5.6.1b & 5 - STAGE 1 - ENERGY RECOVERY							
IC CHECKING & CERTIFICATION							
O2_C56550e	IC Certify Energy Recovery (Clause 5.4.3.9, Specs A)	14	16-Oct-21	29-Oct-21	26-Oct-21 A	29-Oct-21 A	
C5.7 - STAGE 1 - DEWATERING AND GRANULATION SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C57130	Submit further information for the re-submitted Dewatering & Granulation System to IC (Clause 5.4.3.9, Specs A)	140	13-Apr-21	30-Aug-21	13-Apr-21 A	02-Nov-21 A	
O2_C57140	IC Certify Dewatering & Granulation System (Clause 5.4.3.9, Specs A)	136	01-May-21	13-Sep-21	01-May-21 A	04-Nov-21 A	



Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
C5.10 - STAGE 1 - C&I WORKS							
IC CHECKING & CERTIFICATION							
O2_C510130	Submit further information for the re-submitted C&I Works to IC (Clause 5.4.3.9, Specs A)	149	24-Apr-21	19-Sep-21	24-Apr-21 A	14-Dec-21	27
O2_C510140	IC Certify C&I Works (Clause 5.4.3.9, Specs A)	14	20-Sep-21	03-Oct-21	30-Sep-21 A	28-Dec-21	27
STAGE 2 SUBMISSIONS (Process Equipment)							
C5.5 - STAGE 2 - BIOGAS CLEANING & STORAGE SYSTEM AND FLARE							
C5.5.7 - STAGE 2- FLARE							
IC CHECKING & CERTIFICATION							
O2_C55_S2-73	IC Comment on the re-submitted Flare (Clause 5.4.3.9, Specs A)	14			23-Oct-21 A	01-Nov-21 A	
O2_C55_S2-74	Submit further information for the re-submitted Flare to IC (Clause 5.4.3.9, Specs A)	7			02-Nov-21 A	10-Dec-21	74
O2_C55_S2-75	IC Certify Flare (Clause 5.4.3.9, Specs A)	14			11-Dec-21	24-Dec-21	74
C5.6.2, 3 & 4 - STAGE 2- CHP							
IC CHECKING & CERTIFICATION							
O2_C56_S2-12(	Submit further information for the submitted CHP to IC (Clause 5.4.3.9, Specs A)	221	24-Feb-21	02-Oct-21	24-Feb-21 A	01-Nov-21 A	
O2_C56_S2-13(	IC Comment on the re-submitted CHP (Clause 5.4.3.9, Specs A)	14	03-Oct-21	16-Oct-21	02-Nov-21 A	10-Nov-21 A	
O2_C56_S2-14(	Submit further information for the re-submitted CHP to IC (Clause 5.4.3.9, Specs A)	14	17-Oct-21	30-Oct-21	10-Nov-21 A	10-Nov-21 A	
O2_C56_S2-15(	IC Certify CHP (Clause 5.4.3.9, Specs A)	14	31-Oct-21	13-Nov-21	10-Nov-21 A	10-Nov-21 A	
C5.8 - STAGE 2- WASTEWATER TREATMENT PLANT							
SUBMISSION							
O2_C58_S2-10(	Wastewater Treatment Plant (Clause 5.4.3.9, Specs A)	267	07-Dec-20	30-Aug-21	07-Dec-20 A	03-Nov-21 A	
IC CHECKING & CERTIFICATION							
O2_C58_S2-11(	IC Comment on the submitted Wastewater Treatment Plant (Clause 5.4.3.9, Specs A)	229	28-Jan-21	13-Sep-21	28-Jan-21 A	11-Nov-21 A	
O2_C58_S2-12(	Submit further information for the submitted Wastewater Treatment Plant to IC (Clause 5.4.3.9, Specs A)	172	09-Apr-21	27-Sep-21	09-Apr-21 A	14-Dec-21	15
O2_C58_S2-13(	IC Comment on the re-submitted Wastewater Treatment Plant (Clause 5.4.3.9, Specs A)	14	28-Sep-21	11-Oct-21	03-May-21 A	28-Dec-21	15
O2_C58_S2-14(	Submit further information for the re-submitted Wastewater Treatment Plant to IC (Clause 5.4.3.9, Specs A)	14	12-Oct-21	25-Oct-21	29-Dec-21	11-Jan-22	15
O2_C58_S2-15(	IC Certify Wastewater Treatment Plant (Clause 5.4.3.9, Specs A)	14	26-Oct-21	08-Nov-21	12-Jan-22	25-Jan-22	15
C5.9 - STAGE 2- CENTRALISED AIR POLLUTION CONTROL SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C59_S2-12(	Submit further information for the submitted CAPC System to IC (Clause 5.4.3.9, Specs A)	83	22-Jul-21	12-Oct-21	22-Jul-21 A	14-Dec-21	14
O2_C59_S2-13(	IC Comment on the re-submitted CAPC System (Clause 5.4.3.9, Specs A)	14	13-Oct-21	26-Oct-21	15-Dec-21	28-Dec-21	14
O2_C59_S2-14(	Submit further information for the re-submitted CAPC System to IC (Clause 5.4.3.9, Specs A)	7	27-Oct-21	02-Nov-21	29-Dec-21	04-Jan-22	14
O2_C59_S2-15(	IC Certify CAPC System (Clause 5.4.3.9, Specs A)	14	03-Nov-21	16-Nov-21	05-Jan-22	18-Jan-22	14
C5.11 - STAGE 2- ELECTRICAL WORKS (PROCESS)							
IC CHECKING & CERTIFICATION							
O2_C511_S2-12	Submit further information for the submitted Electrical Works to IC (Clause 5.4.3.9, Specs A)	14	28-Sep-21	11-Oct-21	21-Aug-21 A	22-Nov-21 A	
O2_C511_S2-13	IC Comment on the re-submitted Electrical Works (Clause 5.4.3.9, Specs A)	14	12-Oct-21	25-Oct-21	23-Nov-21 A	30-Nov-21 A	
O2_C511_S2-14	Submit further information for the re-submitted Electrical Works to IC (Clause 5.4.3.9, Specs A)	7	26-Oct-21	01-Nov-21	30-Nov-21 A	30-Nov-21 A	
O2_C511_S2-15	IC Certify Electrical Works (Clause 5.4.3.9, Specs A)	14	02-Nov-21	15-Nov-21	30-Nov-21 A	30-Nov-21 A	
C5.2 & C5.3 - STAGE 2 - WASTE RECEIVING & PRE-TREATMENT SYSTEMS							
Eisele							
O2_C52A21020	Submit Stage 2 Waste Receiving and Pre-Treatment Equipment Submissions: Eisele	276	20-Nov-20	22-Aug-21	20-Nov-20 A	16-Nov-21 A	
O2_C52A21030	IC Approve Stage 2 Waste Receiving and Pre-Treatment Equipment Submission: Eisele	149	10-Apr-21	05-Sep-21	10-Apr-21 A	22-Nov-21 A	
SUMA							
O2_C52A21050	IC Approve Stage 2 Equipment Submission: SUMA	109	19-Feb-21	07-Jun-21	19-Feb-21 A	04-Nov-21 A	
All Other Equipment							
O2_C52A21100	Submit Stage 2 Waste Receiving and Pre-Treatment Equipment Submissions: Other Equipment	114	31-May-21	21-Sep-21	31-May-21 A	19-Nov-21 A	
O2_C52A21110	IC Approve Stage 2 Waste Receiving and Pre-Treatment Equipment Submission: Other Equipment	10	22-Sep-21	20-Oct-21	20-Nov-21 A	10-Dec-21*	52
C5.4 - STAGE 2 - ANAEROBIC DIGESTION TREATMENT SYSTEM							
SUMA							
O2_C54A21010	IC Approve Stage 2 Equipment Submission: SUMA	109	19-Feb-21	07-Jun-21	19-Feb-21 A	01-Dec-21	164
Vogelsang							
O2_C54A21070	IC Approve Stage 2 Equipment Submission: Vogelsang	81	15-Jun-21	03-Sep-21	15-Jun-21 A	04-Dec-21	95
Grundfos							
O2_C54A21080	Submit Stage 2 Equipment Submissions: Grundfos	154	29-Dec-20	31-May-21	29-Dec-20 A	04-Dec-21	49
O2_C54A21090	IC Approve Stage 2 Equipment Submission: Grundfos	62	31-May-21	31-May-21	31-May-21 A	17-Dec-21	637
Heating Coils							
O2_C54A21140	Submit Stage 2 Equipment Submissions: Heating Coils	269	19-Nov-20	14-Aug-21	19-Nov-20 A	04-Dec-21	66
O2_C54A21150	IC Approve Stage 2 Equipment Submission: Heating Coils	13	15-Aug-21	12-Sep-21	05-Dec-21	17-Dec-21	66
C5.7 - STAGE 2 - DEWATERING AND GRANULATION SYSTEM							
Huning							
O2_C57A21020	Submit Stage 2 Equipment Submissions: Huning	270	04-Dec-20	30-Aug-21	04-Dec-20 A	06-Dec-21	7
O2_C57A21030	IC Approve Stage 2 Equipment Submission: Huning	171	27-Mar-21	13-Sep-21	27-Mar-21 A	13-Dec-21	9
Borger							
O2_C57A21040	Submit Stage 2 Equipment Submissions: Borger	250	19-Dec-20	25-Aug-21	19-Dec-20 A	04-Dec-21	28
O2_C57A21050	IC Approve Stage 2 Equipment Submission: Borger	125	07-May-21	08-Sep-21	07-May-21 A	17-Dec-21	28
Alfa Laval							
O2_C57A21060	Submit Stage 2 Equipment Submissions: Alfa Laval	146	03-Jan-21	28-May-21	03-Jan-21 A	04-Dec-21	46
O2_C57A21070	IC Approve Stage 2 Equipment Submission: Alfa Laval	133	28-Jan-21	09-Jun-21	28-Jan-21 A	18-Dec-21	46
Wangen							
O2_C57A21080	Submit Stage 2 Equipment Submissions: Wangen	101	18-Jan-21	28-Apr-21	18-Jan-21 A	04-Dec-21	88



Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_C57A21090	IC Approve Stage 2 Equipment Submission: Wangen	108	29-Apr-21	14-Aug-21	29-Apr-21 A	18-Dec-21	636
Polymer Preparation							
O2_C57A21100	Submit Stage 2 Equipment Submissions: Polymer Preparation	210	02-Feb-21	30-Aug-21	02-Feb-21 A	04-Dec-21	119
O2_C57A21110	IC Approve Stage 2 Equipment Submission: Polymer Preparation	116	21-May-21	13-Sep-21	21-May-21 A	18-Dec-21	119
C5.10 - STAGE 2 - CONTROL & INSTRUMENTATION WORKS							
All Equipment Submissions							
O2_C510A2100	Submit Stage 2 C&I Equipment Submissions:	184	01-Mar-21	31-Aug-21	01-Mar-21 A	28-Dec-21	21
O2_C510A2101	IC Approve Stage 2 C&I Equipment Submission:	189	25-Mar-21	29-Sep-21	25-Mar-21 A	11-Jan-22	21
STAGE 3 SUBMISSIONS (Process Installation)							
C5.1 - STAGE 3- WASTE ARRIVAL AND EXIT (WEIGHBRIDGE, TRUCK WASHING, TRAFFIC CONTROL)							
IC CHECKING & CERTIFICATION							
O2_C51_S3-12(	Submit further information for the submitted Waste Arrival and Exit to IC (Clause 5.4.3.9, Specs A)	216	11-Feb-21	14-Sep-21	11-Feb-21 A	30-Nov-21 A	
O2_C51_S3-13(	IC Comment on the re-submitted Waste Arrival and Exit (Clause 5.4.3.9, Specs A)	104	10-Jun-21	21-Sep-21	10-Jun-21 A	09-Dec-21	160
O2_C51_S3-14(	Submit further information for the re-submitted Waste Arrival and Exit to IC (Clause 5.4.3.9, Specs A)	14	22-Sep-21	28-Sep-21	10-Dec-21	23-Dec-21	160
O2_C51_S3-15(	IC Certify Waste Arrival and Exit (Clause 5.4.3.9, Specs A)	7	29-Sep-21	12-Oct-21	24-Dec-21	30-Dec-21	160
EMPLOYER's CONSENT							
O2_C51150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	27-Oct-21	29-Oct-21	31-Dec-21	02-Jan-22	160
O2_C51200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	30-Oct-21	01-Nov-21	03-Jan-22	05-Jan-22	160
O2_C51210	ER Comment on the submitted Waste Arrival and Exit (Clause 5.4.3.17.c, Specs A)	14	02-Nov-21	15-Nov-21	06-Jan-22	19-Jan-22	160
O2_C51240	ER Consented Waste Arrival and Exit (Clause 5.4.3.17.a, Specs A)	0		15-Nov-21		19-Jan-22	160
O2_C51250	Submit Two Complete Sets Waste Arrival and Exit to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	16-Nov-21	18-Nov-21	20-Jan-22	22-Jan-22	160
O2_C51260	Design Registered - Waste Arrival and Exit	0		21-Nov-21		22-Jan-22	160
C5.5 - STAGE 3- BIOGAS CLEANING & STORAGE SYSTEM AND FLARE							
C5.5.1 - STAGE 3- BIOGAS CLEANING SYSTEM							
EMPLOYER's CONSENT							
O2_C55210	ER Comment on the submitted Biogas Cleaning System (Clause 5.4.3.17.c, Specs A)	3	15-Dec-21	17-Dec-21	15-Sep-21 A	14-Dec-21	111
O2_C55240	ER Consented Biogas Cleaning System (Clause 5.4.3.17.a, Specs A)	0		17-Dec-21		14-Dec-21	111
O2_C55250	Submit Two Complete Sets Biogas Cleaning System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	18-Dec-21	20-Dec-21	15-Dec-21	17-Dec-21	111
O2_C55260	Design Registered - Biogas Cleaning System	3	21-Dec-21	23-Dec-21	18-Dec-21	20-Dec-21	111
C5.5.2 - STAGE 3- BIOGAS STORAGE SYSTEM							
EMPLOYER's CONSENT							
O2_C55_S3-26	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	14	09-Dec-21	11-Dec-21	01-Dec-21	14-Dec-21	75
O2_C55_S3-27	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	12-Dec-21	14-Dec-21	15-Dec-21	17-Dec-21	75
O2_C55_S3-28	ER Comment on the submitted Biogas Storage System (Clause 5.4.3.17.c, Specs A)	3	15-Dec-21	17-Dec-21	18-Dec-21	20-Dec-21	75
O2_C55_S3-29	ER Consented Biogas Storage System (Clause 5.4.3.17.a, Specs A)	0		17-Dec-21		20-Dec-21	75
O2_C55_S3-30	Submit Two Complete Sets Biogas Storage System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	18-Dec-21	20-Dec-21	21-Dec-21	23-Dec-21	75
O2_C55_S3-31	Design Registered - Biogas Storage System	3	21-Dec-21	23-Dec-21	24-Dec-21	26-Dec-21	75
C5.5.9- STAGE 3- FLARE							
EMPLOYER's CONSENT							
O2_C55_S3-56	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	14	09-Dec-21	11-Dec-21	25-Dec-21	07-Jan-22	111
O2_C55_S3-57	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	12-Dec-21	14-Dec-21	08-Jan-22	10-Jan-22	111
O2_C55_S3-58	ER Comment on the submitted Flare (Clause 5.4.3.17.c, Specs A)	3	15-Dec-21	17-Dec-21	11-Jan-22	13-Jan-22	111
O2_C55_S3-59	ER Consented Flare (Clause 5.4.3.17.a, Specs A)	0		17-Dec-21		13-Jan-22	111
O2_C55_S3-60	Submit Two Complete Sets Flare to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	18-Dec-21	20-Dec-21	14-Jan-22	16-Jan-22	111
O2_C55_S3-61	Design Registered - Flare	0		23-Dec-21		16-Jan-22	111
C5.6.1c - STAGE 3- ENERGY RECOVERY AND CHP							
IC CHECKING & CERTIFICATION							
O2_C56_S3-14(	Submit further information for the re-submitted CHP to IC (Clause 5.4.3.9, Specs A)	448	08-Aug-20	29-Oct-21	08-Aug-20 A	29-Nov-21 A	
O2_C56_S3-15(	IC Certify CHP (Clause 5.4.3.9, Specs A)	178	12-May-21	05-Nov-21	12-May-21 A	07-Dec-21	120
EMPLOYER's CONSENT							
O2_C56_S3-16(	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	14	14-Nov-21	16-Nov-21	08-Dec-21	21-Dec-21	120
O2_C56_S3-17(	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	17-Nov-21	19-Nov-21	22-Dec-21	24-Dec-21	120
O2_C56_S3-18(	ER Comment on the submitted CHP (Clause 5.4.3.17.c, Specs A)	14	20-Nov-21	03-Dec-21	25-Dec-21	07-Jan-22	120
O2_C56_S3-19(	ER Consented CHP (Clause 5.4.3.17.a, Specs A)	0		03-Dec-21		07-Jan-22	120
O2_C56_S3-20(	Submit Two Complete Sets CHP to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	04-Dec-21	10-Dec-21	08-Jan-22	10-Jan-22	120
O2_C56_S3-21(	Design Registered - CHP	0		17-Dec-21		10-Jan-22	120
C5.8.3 - STAGE 3- WASTEWATER TREATMENT PLANT							
EMPLOYER's CONSENT							
O2_C58150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	09-Nov-21	11-Nov-21	26-Jan-22	28-Jan-22	51
O2_C58200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	12-Nov-21	14-Nov-21	29-Jan-22	31-Jan-22	51
O2_C58210	ER Comment on the submitted Wastewater Treatment Plant (Clause 5.4.3.17.c, Specs A)	14	15-Nov-21	28-Nov-21	01-Feb-22	14-Feb-22	51
O2_C58220	ER Consented Wastewater Treatment Plant (Clause 5.4.3.17.a, Specs A)	0		28-Nov-21		14-Feb-22	51
O2_C58230	Submit Two Complete Sets Wastewater Treatment Plant to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	29-Nov-21	01-Dec-21	15-Feb-22	17-Feb-22	51
O2_C58240	Design Registered - Wastewater Treatment Plant	0		04-Dec-21		17-Feb-22	51
C5.9.3 - STAGE 3- CENTRALISED AIR POLLUTION CONTROL SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C59_S3-14(	Submit further information for the re-submitted CAPC System to IC (Clause 5.4.3.9, Specs A)	8	29-Sep-21	05-Oct-21	04-Sep-21 A	08-Dec-21	105
O2_C59_S3-15(	IC Certify CAPC System (Clause 5.4.3.9, Specs A)	14	06-Oct-21	19-Oct-21	09-Dec-21	22-Dec-21	105
EMPLOYER's CONSENT							
O2_C59150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	17-Nov-21	19-Nov-21	19-Jan-22	21-Jan-22	78

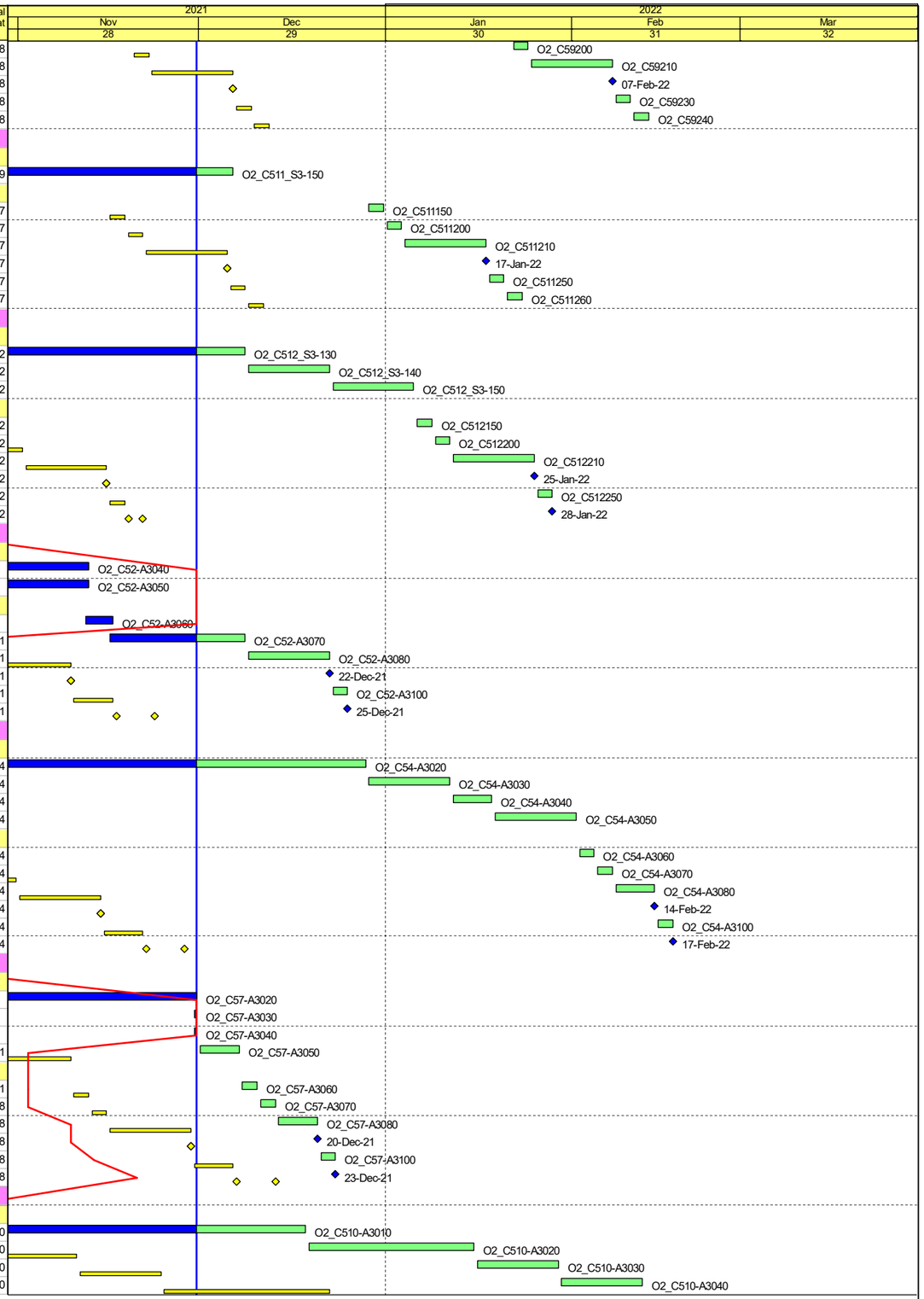


Remaining Work
Remaining Work (Critical)
Actual Work
Level of Effort
Primary Baseline
Baseline Milestone
Start Milestone

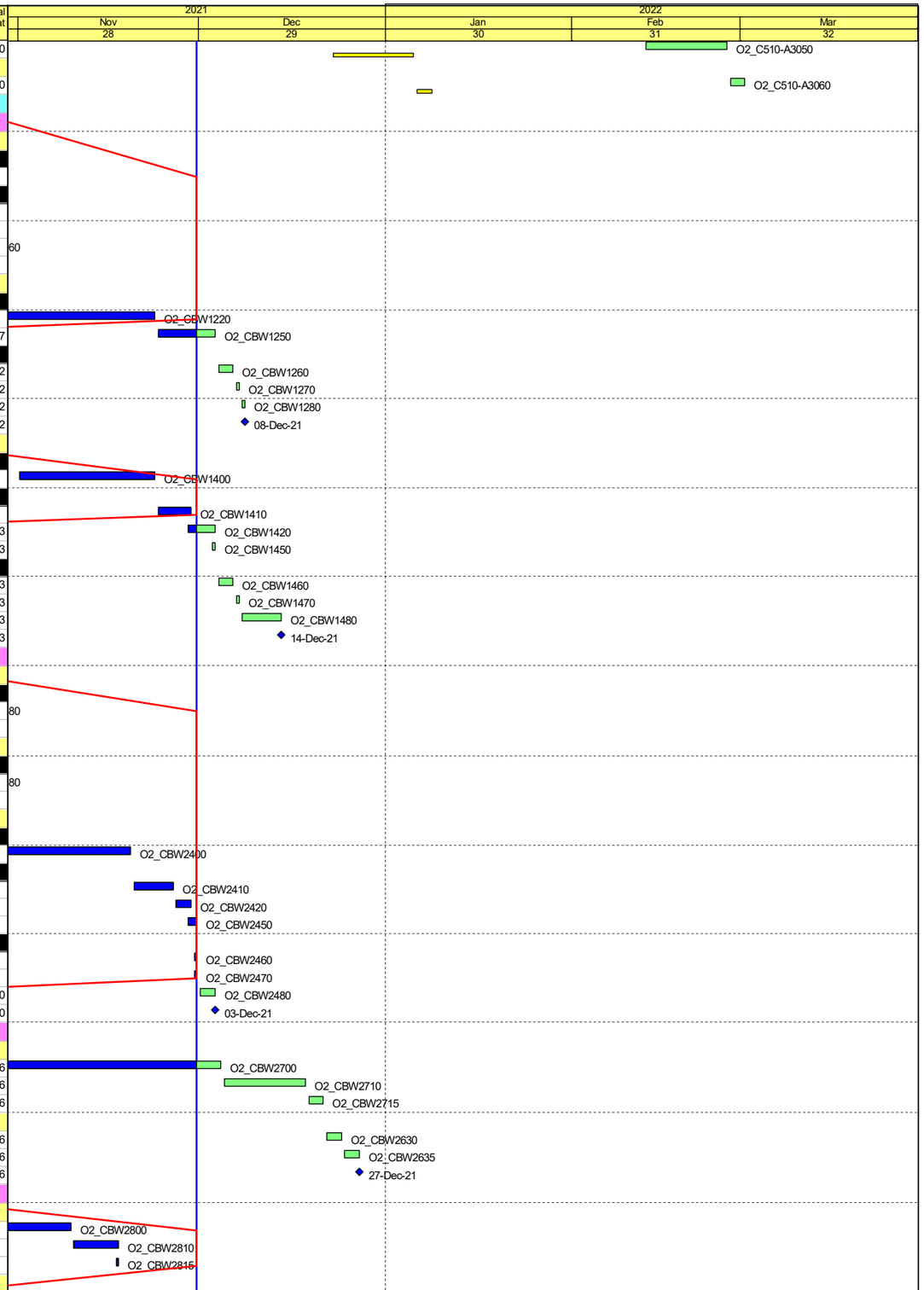
Contract No. EP/SP/86/15
Organic Waste Treatment Facilities, Phase 2
Works Programme 3rd Issue
3-Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-21			

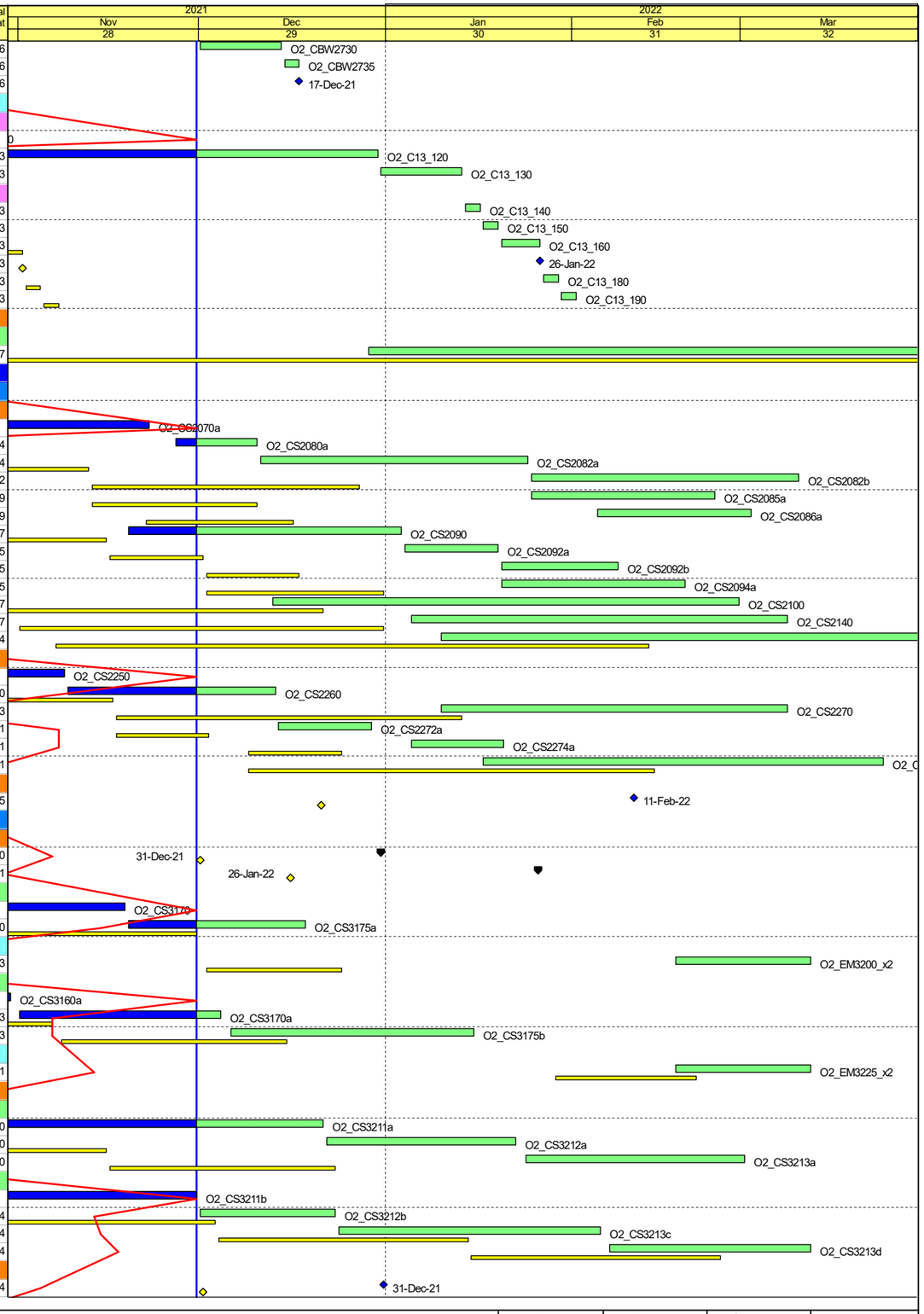
Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_C59200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	20-Nov-21	22-Nov-21	22-Jan-22	24-Jan-22	78
O2_C59210	ER Comment on the submitted CAPC System (Clause 5.4.3.17.c, Specs A)	14	23-Nov-21	06-Dec-21	25-Jan-22	07-Feb-22	78
O2_C59220	ER Consented CAPC System (Clause 5.4.3.17.a, Specs A)	0		06-Dec-21		07-Feb-22	78
O2_C59230	Submit Two Complete Sets CAPC System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	07-Dec-21	09-Dec-21	08-Feb-22	10-Feb-22	78
O2_C59240	Design Registered - CAPC System	3	10-Dec-21	12-Dec-21	11-Feb-22	13-Feb-22	78
C5.11.3 - STAGE 3- ELECTRICAL WORKS (PROCESS)							
IC CHECKING & CERTIFICATION							
O2_C511_S3-15	IC Certify Electrical Works (Clause 5.4.3.9, Specs A)	6	06-Oct-21	19-Oct-21	17-Apr-21 A	06-Dec-21	59
EMPLOYER's CONSENT							
O2_C511150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	16-Nov-21	18-Nov-21	29-Dec-21	31-Dec-21	37
O2_C511200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	19-Nov-21	21-Nov-21	01-Jan-22	03-Jan-22	37
O2_C511210	ER Comment on the submitted Electrical Works (Clause 5.4.3.17.c, Specs A)	14	22-Nov-21	05-Dec-21	04-Jan-22	17-Jan-22	37
O2_C511240	ER Consented Electrical Works (Clause 5.4.3.17.a, Specs A)	0		05-Dec-21		17-Jan-22	37
O2_C511250	Submit Two Complete Sets Electrical Works to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	06-Dec-21	08-Dec-21	18-Jan-22	20-Jan-22	37
O2_C511260	Design Registered - Electrical Works	3	09-Dec-21	11-Dec-21	21-Jan-22	23-Jan-22	37
C5.12 - STAGE 3- LIFTING APPLIANCE							
IC CHECKING & CERTIFICATION							
O2_C512_S3-13	IC Comment on the re-submitted Lifting Appliance (Clause 5.4.3.9, Specs A)	14	15-Sep-21	28-Sep-21	02-Jul-21 A	08-Dec-21	32
O2_C512_S3-14	Submit further information for the re-submitted Lifting Appliance to IC (Clause 5.4.3.9, Specs A)	14	29-Sep-21	05-Oct-21	09-Dec-21	22-Dec-21	32
O2_C512_S3-15	IC Certify Lifting Appliance (Clause 5.4.3.9, Specs A)	14	06-Oct-21	19-Oct-21	23-Dec-21	05-Jan-22	32
EMPLOYER's CONSENT							
O2_C512150	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	27-Oct-21	29-Oct-21	06-Jan-22	08-Jan-22	32
O2_C512200	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	30-Oct-21	01-Nov-21	09-Jan-22	11-Jan-22	32
O2_C512210	ER Comment on the submitted Lifting Appliance (Clause 5.4.3.17.c, Specs A)	14	02-Nov-21	15-Nov-21	12-Jan-22	25-Jan-22	32
O2_C512240	ER Consented Lifting Appliance (Clause 5.4.3.17.a, Specs A)	0		15-Nov-21		25-Jan-22	32
O2_C512250	Submit Two Complete Sets Lifting Appliance to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	16-Nov-21	18-Nov-21	26-Jan-22	28-Jan-22	32
O2_C512260	Design Registered - Lifting Appliance	0		21-Nov-21		28-Jan-22	32
C5.2.4 & C5.3.4 - STAGE 3 - WASTE RECEIVING, STORAGE AND FEEDING SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C52-A3040	Submit further information for the re-submitted Waste Receiving, Storage & Feeding System (Clause 5.4.3.9, Specs A)	103	28-Nov-20	10-Mar-21	28-Nov-20 A	12-Nov-21 A	
O2_C52-A3050	IC Certify Waste Receiving, Storage & Feeding System (Clause 5.4.3.9, Specs A)	9	11-Mar-21	19-Mar-21	11-Mar-21 A	12-Nov-21 A	
EMPLOYER's CONSENT							
O2_C52-A3060	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	21-Oct-21	23-Oct-21	12-Nov-21 A	16-Nov-21 A	
O2_C52-A3070	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	24-Oct-21	26-Oct-21	16-Nov-21 A	08-Dec-21	41
O2_C52-A3080	ER Comment on the submitted Waste Receiving, Storage & Feeding System (Clause 5.4.3.17.a, Specs A)	14	27-Oct-21	09-Nov-21	09-Dec-21	22-Dec-21	41
O2_C52-A3090	ER Consented Waste Receiving, Storage & Feeding System (Clause 5.4.3.17.a, Specs A)	0		09-Nov-21		22-Dec-21	41
O2_C52-A3100	Submit Two Complete Sets Waste Rec'v, Storage & Feeding System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	10-Nov-21	16-Nov-21	23-Dec-21	25-Dec-21	41
O2_C52-A3110	Design Registered - Waste Receiving, Storage & Feeding System	0		23-Nov-21		25-Dec-21	41
C5.4.5 - STAGE 3 SUBMISSION - AD SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C54-A3020	Submit further information for the submitted AD Treatment System to IC (Clause 5.4.3.9, Specs A)	7	14-Sep-21	20-Sep-21	29-Apr-20 A	28-Dec-21	4
O2_C54-A3030	IC Comment on the re-submitted AD Treatment System (Clause 5.4.3.9, Specs A)	14	21-Sep-21	04-Oct-21	29-Dec-21	11-Jan-22	4
O2_C54-A3040	Submit further information for the re-submitted AD Treatment System to IC (Clause 5.4.3.9, Specs A)	7	05-Oct-21	11-Oct-21	12-Jan-22	18-Jan-22	4
O2_C54-A3050	IC Certify AD Treatment System (Clause 5.4.3.9, Specs A)	14	12-Oct-21	25-Oct-21	19-Jan-22	01-Feb-22	4
EMPLOYER's CONSENT							
O2_C54-A3060	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	26-Oct-21	28-Oct-21	02-Feb-22	04-Feb-22	4
O2_C54-A3070	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	29-Oct-21	31-Oct-21	05-Feb-22	07-Feb-22	4
O2_C54-A3080	ER Comment on the submitted AD Treatment System (Clause 5.4.3.17.c, Specs A)	7	01-Nov-21	14-Nov-21	08-Feb-22	14-Feb-22	4
O2_C54-A3090	ER Consented AD Treatment System (Clause 5.4.3.17.a, Specs A)	0		14-Nov-21		14-Feb-22	4
O2_C54-A3100	Submit Two Complete Sets AD Treatment System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	15-Nov-21	21-Nov-21	15-Feb-22	17-Feb-22	4
O2_C54-A3110	Design Registered - AD Treatment System	0		28-Nov-21		17-Feb-22	4
C5.7.4 - STAGE 3 - GRANULATION SYSTEM							
IC CHECKING & CERTIFICATION							
O2_C57-A3020	Submit further information for the submitted Dewatering & Granulation System to IC (Clause 5.4.3.9, Specs A)	7	29-Sep-21	05-Oct-21	20-Aug-21 A	30-Nov-21 A	
O2_C57-A3030	IC Comment on the re-submitted Dewatering & Granulation System (Clause 5.4.3.9, Specs A)	7	06-Oct-21	19-Oct-21	30-Nov-21 A	30-Nov-21 A	
O2_C57-A3040	Submit further information for the re-submitted Dewatering & Granulation System to IC (Clause 5.4.3.9, Specs A)	7	20-Oct-21	26-Oct-21	30-Nov-21 A	30-Nov-21 A	
O2_C57-A3050	IC Certify Dewatering & Granulation System (Clause 5.4.3.9, Specs A)	7	27-Oct-21	09-Nov-21	01-Dec-21	07-Dec-21	61
EMPLOYER's CONSENT							
O2_C57-A3060	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	10-Nov-21	12-Nov-21	08-Dec-21	10-Dec-21	61
O2_C57-A3070	Submit Design Check Certificate & Method of Construction Check Certificate to ER (Clause 5.4.3.16, Specs A)	3	13-Nov-21	15-Nov-21	11-Dec-21	13-Dec-21	98
O2_C57-A3080	ER Comment on the submitted Dewatering & Granulation System (Clause 5.4.3.17.c, Specs A)	7	16-Nov-21	29-Nov-21	14-Dec-21	20-Dec-21	98
O2_C57-A3090	ER Consented Dewatering & Granulation System (Clause 5.4.3.17.a, Specs A)	0		29-Nov-21		20-Dec-21	98
O2_C57-A3100	Submit Two Complete Sets Dewatering & Granulation System to IC, ER for Register Design (Clause 5.4.3.22, Specs A)	3	30-Nov-21	06-Dec-21	21-Dec-21	23-Dec-21	98
O2_C57-A3110	Design Registered - Dewatering & Granulation System	0		13-Dec-21		23-Dec-21	98
C5.10.8 - STAGE 3 - C&I WORKS							
IC CHECKING & CERTIFICATION							
O2_C510-A3010	IC Comment on the submitted C&I Works (Clause 5.4.3.9, Specs A)	14	30-Sep-21	13-Oct-21	01-Jul-21 A	18-Dec-21	90
O2_C510-A3020	Submit further information for the submitted C&I Works to IC (Clause 5.4.3.9, Specs A)	28	14-Oct-21	10-Nov-21	19-Dec-21	15-Jan-22	90
O2_C510-A3030	IC Comment on the re-submitted C&I Works (Clause 5.4.3.9, Specs A)	14	11-Nov-21	24-Nov-21	16-Jan-22	29-Jan-22	90
O2_C510-A3040	Submit further information for the re-submitted C&I Works to IC (Clause 5.4.3.9, Specs A)	14	25-Nov-21	22-Dec-21	30-Jan-22	12-Feb-22	90



Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_C510-A305(	IC Certify C&I Works (Clause 5.4.3.9, Specs A)	14	23-Dec-21	05-Jan-22	13-Feb-22	26-Feb-22	90
EMPLOYER's CONSENT							
O2_C510-A306(	Obtain Design Check Certificate & Method of Construction Check Certificate (Clause 5.4.3.11 & 5.4.3.12, Specs A)	3	06-Jan-22	08-Jan-22	27-Feb-22	01-Mar-22	90
CBWD							
C7.1 - CBWD - GRANULATION BUILDING							
C7.1.1a - CBWD - GRANULATION BUILDING (G/F)							
IC CHECKING & CERTIFICATION							
O2_CBW1630	IC Certify CBWD Granulation - G/F	7	27-Aug-21	29-Aug-21	04-Oct-21 A	04-Oct-21 A	
EMPLOYER's CONSENT							
O2_CBW1640	Obtain Design Check Certificate for CBWD Granulation - G/F	2	30-Aug-21	01-Sep-21	04-Oct-21 A	04-Oct-21 A	
O2_CBW1650	Submit Design Check Certificate to ER	2	02-Sep-21	04-Sep-21	05-Oct-21 A	05-Oct-21 A	
O2_CBW1660	ER Comment on the submitted CBWD Granulation - G/F	2	05-Sep-21	07-Sep-21	06-Oct-21 A	19-Oct-21 A	
O2_CBW1670	ER Consented CBWD Granulation - G/F	0		07-Sep-21		19-Oct-21 A	
C7.1.2 - CBWD - GRANULATION BUILDING (M/F)							
IC CHECKING & CERTIFICATION							
O2_CBW1220	Submit further information for the submitted CBWD Granulation - M/F	26	07-Sep-21	13-Sep-21	01-Sep-21 A	23-Nov-21 A	
O2_CBW1250	IC Certify CBWD Granulation - M/F	3	14-Sep-21	20-Sep-21	24-Nov-21 A	03-Dec-21	27
EMPLOYER's CONSENT							
O2_CBW1260	Obtain Design Check Certificate for CBWD Granulation - M/F	3	21-Sep-21	23-Sep-21	04-Dec-21	06-Dec-21	32
O2_CBW1270	Submit Design Check Certificate to ER	1	24-Sep-21	26-Sep-21	07-Dec-21	07-Dec-21	32
O2_CBW1280	ER Comment on the submitted CBWD Granulation - M/F	1	27-Sep-21	29-Sep-21	08-Dec-21	08-Dec-21	32
O2_CBW1290	ER Consented CBWD Granulation - M/F	0		29-Sep-21		08-Dec-21	32
C7.1.3 - CBWD - GRANULATION BUILDING (R/F)							
SUBMISSION							
O2_CBW1400	Prepare & Submit CBWD Granulation - R/F	28	01-Aug-21	30-Aug-21	01-Nov-21 A	23-Nov-21 A	
IC CHECKING & CERTIFICATION							
O2_CBW1410	IC Comment on the CBWD Granulation - R/F	7	31-Aug-21	06-Sep-21	24-Nov-21 A	29-Nov-21 A	
O2_CBW1420	Submit further information for the submitted CBWD Granulation - R/F	3	07-Sep-21	13-Sep-21	29-Nov-21 A	03-Dec-21	23
O2_CBW1450	IC Certify CBWD Granulation - R/F	1	14-Sep-21	20-Sep-21	03-Dec-21	03-Dec-21	23
EMPLOYER's CONSENT							
O2_CBW1460	Obtain Design Check Certificate for CBWD Granulation - R/F	3	21-Sep-21	23-Sep-21	04-Dec-21	06-Dec-21	23
O2_CBW1470	Submit Design Check Certificate to ER	1	24-Sep-21	26-Sep-21	07-Dec-21	07-Dec-21	23
O2_CBW1480	ER Comment on the submitted CBWD Granulation - R/F	7	27-Sep-21	29-Sep-21	08-Dec-21	14-Dec-21	23
O2_CBW1490	ER Consented CBWD Granulation - R/F	0		29-Sep-21		14-Dec-21	23
C7.2 - CBWD - RECEPTION BUILDING							
C7.2.1a - CBWD - RECEPTION BUILDING (G/F)							
EMPLOYER's CONSENT							
O2_CBW2080	ER Comment on the submitted CBWD Reception Bldg (G/F)	13	24-Aug-21	26-Aug-21	07-Oct-21 A	19-Oct-21 A	
O2_CBW2090	ER Consented CBWD Reception Bldg (G/F)	0		26-Aug-21		19-Oct-21 A	
C7.2.2 - CBWD - RECEPTION BUILDING (Admin. Bldg)							
EMPLOYER's CONSENT							
O2_CBW2280	ER Comment on the submitted CBWD Reception Bldg (Admin. Bldg)	22	21-Sep-21	23-Sep-21	01-Oct-21 A	19-Oct-21 A	
O2_CBW2290	ER Consented CBWD Reception Bldg (Admin. Bldg)	0		23-Sep-21		19-Oct-21 A	
C7.2.3 - CBWD - RECEPTION BUILDING (R/F)							
SUBMISSION							
O2_CBW2400	Prepare & Submit CBWD Reception Bldg (R/F)	204	08-Feb-21	30-Aug-21	08-Feb-21 A	19-Nov-21 A	
IC CHECKING & CERTIFICATION							
O2_CBW2410	IC Comment on the CBWD Reception Bldg (R/F)	7	31-Aug-21	06-Sep-21	20-Nov-21 A	26-Nov-21 A	
O2_CBW2420	Submit further information for the submitted CBWD Reception Bldg (R/F)	7	07-Sep-21	13-Sep-21	27-Nov-21 A	29-Nov-21 A	
O2_CBW2450	IC Certify CBWD Reception Bldg (R/F)	7	14-Sep-21	20-Sep-21	29-Nov-21 A	30-Nov-21 A	
EMPLOYER's CONSENT							
O2_CBW2460	Obtain Design Check Certificate for CBWD Reception Bldg (R/F)	3	21-Sep-21	23-Sep-21	30-Nov-21 A	30-Nov-21 A	
O2_CBW2470	Submit Design Check Certificate to ER	3	24-Sep-21	26-Sep-21	30-Nov-21 A	30-Nov-21 A	
O2_CBW2480	ER Comment on the submitted CBWD Reception Bldg (R/F)	3	27-Sep-21	29-Sep-21	01-Dec-21	03-Dec-21	40
O2_CBW2490	ER Consented CBWD Reception Bldg (R/F)	0		29-Sep-21		03-Dec-21	40
C7.4.2 - CBWD - DIGESTATE TANKS							
IC CHECKING & CERTIFICATION							
O2_CBW2700	Submit further information for the submitted CBWD DIGESTATE TANKS	245	13-Jan-21	14-Sep-21	13-Jan-21 A	04-Dec-21	6
O2_CBW2710	IC Certify CBWD DIGESTATE TANKS	14	15-Sep-21	28-Sep-21	05-Dec-21	18-Dec-21	6
O2_CBW2715	Obtain Design Check Certificate for CBWD DIGESTATE TANKS	3	29-Sep-21	01-Oct-21	19-Dec-21	21-Dec-21	6
EMPLOYER's CONSENT							
O2_CBW2630	Submit Design Check Certificate to ER	3	02-Oct-21	04-Oct-21	22-Dec-21	24-Dec-21	6
O2_CBW2635	ER Comment on the submitted CBWD DIGESTATE TANKS	3	05-Oct-21	07-Oct-21	25-Dec-21	27-Dec-21	6
O2_CBW2640	ER Consented CBWD DIGESTATE TANKS	0		07-Oct-21		27-Dec-21	6
C7.4.5 - CBWD - FLARE							
IC CHECKING & CERTIFICATION							
O2_CBW2800	Submit further information for the submitted CBWD Flare	14	14-Sep-21	27-Sep-21	24-Aug-21 A	09-Nov-21 A	
O2_CBW2810	IC Certify CBWD Flare	14	28-Sep-21	11-Oct-21	10-Nov-21 A	17-Nov-21 A	
O2_CBW2815	Obtain Design Check Certificate for CBWD Flare	3	12-Oct-21	14-Oct-21	17-Nov-21 A	17-Nov-21 A	
EMPLOYER's CONSENT							



Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_CBW2730	Submit Design Check Certificate to ER (with MoC)	14	15-Oct-21	17-Oct-21	01-Dec-21	14-Dec-21	186
O2_CBW2735	ER Comment on the submitted CBWD Flare	3	18-Oct-21	20-Oct-21	15-Dec-21	17-Dec-21	186
O2_CBW2740	ER Consented CBWD Flare	0		20-Oct-21		17-Dec-21	186
C3.12a - COMPOSITE SERVICES WALKWAY							
IC CHECKING & CERTIFICATION							
O2_C13_110	IC Comment on the DDS for Composite Services Walkway	14	15-Sep-21	28-Sep-21	07-Oct-21 A	19-Oct-21 A	
O2_C13_120	Submit further information for the submitted DDS for Composite Services Walkway	7	29-Sep-21	05-Oct-21	20-Oct-21 A	30-Dec-21	3
O2_C13_130	IC Certify DDS for Composite Services Walkway	14	06-Oct-21	19-Oct-21	31-Dec-21	13-Jan-22	3
EMPLOYER's CONSENT							
O2_C13_140	Obtain Design Check Certificate for DDS for Composite Services Walkway	3	20-Oct-21	22-Oct-21	14-Jan-22	16-Jan-22	3
O2_C13_150	Submit Design Check Certificate to ER	3	23-Oct-21	25-Oct-21	17-Jan-22	19-Jan-22	3
O2_C13_160	ER Comment on the submitted DDS for Composite Services Walkway	7	26-Oct-21	01-Nov-21	20-Jan-22	26-Jan-22	3
O2_C13_170	ER Consented DDS for Composite Services Walkway	0		01-Nov-21		26-Jan-22	3
O2_C13_180	Submit Two Complete Sets DDS for Composite Services Walkway	3	02-Nov-21	04-Nov-21	27-Jan-22	29-Jan-22	3
O2_C13_190	Design Registered - DDS for Composite Services Walkway	3	05-Nov-21	07-Nov-21	30-Jan-22	01-Feb-22	3
D. OTHER SUBMISSIONS							
HMI GRAPHIC DESIGN & PROGRAMME DEVELOPMENT OF SCADA							
O2_C510-A5000	Programme Development & HMI Graphic Design of SCADA - 1st Draft	180	04-Oct-21	01-Apr-22	29-Dec-21	26-Jun-22	27
CIVIL , STRUCTURAL AND BUILDING WORKS							
RECEPTION BUILDING (INCLUDING ADMINISTRATION BUILDING)							
RC WORKS - RECEPTION BUILDING @ GL SD-SJ/S1-S7 (INCLUDING VEHICLE WASHING AREA) (ZONE 1)							
O2_CS2070a	Ground slab and beams to +38.625mPD	32	09-Aug-21	14-Sep-21	09-Aug-21 A	22-Nov-21 A	
O2_CS2080a	Remove scaffold to G/F and prepare underground tank for waterthigtness test	14	15-Sep-21	28-Sep-21	27-Nov-21 A	10-Dec-21	14
O2_CS2082a	Watertightness Test for Underground Tanks (External/Perimeter wall)	45	29-Sep-21	12-Nov-21	11-Dec-21	24-Jan-22	14
O2_CS2082b	Watertightness Test for Underground Tanks (Internal walls)	45	13-Nov-21	27-Dec-21	25-Jan-22	10-Mar-22	22
O2_CS2085a	Backfilling	24	13-Nov-21	10-Dec-21	25-Jan-22	24-Feb-22	9
O2_CS2086a	Construct Tanker Bay Area & Bin Unloading Bay 5 / Refuse Chamber GF (SF-SH/S1-S2 & S6-S7)	22	22-Nov-21	16-Dec-21	05-Feb-22	02-Mar-22	9
O2_CS2090	Columns, Walls and Roof (RF) to +47.075mPD (grid SD-SJ/S1-S7)	50	15-Sep-21	15-Nov-21	19-Nov-21 A	03-Jan-22	7
O2_CS2092a	Watertightness Test for RF Roof	14	16-Nov-21	01-Dec-21	04-Jan-22	19-Jan-22	15
O2_CS2092b	Remove scaffold to RF	14	02-Dec-21	17-Dec-21	20-Jan-22	08-Feb-22	15
O2_CS2094a	ABWF Works (Internal before E&M Works)	24	02-Dec-21	31-Dec-21	20-Jan-22	19-Feb-22	15
O2_CS2100	Columns, Walls and Roof (UF) to +52.075mPD / +57.025mPD (grid SG-SJ/S1-S6)	61	11-Oct-21	21-Dec-21	13-Dec-21	28-Feb-22	7
O2_CS2140	Columns, Walls & Roof (UF) at +46.725mPD (MCC Room / AC Room / FS Tank / SPR Tank / Pump Room)	51	01-Nov-21	31-Dec-21	05-Jan-22	08-Mar-22	7
O2_CS2152a	ABWF Works (Internal before E&M Works)	99	07-Nov-21	13-Feb-22	10-Jan-22	18-Apr-22	14
RC WORKS - ADMINISTRATION BUILDING @ GL SA-SD/S2-S7 (INCLUDING STARCASE AREA) (ZONE 1)							
O2_CS2250	Columns, Walls and Slab to +43.225mPD (G/F) (incl staricase area)	36	25-Aug-21	05-Oct-21	11-Aug-21 A	08-Nov-21 A	
O2_CS2260	Columns, Walls and Slab to +47.075mPD (1/F) (incl staricase area)	36	06-Oct-21	16-Nov-21	09-Nov-21 A	13-Dec-21	70
O2_CS2270	Columns, Walls and Roof Slab to +51.575mPD (RF) / +55.525mPD (UF/TR) (incl staricase area)	50	17-Nov-21	13-Jan-22	10-Jan-22	08-Mar-22	53
O2_CS2272a	Remove Formwork and Scaffold (@ +43.225mPD incl staricase area)	14	17-Nov-21	02-Dec-21	14-Dec-21	29-Dec-21	71
O2_CS2274a	Remove Formwork and Scaffold (@ +47.075mPD (RF) incl staricase area)	14	09-Dec-21	24-Dec-21	05-Jan-22	20-Jan-22	71
O2_CS2276a	Internal ABWF Works (GF & RF)	58	09-Dec-21	14-Feb-22	17-Jan-22	24-Mar-22	61
HANDOVER FOR E&M WORKS							
O2_CS2600a	Zone 1 Ready for Handover to E&M Works (Waste Reception Building - GF)	0		21-Dec-21		11-Feb-22	15
ANAEROBIC DIGESTION TANKS (4 AD Tanks)							
AD TANKS - FOUNDATION (FIRST 2 TANKS) (ZONE 2)							
O2_CS3270a	First AD Tank Ready for E&M Works	0	01-Dec-21		31-Dec-21		40
O2_CS3270b	Second AD Tank Ready for E&M Works	0	16-Dec-21		26-Jan-22		61
AD TANKS - RC WORKS FIRST TANK (DIGESTER 4)							
O2_CS3170	4th Lift of Chamber Wall for Tanks (5m height)	28	11-Sep-21	22-Oct-21	13-Oct-21 A	18-Nov-21 A	
O2_CS3175a	5th Lift of Chamber Wall for Tanks (5m height)	29	23-Oct-21	30-Nov-21	19-Nov-21 A	18-Dec-21	40
E&M WORKS FOR DIGESTER 4							
O2_EM3200_x2	Install Heating Coils at High Level (Digester 4)	20	02-Dec-21	24-Dec-21	18-Feb-22	12-Mar-22	3
AD TANKS - RC WORKS SECOND TANK (DIGESTER 2)							
O2_CS3160a	3rd Lift of Chamber Wall for Tanks (5m height)	33	19-Aug-21	27-Sep-21	19-Aug-21 A	30-Oct-21 A	
O2_CS3170a	4th Lift of Chamber Wall for Tanks (5m height)	30	28-Sep-21	06-Nov-21	01-Nov-21 A	04-Dec-21	63
O2_CS3175b	5th Lift of Chamber Wall for Tanks (5m height)	33	08-Nov-21	15-Dec-21	06-Dec-21	15-Jan-22	63
E&M WORKS FOR DIGESTER 2							
O2_EM3225_x2	Install Heating Coils at High Level (Digester 2)	20	29-Jan-22	21-Feb-22	18-Feb-22	12-Mar-22	51
AD TANKS - FOUNDATION & RC WORKS (REMAINING 2 TANKS) (ZONE 2)							
AD TANKS - RC WORKS THIRD TANK (DIGESTER 3)							
O2_CS3211a	2nd Lift of Chamber Wall for Tanks (5m height)	33	31-Aug-21	07-Oct-21	24-Sep-21 A	21-Dec-21	30
O2_CS3212a	3rd Lift of Chamber Wall for Tanks (5m height)	28	08-Oct-21	15-Nov-21	22-Dec-21	22-Jan-22	30
O2_CS3213a	4th Lift of Chamber Wall for Tanks (5m height)	32	16-Nov-21	23-Dec-21	24-Jan-22	01-Mar-22	30
AD TANKS - RC WORKS FOURTH TANK (DIGESTER 1)							
O2_CS3211b	2nd Lift of Chamber Wall for Tanks (5m height)	33	15-Sep-21	26-Oct-21	11-Sep-21 A	30-Nov-21 A	
O2_CS3212b	3rd Lift of Chamber Wall for Tanks (5m height)	20	27-Oct-21	03-Dec-21	01-Dec-21	23-Dec-21	64
O2_CS3213c	4th Lift of Chamber Wall for Tanks (5m height)	32	04-Dec-21	14-Jan-22	24-Dec-21	05-Feb-22	64
O2_CS3213d	5th Lift of Chamber Wall for Tanks (5m height)	30	15-Jan-22	25-Feb-22	07-Feb-22	12-Mar-22	64
HANDOVER FOR E&M WORKS							
O2_CS3400a	Zone 2 Ready for Handover to E&M Works (First AD Tanks)	0		01-Dec-21		31-Dec-21	44



AJA JOINT VENTURE

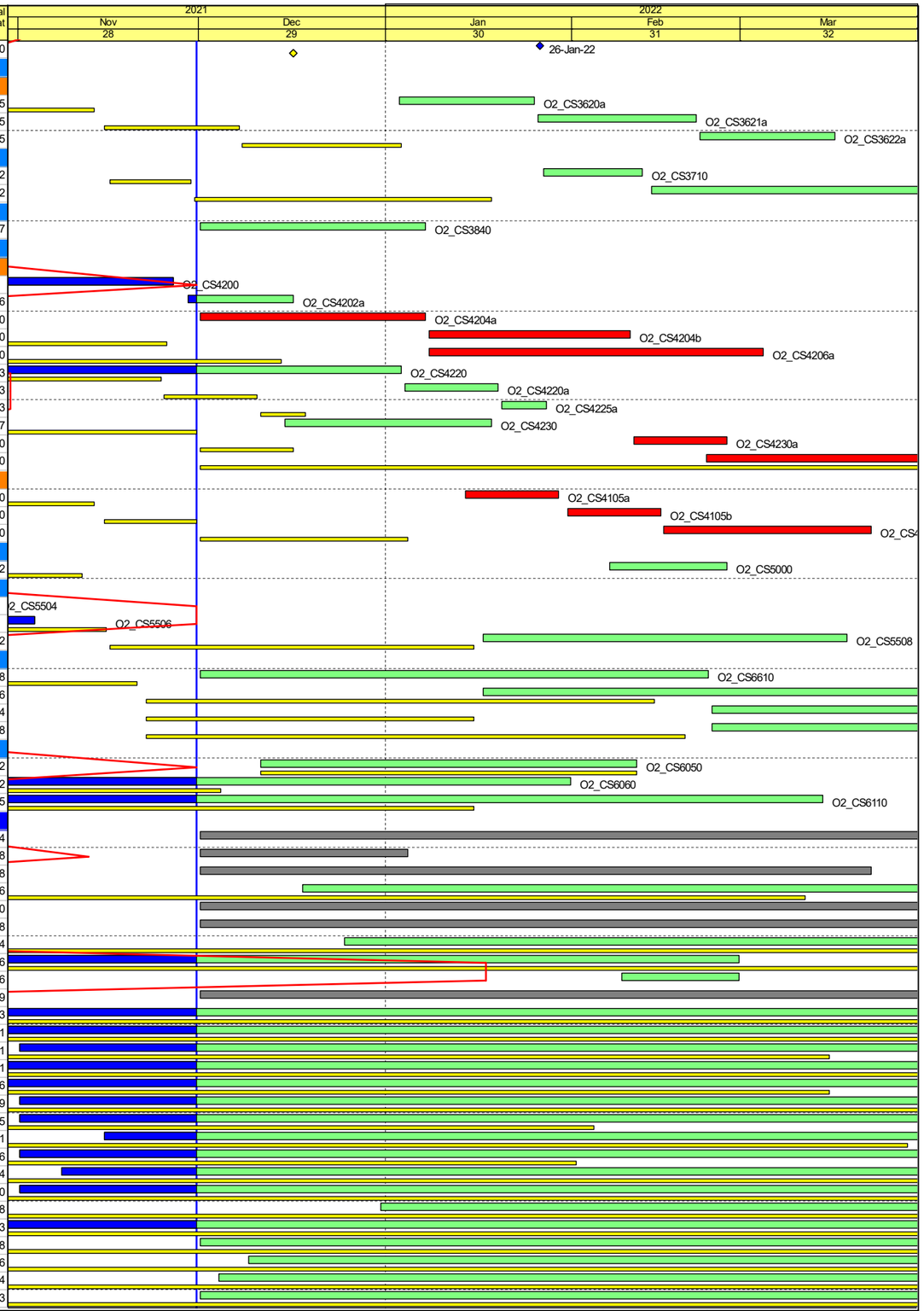
File Name: WP_04.2021-3M.11 R2c
Layout: ORRC2_WP_2021_3M
Task filter: TASK filters: 3MK, 3MN, 3MRP.
Date Printed: 22-Dec-21

Remaining Work
Remaining Work (Critical)
Actual Work
Level of Effort
Primary Baseline
Baseline Milestone
Start Milestone

Contract No. EP/SP/86/15
Organic Waste Treatment Facilities, Phase 2
Works Programme 3rd Issue
3-Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-21			

Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_CS3400b	Zone 2 Ready for Handover to E&M Works (Second AD Tanks)	0		16-Dec-21		26-Jan-22	70
BIOGAS STORAGE TANKS, DIGESTATE TANK & PUMP ROOM							
DIGESTATE TANK (ZONE 2)							
O2_CS3620a	1st Lift of Chamber Wall for Tanks (4m height)	20	22-Oct-21	13-Nov-21	03-Jan-22	25-Jan-22	5
O2_CS3621a	2nd Lift of Chamber Wall for Tanks (4m height)	20	15-Nov-21	07-Dec-21	26-Jan-22	21-Feb-22	5
O2_CS3622a	3rd Lift of Chamber Wall for Tanks (4m height)	20	08-Dec-21	03-Jan-22	22-Feb-22	16-Mar-22	5
PUMP HOUSE (ZONE 2)							
O2_CS3710	Foul Drainage Connections & G/F Slab	12	16-Nov-21	29-Nov-21	27-Jan-22	12-Feb-22	22
O2_CS3710a	Columns, Walls and Slab (M/F & 1/F)	40	30-Nov-21	18-Jan-22	14-Feb-22	31-Mar-22	22
BOUNDARY WALL (ZONE 2)							
O2_CS3840	Backfilling	30	02-Aug-21	11-Sep-21	01-Dec-21	07-Jan-22	177
GRANULATION BUILDING & FACILITIES							
RC WORKS - WASTE WATER TREATMENT PLANT & GRANULATION HALL (GL NA-NI/N1-N7) (ZONE 4 & 5)							
O2_CS4200	Ground Floor Slab & Beams at +38.575mPD (GF)	34	23-Aug-21	30-Sep-21	09-Sep-21 A	26-Nov-21 A	
O2_CS4202a	Remove scaffold (ground floor slab & beams at +38.575mPD)	14	02-Oct-21	19-Oct-21	29-Nov-21 A	16-Dec-21	16
O2_CS4204a	Watertightness Test for Underground Tanks (External/Perimeter wall)	38	15-Sep-21	22-Oct-21	01-Dec-21	07-Jan-22	0
O2_CS4204b	Watertightness Test for Underground Tanks (Internal walls)	34	23-Oct-21	25-Nov-21	08-Jan-22	10-Feb-22	0
O2_CS4206a	Backfilling along GL NA-NI/N1~N9 (ind removal of GFRP soil nails)	45	23-Oct-21	14-Dec-21	08-Jan-22	04-Mar-22	0
O2_CS4220	Column, Wall and Roof Slab to +47.775mPD (RF)	45	02-Oct-21	24-Nov-21	25-Oct-21 A	03-Jan-22	23
O2_CS4220a	Remove scaffold (UF)	14	25-Nov-21	10-Dec-21	04-Jan-22	19-Jan-22	23
O2_CS4225a	Watertightness Test for Roofs	7	11-Dec-21	18-Dec-21	20-Jan-22	27-Jan-22	23
O2_CS4230	Column, Wall and Roof Slab to +57.570mPD (UF) at GL NA-NF/N1-N7	27	30-Oct-21	30-Nov-21	15-Dec-21	18-Jan-22	17
O2_CS4230a	Remove scaffold (UF)	14	01-Dec-21	16-Dec-21	11-Feb-22	26-Feb-22	0
O2_CS4245a	External ABWF Works	116	01-Dec-21	14-Apr-22	23-Feb-22	07-Jul-22	0
RC WORKS - PLANT ROOMS & CHP AREAS (GL NA-NI/N7-N10) (ZONE 3)							
O2_CS4105a	Excavation/Trimming works for CHP area footprint	14	29-Oct-21	13-Nov-21	14-Jan-22	29-Jan-22	0
O2_CS4105b	Installation of Earth Mat	14	15-Nov-21	30-Nov-21	31-Jan-22	15-Feb-22	0
O2_CS4110	Raft Footing/Base Slab to +38.575mPD (GL NA~NI / N7~N10)	30	01-Dec-21	04-Jan-22	16-Feb-22	22-Mar-22	0
WEIGHBRIDGES & GUARD HOUSE							
O2_CS5000	Excavation	18	22-Oct-21	11-Nov-21	07-Feb-22	26-Feb-22	12
FOOTBRIDGE / WALKWAY							
O2_CS5504	Footbridge/Walkway - Pier/Column Stage 1	30	15-Sep-21	22-Oct-21	07-Oct-21 A	27-Oct-21 A	
O2_CS5506	Footbridge/Walkway - Backfilling to Formation Level	20	23-Oct-21	15-Nov-21	28-Oct-21 A	03-Nov-21 A	
O2_CS5508	Footbridge/Walkway - Offsite Fabrication of Bridge Decking + UU Work at Portion 3	50	16-Nov-21	15-Jan-22	17-Jan-22	18-Mar-22	22
SITEWIDE UNDERGROUND UTILITIES, SEWERAGE & DRAINAGE WORKS							
O2_CS6610	Portion 1 (@ Road 2)	67	01-Sep-21	20-Nov-21	01-Dec-21	23-Feb-22	8
O2_CS6611	Portion 2 (@ Road 2)	67	22-Nov-21	14-Feb-22	17-Jan-22	08-Apr-22	46
O2_CS6612	Portion 3 (@ Road 1 & 2)	45	22-Nov-21	15-Jan-22	24-Feb-22	21-Apr-22	64
O2_CS6616	Portion 6 (@ Road 4)	72	22-Nov-21	19-Feb-22	24-Feb-22	25-May-22	8
EXTERNAL WORKS							
O2_CS6050	Biogas Blower & Condensate Chamber	48	11-Dec-21	11-Feb-22	11-Dec-21	11-Feb-22	122
O2_CS6060	Standby Flare slab (incl. mini-piling)	536	16-Dec-19	04-Dec-21	16-Dec-19 A	31-Jan-22	132
O2_CS6110	Geotechnical Works (slope stabilization etc.)	204	24-May-21	15-Jan-22	24-May-21 A	14-Mar-22	215
OTHER MAJOR EQUIPMENT FABRICATION & DELIVERY							
O2_D9000	Procurement, Fabrication & Delivery of Pre-treatment Equipment (Summary of C52-P1280 to C53-P3200)	182	31-Aug-21	20-Apr-22	08-Aug-21 A	31-May-22	54
O2_D9005a	Procurement, Fabrication & Delivery of Walking Floor System (Summary of C52-P1200 to C52-P1260)	185	16-Jun-21	17-Dec-21	16-Jun-21 A	04-Jan-22	98
O2_D9010a	Procurement, Fabrication & Delivery of Hammermills & Containments Press (Summary of C53-P5200 & C53-P4200)	172	01-Aug-21	19-Jan-22	15-Jul-21 A	22-Mar-22	58
O2_D9020	Procurement, Fabrication & Delivery of Heating Coils for Digesters	180	13-Sep-21	11-Mar-22	18-Dec-21	15-Jun-22	66
O2_D9021a	Procurement, Fabrication & Delivery of Anaerobic Digestion Equipment (Summary of C54-P1200 to C54-P1220)	308	08-Jul-21	11-May-22	08-Jul-21 A	22-Jul-22	420
O2_D9023a	Procurement, Fabrication & Delivery of Gas Holders, Condtioning Plant & Asso. Equipment (C54-P2200 & C54-P2220)	422	08-Jun-21	03-Aug-22	16-Aug-21 A	12-Oct-22	338
O2_D9025a	Procurement, Fabrication & Delivery of Flare	210	14-Oct-21	11-May-22	25-Dec-21	22-Jul-22	14
O2_D9030	Procurement & Fabrication of CHP Units	326	27-May-21	17-Apr-22	27-May-21 A	28-Feb-22	86
O2_D9040	FAT of CHP Units	20	03-Apr-22	17-Apr-22	09-Feb-22	28-Feb-22	86
O2_D9060a	Procurement, Fabrication & Delivery of Granulation Equipment (Summary of C57-P1200 to C57-P7210)	262	14-Sep-21	27-May-22	04-Nov-21 A	12-Aug-22	399
O2_D9080	Procurement, Fabrication & Delivery of Centralized Air Pollution Control Equipment	210	18-Sep-21	15-Apr-22	04-Oct-21 A	28-Jun-22	3
O2_D9100	Procurement, Fabrication & Delivery of Wastewater Treatment Equipment	220	10-Sep-21	17-Apr-22	04-Oct-21 A	08-Jul-22	11
O2_D9130	Procurement & Fabrication of HV Transformers	180	17-Sep-21	15-Mar-22	01-Nov-21 A	29-May-22	21
O2_D9160	Procurement, Fabrication & Delivery of HV Switchboards	180	17-Oct-21	14-Apr-22	04-Oct-21 A	29-May-22	51
O2_D9170	Procurement & Fabrication of LV Switchboards & MCC	180	17-Sep-21	15-Mar-22	04-Oct-21 A	29-May-22	56
O2_D9200a	Procurement & Fabrication of SCADA System & Asso. Control Panels / Consoles	230	30-Sep-21	17-May-22	01-Nov-21 A	10-Jul-22	39
O2_D9250	Procurement, Fabrication & Delivery of Odour Control Ducts	150	08-Sep-21	04-Feb-22	01-Nov-21 A	29-Apr-22	5
O2_D9260	Procurement, Fabrication & Delivery of Control and Instrumentation	210	31-Aug-21	28-Mar-22	15-Nov-21 A	10-Jun-22	21
O2_D9270	Procurement, Fabrication & Delivery of Lifting Beams / Monorail Crane	165	21-Aug-21	01-Feb-22	01-Nov-21 A	14-May-22	26
O2_D9280	Procurement, Fabrication & Delivery of P/D Equipment / Material	210	25-Sep-21	22-May-22	08-Nov-21 A	12-Jul-22	24
O2_D9300	Procurement, Fabrication & Delivery of Cooling Tower / Chillers	300	27-Aug-21	22-Jun-22	01-Nov-21 A	27-Aug-22	10
O2_D9320	Procurement, Fabrication & Delivery of AHU & Other MVAC Equipment	240	26-Oct-21	22-Jun-22	31-Dec-21	27-Aug-22	18
O2_D9330a	Procurement, Fabrication & Delivery of Electrical Equipment /. Material	210	18-Aug-21	14-Apr-22	04-Oct-21 A	28-Jun-22	3
O2_D9340	Procurement, Fabrication & Delivery of ELV, ACS & CCTV	210	26-Sep-21	23-May-22	01-Dec-21	28-Jun-22	38
O2_D9360	Procurement, Fabrication & Delivery of Lifts	180	03-Sep-21	31-Mar-22	09-Dec-21	06-Jun-22	6
O2_D9380	Procurement, Fabrication & Delivery of FS Equipment	240	20-Sep-21	17-May-22	04-Dec-21	31-Jul-22	14
O2_D9400	Procurement, Fabrication & Delivery of Vehicle Washing Plant	240	27-Oct-21	23-Jun-22	01-Dec-21	28-Jul-22	43

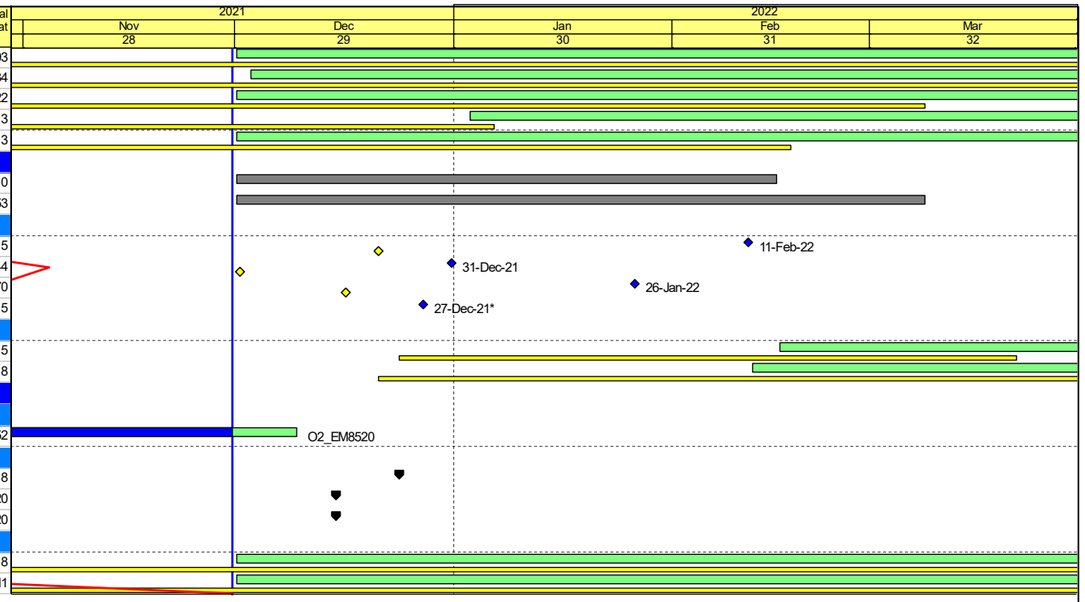


Remaining Work
Remaining Work (Critical)
Actual Work
Level of Effort
Primary Baseline
Baseline Milestone
Start Milestone

Contract No. EP/SP/86/15
Organic Waste Treatment Facilities, Phase 2
Works Programme 3rd Issue
3-Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-21			

Activity ID	Activity Name	Original Duration	Baseline Start Date	Baseline Finish Date	Start	Finish	Total Float
O2_D9420	Procurement, Fabrication & Delivery of Weightbridge	180	27-Oct-21	24-Apr-22	01-Dec-21	29-May-22	93
O2_D9430	Procurement, Fabrication & Delivery of Surplus Energy Export System	240	24-Oct-21	20-Jun-22	03-Dec-21	30-Jul-22	34
O2_D9450	Procurement, Fabrication & Delivery of Chemical Storage & Dosing System	180	10-Sep-21	08-Mar-22	01-Dec-21	29-May-22	22
O2_D9490	Procurement, Fabrication & Delivery of Composite Services Walkway	90	09-Oct-21	06-Jan-22	03-Jan-22	02-Apr-22	3
O2_D9500	Procurement, Fabrication & Delivery of Gensets	150	22-Aug-21	17-Feb-22	01-Dec-21	29-Apr-22	3
E & M INSTALLATION WORKS							
O2_EM0020	Installation of Earth Mat - Granulation Bldg (before base slab)	430	17-Jul-20	30-Nov-21	17-Jul-20 A	15-Feb-22	0
O2_EM0030	Installation of Conseal Conduits	122	11-Aug-21	13-Jan-22	11-Aug-21 A	08-Mar-22	53
SITE ACCESS DATES FOR E&M INSTALLATION							
O2_EMA1000	Handover to E&M Works, Zone 1 - Waste Reception / Pretreatment (GF)	0		21-Dec-21		11-Feb-22	15
O2_EMA2000	Handover to E&M Works, Zone 2 - Anaerobic Digestion Tank (First AD Tanks)	0		01-Dec-21		31-Dec-21	44
O2_EMA2000a	Handover to E&M Works, Zone 2 - Anaerobic Digestion Tank (Second AD Tanks)	0		16-Dec-21		26-Jan-22	70
O2_EMA2060	Handover to E&M Works, Zone 2 - Biogas Storage Tanks Area	0		02-Aug-21		27-Dec-21*	115
ZONE 1 - WASTE RECEPTION BUILDING AREA							
O2_EM1000	Install Walking Floor System	75	24-Dec-21	21-Mar-22	16-Feb-22	13-May-22	15
O2_EM1260	BS Installation for Waste Reception Area - 1st Fix	120	21-Dec-21	09-May-22	12-Feb-22	01-Jul-22	18
STATUTORY INSPECTION (FSD, WA, EMSD)							
NGI - EMSD							
O2_EM8520	Application for Construction Approval of NGI - Gas Holder (Form 104)	372	03-Aug-20	09-Aug-21	03-Aug-20 A	09-Dec-21	152
PLUMBING - WSD							
O2_EM8600	Submission of WWO46 Pt I & II (A/C Water Supply)	0	05-Oct-21		24-Dec-21		8
O2_EM8700	Submission of WWO46 Pt I & II (FS)	0	25-Sep-21		15-Dec-21		20
O2_EM8710	Submission of WWO46 Pt I & II (Plumbing)	0	25-Sep-21		15-Dec-21		20
ENVIRONMENTAL PROTECTION - EPD							
O2_EM8930	EPD Submission & Approval for Air Pollution Control - Genset (Clause 2.4.13, Specs A)	240	05-Sep-21	02-May-22	01-Dec-21	28-Jul-22	8
O2_EM8940	EPD Submission & Approval for Air Pollution Control - CHP & Flare (Clause 2.4.13, Specs A)	240	30-Oct-21	26-Jun-22	01-Dec-21	28-Jul-22	111



AJA JOINT VENTURE

File Name: WP_04.2021-3M.11 R2c
Layout: ORRC2_WP_2021_3M
Task filter: TASK filters: 3MK, 3MN, 3MRP.
Date Printed: 22-Dec-21

Remaining Work
Remaining Work (Critical)
Actual Work
Level of Effort
Primary Baseline
Baseline Milestone
Start Milestone

Contract No. EP/SP/86/15
Organic Waste Treatment Facilities, Phase 2
Works Programme 3rd Issue
3-Months Rolling Programme

Date	Revision	Checked	Approved
30-Nov-21			

Appendix E

Event and Action Plan

Event and Action Plan for Construction Noise

Event	Action			
	ET	**IEC**	**ER**	**Contractor**
Action Level Exceedance	1. Notify IEC and Contractor; 2. Carry out investigation; 3. Report the results of investigation to the IEC and Contractor; 4. Discuss with the Contractor and formulate remedial measures; 5. Increase monitoring frequency to check mitigation effectiveness.	1. Review the investigation results submitted by the ET; 2. Review the proposed remedial measures by the Contractor and advise the ER accordingly; 3. Advise the ER on the effectiveness of the proposed remedial measures.	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consultation with the IEC, agree with the Contrator on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures	1. Submit noise mitigation proposals to IEC; 2. Implement noise mitigation proposals.
Limit Level Exceedance	1. Inform IEC, ER, EPD and Contractor; 2. Repeat measurements to confirm findings; 3. Increase monitoring frequency; 4. Identify source and investigate the cause of exceedance; 5. Carry out analysis of Contractor's working procedures; 6. Discuss with IEC, Contractor and ER on remedial measures requried; 7. Assess effectiveness of Contractor's remedial actions and keep IEC, EPD and ER informed of the results; 8. If exceedance stops, cease additional monitoring.	1. Discuss amongst ER, ET Leader and Contractor on the potential remedial actions; 2. Review Contractors remedial actions whenever necessary to assure their effectiveness and advise the ER accordingly;	1. Confirm receipt of notification of exceedance in writing; 2. Notify Contractor; 3. In consolidation with the IEC, agree with the Contractor on the remedial measures to be implemented; 4. Supervise the implementation of remedial measures; 5. If exceedance continues, consider stopping the Contractor to continue working on that portion of work which causes exceedance 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. Submit further proposals if problem still not under control; 5. Stop the relevant portion of works as determined by the ER until the exceedance is abated.

Appendix F

Impact Monitoring Schedule of the Reporting Period and Coming Month

Impact Monitoring Schedule for reporting period – February 2023

Date		Noise Monitoring (Leq30min)
Wed	1-Feb-23	
Thu	2-Feb-23	
Fri	3-Feb-23	
Sat	4-Feb-23	
Sun	5-Feb-23	
Mon	6-Feb-23	✓
Tue	7-Feb-23	
Wed	8-Feb-23	
Thu	9-Feb-23	
Fri	10-Feb-23	
Sat	11-Feb-23	
Sun	12-Feb-23	
Mon	13-Feb-23	
Tue	14-Feb-23	
Wed	15-Feb-23	
Thu	16-Feb-23	
Fri	17-Feb-23	✓
Sat	18-Feb-23	
Sun	19-Feb-23	
Mon	20-Feb-23	
Tue	21-Feb-23	
Wed	22-Feb-23	
Thu	23-Feb-23	✓
Fri	24-Feb-23	
Sat	25-Feb-23	
Sun	26-Feb-23	
Mon	27-Feb-23	
Tue	28-Feb-23	

Remark:

	Public Holiday or Sunday

✓ Impact noise monitoring in normal working days (Monday to Saturday) 07:00 – 19:00 except public holiday
Additional weekly impact monitoring during restricted hours including public holidays and Sundays

Impact Monitoring Schedule for coming month – March 2023

Date		Noise Monitoring (L_{eq}30min)
Wed	1-Mar-23	✓
Thu	2-Mar-23	
Fri	3-Mar-23	
Sat	4-Mar-23	
Sun	5-Mar-23	
Mon	6-Mar-23	
Tue	7-Mar-23	✓
Wed	8-Mar-23	
Thu	9-Mar-23	
Fri	10-Mar-23	
Sat	11-Mar-23	
Sun	12-Mar-23	
Mon	13-Mar-23	✓
Tue	14-Mar-23	
Wed	15-Mar-23	
Thu	16-Mar-23	
Fri	17-Mar-23	
Sat	18-Mar-23	
Sun	19-Mar-23	
Mon	20-Mar-23	
Tue	21-Mar-23	
Wed	22-Mar-23	
Thu	23-Mar-23	
Fri	24-Mar-23	✓
Sat	25-Mar-23	
Sun	26-Mar-23	
Mon	27-Mar-23	
Tue	28-Mar-23	
Wed	29-Mar-23	
Thu	30-Mar-23	✓
Fri	31-Mar-23	

Remark:

	Public Holiday or Sunday

✓ Impact noise monitoring in normal working days (Monday to Saturday) 07:00 – 19:00 except public holiday

Appendix G

Calibration Certificates of Equipment

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

Certificate of Calibration
校正證書

Certificate No. : C224779
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC22-1539) Date of Receipt / 收件日期 : 4 August 2022

Description / 儀器名稱 : Sound Level Calibrator (EQ085)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NC-73
Serial No. / 編號 : 10655561
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 : 20 August 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 & user's specified acceptance criteria.
The results are detailed in the subsequent page(s).

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

Tested By 測試 : H T Wong, Assistant Engineer

Certified By 核證 : K C Lee, Engineer

Date of Issue 簽發日期 : 23 August 2022

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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

Certificate of Calibration
校正證書

Certificate No. : C224779
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	C223647
CL281	Multifunction Acoustic Calibrator	AV210017
TST150A	Measuring Amplifier	C221750

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	± 0.5	± 0.2

5.2 Frequency Accuracy

UUT Nominal Value (kHz)	Measured Value (kHz)	User's Spec.	Uncertainty of Measured Value (Hz)
1	0.953	1 kHz ± 6 %	± 1

Remarks : - The user's specified acceptance criteria (user's spec.) is a customer pre-defined operating tolerance of the UUT, suitable for one's own intended use.

- 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.

Sun Creation Engineering Limited - Calibration & Testing Laboratory
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
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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

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

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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

Certificate of Calibration
校正證書

Certificate No. : C221365
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	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)

Certificate of Calibration
校正證書

Certificate No. : C221365
證書編號

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.

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

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

Certificate of Calibration
校正證書

Certificate No. : C226781
證書編號

ITEM TESTED / 送檢項目 (Job No. / 序引編號 : IC22-2282) Date of Receipt / 收件日期 : 8 November 2022

Description / 儀器名稱 : Sound Level Meter (EQ016)
Manufacturer / 製造商 : Rion
Model No. / 型號 : NL-52
Serial No. / 編號 : 00464681
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 : 19 November 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
- Agilent Technologies / Keysight Technologies
- Fluke Everett Service Center, USA

Tested By 測試 : H T Wong
Assistant Engineer

Certified By 核證 : K C Lee
Engineer

Date of Issue 簽發日期 : 21 November 2022

Sun Creation Engineering Limited – Calibration & Testing Laboratory
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
Tel/電話: (852) 2927 2606 Fax/傳真: (852) 2744 8986 E-mail/電郵: callab@suncreation.com Website/網址: www.suncreation.com

Certificate of Calibration
校正證書

Certificate No. : C226781
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	93.6	± 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	93.6 (Ref.)
				104.00		103.5
				114.00		113.5

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	93.6	Ref.
			Slow			93.6	± 0.3

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Certificate of Calibration
校正證書

Certificate No. : C226781
證書編號

6.3 Frequency Weighting

6.3.1 A-Weighting

UUT Setting				Applied Value		UUT Reading (dB)	IEC 61672 Class 1 Spec. (dB)
Range (dB)	Function	Frequency Weighting	Time Weighting	Level (dB)	Freq.		
30 - 130	L_A	A	Fast	94.00	63 Hz	67.3	-26.2 ± 1.5
					125 Hz	77.4	-16.1 ± 1.5
					250 Hz	84.9	-8.6 ± 1.4
					500 Hz	90.3	-3.2 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	94.8	+1.2 ± 1.6
					4 kHz	94.6	+1.0 ± 1.6
					8 kHz	92.5	-1.1 (+2.1 ; -3.1)
					16 kHz	85.6	-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	92.7	-0.8 ± 1.5
					125 Hz	93.4	-0.2 ± 1.5
					250 Hz	93.6	0.0 ± 1.4
					500 Hz	93.6	0.0 ± 1.4
					1 kHz	93.6	Ref.
					2 kHz	93.4	-0.2 ± 1.6
					4 kHz	92.8	-0.8 ± 1.6
					8 kHz	90.6	-3.0 (+2.1 ; -3.1)
					16 kHz	83.7	-8.5 (+3.5 ; -17.0)

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Remarks : - UUT Microphone Model No. : UC-59 & S/N : 17434

- 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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Appendix H

Database of Monitoring Results

Daytime Noise Measurement Results (dB) of N1																				
Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Façade Correction
		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)		
6-Feb-23	9:05	57.1	60.6	47.5	57.8	60.5	54.0	58.9	61.9	53.6	60.2	63.0	51.8	56.7	61.2	52.3	57.9	61.7	52.4	58.3	61.3
17-Feb-23	13:02	71.0	74.4	47.6	52.4	55.0	46.4	48.3	51.3	43.5	48.8	51.9	43.8	58.6	54.0	43.4	46.5	50.7	42.7	63.6	66.6
23-Feb-23	10:28	67.8	60.0	48.0	50.2	53.0	46.0	49.3	50.0	43.0	52.2	53.0	49.0	50.5	53.0	48.0	50.6	53.0	48.0	60.4	63.4

Daytime Noise Measurement Results (dB) of N2a																				
Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Distance & Façade Correction
		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)		
6-Feb-23	9:40	53.1	56.8	44.9	55.0	58.1	48.8	54.8	57.9	43.4	54.1	57.0	42.9	54.8	58.9	43.4	53.9	57.1	42.7	54.3	58.3
17-Feb-23	13:38	60.5	55.5	45.7	48.2	50.4	44.8	43.5	45.5	41.0	61.2	67.8	43.2	47.5	51.7	41.1	44.4	47.2	40.6	56.4	60.4
23-Feb-23	9:49	53.8	57.0	45.0	48.6	55.0	45.0	49.5	56.0	46.0	47.4	56.5	46.0	49.5	58.5	48.0	48.7	57.0	46.0	50.1	54.1

Daytime Noise Measurement Results (dB) of N3a																				
Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Distance & Façade Correction
		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)		
6-Feb-23	11:05	58.6	60.9	54.1	60.0	62.8	55.6	59.2	61.2	55.0	59.0	62.1	56.5	58.2	61.7	57.1	57.9	60.8	54.9	58.9	64.9
17-Feb-23	15:19	70.7	74.5	53.1	69.3	73.5	55.6	66.9	71.9	55.1	63.4	66.7	55.7	64.4	68.8	54.3	58.4	61.4	54.1	67.1	73.1
23-Feb-23	11:12	68.5	57.5	52.0	53.0	55.0	50.0	53.2	55.0	50.5	54.2	57.0	51.0	53.5	55.0	50.5	52.6	54.0	50.0	61.3	67.3

Daytime Noise Measurement Results (dB) of N4																				
Date	Start Time	1st Leq (5min)			2nd Leq (5min)			3rd Leq (5min)			4th Leq (5min)			5th Leq (5min)			6th Leq (5min)			Leq30min, dB(A)	Distance & Façade Correction
		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)		
6-Feb-23	10:20	61.2	60.1	53.2	57.9	59.8	52.7	57.7	58.9	53.3	56.9	59.2	52.4	57.4	59.3	53.1	59.4	61.8	56.7	58.7	61.7
17-Feb-23	14:23	69.6	74.1	42.8	71.4	74.9	41.8	52.7	56.7	45.3	46.7	48.8	43.5	48.0	50.8	45.1	45.9	47.0	45.0	65.9	68.9
23-Feb-23	9:12	70.2	59.0	44.0	43.2	47.0	42.0	45.3	47.0	42.0	46.2	49.0	43.0	48.5	52.5	44.5	50.2	55.0	45.0	62.5	65.5

Additional Noise Measurement Results during Restricted Hours (dB) of N1					
Date	Start Time	Leq (5min)			Distance & Façade Correction
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	
1-Feb-22	20:03	48.8	49.6	39.5	51.8
5-Feb-23	9:46	44.3	48.0	38.0	47.3
9-Feb-23	20:07	52.6	55.1	44.6	55.6
12-Feb-23	9:57	39.1	41.5	34.5	42.1
16-Feb-23	20:04	48.5	50.4	39.1	51.5
19-Feb-23	9:51	40.3	41.0	36.0	43.3
23-Feb-23	20:12	46.5	48.4	40.5	49.5
26-Feb-23	9:49	50.3	69.5	52.5	53.3

Additional Noise Measurement Results during Restricted Hours (dB) of N2a					
Date	Start Time	Leq (5min)			Distance & Façade Correction
		Leq, dB(A)	L10, dB(A)	L90, dB(A)	
1-Feb-22	19:32	44.0	47.2	37.1	48.0
5-Feb-23	9:19	44.2	46.0	35.5	48.2
9-Feb-23	19:39	45.9	49.8	38.9	49.9
12-Feb-23	9:24	51.7	55.0	41.0	55.7
16-Feb-23	19:33	44.3	47.3	37.4	48.3
19-Feb-23	9:19	45.2	50.0	40.0	49.2
23-Feb-23	19:34	46.7	48.2	37.4	50.7
26-Feb-23	9:26	47.2	69.7	48.5	51.2

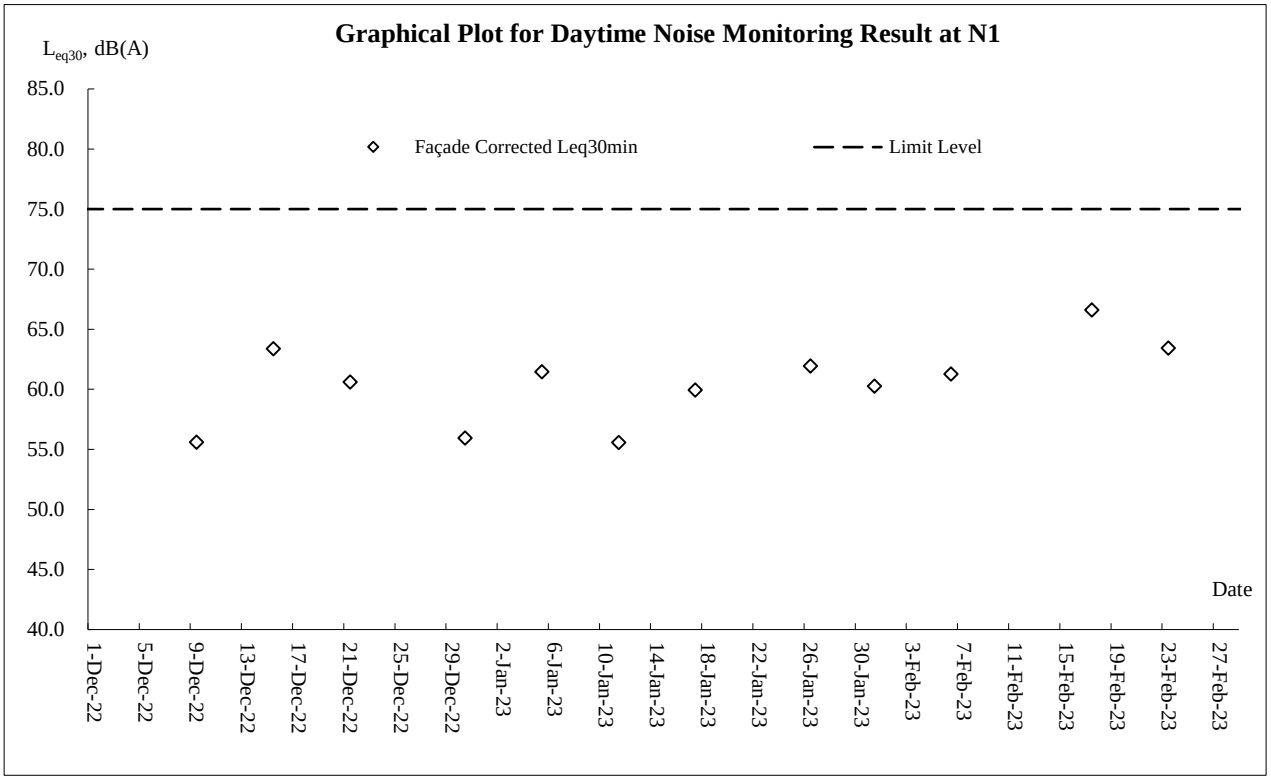
Additional Noise Measurement Results during Restricted Hours (dB) of N3a					
Date	**Start Time**	**Leq (5min)**			**Distance & Façade Correction**
		Leq, dB(A)	**L10, dB(A)**	**L90, dB(A)**	
1-Feb-22	20:24	48.0	48.9	38.3	54.0
5-Feb-23	11:05	48.0	50.0	45.0	54.0
9-Feb-23	20:37	53.4	54.7	52.6	59.4
12-Feb-23	10:45	45.3	48.5	45.0	51.3
16-Feb-23	20:26	49.0	50.4	39.1	55.0
19-Feb-23	11:08	43.3	45.5	43.0	49.3
23-Feb-23	20:38	49.5	51.2	47.8	55.5
26-Feb-23	11:12	45.3	48.0	43.5	51.3

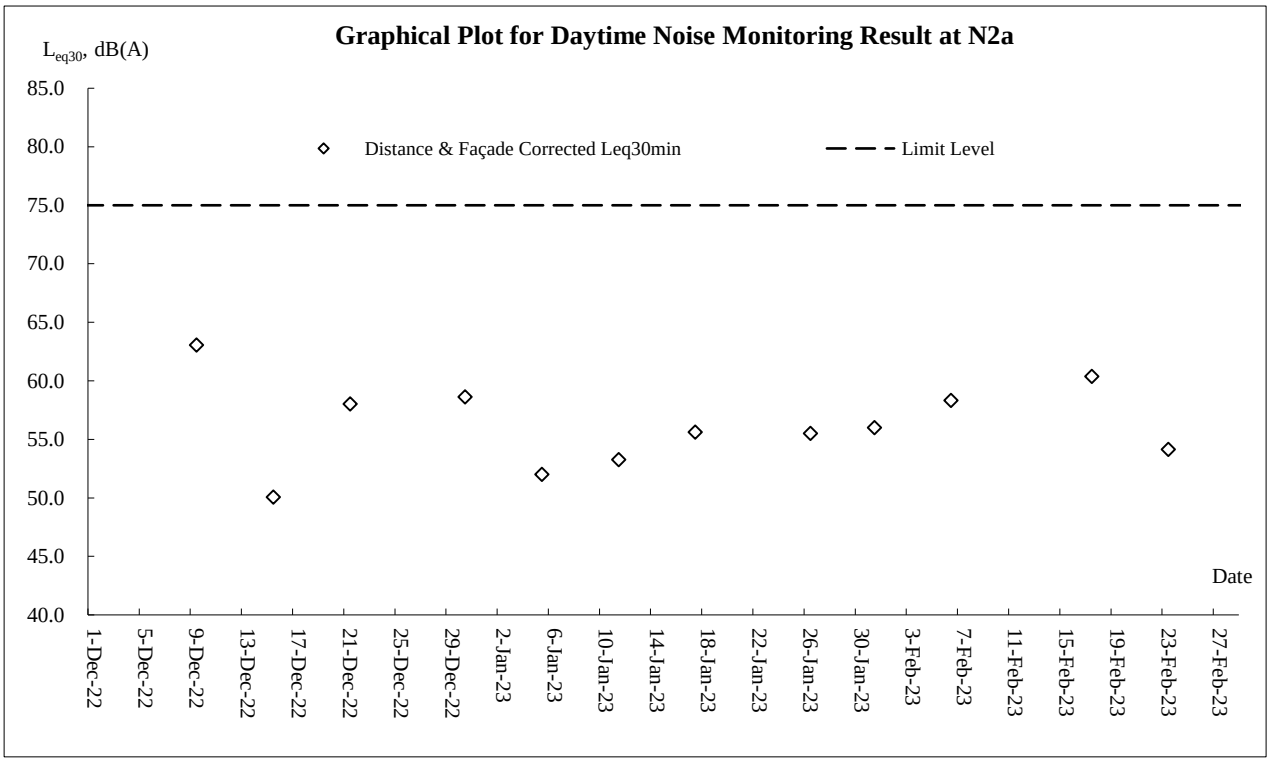
Additional Noise Measurement Results during Restricted Hours (dB) of N4					
Date	**Start Time**	**Leq (5min)**			**Façade Correction**
		Leq, dB(A)	**L10, dB(A)**	**L90, dB(A)**	
1-Feb-22	19:10	47.0	49.1	39.1	50.0
5-Feb-23	10:22	46.8	48.5	43.0	49.8
9-Feb-23	19:10	46.2	52.9	41.0	49.2
12-Feb-23	10:17	38.5	42.0	32.0	41.5
16-Feb-23	19:10	47.3	49.4	39.6	50.3
19-Feb-23	10:32	40.5	42.0	33.0	43.5
23-Feb-23	19:11	48.8	50.6	42.8	51.8
26-Feb-23	10:26	42.2	43.5	40.0	45.2

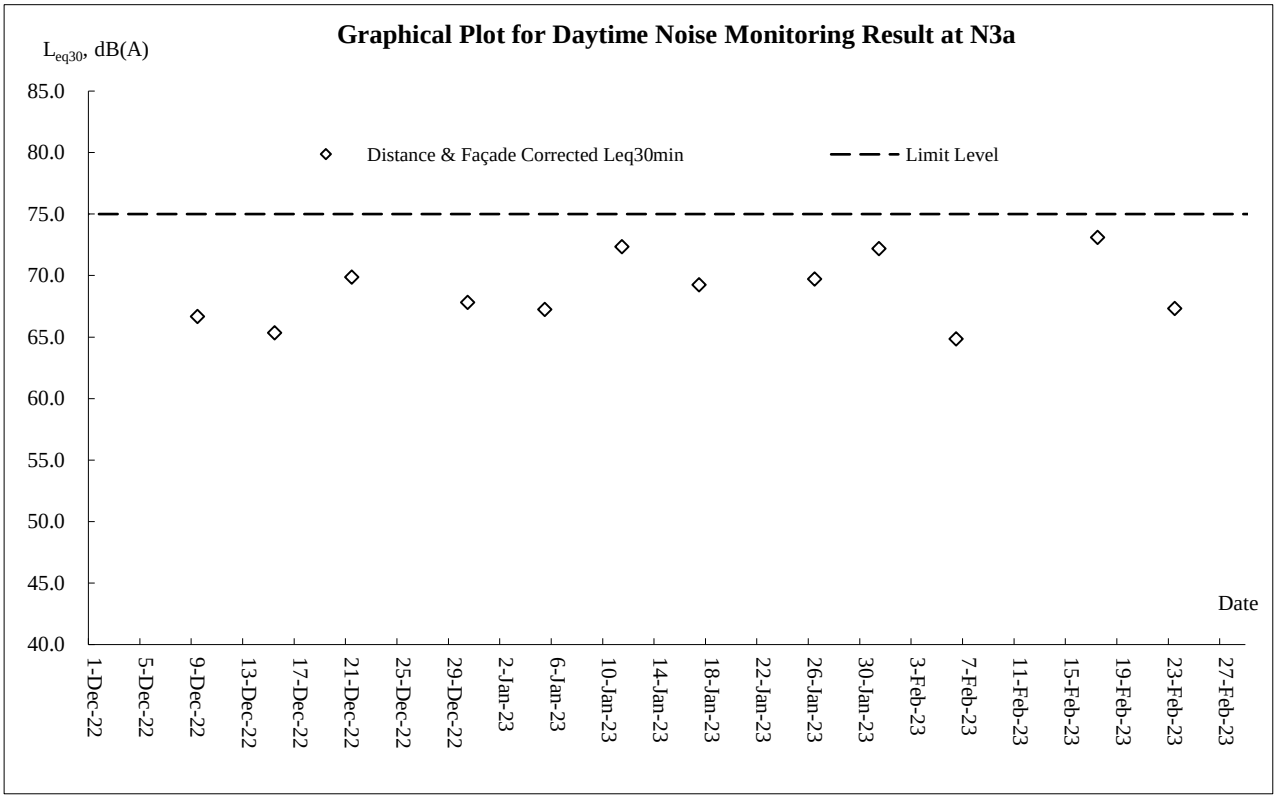
Appendix I

Graphical Plots of Monitoring Results

Construction Noise - Daytime






Graphical Plot for Daytime Noise Monitoring Result at N3a
Leq30, dB(A)
85.0
80.0
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
Distance & Façade Corrected Leq30min
Limit Level
Date
1-Dec-22
5-Dec-22
9-Dec-22
13-Dec-22
17-Dec-22
21-Dec-22
25-Dec-22
29-Dec-22
2-Jan-23
6-Jan-23
10-Jan-23
14-Jan-23
18-Jan-23
22-Jan-23
26-Jan-23
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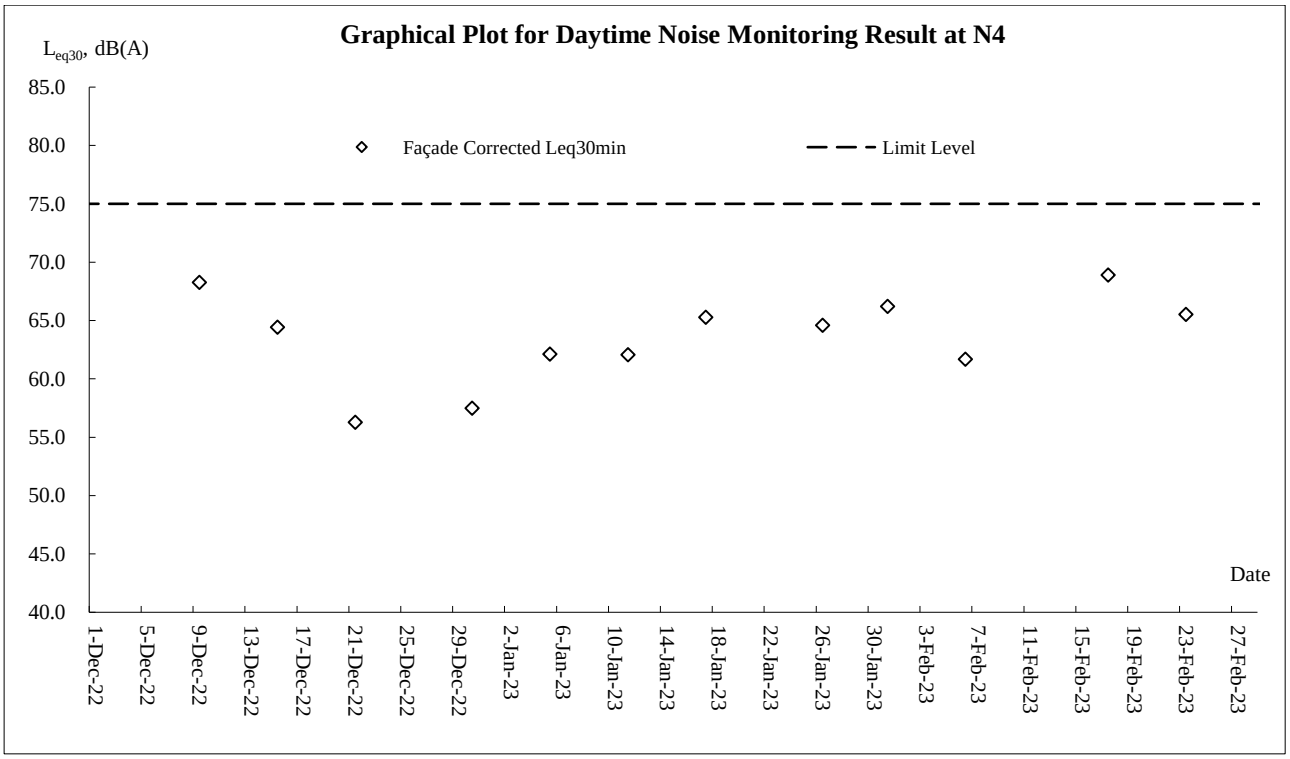
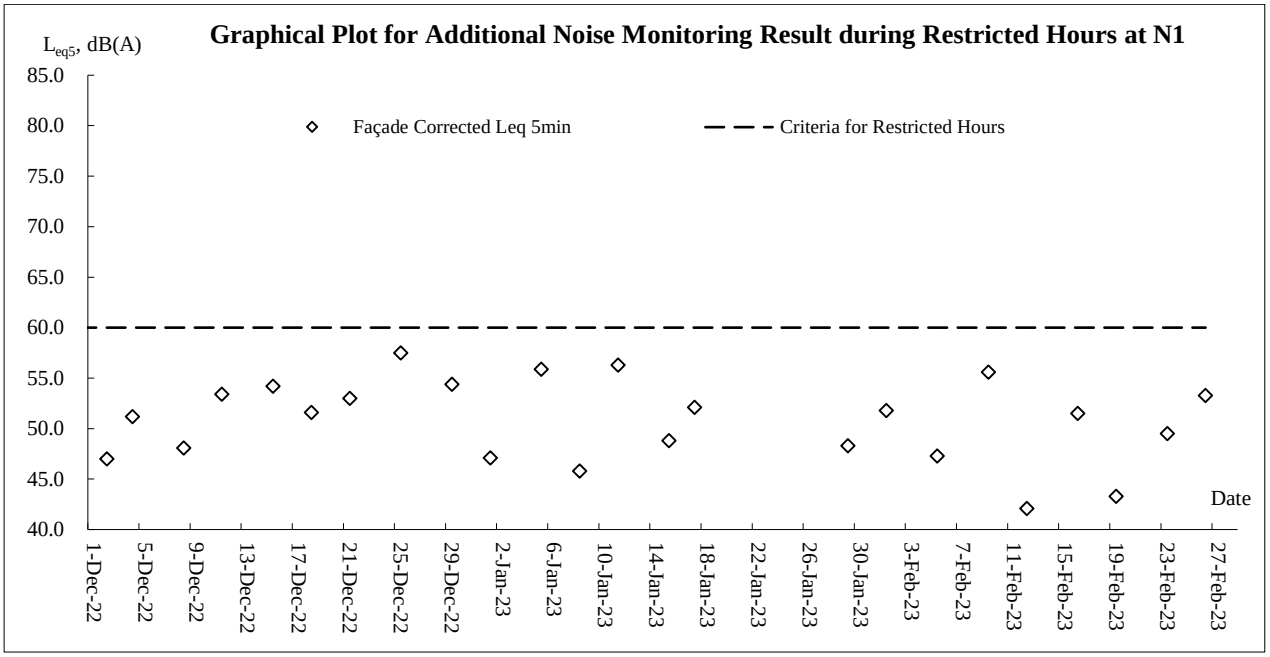
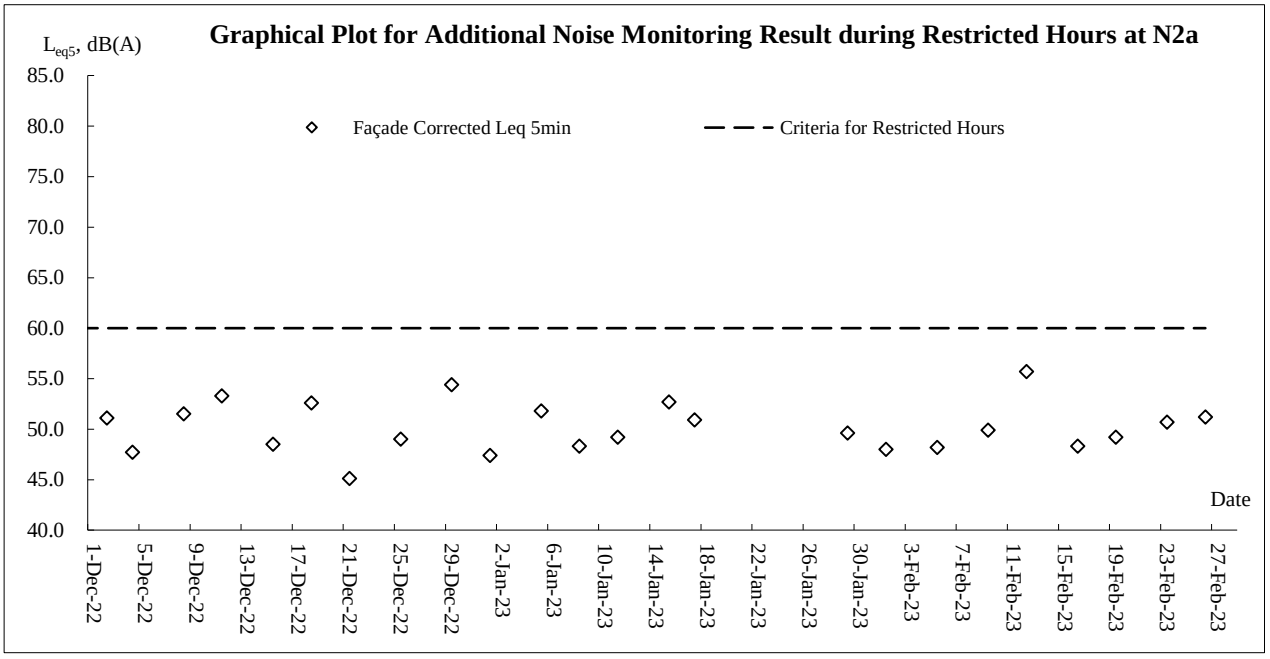
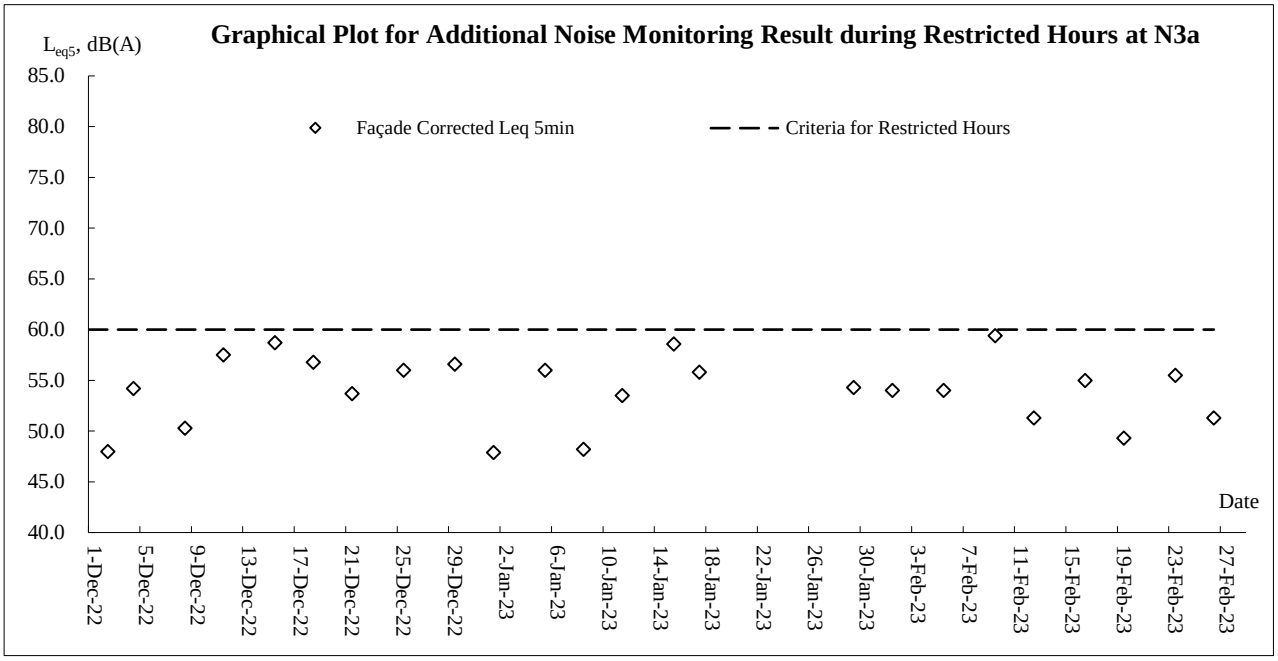
7-Feb-23
11-Feb-23
15-Feb-23
19-Feb-23
23-Feb-23
27-Feb-23


Graphical Plot for Daytime Noise Monitoring Result at N4
Leq30, dB(A)
85.0
80.0
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
Façade Corrected Leq30min
Limit Level
Date
1-Dec-22
5-Dec-22
9-Dec-22
13-Dec-22
17-Dec-22
21-Dec-22
25-Dec-22
29-Dec-22
2-Jan-23
6-Jan-23
10-Jan-23
14-Jan-23
18-Jan-23
22-Jan-23
26-Jan-23
30-Jan-23
3-Feb-23
7-Feb-23
11-Feb-23
15-Feb-23
19-Feb-23
23-Feb-23
27-Feb-23

Construction Noise – Restricted Hours






Graphical Plot for Additional Noise Monitoring Result during Restricted Hours at N3a
Leq5, dB(A)
Façade Corrected Leq 5min
Criteria for Restricted Hours
85.0
80.0
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
Date
1-Dec-22
5-Dec-22
9-Dec-22
13-Dec-22
17-Dec-22
21-Dec-22
25-Dec-22
29-Dec-22
2-Jan-23
6-Jan-23
10-Jan-23
14-Jan-23
18-Jan-23
22-Jan-23
26-Jan-23
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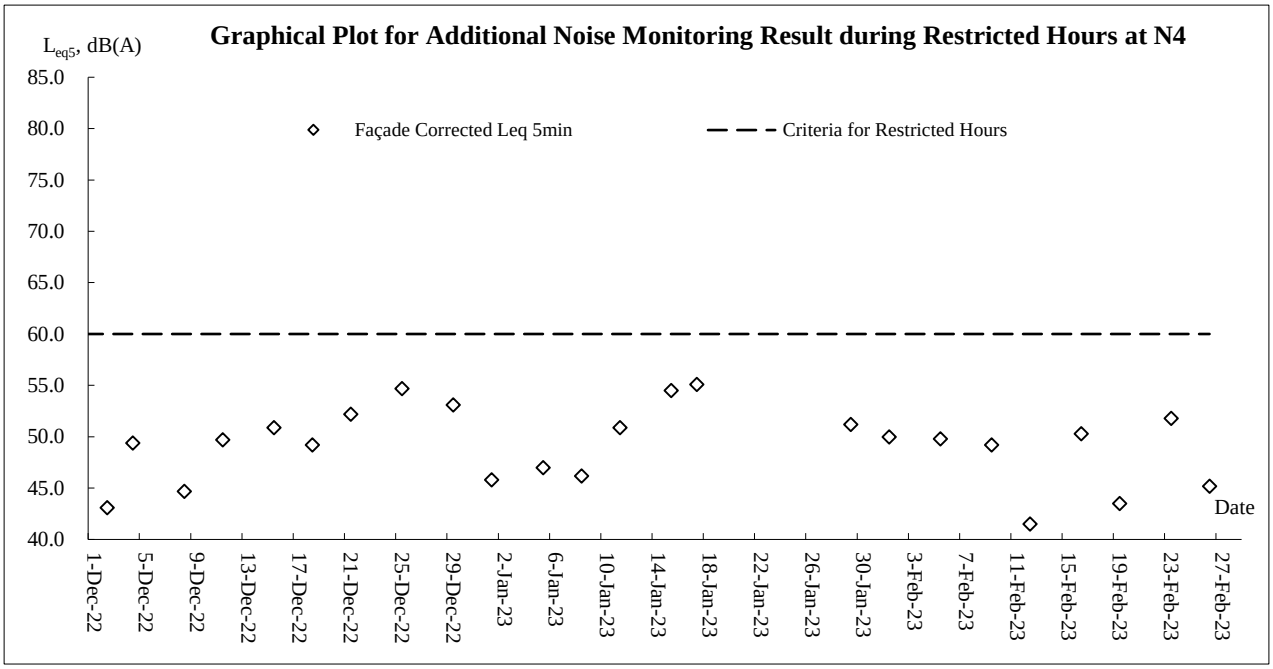
7-Feb-23
11-Feb-23
15-Feb-23
19-Feb-23
23-Feb-23
27-Feb-23


Graphical Plot for Additional Noise Monitoring Result during Restricted Hours at N4
Leq5, dB(A)
Façade Corrected Leq 5min
Criteria for Restricted Hours
85.0
80.0
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
Date
1-Dec-22
5-Dec-22
9-Dec-22
13-Dec-22
17-Dec-22
21-Dec-22
25-Dec-22
29-Dec-22
2-Jan-23
6-Jan-23
10-Jan-23
14-Jan-23
18-Jan-23
22-Jan-23
26-Jan-23
30-Jan-23
3-Feb-23
7-Feb-23
11-Feb-23
15-Feb-23
19-Feb-23
23-Feb-23
27-Feb-23

Appendix J

Waste Flow Table

Name of Department : EPD
Contract No: EP/SP/86/15

Monthly Summary Waste Flow Table for February 2023

Version: 0

Month	Actual Quantities of Inert C&D Materials Generated Monthly						Actual Quantity of C&D Wastes Generated Monthly				
	Total Quantity Generated	Hard Rock and Large Broken Concrete	Reused in the Contract	Reused in other Projects (see Note 10)	Disposed as Public Fill	Imported Fill	Metals	Paper/ cardboard packaging (see Notes 4)	Plastics (see Notes 2 &4)	Chemical Waste	Others, eg. general refuse
	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000m3)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000kg)	(in '000m3)
sub-total up to 2022	**98.401**	0.000	0.000	83.508	14.660	0.233	337.486	1.250	0.700	0.000	3.497
Jan-23	**0.314**	0.000	0.000	0.000	0.314	0.000	0.000	0.000	0.000	0.000	0.136
Feb-23	**0.932**	0.000	0.000	0.000	0.932	0.000	0.000	0.000	0.000	0.000	0.059
Mar-23											
Apr-23											
May-23											
Jun-23											
Sub total (since 2019)	99.647	0.000	0.000	83.508	15.906	0.233	337.486	1.250	0.700	0.000	3.692
Jul-23											
Aug-23											
Sep-23											
Oct-23											
Nov-23											
Dec-23											
Total (since 2019)	99.647	0.000	0.000	83.508	15.906	0.233	337.486	1.250	0.700	0.000	3.692

Note 1	The waste flow table shall also include C&D materials that are not specified in the Contract to be imported for use at the Site
2	Plastics refer to plastic bottles/containers, plastic sheets/foam from packaging material
3	The Contractor shall also submit the latest forecast of the 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 50,000m3.
4	All recyclable materials, including metals, paper / cardboard packaging, plastics, etc. will be collected by registered collector for recycling.
5	Conversion factors for reporting purpose:
	in-situ: rock = 2.5 tonnes/m^3; soil = 2.0 tonnes/m^3
	excavated: rock = 2.0 tonnes/m^3; soil = 1.8 tonnes/m^3; broken concrete and bitumen = 2.4 tonnes/m^3
	C&D Waste (including tree waste) = 0.9 tonnes/m^3; bentonite slurry = 2.8 tonnes/m^3
6	Numbers are rounded off to the nearest three decimal places
7	The "Total Quantity Generated" equals to the sum of "Reuse in the Contract", "Reuse in Other Projects" and "Disposed as Public Fill"
8	The "Hard Rock and Large Broken Concrete" were disposed as public fill
9	The amount in "Disposed as Public Fill" includes the "Hard Rock and Large Broken Concrete" disposed as public fill
10	The "Reused in other projects" include C&D inert material and hard rock and large broken concrete

Appendix K

Environmental Mitigation Implementation Schedule (Extracted from EM&A Manual)

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
Air Quality Impact (Construction)									
3.8.1.1	2.4	**General Dust Control Measures** Dust emissions could be suppressed by regular water spraying on site. In general, water spraying twice a day could reduce dust emission from active construction area by 50%. However, for the Project more frequent water spraying is proposed. Watering eight times per day, or once every 1.5 hours, is suggested at all active works areas in order to achieve a higher dust suppression efficiency of 87.5%.	Within construction site / Duration of the construction phase	Contractor		✓			EIA Recommendation and Air Pollution Control (Construction Dust) Regulation
3.8.1.2	2.4	**Best Practice For Dust Control** The relevant best practices for dust control as stipulated in the *Air Pollution Control (construction Dust) Regulation* should be adopted to further reduce the construction dust impacts of the Project. These best practices include: *Good Site Management* ■ Good site management is important to help reducing potential air quality impact down to an acceptable level. As a general guide, the Contractor should maintain a high standard of housekeeping to prevent emissions of fugitive dust. Loading, unloading, handling and storage of raw materials, wastes or by-products should be carried out in a manner so as to minimise the release of visible dust emission. Any piles of materials accumulated on or around the work areas should be cleaned up regularly. Cleaning, repair and maintenance of all plant facilities within the work areas should be carried out in a manner minimising generation of fugitive dust emissions. The material should be handled properly to prevent fugitive dust emission before cleaning. *Disturbed Parts of the Roads* ■ Each and every main temporary access should be paved with concrete, bituminous hardcore materials or metal plates and kept clear of dusty materials; or ■ Unpaved parts of the road should be sprayed with water or a dust suppression chemical so as to keep the entire road	Within construction site / Duration of the construction phase	Contractor		✓			EIA Recommendation and Air Pollution Control (Construction Dust) Regulation

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		surface wet. *Exposed Earth* ■ Exposed earth should be properly treated by compaction, hydroseeding, vegetation planting or seating with latex, vinyl, bitumen within six months after the last construction activity on the site or part of the site where the exposed earth lies. *Loading, Unloading or Transfer of Dusty Materials* ■ All dusty materials should be sprayed with water immediately prior to any loading or transfer operation so as to keep the dusty material wet. *Debris Handling* ■ Any debris should be covered entirely by impervious sheeting or stored in a debris collection area sheltered on the top and the three sides. ■ Before debris is dumped into a chute, water should be sprayed so that it remains wet when it is dumped. *Transport of Dusty Materials* ■ Vehicle used for transporting dusty materials/spoils should be covered with tarpaulin or similar material. The cover should extend over the edges of the sides and tailboards. *Wheel washing* ■ Vehicle wheel washing facilities should be provided at each construction site exit. Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. *Use of vehicles* ■ The speed of the trucks within the site should be controlled to about 10km/hour in order to reduce adverse dust impacts and secure the safe movement around the site. ■ Immediately before leaving the construction site, every vehicle should be washed to remove any dusty materials from its body and wheels. ■ Where a vehicle leaving the construction site is carrying a load of dusty materials, the load should be covered entirely							

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		by clean impervious sheeting to ensure that the dusty materials do not leak from the vehicle. *Site hoarding* ■ Where a site boundary adjoins a road, street, service lane or other area accessible to the public, hoarding of not less than 2.4m high from ground level should be provided along the entire length of that portion of the site boundary except for a site entrance or exit.							
Air Quality Impact (Operation)									
3.8.2	2.3	**Odour patrol at site boundary of the Project**	Site boundary / During operation stage (the need to continue the odour patrol after the end of the 2-year monitoring period would depend on the monitoring results and should be agreed with EPD)	OWTF Operator	✓		✓		EIAO-TM
3.8.2	2.4	**Install gas cleaning equipment and stack on the CHP and odour treatment unit** ■ The preliminary design suggests the use of a two stage process involving either a biofilter or Ultraviolet Light (UV-C) together with ozone treatment as the first stage, and an activated carbon filter as the second stage for the odour treatment unit. It is recommended to install the UV-C and ozone treatment system with second stage active carbon filters as this has a lower footprint requirement than the biofilter option. However, the actual unit installed depends on the final design by the contractor in the design phase. ■ The preliminary design incorporates a combination of thermal and catalytic treatment processes to remove pollutants from the exhaust gasses from the CHP. ■ Both the odour treatment unit and the CHP emissions are suggested to be directed to a flue to aid the dispersion and minimise effects on ASRs.	CHP and odour treatment unit	Design Consultant / OWTF Operator	✓		✓		EIA Recommendation
Hazard Risk Assessment (Operation)									

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
4.9	3.2	The HA has assumed that the following "Good Practices" and "recommended design measures" for the safe operation of OWTF 2 shall be carried out as far as reasonably practicable: ■ The process plant building will be provided with adequate number of gas detectors distributed over the various areas of potential leak sources to provide adequate coverage. ■ All electrical equipment inside the building will be classified in accordance with the electrical area classification requirements. No unclassified electrical equipment will be used during operations or maintenance. ■ Reference can be made to Codes of Practice and guidance issued in Europe that applies to places where explosive atmospheres may occur (called 'ATEX' requirements). These are covered as part of the European Directive: the Explosive Atmospheres Directive (99/92/EC) and the UK regulations, Dangerous Substances and Explosive Atmospheres Regulations 2002 (DSEAR). Where potentially explosive atmospheres may occur in the workplace, the requirements include, identifying and classifying (zoning) areas where potentially explosive atmospheres may occur; avoiding ignition sources in zoned areas, in particular those from electrical and mechanical equipment; where necessary, identifying the entrances to zoned areas; providing appropriate anti-static clothing for employees; and before they come into operation, verifying the overall explosion protection safety of areas where explosive atmospheres may occur. ■ All safety valves design shall take into account discharging any released fluid to a safe location, or stopping misdirection of fluid flows in order to avoid hazardous outcome. ■ Safety markings and crash barriers will be provided to the aboveground piping, digesters and the gas holder near the entrance. ■ Lightning protection installations will be installed following IEC 62305, BS EN 62305, AS/NZS 1768, NFPA 780 or equivalent standards. ■ A 10m high boundary wall with fire resistance will be	During design and operation phases	Design Consultant / OWTF Operator	✓		✓		EIAO & EIAO TM Annex 4

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		provided in the vicinity of the digester tanks, gasholders and gas purification equipment to protect the equipment against external fires, and to provide some protection to external areas from the effects of fire/explosion. ■ Suitable fire extinguishers will be provided within the site. An External Water Spray System (EWSS) will be installed in appropriate areas, such as around the gasholders, gas purification, desulphurisation units, and digester areas. The facilities will also be equipped with fire and gas detection system and fire suppression system. Stringent procedures are implemented to prohibit smoking or naked flames to be used on-site. ■ Fixed crash barriers will be provided in areas where process equipment is adjacent to the internal roadway to protect against vehicle collision. Adequate warning signage and lighting will also be provided and maximum speed limit will also be in place.							
Noise Impact (Construction)									
5.9.1	4.2.7	**Good Site Practice** Good site practice and noise management can significantly reduce the impact of construction site activities on nearby NSRs. The following package of measures should be followed during each phase of construction: ■ only well-maintained plant to be operated on-site and plant should be serviced regularly during the construction works; ■ machines and plant that may be in intermittent use to be shut down between work periods or should be throttled down to a minimum; ■ plant known to emit noise strongly in one direction, should, where possible, be orientated to direct noise away from the NSRs; ■ mobile plant should be sited as far away from NSRs as possible; and ■ material stockpiles and other structures to be effectively utilised, where practicable, to screen noise from on-site	Within construction site / During construction phase	Contractor		✓			EIAO, EIAO-TM and Noise Control Ordinance

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1]				Relevant Legislation & Guidelines
					Des	Con	Op	Dec	
		construction activities.							
5.9.1	4.2.7	**Selection of Quieter PME** The recommended quieter PME adopted in the assessment were taken from the EPD's QPME Inventory and British Standard, namely *Noise Control on Construction and Open Sites, BS 5228: Part 1: 2009* . It should be noted that the silenced PME selected for assessment can be found in Hong Kong.	Within construction site / During construction phase	Contractor		✓			EIAO, EIAO-TM and Noise Control Ordinance
5.9.1	4.2.7	**Use of Movable Noise Barriers** Movable noise barriers can be very effective in screening noise from particular items of plant when constructing the Project. Noise barriers located along the active works area close to the noise generating component of a PME could produce at least 10 dB(A) screening for stationary plant and 5 dB(A) for mobile plant provided the direct line of sight between the PME and the NSRs is blocked.	Within construction site / During construction phase	Contractor		✓			EIAO, EIAO-TM and Noise Control Ordinance
5.9.1	4.2.7	**Use of Noise Enclosure/ Acoustic Shed** The use of noise enclosure or acoustic shed is to cover stationary PME such as air compressor and generator. With the adoption of the noise enclosure, the PME could be completely screened, and noise reduction of 15 dB(A) can be achieved according to the EIAO Guidance Note No.9/2010.	Within construction site / During construction phase	Contractor		✓			EIAO, EIAO-TM and Noise Control Ordinance
5.9.1	4.2.7	**Use of Noise Insulating Fabric** Noise insulating fabric can also be adopted for certain PME (e.g. pilling machine etc). The fabric should be lapped such that there are no openings or gaps on the joints. According to the approved Tsim Sha Tsui Station Northern Subway EIA report (AEIAR-127/2008), a noise reduction of 10 dB(A) can be achieved for the PME lapped with the noise insulating fabric.	Within construction site / During construction phase	Contractor		✓			EIAO, EIAO-TM and Noise Control Ordinance
Noise Impact (Operation)									
5.9.2	4.2.7	**Fixed Plant Noise** Specification of the maximum allowable sound power levels of the proposed fixed plants should be followed. The following noise reduction measures should be considered as far as practicable during operation: ■ Choose quieter plant such as those which have been effectively silenced;	Within construction site / During operation phase / Throughout operation phase	Design Consultant / Contractor	✓		✓		EIAO, EIAO-TM and Noise Control Ordinance

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		■ Include noise levels specification when ordering new plant (including chillier and E/M equipment); ■ Locate fixed plant/louver away from any NSRs as far as practicable; ■ Locate fixed plant in walled plant rooms or in specially designed enclosures; ■ Locate noisy machines in a completely separate building; ■ Install direct noise mitigation measures including silencers, acoustic louvers and acoustic enclosure where necessary; and ■ Develop and implement a regularly scheduled plant maintenance programme so that equipment is properly operated and serviced in order to maintain a controlled level of noise.							
Water Quality Impact (Construction)									
6.8.1.1	5.3	**Construction site runoff** The site practices outlined in ProPECC Note PN 1/94 should be followed as far as practicable in order to minimise surface runoff and the chance of erosion. The following measures are recommended to protect water quality and sensitive uses of the coastal area, and when properly implemented should be sufficient to adequately control site discharges so as to avoid water quality impacts: ■ 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 and erosion and sedimentation control facilities implemented. Channels, earth bunds or sand bag barriers should be provided on site to direct storm water to silt removal facilities. The design of the temporary on-site drainage system should be undertaken by the Contractor prior to the commencement of construction; ■ Sand/silt removal facilities such as sand/silt traps and sediment basins should be provided to remove sand/silt particles from runoff to meet the requirements of the TM standards under the WPCO. The design of efficient silt	Within construction site / Duration of the construction phase	Contractor		✓			ProPECC Note PN 1/94

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		removal facilities should be based on the guidelines in Appendix A1 of ProPECC Note PN 1/94. Sizes may vary depending upon the flow rate. The detailed design of the sand/silt traps should be undertaken by the Contractors prior to the commencement of construction. ■ 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 during rainstorms. Deposited silt and grit should be regularly removed, at the onset of and after each rainstorm to ensure that these facilities are functioning properly at all times. ■ Measures should be taken to minimize the ingress of site drainage into excavations. If excavation of trenches in wet periods is necessary, they should be dug and backfilled in short sections wherever practicable. Water pumped out from foundation excavations should be discharged into storm drains via silt removal facilities. ■ All vehicles and plant should be cleaned before leaving a construction site to ensure no earth, mud, debris and the like is deposited by them on roads. An adequately designed and sited wheel washing facility should be provided at construction site exit where practicable. Wash-water should have sand and silt settled out and removed regularly to ensure the continued efficiency of the process. The section of access road leading to, and exiting from, the wheel-wash bay to the public road should be paved with sufficient backfall toward the wheel-wash bay to prevent vehicle tracking of soil and silty water to public roads and drains. ■ Open stockpiles of construction materials or construction wastes on-site should be covered with tarpaulin or similar fabric during rainstorms. Measures should be taken to prevent the washing away of construction materials, soil, silt or debris into any drainage system. ■ Manholes (including newly constructed ones) should be adequately covered and temporarily sealed so as to prevent silt, construction materials or debris being washed into the drainage system and stormwater runoff being directed into							

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		foul sewers. ■ Precautions should be taken at any time of the year when rainstorms are likely. Actions should be taken when a rainstorm is imminent or forecasted and actions to be taken during or after rainstorms are summarized in Appendix A2 of ProPECC Note PN 1/94. Particular attention should be paid to the control of silty surface runoff during storm events, especially for areas located near steep slopes. ■ Bentonite slurries used in piling or slurry walling should be reconditioned and reused wherever practicable. Temporary enclosed storage locations should be provided on-site for any unused bentonite that needs to be transported away after all the related construction activities are completed. The requirements in ProPECC Note PN 1/94 should be adhered to in the handling and disposal of bentonite slurries.							
6.8.1.2	5.3	**General construction activities** Construction solid waste, debris and refuse generated on-site should be collected, handled and disposed of properly to avoid entering any nearby storm water drain. Stockpiles of cement and other construction materials should be kept covered when not being used.	Within construction site / During construction phase	Contractor		✓			ProPECC Note PN 1/94
6.8.1.3	5.3	**Excavation works** The construction programme should be properly planned to minimise excavation works during the wet season (April to September), temporarily exposed slope/soil surfaces should be covered by a tarpaulin or other means, as far as practicable. Interception channels should be provided (e.g. along the crest/edge of the excavation) to prevent storm runoff from washing across exposed soil surfaces. Arrangements should be in place to ensure that adequate surface protection measures can be safely carried out well before the arrival of a rainstorm. Other measures that need to be implemented before, during and after rainstorms are summarized in ProPECC PN 1/94.	Within construction site / During construction phase	Contractor		✓			ProPECC Note PN 1/94
6.8.1.4	5.3	**Accidental spillage** ■ The Contractor should register as a chemical waste producer	Within construction site / During construction phase	Contractor		✓			ProPECC Note PN 1/94 and Waste Disposal

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		if chemical wastes are produced from construction activities. The Waste Disposal Ordinance (Cap 354) and its subsidiary regulations in particular the Waste Disposal (Chemical Waste) (General) Regulation should be observed and complied with for control of chemical wastes. ■ Maintenance of vehicles and equipment, involving activities with potential for leakage and spillage, should only be undertaken within areas appropriately equipped to control these discharges. ■ Oils and fuels should only be stored in designated areas which have pollution prevention facilities. To prevent spillage of fuels and solvents to any nearby storm water drain, all fuel tanks and storage areas should be provided with locks and be sited on sealed areas, within bunds of a capacity equal to 110% of the storage capacity of the largest tank. The bund should be drained of rainwater after a rain event. ■ Disposal of chemical wastes should be carried out in compliance with the Waste Disposal Ordinance. The Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes published under the Waste Disposal Ordinance details the requirements to deal with chemical wastes. General requirements are given as follows: – Suitable containers should be used to hold the chemical wastes to avoid leakage or spillage during storage, handling and transport. – Chemical waste containers should be suitably labelled, to notify and warn the personnel who are handling the wastes, to avoid accidents. – Storage area should be selected at a safe location on site and adequate space should be allocated to the storage area.							Ordinance
6.8.1.5	5.3	**Sewage effluent from construction workforce** Temporary sanitary facilities, such as portable chemical toilets, should be employed on-site where necessary to handle sewage from the workforce. A licensed contractor should be employed to provide appropriate and adequate portable toilets and be	Within construction site / During construction phase	Contractor		✓			ProPECC Note PN 1/94

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		responsible for appropriate disposal and maintenance.							
Water Quality Impact (Operation)									
6.8.2.1	5.3	**Sewage effluent and sewerage impact** In order to minimise the risk of exceeding capacity of the sewerage system, on-site underground storage of effluent is recommended for the OWTF 2, with a capacity of 6 hours of peak flow. Using the values presented in the preliminary design, the on-site storage required to buffer excess capacity would be equivalent to 30 m^3. A below ground effluent retention tank would function to store effluent produced during peak periods when usage of the Sha Ling pumping station is high. Effluent stored during such periods could then be pumped out of the retention tank and discharged into the public sewer during off-peak times when capacity is sufficient.	Within construction site / During design and operation phase	Design Consultant / OWTF Operator	✓		✓		EIA recommendations
6.8.2.2	5.3	**Wastewater generation from organic waste treatment processes** Wastewater must be collected and diverted to the wastewater treatment plant (WWTP). An adequately sized WWTP with technologies such as membrane bioreactor, reverse osmosis or multi-phase separation process or system should be provided for the OWTF 2. Polluting parameters in the effluent should be in compliance with the requirements as specified in the TM-DSS. *Leachate from the waste reception and composting process* ▪ A drainage system will be provided at the reception area connecting to the proposed onsite WWTP. The leachate would be treated in the WWTP and there would be no direct discharge of leachate. *Dewatering of the digestate from the separators* ▪ The wastewater generated from the dewatering of digestate from the digesters is expected to be around 229.18 m^3/day and a peak flow of 5.31L/s. The on-site WWTP will deploy suitable treatment process in order to reduce the pollution level to an acceptable standard. The effluent shall be treated according to the TM-DSS standard before discharging to foul sewers.	Within construction site / During design and operation phase	Design Consultant / OWTF Operator	✓		✓		TM-DSS, Water Pollution Control Ordinance

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		Condensate from biogas drying, odour treatment and ventilation system ▪ Condensate from biogas handling and wastewater from the odour treatment process would be collected and transferred to the WWTP. There is no direct discharge of wastewater to the sewer. *Washing of waste delivery trucks* ▪ Surplus wastewater generated from the vehicle washing facilities would be collected and transferred to the WWTP for further treatment before discharging to the foul sewer. *Untreated wastewater from wastewater treatment plant* ▪ Maintenance of the WWTP and its connection pipe work would be conducted regularly to confirm the condition of the holding tank and pipes. This will ensure early detection of any damage for repair or replacement. *Leakage of materials from WWTP* ▪ Regular scheduled maintenance of the WWTP will be carried out to confirm the condition of the facility and detect any damages at an early stage for repair or replacement.							
6.8.2.3	5.3	**Contaminated stormwater runoff and accidental spillages** Regular maintenance of plant facilities, as recommended in **Section 6.8.2.2** of the EIA report, will be performed to confirm the condition of plant facilities and detect any damage for repair or replacement. Training should be provided to the employees on handling accidental spillage, so that in such cases, actions can be carried out quickly to avoid runoff to nearby streams/drains.	Within construction site / During operation phase / Throughout operation phase	OWTF Operator			✓		TM-DSS; Water Pollution Control Ordinance
Waste Management Implications (Construction)									
7.6.1.1	6.3	**Good Site Practices** Recommendations for good site practices during the construction activities include: ▪ Obtain the relevant waste disposal permits from appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354) and subsidiary Regulations and the Land (Miscellaneous Provisions) Ordinance (Cap. 28);	Project construction site / Throughout construction stage / Until completion of all construction activities	Contractor		✓			Waste Disposal Ordinance; Regulation and the Land (Miscellaneous Provisions) Ordinance;

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		■ Provide staff training for proper waste management and chemical handling procedures; ■ Provide sufficient waste disposal points and regular waste collection; ■ Provide appropriate measures to minimise windblown litter and dust during transportation of waste by either covering trucks or by transporting wastes in enclosed containers; ■ Carry out regular cleaning and maintenance programme for drainage systems, sumps and oil interceptors; ■ Separate chemical wastes for special handling and disposal to licensed facilities for treatment; and ■ Employ licensed waste collectors to collect waste.							Waste Disposal (Chemical Wastes) (General) Regulation; Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site
7.6.1.2	6.3	**Waste Reduction Measures** Recommendations to achieve waste reduction include: ■ Design foundation works to minimise the amount of excavated material to be generated; ■ Provide training on the importance of site cleanliness and appropriate waste management procedures, including waste reduction, reuse and recycling; ■ Sort demolition debris and excavated materials from demolition works to recover reusable/recyclable portions ■ Segregation and storage of different types of waste in different containers or skips to enhance reuse or recycling of materials and their proper disposal ■ Encourage collection of recyclable waste such as waste paper and aluminium cans by providing separate labelled bins to enable such waste to be segregated from other general refuse generated by the work force ■ Plan the use of construction materials carefully to minimise amount of waste generated and avoid unnecessary generation of waste	Project construction site / Throughout construction stage / Until completion of all construction activities	Contractor	✓	✓			Waste Disposal Ordinance
7.6.1.3	6.3	**Excavated and C&D Materials** In order to minimise impacts resulting from collection and transportation of C&D material for off-site disposal, the	Project construction site / Throughout construction stage / Until completion	Contractor	✓	✓			Waste Disposal Ordinance ; DEVB Technical

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		excavated materials should be reused on-site as fill material as backfilling material and for landscaping works far as practicable. Other mitigation requirements are: ■ A Waste Management Plan (WMP), which becomes part of the Environmental Management Plan (EMP), should be prepared in accordance with ETWB TC(W) No.19/2005; ■ A recording system for the amount of wastes generated, recycled and disposed of (including the disposal sites) should be adopted for easy tracking; and ■ In order to monitor the disposal of excavated and non-inert C&D material at public filling facilities and landfills and to control fly-tipping, a trip-ticket system should be adopted (refer to DEVB TC(W) No. 6/2010).	of all construction activities						Circular (Works) No.6/2010 for Trip Ticket System for Disposal of Construction & Demolition Materials; Technical Circular (Works) No. 19/2005 Environmental Management on Construction Site
7.6.1.4	6.3	**Chemical Waste** Should chemical wastes be produced at the construction site, the Contractor would be required to register with EPD as a Chemical Waste Producer and to follow the guidelines stated in the Code of Practice on the Packaging, Labelling and Storage of Chemical Wastes. Good quality containers compatible with the chemical wastes should be used, and incompatible chemicals should be stored separately. Appropriate labels should be securely attached on each chemical waste container indicating the corresponding chemical characteristics of the chemical waste (such as explosive, flammable, oxidizing, irritant, toxic, harmful, or corrosive). The Contractor should employ a licensed collector to transport and dispose of the chemical wastes, to either the CWTC in Tsing Yi, or any other licensed facilities, in accordance with the Waste Disposal (Chemical Waste) (General) Regulation.	Project construction site / Throughout construction stage / Until completion of all construction activities	Contractor		✓			Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation
7.6.1.5	6.3	**General Refuse** General refuse should be stored in enclosed bins or compaction units separated from excavated and non-inert C&D materials. A reputable waste collector should be employed by the Contractor to remove general refuse from the site, separately from inert C&D materials. Preferably an enclosed and covered area should be provided to reduce the occurrence of 'wind blown' light material.	Project construction site / Throughout construction stage / Until completion of all construction activities	Contractor		✓			Waste Disposal Ordinance and Public Health and Municipal Services Ordinance - Public Cleansing and Prevention of Nuisances

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
									Regulation
Waste Management Implications (Operation)									
7.6.2.1	6.3	**Good site practices** Adoption of the following good operational practices should be recommended to minimise waste management impacts: ■ Obtain the necessary waste disposal permits from the appropriate authorities, in accordance with the Waste Disposal Ordinance (Cap. 354), Waste Disposal (Chemical Waste) (General) Regulation and the Land (Miscellaneous Provision) Ordinance (Cap. 28); ■ Nomination of an approved person to be responsible for good site practice, arrangements for collection and effective disposal to an appropriate facility of all wastes generated at the site; ■ Use of a waste haulier licensed to collect specific category of waste; ■ A trip-ticket system should be included as one of the contractual requirements and implemented by the Environmental Team to monitor the disposal of solid wastes at public filling facilities and landfills, and to control fly tipping. Reference should be made to DEVB TC(W) No. 6/2010. ■ Training of site personnel in proper waste management and chemical waste handling procedures; ■ Separation of chemical wastes for special handling and appropriate treatment at a licensed facility; ■ Routine cleaning and maintenance programme for drainage systems, sumps and oil interceptors; ■ Provision of sufficient waste disposal points and regular collection for disposal; ■ Adoption of appropriate measures to minimise windblown litter and dust during transportation of waste, such as covering trucks or transporting wastes in enclosed containers; and, ■ Implementation of a recording system for the amount of	Construction site / On a regular basis / Throughout operation stage	OWTF Operator			✓		Waste Disposal Ordinance; Waste Disposal (Chemical Waste) (General); Regulation and the Land (Miscellaneous Provision) Ordinance; DEVB Technical Circular (Works) No. 6/2010.

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		wastes generated, recycled and disposed of (including the disposal sites).							
7.6.2.2	6.3	**Waste reduction measures** Adoption of the following good operational practices should be recommended to ensure waste reduction: ■ Segregation and storage of different types of waste in different containers, skips or stockpiles to enhance reuse or recycling of materials and their proper disposal; ■ Encourage collection of aluminium cans, plastic bottles and packaging material (e.g. carton boxes) and office paper by individual collectors. Separate labelled bins should be provided to help segregate this waste from other general refuse generated by the work force; and ■ Any unused chemicals or those with remaining functional capacity should be reused as far as practicable.	Construction site / On a regular basis / Throughout operation stage	OWTF Operator			✓		Waste Disposal Ordinance; Waste Disposal (Chemical Waste) (General); Regulation and the Land (Miscellaneous Provision) Ordinance
7.6.2.3	6.3	**Waste generated from pre-treatment process** Wastes generated from pre-treatment process should be recycled as far as possible. Wastes generated from pre-treatment process should also be separated from any chemical waste and stored in covered skips. The recyclables should be collected by licensed collectors, while the rest of the waste should be removed from the site on a daily basis to minimise odour, pest and litter impacts. Open burning must be strictly prohibited.	Pre-treatment process / Throughout operation stage	OWTF Operator			✓		Waste Disposal (Chemical Waste) (General)
7.6.2.4	6.3	**Chemical Waste** ■ Chemical waste generated from machinery maintenance and servicing should be managed in accordance with the Code of Practice on the Packaging, Labelling and storage of Chemical Wastes under the provisions of Waste Disposal (Chemical Waste) (General) Regulation. The chemical waste should be collected by drum-type containers and, when transported off-site, removed by licensed chemical waste contractors. Alternatively, some of the chemical waste may be retained on-site for re-use by the Project in the manufacture of biogas or other products, subject to their composition being confirmed as suitable for such application.	Construction site Throughout operation stage	OWTF Operator			✓		Code of Practice on the Packaging Labelling and Storage of Chemical Wastes; Waste Disposal (Chemical Waste) (General) Regulation

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		▪ Plant / equipment maintenance schedules should be planned in order to minimise the generation of chemical waste. ▪ Non-recyclable chemical wastes and lubricants should be disposed of at appropriate facilities, such as CWTC. Copies or counterfoils from collection receipts issued by the licensed waste collector should be kept for recording purpose. ▪ Recyclable chemical waste will be transported off-site for treatment by a licensed collector. The Contractor will need to register with EPD as a chemical waste producer.							
7.6.2.5	6.3	**General Refuse** ▪ Waste generated in site offices should be reduced through segregation and collection of recyclables. To promote the recycling of wastes such as used paper, aluminium cans and plastic bottles, it is recommended that recycling bins should be clearly labelled and placed at locations with easy access. For the collection of recyclable materials, they should be collected by licensed collectors. ▪ General refuse, other than segregated recyclable wastes, should be separated from any chemical waste and stored in covered skips. The general refuse should be removed from the site on a daily basis to minimise odour, pest and litter impacts. Also, open burning of refuse must be strictly prohibited.	Construction site / On a regular basis / Throughout operation stage	OWTF Operator			✓		Waste Disposal Ordinance
Ecological Impact (Construction)									
8.7	7.3	For precautionary purposes and to further ensure that no wild flora species of conservation interest will be affected, prior to commencement of any construction works, it is recommended to conduct a detailed vegetation survey as baseline monitoring to update the exact locations, number and condition of individuals of *Aquilaria sinensis* and any other floral species of conservation interest within the Project Area. A Vegetation Survey Report summarizing the findings and recommendations of the detailed vegetation survey should be prepared and submitted to AFCD for approval no later than one month prior to commencement of construction works.	Before Project commencement	OWTF Operator	✓				EIAO-TM
8.7	7.3	During construction phase, erection of a temporary protective	Throughout construction	OWTF Operator		✓			EIAO-TM

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		fence along the plantation area where trees and vegetation, including those of conservation concern identified under the detailed vegetation survey, would be retained within the Project Area is recommended for precautionary purposes to avoid any potential impact from construction activities such as vehicle movement and materials storage. Establishment of the protective fence could also raise the awareness of personnel to be present and protection of the plants. While the protective fence should be properly maintained, monitoring of individuals of *Aquilaria sinensis* and any other floral species of conservation interest identified in the detailed vegetation survey during construction phase on a monthly basis should be conducted to make sure that they are not affected by the construction works of the Project.	stage						
Ecological Impact (Operation)									
		No mitigation measure is required.							
Landscape and Visual Impact (Construction)									
Table 10.7 (CP1)	Table 8.1 (CP1)	**Preservation of Existing Vegetation** The development proposals would avoid disturbance to the existing trees as far as practicable within the confines of the development site. A preliminary tree survey has been undertaken to establish the existing resources. A tree survey review with formal tree removal application will be submitted to the relevant government departments for approval in accordance with ETWB TC(W) 03/2006 Tree Preservation, during the detailed design phase of the Project. Based on the preliminary findings it would be possible to retain 441 of the existing trees. If possible, all trees which are not in conflict with the proposals would be retained and shall be protected through the means of fencing, where appropriate, to prevent potential damage to tree canopies and root zones from vehicles and materials storage. Specifications for the protection of existing trees will be circulated to the relevant government authorities for approval together with the formal tree removal application.	Construction site / Throughout construction stage / Until completion of all construction activities	Contractor	✓	✓			Technical Circular (Works) No. 3/2006
Table 10.7 (CP2)	Table 8.1 (CP2)	**Control of site construction activities** ■ Storage of materials should be carefully arranged to minimise potential landscape and visual impact.	Construction site / Throughout construction stage / Until completion	Contractor	✓	✓			EIAO-TM

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		▪ The location and appearance of site accommodation should be carefully designed to minimise potential landscape and visual impact. ▪ Site lighting should be carefully designed to prevent light spillage, ▪ Extent of the works area and construction period should be minimised as far as practicable. ▪ Screen hoarding with compatible design to blend into the surrounding natural environmental should be considered. ▪ Temporary works areas should be reinstated at the earliest possible opportunity.	of all construction activities						
Table 10.7 (CP3)	Table 8.1 (CP3)	**Transplantation of existing trees** Under current proposal, no tree is recommended to be transplanted since the trees in conflict with the proposed works are not suitable to be transplanted. However, should transplantation be proposed in the detailed design stage after an update tree survey, the recommended final recipient sites should be adjacent to their current locations. Enough time should be reserved for tree transplantation works to increase the survival rate of the transplanting trees. To ensure the survival of transplanted trees, protection work should be considered. The tree transplantation proposal will be submitted to relevant authorities for approval together with the formal tree removal application.	Construction site / Throughout construction stage / Until completion of all construction activities	Contractor	✓	✓			Technical Circular (Works) No. 3/2006
Landscape and Visual Impact (Operation)									
Table 10.8 (OP1)	Table 8.2 (OP1)	**Design of the Proposed OWTF** OWTF will incorporate design features as part of design mitigation measures including ▪ **Integrated design approach** - the location of OWTF should be within the existing Livestock Waste Composting Plant, as far as technically feasible. The location and orientation of the OWTF should be away from landscape and visually sensitive areas such as ponds and woodlands. ▪ **Building massing** – the proposed use of simple responsive design includes having specific height profile requirement	Construction site / During design stage	Design Consultant / OWTF Operator	✓				EIAO-TM

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		such as, single-storey, lower than the adjacent building structures, and avoiding large built structure for supporting facilities to reduce the intrusion of mass in the rural areas. ▪ **Treatment of built structures** – the structural design should seek to reduce the apparent visual mass of the facilities further through the use of natural materials such as wooden frames or other sustainable materials such as recycled plastics. ▪ **Responsive building finishes** – Natural tones should be considered for the colour palette for proposed structures. Non-reflective finishes are recommended on the outward facing building facades to reduce glare effect. ▪ **Responsive lighting design –** Aesthetic design of architectural and lighting with following glare design measures: – Directional and full cut off lighting is recommended within the boundaries of OWTF to minimise light spillage to the surroundings; – Minimise geographical spread of lighting, only applying for safety at the key access points and staircases; and Limited lighting intensity to meet the minimum safety and operation requirement.							
Table 10.8 (OP2)	Table 8.2 (OP2)	**Amenity / Compensatory Planting** Tree retention within the works area is considered to be important. New tree plantings will be concentrated in the proposed amenity areas along the boundaries of the site and along the exterior of OWTF buildings. Although a preliminary planting proposal is not yet available at the moment of producing this EIA Report, anticipated new tree planting within the Project site should be able to fully compensate for the loss of 14 trees proposed to be felled in terms of both quantity and quality. 441 existing trees will be retained through preserving them at their current locations. Establishment of newly planted trees is expected. Trees with high amenity value will be placed along the access routes to provide shade and soften the hard structures of OWFT buildings. Amenity plantings will utilise native tree species found on existing neighbouring slopes or	Construction site / during design and operation stage	Design Consultant / OWTF Operator	✓		✓		Technical Circular (Works) Nos. 7/2002 and 3/2006

EIA Ref.	EM&A Ref.	Environmental Protection Measures	Location / Duration of measures / Timing of completion of measures	Implementation Agent	Implementation Stage[1] Des	Con	Op	Dec	Relevant Legislation & Guidelines
		woodland areas to improve the ecological connectivity between existing habitats and create a coherent landscape network. Tree species with aggressive roots should be avoided to prevent damage to OWTF buildings and structures. Trees with high or moderate amenity value and low to medium maintenance should be considered as part of landscape resource enhancement. Recommended tree species include *Celtis sinensis* and *Liquidambar formosana*. These proposals will be subjected to review at detail design stage of the Project.							
Table 10.8 (OP3)	Table 8.2 (OP3)	**Treatment of Slopes** In accordance with GEO Publication No. 1/2011 "Technical Guidelines on Landscape Treatment for Slopes", these engineering structures will be aesthetically enhanced through the use of soft landscape works including tree and shrub planting to give man-made slopes a natural appearance, blending into the natural landscape. Whip-sized plantings are preferred on the face of soil cut slopes, at the crest and toe of the slope and within berm planters. These smaller, younger plants can adapt to their new growing conditions quicker than larger sized stock and establish a naturalistic effect rapidly. Recommended tree species include *Mallotus paniculatus, Broussonetia papyrifera* and *Alangium chinense*.	Construction site / during design and operation stage	Design Consultant / OWTF Operator	✓		✓		GEO Publication No. 1/2011 "Technical Guidelines on Landscape Treatment for Slopes
Table 10.8 (OP4)	Table 8.2 (OP4)	**Amenity enhancement** Rooftop greening and vertical greening to mitigate the visual impact of taller structures can soften the façade of OWTF structures. Frameworks utilised for vertical greening should appear naturalistic.	Construction site / during design and operation stage	Design Consultant / OWTF Operator	✓		✓		Technical Circular (Works) No. 7/2002

Remarks:
1. Des – Design Stage, C – Construction Stage, O – Operation, Dec - Decommissioning