

**CONTRACTOR'S REQUEST FOR  
EXTENSION OF TIME (INTERIM EOT-UPDATES)  
FOR  
A'NAMAA POULTRY PROJECT (PACKAGE 1 - TENDER 2)  
AT WILAYAT IBRI IN THE DHAHIRAH GOVERNORATE  
IN THE SULTANATE OF OMAN**



PRESENTED TO  
**M/S. A'NAMAA POULTRY COMPANY SAOC**  
SUBMITTED BY  
**M/S. AL SALSAHEEL TRADING AND CONTRACTING. CO. LLC**

**MAY 2023**

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## PART -1

### 1. INTRODUCTION

#### 1.1. PREFACE

1. A'Namaa Poultry Company SAOC (hereinafter, the 'Employer') awarded the Contract to Al Salsabeel Trading and Contracting. Co. LLC (hereinafter, 'STC' or the 'Contractor') for the execution and completion of the A'Namaa Poultry Project (Package 1 - Tender 2) in Wilayat Ibri in the Dhahriah Governorate.<sup>1</sup>
2. As per the Contract, the date of commencement of the Works was 12 May 2020<sup>2</sup> and the date of completion was set as 11 March 2021,<sup>3</sup> with net execution duration of 10 months (1 month Mobilization + 9 months Construction).<sup>4</sup>
3. The total number of milestones defined in the Contract are 5 (five) in numbers. The details of milestones are as follows:

Milestone	Milestone Description	Planned Start Date	Planned Completion Date
Milestone 1	All MAS & Shop drawing submission	12-05-2020	11-07-2020
Milestone 2	Processing Plant readiness for equipment supplier to start installation of equipment	12-05-2020	01-08-2020
Milestone 3	Processing Plant & Rendering Plant Equipment supplier completion of installation and start of testing	12-05-2020	15-11-2020
Milestone 4	Completion & Handover of Processing Plant, Rendering Plant, WWTP & External connections and services and related required facilities	12-05-2020	11-12-2020
Milestone 5	Final Handing over of Project	12-05-2020	11-03-2021

4. The Employer is aware that due to several reasons not attributable to the Contractor, which were duly notified time to time during the execution of the Works, the progress of the Works

<sup>1</sup> Contract Agreement

<sup>2</sup> Baseline Programme

<sup>3</sup> Baseline Programme

<sup>4</sup> Clause 1.1.3.3 of the Particular Conditions

- has been consistently affected. Therefore, physical progress of 83.05% could only be achieved as on 31 March 2023.<sup>5</sup>
5. The Contractor, in accordance with the terms and condition as set under the Contract, had raised an application for Extension of Time (EOT), the recent being Claim for Extension of Time R6 dated 29 September 2022<sup>6</sup> for the delays accrued till cut-off date of 31 July 2022. By way of such an application, the Contractor sought an EOT up to 11 March 2023 i.e., an EOT of 730 days from the planned completion date due to delay reasons beyond its control.
  6. The Engineer meanwhile issued a reply on EOT R5, on 27 July 2022.<sup>7</sup> The Engineer rejected the Contractor's claim. The Engineer added that the Contractor did not submit the supporting documents to substantiate the claim incorporating in impacted schedule to identify the actual impact.
  7. The Contractor submits herewith its interim Application of EOT-2, with assessment of impact of delay events faced on the Project from 12 May 2020 till 31 March 2023 by performing a CPM based delay analysis namely 'Time Impact Analysis with Windows'. This exercise is performed in compliance with the 'AACE International Recommended Practice No. 52R-06'<sup>8</sup>, 'AACE International Recommended Practice No. 29R-03'<sup>9</sup> and 'SCL Delay and Disruption Protocol 2017'<sup>10</sup> which are globally accepted industry standards used in resolution of various disputes related to delay in construction projects.
  8. The Contractor reserves its right to submit further details and to claim any other delays that are not attributable to it.

## **1.2. DEFINITIONS**

9. The terms adopted in this document are generally those defined within the Contract Agreement (CA) and other documents of the Contract or as the context requires. However, for convenience, the important terms and abbreviations are provided below:

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<sup>5</sup> Latest MPR

<sup>6</sup> Ref/1050/572-R6/21-02

<sup>7</sup> SEM/IBRI/PMC/M-1018/P1/T-2/2022/031

<sup>8</sup> Prospective Time Impact Analysis-As Applied in Construction, AACE International Recommended Practice No. 52R-06 dated 04 May 2017

<sup>9</sup> Forensic Schedule Analysis, AACE International Recommended Practice No. 29R-03 dated 25 April 2011

<sup>10</sup> Society of Construction Law, Delay and Disruption Protocol, 2nd Edition, February 2017

**i. The Project:**

A'Namaa Poultry Project (Package 1 - Tender 2)

**ii. The Employer:**

M/s. A'Namaa Poultry Company SAOC

**iii. The Engineer:**

Semac and Partners LLC

**iv. The Contractor:**

Al Salsabeel Trading and Contracting. Co. LLC

**v. Letter of Intent:**

10 May 2020

**vi. The Contract Agreement:<sup>11</sup>**

12 May 2020

**vii. Accepted Contract Amount:**

OMR 9,307,000.00 (Rials Omani Nine Million Three Hundred and Seven Thousand Only).

**viii. Date of Commencement of Work:**

13 May 2020<sup>12</sup>

**ix. Original Contract Completion Date:**

11 March 2021

**x. Milestone:**

Milestones M1 to M5 as presented in the Contract.<sup>13</sup>

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<sup>11</sup> Contract Agreement

<sup>12</sup> Baseline Programme

<sup>13</sup> Contract Agreement

### 1.3. ABBREVIATIONS

10. The abbreviations and terms in the glossary are not intended to be a complete or exhaustive list. This part of the document was merely compiled in order to assist as a quick reference guide. There may be some abbreviations or terms used in the context of this document that are general and do not require further explanation. Some abbreviations are also described in the body of this document.

Abbreviation Acronym	Description
AACE	Association for the Advancement of Cost Engineering
CPM	Critical Path Method
DE	Delay Event
DAB	Dispute Adjudication Board
DNP	Defect Notification Period
EOT	Extension of Time
GC	General Conditions
HVAC	Heating, Ventilation and Air-Conditioning
LOI	Letter of Intent
LOA	Letter of Acceptance
MEP	Mechanical, Electrical and Plumbing
MOM	Minutes of Meeting
MPR	Monthly Progress Report
M	Milestone
NR	Not Reviewed
OHP	Overheads Profit
OMR	Omani Rials
PC	Particular Conditions
ROP	Royal Oman Police
SCL	Society of Construction Law
STC	Al Salsabeel Trading and Contracting Co. LLC
S&P	Semac and Partners LLC
TIA	Time Impact Analysis
TIWA	Time Impact Window Analysis
TOC	Taking Over Certificate

## 1.4. STRUCTURE OF THE REPORT

11. This Report is sub-divided into various inter-connected parts, covering the background of the matter, the approach & methodology adopted in the analysis and the main findings of the analysis. This Report consists of the following Parts:

- *Part 1- Introduction*

This Part acquaints the reader with the purpose of the Report.

- *Part 2-Project Background*

This Part introduces the background/ narrative of the Project and the Contract.

- *Part 3-Origin and Basis of the Claim for EOT Entitlement*

This Part presents the contractual basis upon which the delay event gives rise to a cause of action for an adjustment to the Time for Completion.

- *Part 4-Delay Events considered in the Analysis*

This Part provides a chronological narrative of the delay events, from 12 May 2020 till 31 March 2023 i.e., the cut-off date of this submission. The details are anchored by the facts and referenced to the contemporaneous documentary evidence.

- *Part 5-Delay Analysis Methodology adopted in this Submission*

The Contractor has presented in detail the rationale for selection of the appropriate delay analysis technique. Time-Impact Analysis (TIA) with Windows method of delay analysis is adopted for conduct of delay analysis on the Project.

- *Part 6- Delay Insertion into Programme and Results-Combined impact of Delay Events at Window end date*

The Contractor has inserted the delay events faced from 12 May 2020 till 31 March 2023 in chronological order based on their date of occurrence in the nearest available monthly updated programme prior to their trigger date. The Contractor has then extracted the longest critical path at Window end date. The Contractor has accordingly claimed its entitlement towards EOT.

- *Part 7-Summary & Conclusion*

Summarized results of the analysis are presented in this Part.

## **1.5. RESERVATION OF RIGHTS**

12. In this submission, the cut-off date for the consideration of the delay events is 31 March 2023. The Contractor reserves its right to submit further details and to claim for any additional delays which may have occurred till such a cut-off date.
13. The Contractor reserves all its rights arising under the Contract; for the avoidance of doubt the Contractor reserves the right to amend this Claim Document to submit any additional documentation and evidence to support its overall claims.

## PART - 2

### 2. THE PROJECT BACKGROUND

#### 2.1. PROJECT INFORMATION

14. This Project includes the execution and completion of Integrated Poultry Farm Works Package 1 - Tender 2 and associated facilities at Ibri Wilayat in the Dhahriah governorate for M/s. A'Namaa Poultry Company S.A.O.C.<sup>14</sup>
15. A'Namaa Poultry Project is a RO 100 million initiative to strengthen Oman's long-term food security. It is being built on a 70 sq. km area, designed and built to the latest international standards. The Poultry farm will yield 60,000 metric tonnes/ year of white meat primarily for the domestic market, but potentially for the regional markets as well.<sup>15</sup>

#### 2.2. PARTIES TO THE CONTRACT

16. The Parties to the Contract are:
  - i. A'Namaa Poultry Company SAOC, P.O. Box: 2394 PC112, Muscat, Sultanate of Oman (hereinafter referred as the 'Employer')
  - ii. Al Salsabeel Trading and Contracting. Co. LLC, P.O. Box 2902, P.C. 211, Dhofar, Salalah, Sultanate of Oman (hereinafter referred as the 'Contractor' or 'STC')
  - iii. Semac and Partners LLC, P.O. Box: 3784 PC112, Ruwi, Sultanate of Oman (hereinafter referred as the 'Engineer')

#### 2.3. THE CONTRACT AGREEMENT

17. The LOI was signed by the Employer and the Contractor on 10 May 2020.<sup>16</sup>
18. The Contract Agreement between the Employer and the Contractor was signed on 12 May 2020, basis which the commencement date of the Project was set as 12 May 2020<sup>17</sup>, and the Project was scheduled to be completed within 10 months (including 1 month mobilization).<sup>18</sup>

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<sup>14</sup> Contract Agreement

<sup>15</sup> <https://www.omanobserver.om/article/2332/Front%20Stories/ro-100m-poultry-project-makes-headway-in-ibri>

<sup>16</sup> Letter of Intent dated 10 May 2020, Page 48 of Signed Contract Agreement

<sup>17</sup> Baseline Programme

<sup>18</sup> Contract Agreement

19. Documents such as the Contract Agreement, LOA, Price bid, technical bid, Particular Conditions, General Conditions, Employer's Requirements etc. form part of the Contract.

## **2.4. SCOPE OF WORKS**

20. A brief description of scope of works is given below:

<b>Milestone</b>	<b>Scope</b>
MILESTONE-1 (ENGINEERING)	MAS Submission & Approvals
	Shop Drawings Submission & Approvals
MILESTONE 2	FEEDMILL Readiness of Equipment Supplier to Start Installation Equipment's
	PROCESSING PLANT Readiness of Equipment Supplier to Start Installation Equipment's
MILESTONE-3	RENDERING PLANT-Equipment supplier completion of Installation/Commissioning
	Processing Plant Equipment Supplier Completion of Installation & start Testing commissioning
MILESTONE-4	WSRS- WWTP
	RENDERING PLANT
	CENTRAL LABORATORY
	PROCESSING PLANT (MEP)
	EXTERNAL CONNECTIONS & SERVICE-RELATED REQUIRED FACILITIES
MILESTONE-5	MAINTENANCE WORKSHOP
	CENTRAL STORE
	TREATMENT, GENERAL STORE, ATM & SALON
	RECREATION CENTRE
	FEED MILL WORK SCOPE (MEP)
	WATER SUPPLY RIVER SYSTEM FROM WWTP
	TRANSFORMER YARD- NO
	BOILER HOUSE- RENDERING PLANT
	WEIGH BRIDGE (5 Nos)
	Holding Tank
	EXTERNAL WORKS
	PACKAGE-2
	PROVISIONAL ITEMS/VARIATION
	HANDING OVER

## **2.5. SALIENT FEATURES OF THE CONTRACT**

21. The salient features of the Contract are tabulated hereunder:

<b>Particular</b>	<b>Sub-Clause</b>	<b>Description</b>
Time for Completion	1.1.3.3	(1-month mobilization + 9 months Construction)
Defects Notification Period	1.1.3.7, 11.1	365 days from issue of the Taking Over Certificate under Clause 10.1
Governing Law	1.4	Law of Sultanate of Oman
Time for access to Site	2.1	No less than two weeks after Commencement Date, but not before handover documentation has been finalized and insurance policies have been submitted.
Amount of Performance Security	4.2	Ten percent (10%) of the Contract Price in the form of a Bank Guarantee.
Date for Commencement of Works	8.1	The day after signing the Letter of Intent
Delay Damages	8.7	<p>Milestone Completion Dates:</p> <ol style="list-style-type: none"> <li>1. Milestone 1: obtain approval on all MAS's within 1 month and all shop drawings within 2 months from Award of contract.</li> <li>2. Milestone 2: Readiness of contractors' scope to start the installation of equipment for Processing Plant and Feed Mill on 1st August 2020.</li> <li>3. Milestone 3: Completion of Installation work of Equipment and start of Testing and Commissioning for Processing Plant and rendering Plant on 15th November 2020.</li> <li>4. Milestone 4: Completion of the Processing plant, Water Treatment Plant and Rendering Plant within 1 month mobilization + 7 months construction).</li> <li>5. Milestone 5: Final Completion of the project (1 -month mobilization + 9 months construction).</li> </ol> <p>Delay in any milestone is subject to a penalty of 0.332% of contract price per day.</p>
Maximum Amount of Delay	8.7	10% of the Contract Price
Adjustment for variations (Maximum 10%)		Main Contractor OHP 10%

Particular	Sub-Clause	Description
Date by which the DAB shall be appointed	20.2	90 days of the date of signing the Contract

## 2.6. THE PRORAMME

### Baseline Programme

22. Following are key features of Baseline programme:

Sr. No.	Description	Date
1	Commencement Date	12 May 2020
2	Finish Date	11 March 2021
3	Total activities	2970

23. The WBS and high-level activities in the baseline programme are tabulated below,

Activity Name	Original Duration	Start Date	Finish Date
PROJECT MILESTONE	304	12-May-20	11-Mar-21
Project Start		12-May-20	
Mobilization Period	31	12-May-20	11-Jun-20
Commencement of Work		13-May-20	
Project Finish			11-Mar-21
MILESTONE-1 (ENGINEERING)	61	12-May-20	11-Jul-20
MAS Submission & Approvals	31	12-May-20	11-Jun-20
Shop Drawings Submission & Approvals	61	12-May-20	11-Jul-20
MILESTONE 2	38	24-Jun-20	31-Jul-20
PROCESSING PLANT Readiness of Equipment Supplier to Start Installation Equipment's	38	24-Jun-20	31-Jul-20
FEEDMILL Readiness of Equipment Supplier to Start Installation Equipment's	33	29-Jun-20	31-Jul-20
MILESTONE-3	91	01-Aug-20	14-Nov-20
Processing Plant Equipment Supplier Completion of Installation & start Testing commissioning	91	01-Aug-20	14-Nov-20
RENDERING PLANT-Equipment supplier completion of Installation/Commissioning	53	14-Sep-20	14-Nov-20
MILESTONE-4	184	12-May-20	12-Dec-20
WSRS- WWTP	155	10-Jul-20	11-Dec-20
PROCESSING PLANT (MEP)	184	12-May-20	12-Dec-20
CENTRAL LABORATORY	175	20-Jun-20	11-Dec-20

Contractor's Request for Extension of Time (Interim EOT-2)

Activity Name	Original Duration	Start Date	Finish Date
RENDERING PLANT	155	10-Jul-20	11-Dec-20
EXTERNAL CONNECTIONS & SERVICE-RELATED REQUIRED FACILITIES	45	28-Oct-20	11-Dec-20
MILESTONE-5	261	12-May-20	11-Mar-21
TREATMENT, GENERAL STORE, ATM & SALON	207	12-May-20	07-Jan-21
MAINTENANCE WORKSHOP	234	22-Jun-20	10-Feb-21
CENTRAL STORE	232	22-Jun-20	08-Feb-21
FEED MILL WORK SCOPE (MEP)	189	23-Jun-20	28-Jan-21
RECREATION CENTRE	215	28-Jun-20	28-Jan-21
PROVISIONAL ITEMS/VARRIATION	189	30-Jun-20	04-Feb-21
BOILER HOUSE- RENDERING PLANT	154	11-Jul-20	11-Dec-20
EXTERNAL WORKS	137	01-Aug-20	15-Dec-20
PACKAGE-2	132	01-Aug-20	10-Dec-20
Holding Tank	117	16-Aug-20	10-Dec-20
TRANSFORMER YARD- NO:6,7 & 9	135	30-Aug-20	11-Jan-21
WEIGH BRIDGE (5 Nos)	74	29-Sep-20	11-Dec-20
WATER SUPPLY RIVER SYSTEM FROM WWTP	63	10-Oct-20	11-Dec-20
HANDING OVER	42	29-Jan-21	11-Mar-21

24. The longest path of the programme is shown below.

Activity ID	Activity Name	Original Duration	Start	Finish
<b>- PROJECT MILESTONE</b>		304	12-May-20	11-Mar-21
A1000	Project Start	0	12-May-20	
A1010	Mobilization Period	31	12-May-20	11-Jun-20
A1020	Commencement of Work	0	13-May-20	
A1030	Project Finish	0		11-Mar-21
<b>- MILESTONE-5</b>		257	28-Jun-20	11-Mar-21
<b>- HANDING OVER</b>		42	29-Jan-21	11-Mar-21
A 30260	Site Cleaning	7	29-Jan-21	04-Feb-21
A 30270	De-Mobilisation	5	05-Feb-21	09-Feb-21
A 30280	ROP Inspection & Approval	7	10-Feb-21	16-Feb-21
A 30320	Attending Snags	19	20-Feb-21	10-Mar-21
A 30330	Final Handing Over	1	11-Mar-21	11-Mar-21
<b>- RECREATION CENTRE</b>		215	28-Jun-20	28-Jan-21
<b>+ SUBSTRUCTURE</b>		94	28-Jun-20	29-Sep-20
<b>+ SUPERSTRUCTURE</b>		45	30-Sep-20	13-Nov-20
<b>- FINISHING WORKS</b>		76	14-Nov-20	28-Jan-21

## **2.7. PREVIOUS EOT SUBMISSION**

25. The Contractor planned to complete the Works within stipulated Project time; and had deployed necessary manpower/equipment at the site. The Contractor while implementing the Works according to the Contract conditions & specifications, had encountered many challenges and conditions which were different from what was expected at the time of planning. Such events led to delays and disruption at the Project site, for which the Contractor had submitted its requests for extension of the Project timelines. The Engineer had to accordingly proceed with determining the tenability aspect of such extensions.

### **EOT- 1:**

26. The Contractor submitted its application for extension of time (EOT-1) to the Engineer on 11 February 2021.<sup>19</sup> The Contractor in its submission, mentioned various delay events faced from the commencement of the Project. Some of the major events claimed were:
- i. Delay due to COVID-19
  - ii. Delay in handing over of site.
  - iii. Delay in Advance Payment.
  - iv. Delay in Excavation.
  - v. Delay in WWTP works, Rendering Plant Works
  - vi. Delay in Architectural changes in Central Lab
  - vii. Delay in procuring SS316 grade Mil finish MAS
  - viii. Delays in MAS approvals, among other events
27. The Contractor by way of this submission sought an extension of 7 months (210 days) up to 07 October 2021.
28. The Engineer via email conveyed that the Contractor EOT stands rejected due to non-submission of an impacted schedule. The Engineer requested the Contractor to submit the time impacted program in order to assess the impact of delay events.<sup>20</sup>

<sup>19</sup> Ref/1050/572/21-02

<sup>20</sup> Email dated 08 March 2021 and April 01 2021

29. The Engineer via email informed that as per the discussions, the Contractor had agreed to withdraw this EOT and resubmit the revised EOT claim at the earliest.<sup>21</sup>

**EOT-1 R2:**

30. Post submission of EOT-1, the Contractor further faced delays as the Project progressed. Subsequently, the Contractor submitted its EOT-1 R2 application to the Engineer on 17 July 2021.<sup>22</sup>
31. The Contractor included additional hinderances faced in progress of works under this revision.
32. The Contractor sought an extension of 264 days for the completion of the Project up to 30 November 2021.
33. The Engineer via email informed that the Contractor had not submitted the EOT claim with proper impacted schedule ((as per the proper delay analysis technique) due to which the EOT could not be assessed without determining actual impact.<sup>23</sup>
34. The Engineer via email informed that the Contractor's EOT is rejected. The Engineer stated that EOT claim should be submitted along with all the requested details and supporting documentation, only the impacted schedule was submitted on 14 September 2021 which was also not a complete and many details were missed by the Contractor. The Engineer requested the Contractor to submit the same with all the documents at the earliest.<sup>24</sup>

**EOT-1 R4:**

35. The Contractor further faced delays as the Project progressed. Subsequently, the Contractor submitted its EOT-1 R4 application to the Engineer on 02 December 2021.<sup>25</sup>

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<sup>21</sup> Email dated 12 July 2021

<sup>22</sup> Ref/1050/572R2/21-02

<sup>23</sup> Email dated 27 July 2021

<sup>24</sup> Email dated 19 September 2021

<sup>25</sup> Ref/1050/572R4/21-02

36. The Contractor included additional hinderances faced in progress of works under this revision. Some of the delay events were:
- i. Delay in Mobilization
  - ii. Delay in Excavation Permit
  - iii. Delay in MAS and Shop Drawing Approval
  - iv. Delay in WWTP Area Works, Rendering Plant and Boiler House
  - v. Delay in Central Laboratory works and MAS approval
  - vi. Delay in Finalizing Vehicle Washing Areas
  - vii. Delay in delivery of RO Tanks due to COVID-19
  - viii. Delay due to Variation/ Additional Work
  - ix. Delay in MEP Works
  - x. Delay in Interim Payments, among other events
37. The Contractor sought an extension of 415 days for the completion of the Project up to 07 July 2022.
38. The Engineer vide letter dated 09 February 2022,<sup>26</sup> replied towards the EOT-1 R4 submitted by the Contractor for Engineer's review and determination. The Engineer informed that upon review of the submitted documents, they could not find any valid delay notices submitted by the Contractor towards each delay events as per the FIDIC conditions of contract clause. 8.4 & 20.1 and in absence of such notices, the claims shall be considered as null and void.

**EOT-1 R5:**

39. Post submission of EOT-1 R4, the Contractor further faced delays as the Project progressed. Subsequently, the Contractor submitted its EOT-1 R5 application to the Engineer on 03 July 2022.<sup>27</sup>
40. The Contractor informed that due to COVID-19 and its impacts, delay in approval of MAS & shop drawings and delay in payment and its impacts has severely jeopardized the progress

<sup>26</sup> SEM/IBRI/PMC/M-1018/P1/T-2/2022/05

<sup>27</sup> Ref/1050/572R5/21-02

at site. The Contractor stated that the anticipated completion date of the Project is December 2022.

41. The Engineer vide letter dated 27 July 2022,<sup>28</sup> informed the Contractor that previous revisions of EOT-1 were rejected due to absence of supporting documents to substantiate the claim which was still not submitted. The delay in MAS & shop drawing approval should be presented with its impact on the works, and the it is Contractor's delay in obtaining all the MAS approval within 1 month and all the shop drawing approval within 2 months from the date of issuance on LOI, the Engineer added that this claim stands rejected.

**EOT-1 R6:**

42. Post submission of EOT-1 R5, the Contractor further faced delays as the Project progressed. Subsequently, the Contractor submitted its EOT-1 R6 application to the Engineer on 29 September 2022.<sup>29</sup>
43. The Contractor informed that in addition to EOT-1 R4 and R5, EOT-1 R6 is submitted along with Revised/ Updated Schedule and relevant communications for review and approval of such EOT.
44. The Contractor sought an extension of 730 days from the original completion date up to 11 March 2023.

<sup>28</sup> SEM/IBRI/PMC/M-1018/P1/T-2/2022/031

<sup>29</sup> Ref/1050/572R6/21-02

## **PART-3**

### **3. ORIGIN AND BASIS OF THE CLAIM FOR EXTENSION OF TIME**

#### **3.1. DELAYS AND DISRUPTIONS TO PLANNED PROGRESS OF WORKS**

45. The Contractor's planned works at each level, such as survey and investigation/selection of standard design/ technical & construction design/ Project execution/ testing and commissioning/ handover & taking over, was dependent on timely approvals, timely receipt of Engineer's direction in an occasion the ground cases do not meet the conditions defined in the Employer's Requirement, timely receipt of revised standard designs from the Employer, support from Employer/ Engineer for getting requisite details from local authorities, timely review of Contractor documents by Engineer, Employer and other interfacing parties, among other things.
  
46. It is evident from chronology of delay events as summarised in **Part-4** of this submission, that the Contractor has fulfilled its obligation under the Contract and complied with the due procedure by notifying/ following up with the concerned parties such as the Engineer, Employer, authorities, other stakeholders, etc. However, despite of its best efforts and undertaking possible mitigating measures, several of the inputs that were required from Engineer/ Employer were delayed beyond the Contractor's control.
  
47. It is noteworthy to mention that multiple delays are emanating from changes introduced to the existing standard designs and non-receipt of timely directions to the Contractor's requests related to design.

#### **3.2. CONTRACTUAL ENTITLEMENT TO EXTENSION OF TIME**

48. While the contractual entitlement for each of the delay events claimed is illustrated in **Part-5** of this submission, the following are the key Contract clauses under which entitlement to EOT is being claimed within this submission:

Relevant Provisions of GCC/PCC	Definitions
Sub-Clause 1.4 (Governing Law)	<p>The Project shall be governed under the law of the Sultanate of Oman</p>
Sub-Clause 1.9 (Delayed Drawings or Instructions)	<p>The Contractor shall give notice to the Engineer whenever the Works are likely to be delayed or disrupted if any necessary drawing or instruction is not issued to the Contractor within a particular time, which shall be reasonable. The notice shall include details of the necessary drawing or instruction, details of why and by when it should be issued, and details of the nature and amount of the delay or disruption likely to be suffered if it is late.</p> <p>Should the Contractor fail to notify the Engineer sufficiently in advance that additional design information is required, in order for such information to be prepared, then the Contractor shall be fully responsible for all costs associated with the late notification.</p> <p>The Contractor will be responsible for the preparation of all necessary "workshop drawings" as defined within the drawing preambles forming part of the Contract.</p> <p>This provision is not to be construed as derogating from clause 8.6A</p> <p>If the Contractor suffers delay and/or incurs Cost as a result of a failure of the Engineer to issue the notified drawing or instruction within a time which is reasonable and is specified in the notice with supporting details, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <p class="list-item-l1">(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and</p> <p class="list-item-l1">(b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
Sub-Clause 2.1 (Right of Access to the Site)	<p>If the Contractor suffers delay and/or incurs Cost as a result of a failure by the Employer to give any such right or possession within such time, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <ul style="list-style-type: none"> <li>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and</li> <li>(b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.</li> </ul>
Sub-Clause 2.4 (Employer's Financial Arrangements)	The Employer shall submit, within 28 days after receiving any request from the Contractor, reasonable evidence that financial arrangements have been made and are being maintained which will enable the Employer to pay the Contract Price (as estimated at that time) in accordance with Clause 14 [Contract Price and Payment]. If the Employer intends to make any material change to his financial arrangements, the Employer shall give notice to the Contractor with detailed particulars.
Sub-Clause 2.5 (Employer's Claims)	This Sub-Clause provides that the Employer shall give notice or particulars to the Contractor if the Employer considers itself entitled to any payment under any Clause of the Contract.
Sub-Clause 3.3 (Instructions of the Engineer)	<p>The Contractor shall only take instructions from the Engineer, or from an assistant to whom the appropriate authority has been delegated under this Clause. If an instruction constitutes a Variation, Clause 13 [Variations and Adjustments] shall apply.</p> <p>The Contractor shall comply with the instructions given by the Engineer or delegated assistant, on any matter related to the Contract. Whenever practicable, their instructions shall be given in writing. If the Engineer or a delegated assistant:</p> <ul style="list-style-type: none"> <li>(a) gives an oral instruction,</li> </ul>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>(b) receives a written confirmation of the instruction, from (or on behalf of) the Contractor, within two working days after giving the instruction, and</p> <p>(c) does not reply by issuing a written rejection and/or instruction within two working days after receiving the confirmation, then the confirmation shall constitute the written instruction of the Engineer or delegated assistant (as the case may be).</p>
Sub-Clause 3.5 (Determinations)	<p>Whenever these Conditions provide that the Engineer shall proceed in accordance with this Sub-Clause 3.5 to agree or determine any matter, the Engineer shall consult with each Party in an endeavour to reach agreement. If agreement is not achieved, the Engineer shall make a fair determination in accordance with the Contract, taking due regard of all relevant circumstances.</p> <p>The Engineer shall give notice to both Parties of each agreement or determination, with supporting particulars. Each Party shall give effect to each agreement or determination unless and until revised under Clause 20 [Claims, Disputes and Arbitration].</p>
Sub-Clause 4.7 (Setting out)	<p>If the Contractor suffers delay and/or incurs Cost from executing work which was necessitated by an error in these items of reference, and an experienced contractor could not reasonably have discovered such error and avoided this delay and/or Cost, the Contractor shall give notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <p>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and</p> <p>(b) payment of any such Cost plus reasonable profit, which shall be included in the Contract Price.</p>

Relevant Provisions of GCC/PCC	Definitions
Sub-Clause 4.12 (Unforeseeable Physical Conditions)	<p>If the Contractor encounters adverse physical condition which is considered to be unforeseeable the Contractor shall give notice to the Engineer.</p> <p>If and to the extent that the Contractor encounters physical conditions which are Unforeseeable, gives such a notice, and suffers delay and/or incurs Cost due to these conditions, the Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <ul style="list-style-type: none"> <li>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and</li> <li>(b) payment of any such Cost, which shall be included in the Contract Price.</li> </ul>
Sub-Clause 4.21 (Progress Reports)	<p>Monthly progress reports shall be prepared by the Contractor and submitted to the Engineer in six hard copies and one soft copy. The first report shall cover the period up to the end of the first calendar month after the Works commence on site. Reports shall thereafter be submitted on a monthly basis (up to the issue of the Taking Over Certificate) within five (5) days of the last day of the month to which the report relates. Reports shall be provided on an as necessary basis during the Defect Notification Period as may be instructed by the Engineer.</p> <p>Each report shall include:</p> <ul style="list-style-type: none"> <li>(a) photographs and detailed descriptions of progress, including each stage of design, preparation of the Contractor's sub-contract documentation, sample submissions, sample approval periods, sample sign off milestone, procurement, manufacture, delivery to site, construction, erection, testing, commissioning, training of Employer's building management team, and targeted, Hand Over';</li> <li>(b) Charts identifying the status of Construction documents, purchase orders, subcontracts placed, manufacture and Construction;</li> <li>(c) Records of personnel and Contractor's equipment on the site;</li> </ul>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>(d) Copies of quality assurance documents, test results and certificate of materials;</p> <p>(e) Safety statistics, including details of any hazardous incidents and activities relating to environmental aspects and public relations;</p> <p>(f) Details of any accidents on site together with a full report detailing sue issues;</p> <p>(g) Construction Programme updates with comparisons of actual and planned progress, with details of any aspects which may jeopardize the completion of the works in accordance with the Contract together with the measures being (or to be) implemented to overcome such aspects.</p> <p>(h) Progress against each milestone set in these Conditions</p> <p>(i) Daily Working journal/site Diary</p>
Sub-Clause 8.3 (Programme)	<p>This Sub-Clause pertains to submission of a detailed Programme to the Engineer by the Contractor.</p> <p>The Contractor shall submit 3 copies and 1 soft copy of every required detailed time programme to the Engineer. The first such programme will be the programme provided to the Engineer for approval prior to the signing of the Contract, and which forms one of the Contract documents. The Contractor shall also submit a revised programme whenever the previous programme is inconsistent with actual progress or with the Contractor's obligations. Each programme shall include:</p> <p>(a) the order and dates by which the Contractor proposes to carry out the Works (and Sections thereof), including the anticipated timing for each stage of</p> <ul style="list-style-type: none"> <li>• Design</li> <li>• The preparation of the sub-contract documentation</li> <li>• Sample submissions</li> </ul>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<ul style="list-style-type: none"><li>• Sample approval periods</li><li>• Sample sign off milestones</li><li>• Procurement</li><li>• Manufacture off site</li><li>• Delivery to site</li><li>• Erection</li><li>• Testing</li><li>• Commissioning</li><li>• Training of Employer's building management team</li><li>• Use permit, and</li><li>• The targeted completion of Sections by the dates for their respective completion and the Works by the Time for Completion.</li></ul> <p>The Construction phase of the programme should clearly identify the key dates for Sectional completion and the Time for Completion of the Works.</p> <p>(b) each of these stages for work by each nominated Subcontractor (as defined in Clause 5 [Nominated Subcontractors],</p> <p>(c) Sequence and timing of inspections and all tests specified in the Contract and all applicable commissioning periods.</p> <p>The programme shall reflect precedence networking techniques, showing early start, late start, early finish, late finish dates.</p> <p>(d) a supporting Schedule which includes:</p> <p>(i) Periods of activity, sequence of the work, and the interface of the Contractor with any other contractors carrying out works;</p> <p>(ii) Dates and logic by which the information described in the information release schedule, information request schedule, or any other request by the</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>Contractor for information, is to be supplied in relation to any activity which is dependent on such information.</p> <p>(iii) Dates and logic by which plant, materials or goods are to be supplied, or work is to be carried out by the Employer (if any) or those engaged, or employed by it in relation to the activity dependent on them;</p> <p>(iv) Any time contingency required by any designer, utility, contractor or any sub-contractor and/or supplier for whom the Contractor is responsible in relation....</p> <p>(v) completion dates and the Time for Completion;</p> <p>(vi) Any time contingency required by any designer, utility, contractor or any sub-contractor and/or supplier for whom the Employer is responsible in relation to any activity, sequence of activities, or key dates, or sectional completion dates and the Time for Completion;</p> <p>(vii) identifying free float and total float that is available to be used by the contractor and/or the employer for managing the re -sequencing of work, or redeployment</p> <p>(viii) The degree of progress actually achieved on all activities;</p> <p>(ix) The likely and actual effect of any delay to progress caused by a variation or other interfering event (providing particulars) on the completion of an activity, and whether it has or is likely to have any effect on sectional completion dates or the Time for Completion;</p> <p>Unless the Engineer, within 21 days after receiving a programme, gives notice to the Contractor stating the extent to which it does not comply with the Contract, the Contractor shall proceed in accordance with the programme, subject to his other obligations under the Contract. The Employer's Personnel shall be entitled to rely upon the programme when planning their activities.</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>The Contractor shall, whenever required by the Engineer, provide in writing for information, a general description of the arrangements and methods, which the Contractor is adopting, or proposes to adopt, for the execution of the Works.</p> <p>No significant alteration to the programme, or to such arrangements and methods, shall be made without informing the Engineer.</p> <p>The Contractor shall prepare a Schedule of Payments based on the Programme. Cashflows are to be in an s-curve format.</p> <p>The programme shall be generated in Microsoft Project 2007 and saved with a baseline to facilitate future tracking of Actual Progress vs Forecast Progress.</p>
Sub-Clause 8.4 (Extension of Time for Completion)	<p>This Sub-Clause stipulates the conditions under which the Contractor shall be entitled for the extension of time for completion.</p> <p>The Contractor shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to an extension of the Time for Completion if and to the extent that completion for the purposes of Sub-Clause 10.1 [Taking Over of the Works and Sections] is or will be delayed by any of the following causes:</p> <ul style="list-style-type: none"><li>(a) a Variation (unless an adjustment to the Time for Completion has been agreed under Sub-Clause 13.3 [Variation Procedure]) or other substantial change in the quantity of an item of work included in the Contract,</li><li>(b) a cause of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions,</li><li>(c) exceptionally adverse climatic conditions,</li><li>(d) Unforeseeable shortages in the availability of personnel or Goods caused by epidemic or governmental actions, or</li><li>(e) any delay, impediment or prevention caused by or attributable to the Employer, the Employer's Personnel, or the Employer's other contractors on the Site.</li></ul>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	If the Contractor considers himself to be entitled to an extension of the Time for Completion, the Contractor shall give notice to the Engineer in accordance with Sub-Clause 20.1 [Contractor's Claims]. When determining each extension of time under Sub-Clause 20.1, the Engineer shall review previous determinations and may increase, but shall not decrease, the total extension of time.
Sub-Clause 8.5 (Delays Caused by Authorities)	<p>This Sub-Clause provides that the delays caused by the authorities would be considered as cause of delay under Clause 8.4.</p> <p>If the following conditions apply, namely:</p> <ul style="list-style-type: none"> <li>(a) the Contractor has diligently followed the procedures laid down by the relevant legally constituted public authorities in the Country,</li> <li>(b) these authorities delay or disrupt the Contractor's work, and</li> <li>(c) the delay or disruption was Unforeseeable,</li> </ul> <p>then this delay or disruption will be considered as a cause of delay under subparagraph (b) of Sub-Clause 8.4 [Extension of Time for Completion].</p>
Sub-Clause 8.6A (Further Design Risk)	The Contractor warrants that it is also required to prepare construction drawings for the execution of the Works from the Tender Design on which the tender of the Contractor was based, and that the Tender Design for the Works (being all the drawings forming part of the Contract) accurately and sufficiently reflects the broad design requirements and architectural intent of the Employer, and include no such defects or deficiencies as will prevent, impede or delay the preparation by the Contractor of Construction Drawings for approval by the employer. The Contractor further expressly warrants that it shall make no claim for loss, cost, expense or delay allegedly caused to the Contractor by an alleged deficiency in the Tender Design.

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
<p><b>Sub-Clause 8.7 (Delays Damages)<sup>30</sup></b></p>	<p>If the Contractor fails to comply with Sub-Clause 8.2 [Time for Completion], the Contractor shall subject to Sub-Clause 2.5 [Employer's Claims] pay delay damages to the Employer for this default. These delay damages shall be the respective sums stated in the Appendix to Tender, which shall be paid:</p> <ul style="list-style-type: none"> <li>(a) for every day which shall elapse between the relevant Time for Completion of a Section and Completion thereof as evidenced by a Sectional Completion Certificate; and</li> <li>(b) for every day which shall elapse between the Time for Completion of the Works and the date stated in the Taking -Over Certificate.</li> </ul> <p>PROVIDED that should the Contractor achieve completion of the Works by the Time of Completion of the Works (as may have been extended pursuant to the provisions of the Contract) the Employer shall refund to the Contractor all and any amounts that may have been paid by the Contractor (Whether by way of remittance by the Contractor or by way of set-off from any sum owing by the Employer to the Contractor) pursuant to this Clause.</p> <p>The Employer shall be entitled to set off from any sum owing to the Contractor delay damages as become due to the Employer as calculated above. However, the total amount due under this Sub-Clause shall not exceed the maximum amount of delay damages (if any) stated in the Appendix to Tender.</p>
<p><b>Sub-Clause 13.1 (Right to instruct Variation)</b></p>	<p>This Sub-Clause provides that the Engineer may initiate Variation at any time prior to issuing the Taking-Over certificate.</p> <p>The Contractor shall execute and be bound by each Variation, unless the Contractor promptly gives notice to the Engineer stating (with supporting particulars) that the Contractor cannot readily obtain the Goods required</p>

<sup>30</sup> Mentioned in Part 3.6 SALIENT FEATURES OF THE CONTRACT of this submission

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>for the Variation. Upon receiving this notice, the Engineer shall cancel, confirm or vary the instruction</p>
Sub-Clause 13.3 (Variation Procedure)	<p>This Sub-Clause provides the procedure to be followed by the Contractor in case a Variation is issued.</p> <p>If the Engineer requests a proposal, prior to instructing a Variation, the Contractor shall respond in writing as soon as practicable, either by giving reasons why he cannot comply (if this is the case) or by submitting:</p> <ul style="list-style-type: none"> <li>(a) a description of the proposed work to be performed and a programme for its execution,</li> <li>(b) the Contractor's proposal for any necessary modifications to the programme according to Sub-Clause 8.3 [Programme] and to the Time for Completion, and</li> <li>(c) the Contractor's proposal for evaluation of the Variation.</li> </ul> <p>The Engineer shall, as soon as practicable after receiving such proposal (under Sub-Clause 13.2 [Value Engineering] or otherwise), respond with approval, disapproval or comments. The Contractor shall not delay any work whilst awaiting a response.</p> <p>In the absence of the Engineer requesting a proposal, prior to instructing a variation, as set out above, and the procedure described being adopted, where the Engineer instructs a variation, the Contractor shall within 15 days from the date of the instruction, submit a priced proposal for the variation to the Engineer. The Engineer shall review the Contractor's Submission and within a period of 15 Days from the receipt of the Contractor's Submission, meet with the Contractor to review, negotiate and make best endeavours to agree the value of the Variation in terms of cost and applicable time (if applicable).</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
Sub-Clause 14.4 (Schedule of Payments)	<p>If the Contract includes a schedule of payments specifying the instalments in which the Contract Price will be paid, then unless otherwise stated in this schedule:</p> <p>(a) By the way of describing the stage of works reached, together with all other documents required to be provided before an instalment is due, together with the instalment said to be due”, shall be substituted for the expression “the estimated contract values of the works executed” in subparagraph (a) of Sub-Clause 14.3 [Application for Interim Payment Certificates];</p> <p>(b) Sub-Clause 14.5 [Plant and Materials intended for the Works] shall not apply; and (c) if these instalments are not defined by reference to the actual progress achieved in executing the Works, and if actual progress is found to be less than that on which this schedule of payments was based, then the Engineer may proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine revised instalments, which shall take account of the extent to which progress is less than that on which the instalments were previously based.</p> <p>The Contractor shall submit 3 copies of a detailed Schedule of Payments (being a forecast of when payments will need to be made to the Contractor) to the Engineer and this shall be agreed before the signing of the Contract. The Cash flow shall be based on the agreed milestone schedule. Payments will be made in accordance with the agreed milestone schedule subject to the satisfaction of the Engineer that all works have been carried out to in accordance to the standards detailed in the contract.</p> <p>If the Contract does not include a schedule of payments, the Contractor shall submit non-binding estimates of the payments which he expects to become due during each quarterly period. The first estimate shall be submitted within 42 days after the Commencement Date. Revised estimates</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>shall be submitted at quarterly intervals, until the Taking-Over Certificate has been issued for the Works</p>
Sub-Clause 17.3 (Employer's Risks)	<p>This Sub-Clause lists down the Employer's Risks.</p> <p>The risks referred to in Sub-Clause 17.4 below are:</p> <ul style="list-style-type: none"> <li>(a) war, hostilities (whether war be declared or not), invasion, act of foreign enemies,</li> <li>(b) rebellion, terrorism, revolution, insurrection, military or usurped power, or civil war, within the Country,</li> <li>(c) riot, commotion or disorder within the Country by persons other than the Contractor's Personnel and other employees of the Contractor and Subcontractors,</li> <li>(d) munitions of war, explosive materials, ionising radiation or contamination by radio-activity, within the Country, except as may be attributable to the Contractor's use of such munitions, explosives, radiation or radio-activity,</li> <li>(e) pressure waves caused by aircraft or other aerial devices travelling at sonic or supersonic speeds,</li> <li>(f) use or occupation by the Employer of any part of the Permanent Works, except as may be specified in the Contract,</li> <li>(g) design of any part of the Works by the Employer's Personnel or by others for whom the Employer is responsible, and</li> <li>(h) any operation of the forces of nature which is Unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventative precautions.</li> </ul>
Sub-Clause 17.4 (Consequences of Employer's Risks)	<p>This Sub-Clause provides the consequences of the Employer risks enlisted under the Clause 17.3.</p> <p>If and to the extent that any of the risks listed in Sub-Clause 17.3 above results in loss or damage to the Works, Goods or Contractor's Documents,</p>

Relevant Provisions of GCC/PCC	<b>Definitions</b>
	<p>the Contractor shall promptly give notice to the Engineer and shall rectify this loss or damage to the extent required by the Engineer.</p> <p>If the Contractor suffers delay and/or incurs Cost from rectifying this loss or damage, the Contractor shall give a further notice to the Engineer and shall be entitled subject to Sub-Clause 20.1 [Contractor's Claims] to:</p> <ul style="list-style-type: none"> <li>(a) an extension of time for any such delay, if completion is or will be delayed, under Sub-Clause 8.4 [Extension of Time for Completion], and</li> <li>(b) payment of any such Cost, which shall be included in the Contract Price.</li> </ul> <p>In the case of sub-paragraphs (f) and (g) of Sub-Clause 17.3 [Employer's Risks], reasonable profit on the Cost shall also be included.</p> <p>After receiving this further notice, the Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine these matters.</p>
Sub-Clause 19.1 (Force Majeure)	<p>This Sub-Clause provides the consequences of the Force Majeure events faced on the Project.</p>
Sub-Clause 20.1 (Contractor's Claims)	<p>This Sub-Clause provides the conditions for the submission of the Contractor's claim, in an event it considers itself to be entitled to any extension of time for completion and/or any additional payment, under any Clause.</p> <p>If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 14 days after the Contractor became aware, or should have become aware, of the event or circumstance.</p> <p>The Contractor's attention is drawn to the final paragraph of sub-clause 8.4 [Extension of Time for Completion] set out in these Particular Conditions.</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>The Time Impact Analysis and the additional supporting information described therein shall form an integral part of his notice of claim for Extension of Time for Completion. Notice submitted without such information shall not be accepted by the Engineer and shall be regarded as invalid for the purpose of the Contract.</p> <p>If the Contractor fails to give notice of a claim within such period of 14 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub-Clause shall apply.</p> <p>The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.</p> <p>The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Engineer. Without admitting the Employer's liability, the Engineer may, after receiving any notice under this Sub-Clause, monitor the record-keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Engineer to inspect all these records, and shall (if instructed) submit copies to the Engineer.</p> <p>Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:</p> <p>(a) this fully detailed claim shall be considered as interim;</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
	<p>(b) the Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Engineer may reasonably require; and</p> <p>(c) the Contractor shall send a final claim within 14 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Engineer.</p> <p>Within 42 days after receiving a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Engineer and approved by the Contractor, the Engineer shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within such time.</p> <p>Each Payment Certificate shall include such amounts for any claim as have been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.</p> <p>The Engineer shall proceed in accordance with Sub-Clause 3.5 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.</p> <p>The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause.</p>

<b>Relevant Provisions of GCC/PCC</b>	<b>Definitions</b>
Sub-Clause 20.2 (Amicable Dispute Resolution)	If any dispute arises out of or in connection with the Contract then senior representatives of the Parties with authority to settle the dispute shall, within fourteen (14) days of a written request from one Party to the other, meet in order to attempt to resolve the dispute amicably.
Sub-Clause 20.3 (Amicable Settlement)	Both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, arbitration may be commenced on or after the thirtieth (30 <sup>th</sup> ) day after receipt of the written request, even if no attempt at amicable settlement has been made.
Sub-Clause 20.4 (Arbitration)	<p>20.4.1 Unless settled amicably, any dispute between the Parties shall be finally resolved by arbitration. The award rendered in such arbitration shall be final and binding.</p> <p>20.4.2 The dispute shall be settled by a sole arbitrator to be agreed between the Parties and appointed in accordance with the Oman Law of Arbitration in Civil and Commercial Disputes RD 47/1997 (as amended). The seat of the arbitration shall be Muscat, Sultanate of Oman. The language to be used in the arbitration shall be English.</p> <p>20.4.3 In the event the Parties are unable to agree upon the name of the sole arbitrator in accordance with Sub-Clause 10.4.1 above within a period of thirty (30) days then the dispute shall be referred to and finally resolved by arbitration under the Arbitration Rules of the DIFC-LCIA Arbitration Centre, which Rules are deemed to be incorporated by reference into this Clause. The number of arbitrators shall be three. The seat, or legal place, of arbitration shall be Muscat, Sultanate of Oman. The language to be used in the arbitration shall be English.</p>

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49. The aforementioned Clauses are detailed in Conditions of Contract for Construction for Building and Engineering works Designed by the Employer (First Edition 1999).<sup>31</sup>

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<sup>31</sup> Part 1, General Conditions of Contract, Subcontract Agreement

## **PART-4**

### **4. DELAY EVENTS CONSIDERED IN THIS DELAY ANALYSIS**

50. Following is the list of key delay events, that are considered in the Delay Analysis presented in **Part 6** of this submission for assessment of the Contractor's entitlement to EOT (for events from 12 May 2020 till cut-off date of 31 March 2023), in accordance with the terms and conditions of the Contract.

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>
DE-01	Delay in Mobilization	69	12-May-20	19-Jul-20
DE-02	Delay in MAS Submission and Approval	69	12-May-20	19-Jul-20
DE-03	Delay in Shop Drawing Submission and Approval	841	12-May-20	30-Aug-22
DE-04	Delay in Procuring SS 316 grade mil finish MAS	209	09-Jul-20	02-Feb-21
DE-04-01	Additional time for Delivery of Material on Site	60	03-Feb-21	03-Apr-21
DE-05	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20	03-Nov-20
DE-06	Delay in Rendering Plant Works	271	01-Oct-20	28-Jun-21
DE-07	Delay in Weighbridge No 2 and No 3 located near by the feed mill area	419	29-Sep-20	21-Nov-21
DE-08	Delay in Finalizing Vehicle Washing Areas	791	01-Aug-20	30-Sep-22
DE-08-01	Additional time for Delivery on Site	120	01-Oct-22	28-Jan-23
DE-08-02	Additional time for Installation	60	29-Jan-23	29-Mar-23
DE-09	Delay in Swimming Pool works at recreation Centre	309	26-Aug-20	30-Jun-21
DE-10	Delay in finalising and Delivery of Diesel Pump	218	01-Sep-20	06-Apr-21
DE-10-01	Additional time for Shop drawing, MAS and Procurement	30	07-Apr-21	06-May-21
DE-11	Delay due to Stoppage of Works as per Instruction of the Consultant due to Changes in Drawings in LPG Yard Works	408	14-Sep-20	26-Oct-21
DE-12	Delay in Commencement of Rendering Plant Installation Works	469	14-Sep-20	26-Dec-21
DE-13	Delay of Central Laboratory works and MAS approval	629	16-Sep-20	06-Jun-22

DE No.	Delay event	Duration	Start date	Finish date
DE-14	Delay in delivery of RO Tanks due to COVID-19	187	01-Oct-20	05-Apr-21
DE-15	Modification of Rendering Plant Control Panel room size	439	25-Oct-20	06-Jan-22
DE-16	Delay in Provision of Clearance in Accommodation Building for MEP Works	632	15-Dec-20	07-Sep-22
DE-17	DELAY IN APPROVAL OF VARIATION FOR BOREWELL PUMP POWER SUPPLY	229	11-Aug-21	27-Mar-22
DE-17-01	Additional time considered for Procurement and delivery	42	28-Mar-22	08-May-22
DE-17-02	Additional time considered for installation	21	09-May-22	29-May-22
DE-18	Delay in Provision of Design Parameters of Silo/Bins	134	29-Jul-20	09-Dec-20
DE-19	Delay in Commencement of Feed mill 'A' Frame for Silo Erection	198	25-Oct-20	10-May-21
DE-19-01	Additional time for Shop drawing, MAS and Procurement	30	11-May-21	09-Jun-21
DE-19-02	Additional time for Delivery on Site	60	10-Jun-21	08-Aug-21
DE-19-03	Additional time for Installation	30	09-Aug-21	07-Sep-21
DE-20	Delay in commencement of Central Kitchen Works	184	30-Jun-20	30-Dec-20
DE-21	DELAY DUE TO CHANGES IN ROOF AND FLOOR PLAN IN REVISED DRAWINGS IN CENTRAL KITCHEN	410	07-Sep-20	21-Oct-21
DE-21-01	Additional time for preparation of Shop drawings	30	22-Oct-21	20-Nov-21
DE-22	DELAY DUE TO STOPPAGE OF WORKS DUE TO NON-AVAILABILITY OF MEP DETAIL SERVICE DRAWINGS OF CENTRAL KITCHEN	168	25-Feb-21	11-Aug-21
DE-23	Delay in Approval of Steel Structure Shop Drawings of Central Kitchen area works	106	11-Aug-21	24-Nov-21
DE-23-01	Additional time for Procurement and Delivery	60	25-Nov-21	23-Jan-22
DE-24	Delay in receipt of 11 KV Schematic Layout Drawing	197	01-Aug-20	13-Feb-21
DE-25	Delay in finalizing location of Poles due to clash with LPG Yard	547	31-Aug-20	28-Feb-22
DE-26	DELAY IN RECEIPT OF ARCHITECTURAL DRAWINGS FOR EXTERNAL WORKS	153	10-Sep-20	09-Feb-21
DE-27	Delay due to revised Equipment Support Drawings and approval of Variations	480	13-Jun-20	05-Oct-21

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>
DE-28A	Delay in Provision of clearance for MEP works in Zone 1A and 1B	206	24-Jun-20	15-Jan-21
DE-28B	Delay in Provision of Clearance for Equipment Supports in Zone 2 and 3	182	24-Sep-20	24-Mar-21
DE-29	Supply of Pipe, duct and Cable Tray support for Mavitec Works	585	15-Aug-20	22-Mar-22
DE-29-01	Additional time for Shop drawing, MAS and Procurement	30	23-Mar-22	21-Apr-22
DE-29-02	Additional time for Delivery on Site	60	22-Apr-22	20-Jun-22
DE-29-03	Additional time for Installation	30	21-Jun-22	20-Jul-22
DE-30	Supply and Installation of Control Cables and Cable Tray for Evaporators in Chilling Area 1 & 2 in Processing Plant	737	15-Aug-20	21-Aug-22
DE-30-01	Additional time for Shop drawing, MAS and Procurement	30	22-Aug-22	20-Sep-22
DE-30-02	Additional time for Delivery on Site	60	21-Sep-22	19-Nov-22
DE-30-03	Additional time for Installation	30	20-Nov-22	19-Dec-22
DE-31	Delay due to Supply and Installation of Weather Proof DB in Processing Plant	320	27-Sep-20	12-Aug-21
DE-31-01	Additional time for Shop drawing, MAS and Procurement	30	13-Aug-21	11-Sep-21
DE-31-02	Additional time for Delivery on Site	60	12-Sep-21	10-Nov-21
DE-31-03	Additional time for Installation	30	11-Nov-21	10-Dec-21
DE-32	Delay in Commencement of Polythene sheet and Plywood for Boldit flooring protection (Processing Plant)	232	28-Sep-20	17-May-21
DE-32-01	Additional time for Shop drawing, MAS and Procurement	30	18-May-21	16-Jun-21
DE-32-02	Additional time for Delivery on Site	60	17-Jun-21	15-Aug-21
DE-32-03	Additional time for Installation	30	16-Aug-21	14-Sep-21
DE-33	Delay in Commencement and Finalisation of Hot water CIP system (Processing Plant)	210	14-Oct-20	11-May-21
DE-33-01	Additional time for Shop drawing, MAS and Procurement	30	12-May-21	10-Jun-21
DE-33-02	Additional time for Delivery on Site	60	11-Jun-21	09-Aug-21

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DE No.	Delay event	Duration	Start date	Finish date
DE-33-03	Additional time for Installation	30	10-Aug-21	08-Sep-21
DE-34	Supply and Installation of Processing Plant SS Support as per changes in Equipment support drawings	415	26-Oct-20	14-Dec-21
DE-34-01	Additional time for Shop drawing, MAS and Procurement	30	15-Dec-21	13-Jan-22
DE-34-02	Additional time for Delivery on Site	60	14-Jan-22	14-Mar-22
DE-34-03	Additional time for Installation	30	15-Mar-22	13-Apr-22
DE-35	Additional Cable Trays for MEYN Control Panel	437	27-Oct-20	06-Jan-22
DE-35-01	Additional time for Shop drawing, MAS and Procurement	30	07-Jan-22	05-Feb-22
DE-35-02	Additional time for Delivery on Site	60	06-Feb-22	06-Apr-22
DE-35-03	Additional time for Installation	30	07-Apr-22	06-May-22
DE-36	Supply and Installation of isolators for MEYN Equipment's	587	27-Oct-20	05-Jun-22
DE-36-01	Additional time for Shop drawing, MAS and Procurement	30	06-Jun-22	05-Jul-22
DE-36-02	Additional time for Delivery on Site	60	06-Jul-22	03-Sep-22
DE-36-03	Additional time for Installation	30	04-Sep-22	03-Oct-22
DE-37	Supply and Installation of Cut up and Packing equipment additional utility Services	400	11-Nov-20	15-Dec-21
DE-37-01	Additional time for Shop drawing, MAS and Procurement	30	16-Dec-21	14-Jan-22
DE-37-02	Additional time for Delivery on Site	60	15-Jan-22	15-Mar-22
DE-37-03	Additional time for Installation	30	16-Mar-22	14-Apr-22
DE-38	Supply and Installation of Cut up and Packing equipment additional electrical Services	573	11-Nov-20	06-Jun-22
DE-38-01	Additional time for Shop drawing, MAS and Procurement	30	07-Jun-22	06-Jul-22
DE-38-02	Additional time for Delivery on Site	60	07-Jul-22	04-Sep-22
DE-38-03	Additional time for Installation	30	05-Sep-22	04-Oct-22
DE-39	Delay in Feed mill readiness for equipment Installation Works	490	29-Jun-20	31-Oct-21

DE No.	Delay event	Duration	Start date	Finish date
DE-40	Delay in feed mill MEP works due to non-availability of Work access			
DE-40A	Production Building	490	29-Jun-20	31-Oct-21
DE-40B	Raw material Building	211	29-Jun-20	25-Jan-21
DE-40C	Truck Intake Building	457	29-Jun-20	28-Sep-21
DE-40D	Cleaning Building	428	29-Jun-20	30-Aug-21
DE-40E	Finishing Good store	292	29-Jun-20	16-Apr-21
DE-40F	Boiler House	490	29-Jun-20	31-Oct-21
DE-40G	Compressor Room	316	29-Jun-20	10-May-21
DE-40H	Flat store	541	29-Jun-20	21-Dec-21
DE-41	Delay in Interim Payments	777	15-Aug-20	30-Sep-22
DE-41A	Suspension of Works on account of Delay in Payment	396	01-Oct-22	31-Oct-23 (Projected)
DE-41B	Additional time for re-mobilization and Initiation of Procurement	25	01-Nov-23	25-Nov-23 (Projected)

**Notes:** The Finish date for Delay Event 41 A & 41 B is considered as per 'projected' date based on the information received from the Engineer, that the project is likely to resume from 1<sup>st</sup> November 2023 after settlement of pending payments and claims. Any delay thereof of change in date will affect the project completion further.

#### 4.1. DETAILS OF THE DELAY EVENTS

##### 4.1.1. DE-01: DELAY IN MOBILIZATION

###### Delay Period

51. Delay Start Date: 12 May 2020<sup>32</sup>

52. Delay Finish Date: 19 July 2020<sup>33</sup>

<sup>32</sup> Baseline start date of Mobilization (Activity ID - A1010)

<sup>33</sup> Ref/1050/161/20

### **Chronology of the Event**

53. The Project was awarded to the Contractor on 12 May 2020 and The Kick-off meeting for the same was held virtually on 17 May 2020. As per the Baseline programme, the Mobilization was supposed to start on 12 May 2020.
54. The Contractor vide letter dated 04 June 2020,<sup>34</sup> informed the Engineer that they had started to set up the camps and site offices at the camp location provided by the Consultant Engineer at site. But again, as per the instruction received from the Engineer, the site office has to be relocated. The Contractor informed that the site is not handed over to them due to which they are unable to identify the services passing through the same and the locations.
55. The Contractor vide letter dated 08 June 2020,<sup>35</sup> submitted the site office mobilization plan to the Engineer for approval.<sup>36</sup>
56. The Contractor vide letter dated 15 June 2020,<sup>37</sup> notified the Engineer regarding delays in Mobilization due to COVID 19 restrictions. The Contractor informed that they set out the site office on the proposed location which was inspected and confirmed by the Engineer on 10 June 2020. The Contractor added that hand over of site is still pending and Engineer Instruction to Commence the works at site is not received till date.
57. The Contractor vide letter dated 19 July 2020,<sup>38</sup> informed the Engineer that they faced delay in mobilization activity due to restrictions imposed on account of COVID 19, yet they managed to complete all the mobilization activities including the carpentry yard, steel yard, storage, kitchen set up, toilet block, etc except the sign board installation due to delay in approval from ROP. The Contractor added that they will get approval for the same soon and no other work would hamper due to the same.

### **Cause and Effect**

58. The commencement of works was impacted due to delay in mobilization.

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<sup>34</sup> Ref/1050/029/20-04

<sup>35</sup> Ref/1050/041/20-02

<sup>36</sup> Drawing. No. ASC/1050/CVL-01 B Rev 0

<sup>37</sup> Ref/1050/058/20-05

<sup>38</sup> Ref/1050/161/20-06

## **Contractual Entitlement**

59. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5, and 20.1 of the GCC/PCC.

### **4.1.2. DE-02: DELAY IN MAS SUBMISSION AND APPROVAL**

#### **Delay Period**

60. Delay Start Date: 12 May 2020<sup>39</sup>
61. Delay Finish Date: 19 July 2020<sup>40</sup>

#### **Chronology of the Event**

62. Due to the restrictions imposed during COVID-19 period, the Contractor could not obtain data sheets from the suppliers, which delayed the procurement of samples, MAS and shop drawings submission.
63. The Contractor faced substantial delay in shop drawing submittals on account of comments, revisions, changes/ modifications etc.
64. The Contractor vide letter dated 28 May 2020<sup>41</sup> informed the Engineer regarding the delay faced on account of restrictions imposed due to COVID-19 pandemic situation. The Contractor informed that due to such restrictions they were unable to meet the suppliers and obtain technical data for MAS submission. Further, requested the Engineer to extend the period of submission and approval of the MAS.
65. The Contractor vide letter dated 10 June 2020<sup>42</sup> informed the Engineer regarding the delay faced on account of restrictions imposed and subsequent lockdown due to COVID-19 pandemic situation. The Contractor listed down the MAS which were difficult to arrange during such period and requested the Engineer to grant some extension towards submission of MAS.

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<sup>39</sup> Baseline start date of MAS submission (Activity ID - A1040)

<sup>40</sup> Ref/1050/161/22-05

<sup>41</sup> Ref/1050/015/22-05

<sup>42</sup> Ref/1050/038/22-05

66. The Contractor vide letter dated 15 June 2020<sup>43</sup> informed the Engineer that MAS submissions were drastically affected due to lockdown and restrictions on account of COVID-19. The Contractor informed that they were unable to finalize the Suppliers and obtain technical data which delayed the MAS submission.
67. The Contractor vide letter dated 19 July 2020<sup>44</sup> informed the Engineer that despite the restrictions and difficulty in movement due to COVID-19, they managed to submit more than 98% of MAS and is almost completed.

### **Cause and Effect**

68. Milestone 1 (MAS Submission and Approval) was affected due to restrictions in movement on account of COVID-19 pandemic situation. Hence, the start date of this delay event is considered as the baseline start date of MAS Submission and Approval i.e., 12 May 2020.

### **Contractual Entitlement**

69. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.3. DE-03: DELAY IN SHOP DRAWING SUBMISSION AND APPROVAL**

### **Delay Period**

70. Delay Start Date: 12 May 2020<sup>45</sup>
71. Delay Finish Date: 30 August 2022<sup>46</sup>

### **Chronology of the Event**

72. Due to the restrictions imposed during COVID-19 period, the Contractor could not obtain data sheets from the suppliers, which delayed the procurement of samples, MAS and shop drawings submission.
73. The Contractor faced substantial delay in shop drawing submittals on account of comments, revisions, changes/ modifications etc.

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<sup>43</sup> Ref/1050/058/22-05

<sup>44</sup> Ref/1050/161/22-05

<sup>45</sup> Baseline start date of Shop Drawing submission (Activity ID - A1050)

<sup>46</sup> Ref/1050/983/22-05

Contractor's Request for Extension of Time (Interim EOT-2)

74. The Contractor vide letter dated 21 September 2021<sup>47</sup> notified the Engineer that despite several requests there are items whose approval/ confirmation is still pending, the Contractor attached the pending approval item list along with.
75. The Contractor vide letter dated 23 January 2022<sup>48</sup> notified the Engineer that despite several requests there are items whose approval/ confirmation is still pending, the Contractor attached the pending approval item list along with.
76. The Contractor vide letter dated 27 April 2022<sup>49</sup> informed the Engineer that there were delays in approval of some items which was identified in previous communications. The new submissions related to the Project are either due to change in drawings, change in site conditions or variation and provisional Item related materials and shop drawings.
77. The Contractor vide letter dated 30 August 2022<sup>50</sup> notified the Engineer that despite several requests there are items whose approval/ confirmation is still pending, the Contractor attached the pending approval item list along with. The Contractor also notified that due to Covid-19 pandemic situation, some of the suppliers / manufacturers are not able to deliver the previous approved material due to the unavailability of raw material or shortage of the items/ lock clown, lack of transportation etc.

### **Cause and Effect**

78. Milestone 1 (Shop drawing Submission and Approval) was affected due to frequent comments, revisions, changes/ modifications etc. Hence, the start date of this delay event is considered as the baseline start date of Shop drawing Submission and Approval i.e., 12 May 2020.

### **Contractual Entitlement**

79. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

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<sup>47</sup> Ref/1050/789/21-05

<sup>48</sup> Ref/1050/893/21-05

<sup>49</sup> Ref/1050/946/21-05

<sup>50</sup> Ref/1050/983/22-05

#### **4.1.4. DE-04: DELAY IN PROCURING SS 316 GRADE MIL FINISH MAS**

##### **Delay Period**

80. Delay Start Date: 09 July 2020<sup>51</sup>
81. Delay Finish Date: 02 February 2021<sup>52</sup>

##### **Chronology of the Event**

82. The Contractor vide letter dated 04 October 2020<sup>53</sup> informed the Engineer that unlike MAS for SS Pipe and bearings (approved by the Engineer), the sample for SS 316 grade mill finish (MAS No. 1050/C-68 Alt 2) was rejected. The Contractor stated that they lost almost 3 months in procurement of approved SS samples and pipes, and requested the Engineer to either approve the aforementioned material or descope the works to avoid further delay.
83. The Contractor vide letter dated 28 November 2020<sup>54</sup> informed the Engineer that it was already discussed during tendering and clarification stage that the SS mill finish items for equipment supports would be procure from China or India based on availability. The Contractor added that it was never mentioned in the tender documents that materials from China are not acceptable. The Contractor requested the Engineer to review the submitted MAS and convey the approval status.
84. The Contractor vide letter dated 28 December 2020<sup>55</sup> informed the Engineer that they received equipment support drawing officially only on 16 December 2020 and again it was not mentioned anywhere that material from China is not acceptable. The Contractor stated that they are trying to minimize the delay and achieve the milestone.
85. The Contractor vide letter dated 02 February 2021<sup>56</sup> informed the Engineer that they received confirmation of Stainless-Steel support material, received from the approved supplier M/s Bhagyalaxmi Industrial.
86. The Contractor considered 60 days for procurement and delivery of the material to site.

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<sup>51</sup> MAS Actual Submission Date - SS 316 Grade Mills Finish Work (MAS No. 1050/C-68 Alt 2)

<sup>52</sup> Ref/1050/553/21-02

<sup>53</sup> Ref/1050/365/20-04

<sup>54</sup> Ref/1050/459/22-02

<sup>55</sup> Ref/1050/501/20-02

<sup>56</sup> Ref/1050/553/21-02

### Cause and Effect

87. The delay in MAS approval for SS 316 grade mil finish affected the Shop Drawing Submission for mechanical supports installation in Processing Plant.

### Contractual Entitlement

88. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## 4.1.5. DE-05: DELAY IN AERATION TANK IN WWTP AREA WORKS

### Delay Period

89. Delay Start Date: 10 July 2020<sup>57</sup>
90. Delay Finish Date: 03 November 2020<sup>58</sup>

### Chronology of the Event

91. Aeration tank in WWTP area is one of the largest civil structure in the Project. Due to area occupied by the waste material of other Contractor, shortage of concrete supply due to COVID-19 situation and congested layout issue, the commencement of works was delayed.
92. The Contractor received revised structural drawings on 26 July 2020 of Aeration tank and found that the size and structural details of Aeration tank were not matching with the site plan/ layout.
93. The Contractor raised RFI (RFI No. CVL/08) on 30 August 2020, requesting the Engineer to issue the revise site plan/ layout with matching coordinates.
94. The Contractor vide letter dated 14 October 2020<sup>59</sup> clarified to the Engineer that materials of M/s. OSCO were cleared from the site only on 18 July 2020 due to which the works could not be started until then.

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<sup>57</sup> Baseline start date of WWTP works Activity ID – A8950

<sup>58</sup> Ref/1050/420/20-07

<sup>59</sup> Ref/1050/385/20-01

95. On 03 November 2020,<sup>60</sup> the Contractor submitted Cost variation for changes in Revised IFC and Tender Drawing of Aeration Tank.

### **Cause and Effect**

96. The commencement and progress in WWTP Aeration tank was affected due to Change in drawings, area occupied by the waste material of other Contractor, shortage of concrete supply due to COVID-19 situation and congested layout issues.

### **Contractual Entitlement**

97. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.6. DE-06: DELAY IN RENDERING PLANT WORKS**

##### **Delay Period**

98. Delay Start Date: 01 October 2020<sup>61</sup>
99. Delay Finish Date: 28 June 2021<sup>62</sup>

##### **Chronology of the Event**

100. The Contractor received revised civil drawings on 26 July 2020. However, the Contractor had already started the excavation after receiving clearance from M/s. OSCO (another Contactor).
101. The Contractor received the changes in revised IFC drawing vide email dated 26 August 2020.
102. The Contractor had received more changes in Architectural drawings for additional work in office building, for which they received floor plan revised drawing on 04 November 2020.
103. The Contractor vide letter dated 27 January 2021<sup>63</sup> clarified the Engineer regarding the delay faced in the Rendering Plant works. The Contractor informed that the commencement was delayed due to site clearance issue, COVID-19 also impacted the procurement of materials

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<sup>60</sup> Ref/1050/420/20-07

<sup>61</sup> Baseline start date of Activity ID - A 28500

<sup>62</sup> EOT R6 Chronology, Page 18 of PDF

<sup>63</sup> Ref/1050/544/21-07

as all the finishing items/ equipment such as tanks, pump etc. are manufactured in US and UK and factories were closed globally.

104. The Contractor faced delay in supply of RMC material (due to restriction of COVID-19 situation and huge demand at site due to presence of other Contractors), which delayed the completion of Grade slab work. However, the Contractor completed the floor finishing on 04 April 2021 and informed the Employer that the Rendering Plant is ready for equipment installation.
105. MAVITEC visited the site in April and commented regarding the mezzanine floor in Rendering Plant. The Contractor received an official email on 12 April 2021 from the Consultant that MAVITEC has suggested to demolish the mezzanine floor.
106. The Contractor raised cost variation for demolishing of Mezzanine floor. But due to delay in approval of the same, the Contractor was able to complete the said works only on 28 June 2021.

### **Cause and Effect**

107. The commencement and progress of works in Rendering plant was affected due to design/ specification changes, delay and shortage of RMC material and requirements of the Consultant.

### **Contractual Entitlement**

108. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.7. DE-07: DELAY IN WEIGHBRIDGE NO 2 AND NO 3 LOCATED NEAR BY THE FEED MILL AREA**

##### **Delay Period**

109. Delay Start Date: 29 September 2020<sup>64</sup>
110. Delay Finish Date: 21 November 2021<sup>65</sup>

<sup>64</sup> Baseline start date of works for Weigh Bridge (Activity ID A 27770)

<sup>65</sup> Revised Shop drawings submitted - Ref/1050/837/21-02

### **Chronology of the Event**

111. There were 6 nos. vehicle showers and 5 nos. of Weighbridge included in the Scope of the Contractor. However, as per the location drawings of weighbridge and vehicle shower received by the Contractor, it only had location of 3 vehicle showers and 2 weighbridges.
112. The Contractor raised RFI on 29 June 2020 (RFI No. CVL/03) requesting the Engineer to mention the locations of remaining proposed vehicle showers and weigh bridges. The Contractor received final location on 15 July 2020 (weighbridge locations and 03 no. vehicle location drawing, the Consultant informed that remaining 03 nos. of vehicle shower locations will be confirmed at a later stage).
113. The Contractor received GFC drawings for weighbridge on 29 July 2020. However, the location drawing shared by the Consultant, the site layout did not show any setting out plan for the weighbridge no. 2 & 3. On 16 September 2020, the Contractor raised RFI CVL/07 requesting the Engineer to provide the setting out plan showing the exact location for the same.
114. The Contractor submitted shop drawing for final location of Weighbridge No. 2 & 3 on 03 November 2020 and received approval for the same on 04 November 2020.
115. The Contractor vide letter dated 27 January 2021<sup>66</sup> requested the Engineer to provide the locations of remaining proposed vehicle showers and weigh bridges.
116. Among other reasons for delay in civil works of Weigh Bridge No. 2 & 3, the Contractor did not receive site clearance from OSCO regarding civil clearance of Weigh Bridge No. 2 & 3. The Contractor informed same vide email and letter dated 10 February 2021.<sup>67</sup> On 27 February 2021, the Contractor started work after receiving Clearance from OSCO.
117. On 06 May 2021 the Contractor received revised drawing with change in location following which the Contractor had to stop further works. For this revised location for Weighbridge no. 2 & 3, the Contractor re-submitted shop drawing on 11 May 2021<sup>68</sup> and received approval for the same on 05 August 2021.

<sup>66</sup> Ref/1050/540/21-01

<sup>67</sup> Ref/1050/570/20-04

<sup>68</sup> Ref/1050/679/21-02

118. On 26 October 2021, the Contractor received revised details from the Consultant corresponding to site condition and level difference between weigh bridge and rolling shutter. On 27 October 2021,<sup>69</sup> the Contractor notified the Engineer that due to the changes i.e., in order to match the level of existing asphalt level the existing substructure works at site would have to be removed, there will be cost and time implications.
119. On 01 November 2021,<sup>70</sup> the Contractor submitted shop drawings for Weigh Bridge 2 & 3 foundation levels and details rev 02 and based on the comments received from the Consultant, the Contractor resubmitted the shop drawings on 21 November 2021 i.e., Weigh Bridge 2 & 3 foundation levels and details Rev 03.<sup>71</sup>

### **Cause and Effect**

120. The commencement of weigh bridge no. 2 & 3 was affected due to delay in finalization of location and revisions of location drawings.

### **Contractual Entitlement**

121. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.8. DE-08: DELAY IN FINALIZING VEHICLE WASHING AREAS**

### **Delay Period**

122. Delay Start Date: 01 August 2020<sup>72</sup>
123. Delay Finish Date: 30 September 2022<sup>73</sup>

### **Chronology of the Event**

124. There were 6 nos. vehicle showers and 5 nos. of Weighbridge included in the Scope of the Contractor. However, as per the location drawings of weighbridge and vehicle shower received by the Contractor, it only had location of 3 vehicle showers and 2 weighbridges.

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<sup>69</sup> Ref/1050/817/21-02

<sup>70</sup> Ref/1050/822/21-02

<sup>71</sup> Ref/1050/837/21-02

<sup>72</sup> Baseline start date of vehicle shower works Activity ID - A 29090

<sup>73</sup> As per Updated Programme

125. The Contractor raised RFI on 29 June 2020 (RFI No. CVL/03) requesting the Engineer to mention the locations of remaining proposed vehicle showers and weigh bridges. The Contractor received final location on 15 July 2020 (weighbridge locations and 03 no. vehicle location drawing, the Consultant informed that remaining 03 nos. of vehicle shower locations will be confirmed at a later stage). The setting out details were finalized vide RFI CVL/07 on 28 August 2020.
126. The Contractor vide letter dated 27 January 2021<sup>74</sup> requested the Engineer to provide the locations of remaining proposed vehicle showers and weigh bridges.
127. On 03 May 2021, the Contractor received a confirmation from the Consultant that remaining 3 nos. of vehicle shower have been descoped from the Contractor's scope. The Consultant also confirmed that the Contractor has to supply Equipment's and machinery installation for all 6 nos. vehicle showers. The Contractor submitted Cost variation for the same on 04 May 2021.
128. On 09 May 2021, the Contractor received an email from the Consultant instructing the Contractor to proceed with the Hydro Engineering (Equipment and Machinery Installation Vendor) recommended by the Client. After negotiation with the Supplier, the Contractor submitted the final quotation on 02 June 2021.
129. On 20 June 2021, the Consultant agreed and confirmed the Contractor to issue the work order for the same equipment supplier. However, due to delay the Contractor requested the Employer to pay directly to the Supplier. But up to 22 September 2022 the Employer did not proceed with the Supplier.<sup>75</sup>
130. The Contractor requires 4 months for Delivery and 2 months for installation after the Payment (Procurement) confirmation by Employer/ Engineer.

### **Cause and Effect**

131. The commencement of Vehicle Shower works was affected due to delay in location finalization and descoping of partial works at a later stage.

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<sup>74</sup> Ref/1050/540/21-01

<sup>75</sup> As per latest Updated Programme

## **Contractual Entitlement**

132. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

### **4.1.9. DE-09: DELAY IN SWIMMING POOL WORKS AT RECREATION CENTRE**

#### **Delay Period**

133. Delay Start Date: 26 August 2020<sup>76</sup>

134. Delay Finish Date: 30 June 2021<sup>77</sup>

#### **Chronology of the Event**

135. The Contractor faced delay in swimming pool works due to changes in equipment, its approval, variations and Contractor finalizing.
136. The Contractor was instructed to submit the MAS for skimmer system swimming pool equipment vide email dated 09 August 2020, which is a modified requirement to the original scope of works.
137. The Contractor vide letter dated 23 September 2020,<sup>78</sup> submitted the MAS for skimmer system swimming pool equipment and cost proposals to the Engineer.
138. The Engineer vide EI-02 dated 04 January 2021 instructed the Contractor to proceed with Supply and installation of swimming pool equipment system.
139. The Contractor submitted approval requests for the Contractors of Swimming pool work in recreation centre on 25 February 2021. However, the Contractor received approval towards the same on 30 June 2021.

#### **Cause and Effect**

140. The construction of swimming pool works in Recreation Centre was affected due to change in specification and delay in approvals.

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<sup>76</sup> Baseline start date of Activity ID - A 6600

<sup>77</sup> Approval received for swimming pool contractor (EOT R6, Page 24 of pdf)

<sup>78</sup> Ref/1050/358/20-01

## **Contractual Entitlement**

141. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

### **4.1.10. DE-10: DELAY IN FINALIZATION AND DELIVERY OF DIESEL PUMP**

#### **Delay Period**

142. Delay Start Date: 01 September 2020<sup>79</sup>

143. Delay Finish Date: 06 April 2021<sup>80</sup>

#### **Chronology of the Event**

144. As per agreed Baseline, the delivery of the Diesel Pumps has to start as on 01 September 2020. Hence the start date of the delay event is considered as 01 September 2020.

145. The Contractor submitted Cost proposal on 11 August 2020 and as the same was not approved, revised the same on 07 January 2021<sup>81</sup> due to increase in the prices by Vendor on account of COVID-19.

146. Further, the Cost proposal got revised multiple times based on the comments from the Engineer and the Contractor had submitted the final Cost proposal on 18 March 2021<sup>82</sup>. The same was approved by Engineer on 06 April 2021<sup>83</sup> by issuing the Engineer's Instruction 003 for the Diesel transfer pumps with accessories & pressure regulator for the locations provided.

147. Hence the finish date of the delay event is considered as 06 April 2021.

148. The Contractor considers 30 days for preparation of MAS, shop drawings and procurement of Diesel Pump.

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<sup>79</sup> Baseline start of Activity ID (A305920)

<sup>80</sup> Engineer's instruction 03 dated 06-04-2021

<sup>81</sup> Ref/1050/523/20-07 dated 07-01-2021

<sup>82</sup> Ref/1050/552R1/21-05 dated 18-03-2021

<sup>83</sup> Engineer's instruction 03 dated 06-04-2021

### **Cause and Effect**

149. The delay in finalizing the Cost and in issuing Instruction by Engineer hindered or hampered Works and also further delayed the Procurement and delivery of the Diesel pumps for installation.

### **Contractual Entitlement**

150. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Instruction.
151. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
152. The above Delay event 'Delay in finalization and delivery of Diesel pumps' was due to delay in finalizing to issue Instruction by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
153. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

### **4.1.11. DE-11: STOPPAGE OF LPG YARD WORKS AS PER INSTRUCTION OF ENGINEER DUE TO CHANGES IN DRAWINGS**

#### **Delay Period**

154. Delay Start Date: 14 September 2020<sup>84</sup>

155. Delay Finish Date: 26 October 2021<sup>85</sup>

#### **Chronology of the Event**

156. The Contractor started the execution of LPG Yard Works as per the agreed baseline Programme. However, the Works were stopped by the Contractor on 14 September 2020 as

<sup>84</sup> Page 26/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

<sup>85</sup> Email from resident Engineer dated 30-12-2020

per instruction of the Engineer due to changes in the Drawings. Hence, the Start date of the Delay event is considered as 14 September 2020.

157. The Engineer issued Engineer's Instruction (EI) 006 on 11 May 2021 to proceed with the supply and installation of LPG system as per the attached Drawing and Variation.
158. The Contractor informed Engineer that the revised Structural and Architectural Drawings provided in EI 006 aren't matching with the layout provided.
159. Accordingly, the Engineer issued the corrected/ revised architectural and structural Drawings for LPG yard on 16 September 2021<sup>86</sup>.
160. The Contractor submitted the Shop Drawings to Engineer for Approval and the same were approved with comments stating to incorporate the already executed works in the Shop Drawings on 26 October 2021.<sup>87</sup>
161. Hence, the finish date of the Delay event is considered as 26 October 2021.

### **Cause and Effect**

162. The Contractor was instructed to stop the Works due to changes in Drawings and further not provided with the revised Drawings or instruction to Proceed the Works of LPG Yard.
163. In wait of the Engineer's/ Client's instructions to Proceed/ Start the works of the LPG Yard and delay in receipt of revised Drawings, the execution of Works got hindered or hampered.

### **Contractual Entitlement**

164. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/ Instructions.
165. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
166. The above Delay event 'Stoppage of LPG Yard Works as per instruction of Engineer due to changes in Drawings' was due to delay in issue of Instruction to start from the Engineer/

<sup>86</sup> Email from Engineer to Contractor dated 16-09-2021

<sup>87</sup> Email from Engineer to Contractor dated 26-10-2021

Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.

167. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.12. DE-12: DELAY IN COMMENCEMENT OF RENDERING PLANT INSTALLATION WORKS**

##### **Delay Period**

168. Delay Start Date: 14 September 2020<sup>88</sup>

169. Delay Finish Date: 26 December 2021<sup>89</sup>

##### **Chronology of the Event**

170. The Start date of the Delay event is considered as 14 September 2020 i.e., the Baseline start of Installation and Commissioning of Rendering Plant (Activity ID: A8170).
171. The Contractor on 26 December 2021<sup>90</sup> received Engineer's Instruction (EI) -15 regarding instruction to proceed with installation of Rendering plant machineries.
172. The Finish date of the Delay event is considered as 26 December 2021.

##### **Cause and Effect**

173. The Contractor was not provided with the instruction to Proceed the Works of Installation of Rendering Plant.
174. In wait of the Engineer's/ Client's instructions to Proceed/ Start the works of installation of Rendering Plant, the execution of Works got hindered or hampered.

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<sup>88</sup> Baseline start date of Activity ID-A8170

<sup>89</sup> Engineer Instruction -15 dated 26-12-2021

<sup>90</sup> Engineer Instruction -15 dated 26-12-2021

### **Contractual Entitlement**

175. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/ Instructions.
176. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
177. The above Delay event 'Delay in commencement of Rendering plant installation Works' was due to delay in issue of Instruction to start from the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
178. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.13. DE-13: DELAY OF CENTRAL LABORATORY WORKS AND MAS APPROVAL**

##### **Delay Period**

179. Delay Start Date: 16 September 2020<sup>91</sup>

180. Delay Finish Date: 06 June 2022<sup>92</sup>

##### **Chronology of the Event**

181. The Contractor vide letter dated 01 November 2020<sup>93</sup> informed the Engineer that there were various changes (Architectural and Structural changes) introduced via revised drawings, and such revised IFC drawings were issued on 16 September 2020.
182. As per the Employer's instruction for stoppage of works, the Contractor had to stop the works after the completion of Plinth Beam in Central Lab.

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<sup>91</sup> Ref/1050/404/20-01

<sup>92</sup>The Engineer instructed to proceed with works without any changes.

<sup>93</sup> Ref/1050/404/20-01

183. The Contractor vide email received the revised IFC drawing (Rev 03 – major changes in Architectural and structural drawings) on 02 December 2020 and MEP drawings on 31 December 2020.
184. As per discussions held between the Parties, there were major changes in Central Laboratory. The Contractor submitted cost variation proposals to the Engineer. The Contractor submitted Cost proposal for LPG works in Central Lab on 24 February 2021. However, the Contractor received more modifications/ changes. The Contractor re-submitted cost proposal for LPG works in Central Lab on 26 August 2021.
185. On 15 March 2021 vide email, the Contractor received few more modifications/ additional updates in central lab.
  - The toilets at grid 1-2 and B-D needs a WC.
  - Cancel metal foot dip at both labs entrances where movable rubber foot dip (as attached) will be used on the granite floor.
  - Cancel small counter (opposite to the door) in sample receiving area (as attachment1) , and make it wall, not glass.
  - Add 2 water taping point 0.5m height (from outside lab, as showing in attachment1) for cleaning and irrigation purposes outside lab.
  - On the roof, add 2 water taping points (one on technical area roof, the second on admin area roof) for cleaning purpose.
  - Change names of some rooms (as attachment1)
  - As requested before, internal glass walls required to be wall one meter height, then glass.
  - Windows in technical area are fixed windows.
  - Exhaust fan locations and gas connection as requested before (attached)
  - Yes, both bubble area sides should be walls, not glass.
186. On 28 June 2021 vide email, the Contractor received updated drawing Rev 07 for the Central Lab. The Contractor received up to 8 Revisions in Civil and MEP drawings for Central Lab, The Contractor received last revision on 02 August 2021 with MEP work changes in electrical works and conduiting which were already installed in Slab, the Consultant instructed the Contractor to remove the electrical conduits.
187. Based on the changes received in the last revision, the Contractor submitted the shop drawings which were approved on 11 August 2021<sup>94</sup>. The Contractor vide letter dated 17 October 2021<sup>95</sup> submitted the cost variation due to changes received on 02 August 2021 in IFC drawings for Central Laboratory. The Contractor re-submitted the cost variation due to changes in IFC drawings for central laboratory.

<sup>94</sup> Ref/1050/592R2/21-02

<sup>95</sup> Ref/1050/612R2/21-07

188. The Engineer vide email dated 06 June 2022 informed the Contractor that the cost variation is rejected as the Employer has decided to proceed without any changes, and instructed the Contractor to proceed with works as per the issued GFC drawings/ approved shop drawings (with false ceiling).

### **Cause and Effect**

189. The execution of works at Central Laboratory was affected due to introduction of major Architectural and Structural changes/ modification by the Employer/ Consultant.

### **Contractual Entitlement**

190. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.14. DE-14: DELAY IN DELIVERY OF RO TANKS DUE TO COVID 19**

### **Delay Period**

191. Delay Start Date: 01 October 2020<sup>96</sup>

192. Delay Finish Date: 05 April 2021<sup>97</sup>

### **Chronology of the Event**

193. The Contractor had planned installation of RO tanks from 01 October 2020. However, due to unforeseen circumstances the Contractor faced delay in receiving the delivery of R.O. Tanks.
194. The Contractor continuously followed up with the supplier regarding the delivery of tanks. The Contractor vide email dated 05 December 2020 informed the Employer that they had got update from the supplier regarding the delay in delivery of RO tanks. The Contractor added, as informed by the supplier, that due to factory machinery shutdown/ maintenance the tanks are not dispatched from USA and the same will be dispatched in next week.
195. The Contractor vide letter dated 30 December 2020<sup>98</sup> informed the Engineer regarding the official letter received stating the delay in delivery of tanks from the manufacturer. The

<sup>96</sup> Baseline start date of RO tank installation in Activity ID- A1360

<sup>97</sup> Received material (EOT chronology, page 22 of pdf)

<sup>98</sup>

Contractor added that the shipment is waiting for port clearance, but due to snowstorm in USA the ports are completely shut down. The Contractor stated, as informed by the manufacturer, that around second week of January the shipment might move, but there is still uncertainty due to adverse weather condition.

196. Finally, the Contractor received the material on 28 March 2021 and the Contractor commenced the installation on 05 April 2021.

### **Cause and Effect**

197. The commencement of installation of RO tanks was delayed due to unavailability of material at site.

### **Contractual Entitlement**

198. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.15. DE-15: DELAY DUE TO MODIFICATION OF RENDERING PLANT CONTROL PANEL ROOM SIZE**

### **Delay Period**

199. Delay Start Date: 25 October 2020<sup>99</sup>
200. Delay Finish Date: 06 January 2022<sup>100</sup>

### **Chronology of the Event**

201. The start date of the Delay event is considered as 25 October 2020 i.e., the Baseline start date of Blockwork & MEP Primary Work (Activity ID: A 22290).
202. The Engineer issued Engineer's Instruction (EI) 17 regarding modification of rendering plant control panel room size on 06 January 2022.
203. Hence the finish date of the delay event is considered as 06 January 2022.

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<sup>99</sup> Baseline start of Activity ID (A22290)

<sup>100</sup> Engineer Instruction (EI) 017 dated 06-01-2022

### Cause and Effect

204. The delay in issuing Instruction by Engineer hindered or hampered Works.

### Contractual Entitlement

205. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Instruction.
206. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
207. The above Delay event 'Delay due to modification of rendering plant control panel room size' was due to delay in finalizing to issue Instruction by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
208. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

### **4.1.16. DE-16: DELAY IN PROVISION OF CLEARANCE IN ACCOMODATION BUILDING FOR MEP WORKS**

#### **Delay Period**

209. Delay Start Date: 15 December 2020<sup>101</sup>
210. Delay Finish Date: 07 September 2022<sup>102</sup>

#### **Chronology of the Event**

211. The Start date of the Delay event is considered as 15 December 2020 i.e., the Baseline start of MEP Work at Accommodation Building (Activity ID: A3058710).

<sup>101</sup> Baseline start date of Activity ID-A3058710

<sup>102</sup> Ref/1050/985/22-04 dated 07-09-2022

212. The Contractor on 07 September 2022<sup>103</sup> intimated Engineer that Civil works in the Accommodation Building are still pending by the other Contractor appointed by the Client due to which the Contractor was not able to start the MEP Works.
213. The Finish date of the Delay event is considered as 07 September 2022.

### **Cause and Effect**

214. The Contractor was not provided with the clearance to Proceed the MEP Works of Accommodation Building.
215. In wait of the Engineer's/ Client's provision of clearance of the Accommodation Building, the execution of MEP Works got hindered or hampered.

### **Contractual Entitlement**

216. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of clearance.
217. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
218. The above Delay event 'Delay in provision of Clearance in Accommodation Building for MEP Works' was due to delay in provision of Clearance by other Contractor and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
219. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

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<sup>103</sup> Ref/1050/985/22-04 dated 07-09-2022

#### **4.1.17. DE-17: DELAY IN APPROVAL OF VARIATION FOR BOREWELL PUMP POWER SUPPLY**

##### **Delay Period**

220. Delay Start Date: 11 August 2021<sup>104</sup>
221. Delay Finish Date: 27 March 2022<sup>105</sup>

##### **Chronology of the Event**

222. This Delay event is Variation/additional work that is part of Bore well Pump & Distribution system in External works.
223. The Contractor submitted Shop Drawings to Engineer on 19 November 2020 and received comments on 07 December 2020.<sup>106</sup> The Shop Drawings were revised further and finally got approved on 19 May 2021.
224. Based on the approved Shop Drawings, the Contractor submitted Cost proposal for the same on 24 July 2021<sup>107</sup> to which the Engineer submitted Comments on 02 August 2021.
225. The Contractor again submitted the revised Cost proposal for Bore well pump power supply on 11 August 2021<sup>108</sup>. Hence it is considered as the start date of the delay event.
226. The Engineer issued Engineer's Instruction 22 on 27 March 2022<sup>109</sup> and instructed to provide the power supply to the borewell pumps as per approved shop drawings.
227. Hence the Finish date of the Delay event is considered as 27 March 2022.
228. However, the Contractor shall require 6 weeks for Procurement and delivery and 3 weeks for installation of the said variation.

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<sup>104</sup> Ref/1050/691 R1/21-05 dated 11-08-2021

<sup>105</sup> Engineer's instruction 22 dated 27-03-2022

<sup>106</sup> Page 27/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

<sup>107</sup> Ref/1050/691/21-05 dated 24-07-2021

<sup>108</sup> Ref/1050/691 R1/21-05 dated 11-08-2021

<sup>109</sup> SEMAC/PMC/1018/P1/T2/EI/22 dated 27-03-2022

### Cause and Effect

229. The Engineer delayed approval of the Cost proposal for Bore well pump power supply. This delay in approval of the variation hindered or hampered Works and also further delayed the Procurement and delivery of the required material for installation.

### Contractual Entitlement

230. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Instruction for Variation.
231. As per clause 13.3 of Variation procedure of General conditions of Contract, the Engineer shall review the Contractor's price submitted for Variation within 15 days of the Submission.
232. Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
233. The above Delay event 'Delay in approval of Variation for Bore well pump power supply' was due to delay in issue of Variation Instruction by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
234. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

### **4.1.18. DE-18: DELAY IN PROVISION OF DESIGN PARAMETERS OF SILOS/ BINS IN FEEDMILL**

#### **Delay Period**

235. Delay Start Date: 29 July 2020<sup>110</sup>
236. Delay Finish Date: 09 December 2020<sup>111</sup>

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<sup>110</sup> Baseline start date of Activity ID-A8140

<sup>111</sup> Email from Engineer dated 09-12-2020

### **Chronology of the Event**

237. The Start date of the Delay event is considered as 29 July 2020 i.e., the Baseline start of Silo Bins Supply and Installation (Activity ID: A8140).
238. The Contractor on 01 December 2020 informed Engineer to provide the data such as Load combination, dynamic/ static forces and other for the submission of Design calculations.
239. The Engineer on 09 December 2020 mailed Contractor the necessary data required for submission of Design calculation.
240. Based on the received information, the Contractor submitted the Design calculation for Silo/ Hopper on 31 December 2020<sup>112</sup> and the same was re-submitted on 21 January 2021.<sup>113</sup>
241. The Contractor further submitted Design calculation for Bins/ Silos on 09 February 2021<sup>114</sup>.
242. The Finish date of the Delay event is considered as 09 December 2020, the date on which the Contractor received the Design data.

### **Cause and Effect**

243. The Contractor was not provided with the necessary data for Design calculation and submission.
244. In wait of information from the Engineer, the Contractor could not Proceed with the designing of Works and hence got hindered or hampered.

### **Contractual Entitlement**

245. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/ Instructions/ Information.
246. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost- plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).

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<sup>112</sup> Ref/1050/513/20-04 dated 31-12-2020

<sup>113</sup> Ref/1050/534/21-04 dated 21-01-2021

<sup>114</sup> Ref/1050/566/21-04 dated 09-02-2021

247. The above Delay event 'Delay in provision of design parameters of Silos/Bins' was due to delay in providing sufficient information from the Engineer for Designing and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
248. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.19. DE-19: DELAY IN COMMENCEMENT OF FEED MILL 'A' FRAME FOR SILO ERECTION**

##### **Delay Period**

249. Delay Start Date: 25 October 2020<sup>115</sup>
250. Delay Finish Date: 10 May 2021<sup>116</sup>

##### **Chronology of the Event**

251. The start date of the Delay event is considered as 25 October 2020 i.e., the Baseline start date of the Silos Bins installation (Activity ID: A1760).
252. The Engineer provided Engineer's Instruction (EI) 004 for supply and Installation of feed mill 'A' frame for Silo erection on 10 May 2021.
253. Hence the finish date of the delay event is considered as 10 May 2021.
254. The Contractor requires 1 month for receipt of EI and Procurement, 2 months for Delivery and 1 months for installation.

##### **Cause and Effect**

255. The delay in finalizing the Cost and in issuing Instruction by Engineer hindered or hampered Works and also further delayed the Procurement and delivery of the Feed Mill 'A' frame for Silo erection.

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<sup>115</sup> Baseline start of Activity ID (A1760)

<sup>116</sup> Engineer's instruction 04 dated 10-05-2021

### **Contractual Entitlement**

256. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Instruction.
257. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
258. The above Delay event 'Delay in commencement of Feed mill 'A' frame for Silo erection' was due to delay in finalizing to issue Instruction by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
259. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.20. DE-20: DELAY IN COMMENCEMENT OF CENTRAL KITCHEN WORKS**

##### **Delay Period**

260. Delay Start Date: 30 June 2020<sup>117</sup>
261. Delay Finish Date: 30 December 2020<sup>118</sup>

##### **Chronology of the Event**

262. The Start date of the Delay event is considered as 30 June 2020 i.e., the Baseline start of the Central Kitchen Sub-structure Works- Surveying, Site Marking, Bench Mark Setup (Activity ID: CK6210).
263. The Engineer on 30 December 2020 mailed Contractor to Proceed and Start Central kitchen related Works as per the issued GFC Drawings and also instructed to submit Schedule, Shop Drawings, MAS (any specific for the Building), Variation proposal or any other relevant Documents for approvals or clarifications.

<sup>117</sup> Baseline start date of Surveying Works in Central Kitchen Activity ID-CK6210

<sup>118</sup> Email from resident Engineer dated 30-12-2020

264. The Contractor on 28 January 2021<sup>119</sup> mailed Engineer stating that the Contractor only received Civil GFC Drawings and requested to provide MEP GFC Drawings for Central Kitchen related Works.
265. The Finish date of the Delay event is considered as 30 December 2020 i.e., the date of the mail of Engineer to Proceed with the Works.

### **Cause and Effect**

266. The Contractor was not provided with the instruction to Proceed the Works of Central Kitchen.
267. In wait of the Engineer's/ Client's instructions to Proceed/ Start the works of the Central Kitchen, the execution of Works got hindered or hampered.

### **Contractual Entitlement**

268. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/ Instructions.
269. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
270. The above Delay event 'Delay in commencement of Central Kitchen Works' was due to delay in issue of Instruction to start from the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
271. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

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<sup>119</sup> Email from Contractor to Engineer dated 28-01-2021

#### **4.1.21. DE-21: DELAY DUE TO CHANGES IN ROOF AND FLOOR PLAN IN REVISED DRAWINGS IN CENTRAL KITCHEN**

##### **Delay Period**

272. Delay Start Date: 07 September 2020<sup>120</sup>

273. Delay Finish Date: 21 October 2021<sup>121</sup>

##### **Chronology of the Event**

274. As per the agreed Baseline, the Contractor has to start the Super structure Works as on 07 September 2020. Hence, the start date of the Delay event is considered as 07 September 2020.
275. The Contractor received the MEP and Architectural Drawings of Central kitchen on 11 August 2021.
276. Further the Contractor on 21 October 2021 received revised Drawings of Roof and Floor Plan with some changes such as additional Toilet Block and some changes in column dimensions.
277. The contractor suffered delay on account of late receipt of Revised Drawings and also additional time for the execution of additional Items. Hence the finish date of the Delay event is considered as 21 October 2021.
278. Further on receipt of revised IFC drawings, the Contractor has to prepare Shop Drawings and submit to Engineer for approval. The Contractor considers 30 days for the same in Delay Analysis.

##### **Cause and Effect**

279. Due to delay in Provision of revised Drawings to contractor by the Engineer/ Client, the Contractor could not execute the Works and there is requirement of additional time as estimated at the time of Bidding due to requirement of additional items such as Toilet Block.

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<sup>120</sup> Baseline start date of Activity ID-CK6720

<sup>121</sup> Page 25/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

### **Contractual Entitlement**

280. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/ Instructions.
281. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
282. The above Delay event 'Delay due to changes in Roof and Floor Plan in revised Drawings' was due to delay in issue of revised Drawings by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
283. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.22. DE-22: DELAY DUE TO STOPPAGE OF WORKS DUE TO NON-AVAILABILITY OF MEP DETAIL SERVICE DRAWINGS OF CENTRAL KITCHEN**

##### **Delay Period**

284. Delay Start Date: 25 February 2021<sup>122</sup>
285. Delay Finish Date: 11 August 2021<sup>123</sup>

##### **Chronology of the Event**

286. The Contractor on 28 January 2021<sup>124</sup> mailed Engineer stating that the Contractor only received Civil GFC Drawings and requested to provide MEP GFC Drawings for Central Kitchen related Works.
287. Due to non-availability of Details/Drawings of MEP, the Contractor could not proceed with the execution of Works beyond Plinth Beam. Hence, the Contractor had stopped the Works in Central Kitchen on 25 February 2021 after executing up to Plinth Beam PCC works.

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<sup>122</sup> Page 25/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

<sup>123</sup> Page 25/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

<sup>124</sup> Email from Contractor to Engineer dated 28-01-2021

288. Hence the Start date of the Delay event is considered as 25 February 2021.
289. The Contractor received the MEP and Architectural Drawings of Central kitchen on 11 August 2021.
290. Hence the finish date of the Delay event is considered as 11 August 2021.

### **Cause and Effect**

291. The Contractor was not provided with the MEP Drawings and hence could not proceed with the execution of Works beyond Plinth Beam and Contractor has no other position but to stop the Works.
292. In wait of Drawings from the Engineer/ Client, the Works of the Central Kitchen got hindered/ hampered.

### **Contractual Entitlement**

293. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/ Instructions.
294. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
295. The above Delay event 'Stoppage of Works due to non-availability of MEP detail Service Drawing' was due to delay in issue of Drawings by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
296. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.23. DE-23: DELAY IN APPROVAL OF STEEL STRUCTURE SHOP DRAWINGS OF CENTRAL KITCHEN**

##### **Delay Period**

297. Delay Start Date: 11 August 2021<sup>125</sup>
298. Delay Finish Date: 24 November 2021<sup>126</sup>

##### **Chronology of the Event**

299. The Contractor submitted Steel Structure Shop Drawings to Engineer for approval on 11 August 2021<sup>127</sup>. Hence, the start date of the Delay event is considered as 11 August 2021.
300. Further, the Drawings were approved by Engineer on 24 November 2021. Hence the finish date of the Delay event is considered as 24 November 2021.
301. The Contractor considers 60 days additional time for procurement and delivery of material as per the approved Shop Drawing.

##### **Cause and Effect**

302. Due to delay in approval of the Shop Drawings by the Engineer, the Contractor could not execute the Works or the portion of the Works got affected or Hindered.

##### **Contractual Entitlement**

303. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in approval of Shop Drawings.
304. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
305. The above Delay event 'Delay in approval of Steel Structure Shop Drawings' was due to delay in approval by the Engineer/ Client and was beyond Contractor's Scope and hence the

<sup>125</sup> Page 25/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

<sup>126</sup> MAS and Drawing Schedule

<sup>127</sup> Page 25/862 of Ref/1050/572-R6/21-02 dated 29-09-2022

Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.

306. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.24. DE-24: DELAY IN RECEIPT OF 11 KV SCHEMATIC LAYOUT DRAWING**

##### **Delay Period**

307. Delay Start Date: 01 August 2020<sup>128</sup>

308. Delay Finish Date: 13 February 2021<sup>129</sup>

##### **Chronology of the Event**

309. The start date of the Delay event is considered as 01 August 2020 i.e., the Baseline start date of Authority Approvals for External 11 KV Overhead lines (Activity ID: A1370).
310. The Contractor received 11 KV Distribution Schematic layout from Engineer by Mail dated 13 February 2021. The finalization of Schematic Drawing has delayed the Majan Approval for 11 KV Overhead lines.
311. Hence the finish date of the delay event is considered as 13 February 2021.

##### **Cause and Effect**

312. The delay in providing the 11 KV Schematic layout Drawings by Engineer delayed the process of obtaining the Approvals of Authorities for 11 KV overhead lines and hence hindered or hampered Works.

##### **Contractual Entitlement**

313. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/Instruction.

<sup>128</sup> Baseline start of Activity ID (A1370)

<sup>129</sup> Email from Engineer dated 13-02-2021

314. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
315. The above Delay event 'Delay in receipt of 11 KV Schematic layout drawings' was due to delay in providing Drawings by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
316. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.25. DE-25: DELAY IN FINALIZING LOCATION OF POLES DUE TO CLASH WITH LPG YARD**

##### **Delay Period**

317. Delay Start Date: 31 August 2020<sup>130</sup>
318. Delay Finish Date: 28 February 2022<sup>131</sup>

##### **Chronology of the Event**

319. The start date of the Delay event is considered as 31 August 2020 i.e., the Baseline start date of Installation of 11 KV Poles & its accessories (Activity ID: A7860).
320. The Contractor on 05 March 2022<sup>132</sup> informed Engineer that approved Shop Drawings of external overhead lines are as per issued IFC Drawings, Design and layout. The Contractor informed that during inspection to confirm location of poles before proceeding drilling, it was found that the external Overhead lines are passing over the buildings in LPG yard area that are executed as per the latest Architectural layout.

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<sup>130</sup> Baseline start of Activity ID (A7860)

<sup>131</sup> Email from Engineer dated 13-02-2021

<sup>132</sup> Ref/1050/923/22-05 dated 05-03-2022

321. Based on Consultant instruction, the Contractor had submitted revised Shop Drawings on 20 February 2022 to which the Consultant had visited site on 23 February 2022 and finally approved the location of poles on 28 February 2022.
322. Hence the finish date of the delay event is considered as 28 February 2022.

### **Cause and Effect**

323. The delay in finalizing location of poles due to clash with LPG Yard delayed the process of executing Works of 11 KV overhead lines and hence hindered or hampered Works.

### **Contractual Entitlement**

324. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
325. The above Delay event 'Delay in finalizing location of poles due to clash with LPG yard' was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
326. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

### **4.1.26. DE-26: DELAY IN RECEIPT OF ARCHITECTURAL DRAWINGS FOR EXTERNAL WORKS**

#### **Delay Period**

327. Delay Start Date: 10 September 2020<sup>133</sup>
328. Delay Finish Date: 09 February 2021<sup>134</sup>

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<sup>133</sup> Baseline start of Activity ID (A 30155)

<sup>134</sup> Email from Engineer dated 09-02-2021

### **Chronology of the Event**

329. The start date of the Delay event is considered as 10 September 2020 i.e., the Baseline start date of the Site Clearing and excavation for External Works (Activity ID: A 30155).
330. The Contractor received latest Architectural Drawings from Engineer by Mail dated 09 February 2021 due to which site plan MEP coordination layout has been delayed.
331. Hence the finish date of the delay event is considered as 09 February 2021.
332. The Contractor had considered 30 days for preparation and submission and approval of shop drawings, MEP coordination layout.

### **Cause and Effect**

333. The delay in providing the Architectural Drawings by Engineer hindered or hampered executing Works and in preparation of site plan MEP coordination layout.

### **Contractual Entitlement**

334. The Contractor from time-to-time intimated Engineer/ Client regarding the delay in provision of Drawings/Instruction.
335. As per clause 1.9 of General conditions of Contract, the Contractor is entitled for Extension of time under Sub-Clause 8.4 (Extension of Time for Completion) and Payment of any Cost-plus reasonable Profit under Sub-Clause 20.1 (Contractor's Claims).
336. The above Delay event 'Delay in commencement of Feed mill 'A' frame for Silo erection' was due to delay in finalizing to issue Instruction by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 of General conditions of the Contract.
337. Since above mentioned event was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect, in accordance with the provisions of the Contract and prevailing Omani laws.

#### **4.1.27. DE-27: DELAY DUE TO REVISED EQUIPMENT SUPPORT DRAWINGS AND APPROVAL OF VARIATIONS**

##### **Delay Period**

338. Delay Start Date: 13 June 2020<sup>135</sup>

339. Delay Finish Date: 05 October 2021<sup>136</sup>

##### **Chronology of the Event**

340. The Contractor vide letter dated 09 February 2021<sup>137</sup> informed the Engineer that first set of revised drawings were received from the Consultant on 10 November 2020 and the final set of drawings were received from the vendor on 21 December 2020 via email. The Contractor added that they have prepared and submitted the shop drawings but the approval of entire shop drawings is delayed from the Consultant due to which final quantity of SS cannot be finalized.
341. The Contractor vide letter dated 04 March 2021<sup>138</sup> submitted the revised approved shop drawings as per the modified equipment support drawings of the processing plant received through email dated 25 February 2021 from the Consultant.

Sl #	Description	Drg. No	Rev #
1	Proposal steel construction arrival, killing & evisceration line 1 (Sheet no. 1 of 2)	7272.DS01.B00.02	05
2	Proposal steel construction weighing / sorting line (Sheet no. 1 of 2)	7272.DS03.E00.02	01
3	Proposal steel construction Air Chill Tunnel-1 (sheet no. 1 of 2)	7272.DS03.D00.02	01

342. The Contractor vide letter dated 17 April 2021<sup>139</sup> clarified the Engineer regarding the delay in Processing Plant S.S. Supports. The Contractor informed that the final shop drawing was approved on 10 March 2021 post which the final SS quantity was determined. The Contractor added that the fabrication works at site were inspected by the Consultant on 05

<sup>135</sup> Baseline start date Activity ID – A2035

<sup>136</sup> EOT R6 Page 495 of pdf

<sup>137</sup> Ref/1050/565/20-04

<sup>138</sup> Ref/1050/606/21-02

<sup>139</sup> Ref/1050/654/21-04

April 2021 and on the same day base plates were delivered on the site, post which the the fixing of support at site started.

343. On 29 August 2021,<sup>140</sup> the Contractor informed the Engineer that they received drawings with changes via email on 22 August 2021.

1. For weighing and sorting line, as per revised drawing column support box section changed to 100x100x4mm, previously it is 80x80x3mm as per approved shop drawing
2. New stainless steel supports are included for weighing and sorting line, an addition of approximate 40 tonnage of material has been increasing than approved shop drawing
3. Layout /settingout changes in air chilling tunnel-1, as per new drawing, earlier both the air chill tunnel-1&2 having same layout / settingout.

The Contractor requested the Engineer to confirm the changes as those are different than the previously approved drawings as they already purchased and delivered 100% materials at site, and such changes would have additional cost and time implication.

344. The Contractor received the confirmation from the Consultant via email dated 05 October 2021.<sup>141</sup>

345. On 13 October 2021,<sup>142</sup> the Contractor submitted the cost variation due to processing plant revised equipment support drawings.

### **Contractual Entitlement**

346. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.28. DELAY IN PROVISION OF CLEARANCE FOR MEP WORKS AND EQUIPMENT SUPPORTS IN ZONE 1, 2 & 3**

##### **Delay Period**

DE No.	Delay Event	Delay Start Date	Delay Finish Date
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<sup>140</sup> Ref/1050/758/21-02

<sup>141</sup> Page 495 of 862 of EOT R6 Ref/1050/572R6/21-02

<sup>142</sup> Ref/1050/800/21-05

DE-28A	Delay in Provision of clearance for MEP works in Zone 1A and 1B	24-Jun-20 <sup>143</sup>	15-Jan-21 <sup>144</sup>
DE-28B	Delay in Provision of Clearance for Equipment Supports in Zone 2 and 3	24-Sep-20 <sup>145</sup>	24-Mar-21 <sup>146</sup>

### **Chronology of the Events**

347. The Contractor faced substantial delay in MEP works in Zone 1A and 1B due to unavailability of work space.
348. In Processing Plant Zone 1A and 1B, the Employer's material was stacked up resulting in no space for Contractor to work and movement of machinery. Due to this, the Contractor could not commence the MEP works.
349. It was on 15 January 2021 that the Contractor removed Line 01 Employer's equipment's & material and made their own work space. The Contractor was able to start MEP works in Zone 1A and 1B on 15 January 2021.
350. In Processing Plant Zone 1A and 1B, the Employer's material was stacked up resulting in no space for Contractor to work and restriction to movement of machinery. Due to this, the Contractor could not install supports in this area.
351. In Zone 2 and 3, the Contractor faced similar issues. The Contractor could not commence the MEP works as planned due to no work front/ no clearance. The other Contractor OSCO did not complete the civil works on time and provide clearance/ handover the building for MEP works to the Contractor.
352. The installation of equipment supports in Zone 2 and 3 started on 24 March 2021 due to such interface issues with other Contractors.

### **Cause and Effect**

353. The commencement of MEP works and equipment support works in Zone 1, 2 & 3 was affected due to non-availability of area/ workfront/ clearance.

<sup>143</sup> Baseline start date of MEP works (Activity ID - A1783, A1807)

<sup>144</sup> Contractor removed material and started working (EOT R6 chronology, Page 29)

<sup>145</sup> Baseline Start of Fabrication Works(A3057750)

<sup>146</sup> EOT R6 chronology, Page 30

### **Contractual Entitlement**

354. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.29. DE-29: SUPPLY OF PIPE, DUCT AND CABLE TRAY SUPPORT FOR MAVITEC WORKS**

##### **Delay Period**

355. Delay Start Date: 15 August 2020<sup>147</sup>

356. Delay Finish Date: 22 March 2022<sup>148</sup>

##### **Chronology of the Event**

357. The Contractor faced delay in approval of submitted proposal towards supply of pipe, duct and cable tray support for MAVITEC works.
358. As per the baseline programme, the MEP 1<sup>st</sup> & 2<sup>nd</sup> fix (Activity ID – A2023) was planned to commence on 15 August 2020. However, due to additional requirements put forth by the Employer/ Consultant, the commencement of works was hampered. The Contractor vide letter dated 20 February 2022<sup>149</sup> submitted the cost proposal to the Engineer.
359. The Engineer issued EI-20 on 22 March 2022 instructing the Contractor to supply the required supports as per the submitted proposal and MAVITEC (vendors) requirements.
360. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

361. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

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<sup>147</sup> Baseline start date Activity ID – A2023

<sup>148</sup> EI 20 issued

<sup>149</sup> Ref/1050/915/21-07

#### **4.1.30. DE-30: SUPPLY AND INSTALLATION OF CONTROL CABLES AND CABLE TRAY FOR EVAPORATORS IN CHILLING AREA 1 & 2 IN PROCESSING PLANT**

##### **Delay Period**

362. Delay Start Date: 15 August 2020<sup>150</sup>
363. Delay Finish Date: 21 August 2022<sup>151</sup>

##### **Chronology of the Event**

364. The Contractor faced delay in approval of submitted proposal towards supply and install the control cables and cable trays for evaporators in chilling area 1 & 2 in processing plant as per drawings and cable list.
365. As per the baseline programme, the MEP 1<sup>st</sup> & 2<sup>nd</sup> fix (Activity ID – A2023) was planned to commence on 15 August 2020. However, due to additional requirements put forth by the Employer/ Consultant, the progress of works was hampered.
366. The Engineer issued EI-25 on 21 August 2022 instructing the Contractor to supply and install the control cables and cable trays for evaporators in chilling area 1 & 2 in processing plant as per drawings and cable list.
367. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

##### **Contractual Entitlement**

368. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.31. DE-31: DELAY IN COMMENCEMENT OF SUPPLY AND INSTALLATION OF WEATHER PROOF DB IN PROCESSING PLANT**

##### **Delay Period**

369. Delay Start Date: 27 September 2020<sup>152</sup>

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<sup>150</sup> Baseline start date Activity ID-A2023

<sup>151</sup> EI 25 issued

<sup>152</sup> Baseline finish of MEP 1st and 2nd fix (A1783)

370. Delay Finish Date: 12 August 2021<sup>153</sup>

### **Chronology of the Event**

371. The Contractor faced delay in commencement of supply and installation of water proof DB in processing plant.
372. As per the baseline programme, the MEP 1<sup>st</sup> & 2<sup>nd</sup> fix (Activity ID – A1783) was planned to commence on 27 September 2020. The Contractor had procured all the Processing Plant DB as per the approved MAS and Shop drawing previously.
373. However, due to additional requirement of weather proof DB put forth by the Consultant during site walk on 08 March 2021, the Contractor vide letter dated 22 April 2021<sup>154</sup> submitted the details of DB's and cost proposal to the Engineer.
374. The Engineer issued EI-09 on 12 August 2021 instructing the Contractor to proceed with the supply and installation of the weather proof (IP65) DB enclosure at Processing Plant.
375. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

376. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.32. DE-32: DELAY IN COMMENCEMENT OF POLYTHENE SHEET AND PLYWOOD FOR BOLIDT FLOORING PROTECTION IN PROCESSING PLANT**

### **Delay Period**

377. Delay Start Date: 28 September 2020<sup>155</sup>

378. Delay Finish Date: 17 May 2021<sup>156</sup>

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<sup>153</sup> EI-09 issued

<sup>154</sup> Ref/1050/662/21-07

<sup>155</sup> Baseline start of Zone 1 Final Fix (A1786)

<sup>156</sup> EI-07 issued

### **Chronology of the Event**

379. The Contractor faced delay in commencement of Supplying and laying of the polythene sheet and plywood for Bolidt flooring protection in Processing plant.
380. As per the baseline programme, the MEP 1<sup>st</sup> & 2<sup>nd</sup> fix (Activity ID – A1786) was planned to commence on 28 September 2020. However, due to additional requirements put forth by the Employer/ Consultant, the progress of works was hampered. The Contractor vide letter (Rev 02) dated 27 March 2021 submitted the cost proposal to the Engineer
381. The Engineer issued EI-07 on 17 May 2021 instructing the Contractor to proceed with the Supplying and laying of the polythene sheet and plywood for Bolidt flooring protection in Processing plant.
382. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

383. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.33. DE-33: DELAY IN COMMENCEMENT AND FINALIZATION OF HOT WATER CIP SYSTEM IN PROCESSING PLANT**

##### **Delay Period**

384. Delay Start Date: 14 October 2020<sup>157</sup>
385. Delay Finish Date: 11 May 2021<sup>158</sup>

### **Chronology of the Event**

386. The Contractor faced delay in approval of submitted proposal towards supply and installation of the Hot water CIP system for processing plant.

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<sup>157</sup> Baseline start date of Activity ID – A28840

<sup>158</sup> EI-05 issued

387. As per the baseline programme, the Hot Water line piping work (Activity ID – A28840) was planned to commence on 14 October 2020.
388. However, due to additional requirements put forth by the Consultant vide email dated 14 January 2021, the Contractor vide letter dated 04 March 2021<sup>159</sup> submitted the proposal of Hot water CIP system for processing plant.
389. The Engineer issued EI-05 on 11 May 2021 instructing the Contractor to proceed with the supply and installation of the Hot water CIP system for processing plant as per Option 01.
390. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

391. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.34. DE-34: SUPPLY AND INSTALLATION OF PROCESSING PLANT SS SUPPORT AS PER CHANGES IN EQUIPMENT SUPPORT DRAWINGS**

##### **Delay Period**

392. Delay Start Date: 26 October 2020<sup>160</sup>
393. Delay Finish Date: 14 December 2021<sup>161</sup>

##### **Chronology of the Event**

394. The Contractor faced delay in approval of submitted proposal towards supply and installation of the S.S. supports as per the revised drawing issued by the Engineer.
395. As per the baseline programme, the works in Line 02 were planned to commence on 26 October 2020. However, due to additional requirements put forth by the Employer/ Consultant, the progress of works was hampered. The Contractor vide letter dated 13

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<sup>159</sup> Ref/1050/593R/21-02

<sup>160</sup> Baseline Start of Line 02 (Activity ID - A3057750)

<sup>161</sup> EI-12 issued

October 2021<sup>162</sup> submitted the proposal towards supply and installation of the S.S. supports as per the revised drawing issued by the Engineer.

396. The Engineer issued EI-12 on 14 December 2021 instructing the Contractor to proceed with the supply and installation of the S.S. supports as per the revised drawing issued (Weighing and sorting line revised drawing) and the subsequent cost proposal submitted by the Contractor.
397. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

398. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.35. DE-35: ADDITIONAL CABLE TRAYS FOR MEYN CONTROL PANEL**

### **Delay Period**

399. Delay Start Date: 27 October 2020<sup>163</sup>
400. Delay Finish Date: 06 January 2022<sup>164</sup>

### **Chronology of the Event**

401. The Contractor faced delay in approval of submitted variation proposal towards supply and installation of the additional cable trays as per the drawing from MEYN.
402. As per the baseline programme, the MEP final fix works were planned to commence on 27 October 2020. However, due to additional requirements put forth by the Employer/ Consultant, the progress of works was hampered. The Contractor vide letter dated 15 December 2021<sup>165</sup> submitted the proposal towards supply and installation of the additional cable trays.

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<sup>162</sup> Ref/1050/800/21-05

<sup>163</sup> Baseline finish date of MEP (Activity ID – A2026)

<sup>164</sup> EI-16 issued

<sup>165</sup> Ref/1050/861/21-07

403. The Engineer issued EI-16 on 06 January 2022 instructing the Contractor to proceed with the supply and installation of the additional cable trays as per the MEYN signed drawing and variation proposal submitted by Contractor.
404. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

405. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

#### **4.1.36. DE-36: SUPPLY AND INSTALLATION OF ISOLATORS FOR MEYN EQUIPMENTS**

##### **Delay Period**

406. Delay Start Date: 27 October 2020<sup>166</sup>

407. Delay Finish Date: 05 June 2022<sup>167</sup>

##### **Chronology of the Event**

408. The Contractor faced delay in approval of submitted proposal towards supply and install the 70 Nos 32A isolators for MEYN equipment's in processing plant as per vendor requirement.
409. As per the baseline programme, the MEP final fix works were planned to commence on 27 October 2020. However, due to additional requirements put forth by the Employer/ Consultant, the progress of works was hampered. The Contractor submitted the variation proposal towards supply and install the 70 Nos 32A isolators for MEYN equipment's in processing plant as per vendor requirement.
410. The Engineer issued EI-23 on 05 June 2022 instructing the Contractor to supply and install the 70 Nos 32A isolators for MEYN equipment's in processing plant as per vendor requirement and the comments in technically reviewed variation submitted by the Contractor.

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<sup>166</sup> Baseline finish date of MEP (Activity ID – A2026)

<sup>167</sup> EI-23 issued

411. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

### **Contractual Entitlement**

412. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

## **4.1.37. DE-37: SUPPLY AND INSTALLATION OF CUTUP AND PACKING EQUIPMENT ADDITIONAL UTILITY SERVICES**

### **Delay Period**

413. Delay Start Date: 11 November 2020

414. Delay Finish Date: 15 December 2021<sup>168</sup>

### **Chronology of the Event**

415. The Contractor faced delay in approval of submitted proposal towards supply and installation of the cutup & packing equipment additional utility services.
416. The Start date is considered as 11 November 2020, 120 days prior to the Planned completion of Project in order to complete additional scope/ variation within planned duration of the Project i.e., EI shall be issued at least 120 days prior to complete the variation works before the planned completion date.
417. However, due to additional requirements put forth by the Consultant vide email dated 19 April 2021, the Contractor vide letter dated 17 August 2021<sup>169</sup> submitted the cost proposal towards supply and installation of the cutup & packing equipment additional utility services.
418. The Engineer issued EI-20 on 22 March 2022 instructing the Contractor to supply and installation of the cutup & packing equipment additional utility services as per the submitted variation by the Contractor and as per the approved shop drawings.
419. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

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<sup>168</sup> EI-13 issued

<sup>169</sup> Ref/1050/690R2/21-07

## **Contractual Entitlement**

420. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

### **4.1.38. DE-38: SUPPLY AND INSTALLATION OF CUTUP AND PACKING EQUIPMENT ADDITIONAL ELECTRICAL SERVICES**

#### **Delay Period**

421. Delay Start Date: 11 November 2020

422. Delay Finish Date: 06 June 2022<sup>170</sup>

#### **Chronology of the Event**

423. The Contractor faced delay in approval of submitted proposal towards supply and installation of the cutup & packing equipment additional electrical services.
424. The Start date is considered as 11 November 2020, 120 days prior to the Planned completion of Project in order to complete additional scope/ variation within planned duration of the Project i.e., EI shall be issued at least 120 days prior to complete the variation works before the planned completion date.
425. However, due to additional requirements put forth by the Employer/ Consultant, the progress of works was hampered. The Contractor vide letter dated 20 February 2022<sup>171</sup> submitted the cost proposal towards supply and installation of the cutup & packing equipment additional electrical services.
426. The Engineer issued EI-24 on 06 June 2022 instructing the Contractor to proceed with the supply and installation of the cutup & packing equipment additional electrical services as per the approved shop drawings and the variation submitted by the Contractor.
427. The Contractor required 1 month for MAS and Shop drawing, 2 months for procurement and delivery, 1 month for installation and commissioning.

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<sup>170</sup> EI-24 issued

<sup>171</sup> Ref/1050/862R1/21-07

## **Contractual Entitlement**

428. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

### **4.1.39. DE-39: DELAY IN FEEDMILL READINESS FOR EQUIPMENT INSTALLATION WORKS**

#### **Delay Period**

429. Delay Start Date: 29 June 2020<sup>172</sup>

430. Delay Finish Date: 31 October 2021<sup>173</sup>

#### **Chronology of the Event**

431. The Start date of the Delay event is considered as 29 June 2020 i.e., the Baseline start of Feed mill readiness of equipment supplier to start installation (Activity ID: A305500).
432. The Contractor submitted shop drawings on 28 July 2020 and received partially approved drawings on 06 August 2020. Accordingly, the Contractor procured raw material MS steel and delivered to site. However, the Contractor could not start fabrication without KAHL (Client Contractor) instruction.
433. The Contractor requested for KAHL supervision during fabrication, however, KAHL has never provided supervision due to which the fabrication works for delayed.
434. The Contractor informed on 29 September 2022<sup>174</sup> that KAHL has not provided supervision as on 31 October 2021. Hence the finish date of the Delay event is considered as 31 October 2021.
435. The Contractor considers additional 30 days for the approval of Shop drawings and procurement, 60 days for delivery and fabrication of material and 30 days for installation Works.

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<sup>172</sup> Baseline start date of Activity ID- A305500

<sup>173</sup> Page 34 of 862 of Ref/1050/572-R6/21-02 dated 29-09-2022

<sup>174</sup> Ref/1050/572-R6/21-02 dated 29-09-2022

### Cause and Effect

436. The delay in provision of Work access had delayed the MEP 1<sup>st</sup> and 2<sup>nd</sup> fix Works.

### Contractual Entitlement

437. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

### **4.1.40. DE-40: DELAY IN FEEDMILL MEP WORKS DUE TO NON-AVAILABILITY OF WORK ACCESS.**

Sr. No	Building Name	Delay Start Date	Delay Finish Date
40A	Production Building	29 June 2020	31 October 2021
40B	Raw material Building	29 June 2020	25 January 2021
40C	Truck Intake Building	29 June 2020	28 September 2021
40D	Cleaning Building	29 June 2020	30 August 2021
40E	Finishing Good store	29 June 2020	16 April 2021
40F	Boiler House	29 June 2020	31 October 2021
40G	Compressor Room	29 June 2020	10 May 2021

### Chronology of the Event

438. The Contractor has to start the MEP 1<sup>st</sup> and 2<sup>nd</sup> as on 29 June 2020 as per Baseline programme. Hence it is considered as start date of the Delay event.

439. The Contractor could not start the MEP 1<sup>st</sup> ad 2<sup>nd</sup> fix as per the planned dates due to delay in provision of Work access by Client Contractor OSCO.

440. The finish date of the delay events is considered the dates of the provision of the Buildings for MEP works. The same were intimated by the Contractor on 29 September 2022.<sup>175</sup>

<sup>175</sup> Ref/1050/572-R6/21-02 dated 29-09-2022

### Cause and Effect

441. The delay in provision of Work access had delayed the MEP 1<sup>st</sup> and 2<sup>nd</sup> fix Works.

### Contractual Entitlement

442. The Contractor claims its entitlement for EOT under Sub-Clause 2.1, 8.4 (e), 8.5 and 20.1 of GCC/ PCC.

### **4.1.41. DE-41: DELAY IN CERTIFICATIONS AND RELEASE OF INTERIM PAYMENTS**

443. Delay Start Date: 15 August 2020<sup>176</sup>

444. Delay Finish Date: 30 September 2022

### Chronology of the Event

445. The Contractor on 28 October 2020<sup>177</sup> informed Engineer regarding the delay in payment of certified Interim Valuation 02 for an Amount of OMR 158,299.941.

446. The Contractor on 29 December 2020<sup>178</sup> informed Engineer regarding delay in payment of certified Interim Valuation 04 for an Amount of OMR 149,449.678.

447. The Contractor on 07 February 2021<sup>179</sup> informed Engineer regarding delay in payment of certified Interim Valuation 05 for an Amount of OMR 167,153.071. The Contractor also informed that 31 January 2021 is the cut-off date for the receipt of payment.

448. The Contractor on 10 March 2021<sup>180</sup> informed Engineer regarding delay in payment of certified Interim Valuation 06 for an Amount of OMR 289,100.136. The Contractor also informed that 03 March 2021 is the cut-off date for the receipt of payment.

449. The Contractor on 06 April 2021<sup>181</sup> informed Engineer regarding delay in payment of certified Interim Valuation 08 for an Amount of OMR 368,008.584. The Contractor also informed that 30 March 2021 is the cut-off date for the receipt of payment.

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<sup>176</sup> Delay in Payments occurred from August 2020

<sup>177</sup> Ref/1050/411/20-04 dated 28-10-2020

<sup>178</sup> Ref/1050/506/20-04 dated 29-12-2020

<sup>179</sup> Ref/1050/559/20-04 dated 07-02-2021

<sup>180</sup> Ref/1050/616/21-04 dated 10-03-2021

<sup>181</sup> Ref/1050/651/21-04 dated 06-04-2021

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450. The Contractor on 11 April 2021<sup>182</sup> informed Engineer regarding delay in payment of certified Interim Valuation 08 for an Amount of OMR 368,008.584. The Contractor also informed that 30 March 2021 is the cut-off date for the receipt of payment.
451. The Contractor on 03 May 2021<sup>183</sup> informed Engineer regarding delay in payment of certified Interim Valuation 08 for an Amount of OMR 327,654.145. The Contractor also informed that 30 April 2021 is the cut-off date for the receipt of payment.
452. The Contractor on 16 May 2021<sup>184</sup> informed Engineer regarding delay in payment of certified Interim Valuation 08 for an Amount of OMR 327,654.145. The Contractor also informed that 30 April 2021 is the cut-off date for the receipt of payment.
453. The Contractor on 20 May 2021<sup>185</sup> informed Engineer regarding delay in payment of certified Interim Valuation 08 for an Amount of OMR 327,654.145. The Contractor also informed that 30 April 2021 is the cut-off date for the receipt of payment.
454. The Contractor on 05 June 2021<sup>186</sup> informed Engineer that delay in releasing the Interim payment on time affected the Contractor's cashflow and the Contractor was not in position to pay staff, labour, suppliers.
455. The Contractor on 08 June 2021<sup>187</sup> informed Client that delay in release of Interim payments had affected the Project cashflow and the arrangement of Alternate funding is delayed as the Banks are not showing Confidence.
456. The Contractor and Client on 23 June 2021<sup>188</sup> signed Addendum No 1 to the Contract regarding 'Discounted Payment Plan' for approximate total Sum of OMR 5,600,000, subject to evaluation and Certification. The Contractor and Employer agreed that the Discounted payment shall be paid by the Employer to Contractor within 365 days from date of Certification. The Employer agreed to pay 20% of the Certified bill on due date of the

<sup>182</sup> Ref/1050/653/21-04 dated 11-04-2021

<sup>183</sup> Ref/1050/673/21-04 dated 03-05-2021

<sup>184</sup> Ref/1050/673R1/21-04 dated 16-05-2021

<sup>185</sup> Ref/1050/673R2/21-04 dated 20-05-2021

<sup>186</sup> Ref/1050/695/21-05 dated 05-06-2021

<sup>187</sup> Ref/1050/696/21-05 dated 08-06-2021

<sup>188</sup> Addendum No 1 to the Contract dated 12-05-2020

discounted bill. The Parties agreed that the Employer shall pay Contractor upfront Interest payment at 6.10% per annum or actual interest charged by the Bank whichever is lower.

457. The Contractor on 29 July 2021<sup>189</sup> informed Engineer regarding the delay in certifying Interim Bill 12.
458. The Contractor on 09 September 2021<sup>190</sup> informed Engineer that as per the Addendum to Contract, the Contractor had to receive 20% of the IPC 12, but the same had been delayed that is affecting the progress of site.
459. The Contractor on 27 October 2021<sup>191</sup> informed Engineer that delay in releasing the agreed 20% of the Certified amount was severely affecting the execution of Works.
460. The Contractor on 30 November 2021<sup>192</sup> informed Engineer that due to Delay in payment of IPC 14, the Contractor could not pay Subcontractor's, labour salary, staff salary, hired equipment rental charges, supplier's payment and fuel charges.
461. The Contractor on 17 February 2022<sup>193</sup> informed Engineer that due to delay in releasing the minimum agreed payment of 20%, the Banks had stopped processing/ approving the project financials such as releasing emergency fund.
462. The Contractor on 28 February 2022<sup>194</sup> informed Engineer that due to delay in releasing payments, the Works were stopped.
463. The Contractor on 03 April 2022<sup>195</sup> informed Engineer regarding the delay in release of 20% of the Certified bills of IPC 17, 18 &19 and that amounts to OMR 181,905.900.
464. The Contractor on 09 April 2022<sup>196</sup> informed Engineer regarding the stoppage of Bill discounting by the Bank Dhofar due to delay in release of 20 % of the IPC 17,18 &19.

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<sup>189</sup> Ref/1050/727/21-05 dated 29-07-2021

<sup>190</sup> Ref/1050/771/21-05 dated 09-09-2021

<sup>191</sup> Ref/1050/818/21-02 dated 27-10-2021

<sup>192</sup> Ref/1050/841/21-02 dated 30-11-2021

<sup>193</sup> Ref/1050/913/22-02 dated 17-02-2022

<sup>194</sup> Ref/1050/922/22-05 dated 28-02-2022

<sup>195</sup> Ref/1050/938/22-02 dated 03-04-2022

<sup>196</sup> Ref/1050/942/22-02 dated 09-04-2022

465. The Contractor on 23 April 2022<sup>197</sup> submitted Engineer the cash flow status as requested by the Engineer.
466. The Contractor on 21 June 2022<sup>198</sup> informed Engineer regarding delay in release of 20 % of certified IPC 20, the Bank stopped approving Project financials.
467. The Contractor on 12 July 2022<sup>199</sup> informed Engineer regarding delay in release of 20 % of certified IPC 20, the Bank stopped approving Project financials.
468. Further, the Works got suspended completely from 01 October 2022 on account of delay in interim payments.
469. The Contractor was asked to submit the Time Impact and Updated Programme provided the Works resume from 01 November 2023. The Contractor considers 25 additional days for the re-mobilization and initiation of Procurement.
470. Hence the start date and finish date of the ‘suspension of Works on account of delay in Payments’ is considered as 01 October 2022 and 01 November 2023.

### **Cause and Effect**

471. The Delay in Payments had severely affected the Cash flow of the project and had affected execution of the Project and further making Contractor to suspend the Works.

### **Contractual Entitlement**

472. The Contractor from time-to-time notified the Engineer regarding the delay in Payments.
473. As per Sub-Clause 14.7 (Payment) and 14.8 (Delayed Payment) of Particular/ General conditions of Contract, the Employer/ Client shall pay the Contractor within 30 days of the date of submission of the IPC.
474. Since the delay in payment was never envisaged at the time of bidding/ tendering of the Contract, the Contractor is entitled for additional time to complete the Work in all respect,

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<sup>197</sup> Ref/1050/948/22-02 dated 23-04-2022

<sup>198</sup> Ref/1050/963/22-02 dated 21-06-2022

<sup>199</sup> Ref/1050/971/22-02 dated 12-07-2022

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and additional costs incurring thereof in accordance with the provisions of the Contract and prevailing Omani laws

475. The above Delay event 'Delay in Interim Payments' was due to delay by the Engineer/ Client and was beyond Contractor's Scope and hence the Contractor is entitled for Extension of Time under Sub-Clause 8.4 and other Contractual provisions of General conditions of the Contract.

## PART - 5

### 5. DELAY ANALYSIS METHODOLOGY ADOPTED IN THIS SUBMISSION

#### 5.1. INTRODUCTION

476. This Delay Analysis is performed to analyse the details of the multiple delay and disruption events that occurred during the execution of the Project as on 31 March 2023, by establishing the Cause-and-Effect relationships of the delay events and assessing the impact of such events on the completion of the Project.
477. The delay analysis is performed on Primavera P6 using the baseline programme<sup>200</sup> and its monthly updates exchanged between the Contractor and the Engineer. The advantage of performing analysis with a software is that the critical path (which defines the duration of the Project) is defined by the software itself.

#### 5.2. SELECTION OF A SUITABLE DELAY ANALYSIS METHODOLOGY

478. There are many standard methodologies which are currently prevalent for performing a Delay Analysis, but each one has its own advantages as well as its limitations. Therefore, the selection of a suitable methodology is made, depending upon the various factors i.e., agreement conditions, Project complexity, Project status, availability of programmes, records and other governing factors.
479. The Society of Construction Law Delay and Disruption Protocol February 2017<sup>201</sup> (SCL Protocol) introduces 6 (six) different methods for conduct of delay analysis, refer the table below:

S. No.	Method of Analysis	Analysis Type	Critical Path Determined	Delay Impact Determined	Requires
1	Impacted As-Planned Analysis	Cause & Effect	Prospectively	Prospectively	<ul style="list-style-type: none"><li>• Logic linked baseline programme.</li></ul>

<sup>200</sup>

<sup>201</sup> The SCL Delay and Disruption Protocol 2017 states in Introduction (Para A, Page 1): “....The object of the Protocol is to provide useful guidance on some of the common delay and disruption issues that arise on construction projects, where one party wishes to recover from the other an extension of time (EOT) and/or compensation for the additional time spent and the resources used to complete the project...”.

S. No.	Method of Analysis	Analysis Type	Critical Path Determined	Delay Impact Determined	Requires
					<ul style="list-style-type: none"> <li>• A selection of delay events to be modelled.</li> </ul>
2	Time Impact Analysis	Cause & Effect	Contemporaneously	Prospectively	<ul style="list-style-type: none"> <li>• Logic linked baseline programme.</li> <li>• Update programmes or progress information with which to update the baseline programme.</li> <li>• A selection of delay events to be modelled.</li> </ul>
3	Time Slice Windows Analysis	Effect & Cause	Contemporaneously	Retrospectively	<ul style="list-style-type: none"> <li>• Logic linked baseline programme.</li> <li>• Update programmes or progress information with which to update the baseline programme.</li> </ul>
4	As-Planned versus As-Built Windows Analysis	Effect & Cause	Contemporaneously	Retrospectively	<ul style="list-style-type: none"> <li>• Baseline programme.</li> <li>• As-built data.</li> </ul>
5	Retrospective Longest Path Analysis	Effect & Cause	Retrospectively	Retrospectively	<ul style="list-style-type: none"> <li>• Baseline Programme.</li> <li>• As-built programme.</li> </ul>
6	Collapsed As-Built Analysis	Cause & Effect	Retrospectively	Retrospectively	<ul style="list-style-type: none"> <li>• Logic linked as-built programme.</li> <li>• A selection of delay events to be modelled.</li> </ul>

480. The method of delay analysis is specified under the Sub-Clause 20.1 of the Conditions of the Contract as the 'Time Impact Analysis (TIA)'. As the period of analysis is substantial, the TIA is performed using windows i.e., Time Impact Analysis with Windows.

481. The SCL Protocol (2nd Edition, February 2017) stipulates the following on TIA:

*'The time impact analysis involves introducing delay event subnetworks into a logic-linked baseline programme and recalculation of this updated programme using CPM programming software in order to determine the prospective impact the delay event would have on the then predicted completion dates. The baseline programme for each analysis can be either a contemporaneous programme or a contemporaneously updated baseline programme....'*

482. A relevant abstract of Core Principle 4 of the SCL Delay & Disruption Protocol 2017 which states,

***'Do not 'wait and see' regarding impact of delay events (contemporaneous analysis). The parties should attempt so far as possible to deal with the time impact of Employer Risk Events as the work proceeds (both in terms of EOT and compensation). Applications for an EOT should be made and dealt with as close in time as possible to the delay event that gives rise to the application. A 'wait and see' approach to assessing EOT is discouraged.'***

483. AACE Recommended Practice 52R-06: Prospective Time Analysis – As Applied in Construction also directs for use of TIA when the Project is ongoing. Certain relevant abstracts are produced below:

The prospective TIA procedure is performed while a project is on-going, and thus has a *forward-looking* or a *prospective analysis* perspective in near-real time context. Retrospective (forensic) TIA is not typically required during the execution of a project as a prospective TIA is a forecast designed to facilitate a timely contract adjustment prior to the actual work being completely performed.

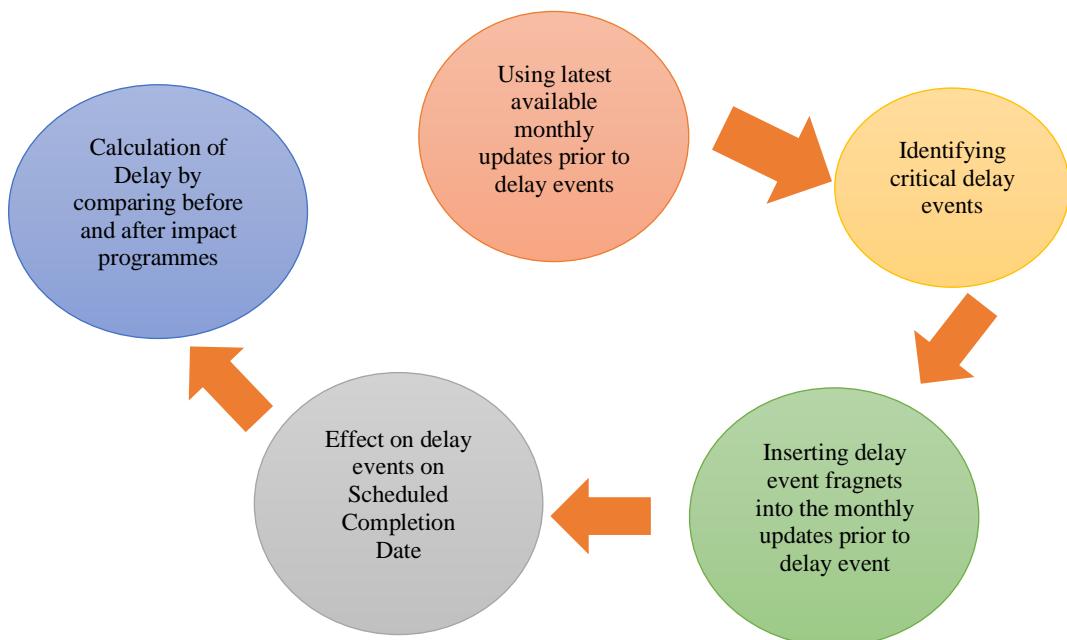
TIA is a simplified analytical procedure oftentimes specified on construction projects to facilitate the award of excusable days to project completion, due to delays caused by events that were not the responsibility of the contractor. The TIA process may also be used by the contractor as an internal method to evaluate alternatives to regain or improve project completion.

484. This methodology requires certain pre-conditions to be fulfilled in order to perform a delay analysis. Such conditions are produced below:

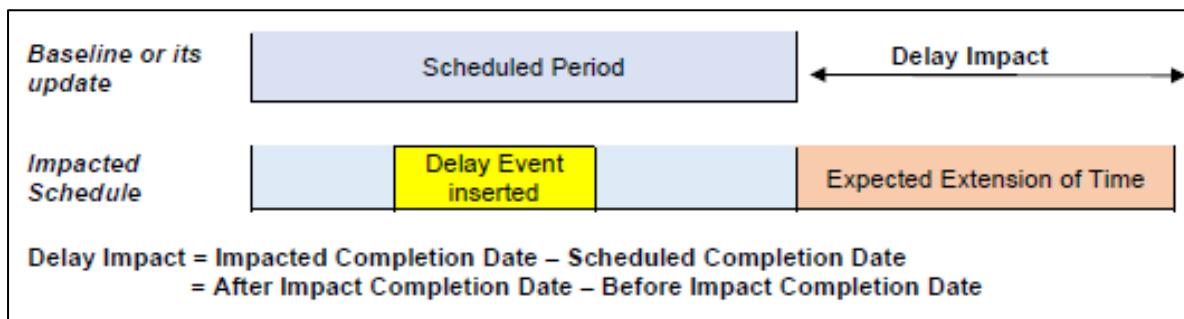
- i. Logic linked baseline programme, which is available in this case
- ii. Updated programmes which are available in this case
- iii. A selection of delay events to be modelled, also referred to as "delay fragnets"; this has been done in this analysis.

### 5.3. TIME IMPACT ANALYSIS PROCEDURE

485. The TIA approach uses contemporaneous Project documents, including Project programmes and updates, to identify critical activities, as well as to measure delays before and after the impact of delay events. The use of contemporaneous project information ensures that the analysis best reflects the party's knowledge of the project's status at the time the delays occurred.
486. Since, with each impact, the programme used will be monthly updated programme just before the occurrence of delay events, therefore, the critical path for each impacted programme is also updated as the works progress. Therefore, the impact of delay events over any period is measured on the latest critical path, and hence, the impact is calculated contemporaneously.
487. In TIA, the effect of delay event(s) on the programmed (or updated) completion date is analysed before and after the impact, while comparing the completion dates.
488. A graphical illustration of Time Impact Analysis adopted for EOT-2 is shown below:



489. Thereafter, the Employer's delay for entire period (up to cut-off date) is calculated by summing up the individual delays of each of the impacted programmes.
490. Overall, this method of assessing a delay is to establish the impact of the delay events on the Baseline Schedule or its update. It is a 'prospective' analysis method which means that it refers to the future and seeks to determine the likely impact of a delay event(s).
491. The effect of any delay event (falling on a critical path) on the schedule is demonstrated as under:



## PART-6

### 6. DELAY ANALYSIS

#### 6.1. DELAY BIFURCATION AND FRAGNETS

492. In this section major/ significant delays are identified for various activities and presented below in tabular form below. The start date and the finish date of the Delay event is added and also the details of the impacted activity (primary impacted activity) along with relationships. The sub-nets are incorporated in Delay Analysis.

DE No.	Delay event	Duration	Start date	Finish date	Activities Affected	Relationship
DE-01	Delay in Mobilization	69	12-May-20	19-Jul-20	A 8950	FS
DE-02	Delay in MAS Submission and Approval	69	12-May-20	19-Jul-20	A 8950	FS
DE-03	Delay in Shop Drawing Submission and Approval	841	12-May-20	30-Aug-22		
DE-04	Delay in Procuring SS 316 grade mil finish MAS	209	09-Jul-20	02-Feb-21	A2035	FS
DE-04-01	Additional time for Delivery of Material on Site	60	03-Feb-21	03-Apr-21	9	FS
DE-05	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20	03-Nov-20	A 8950	FS
DE-06	Delay in Rendering Plant Works	271	01-Oct-20	28-Jun-21	A 28500	FS
DE-07	Delay in Weighbridge No 2 and No 3 located near by the feed mill area	419	29-Sep-20	21-Nov-21	A 27770	FS
DE-08	Delay in Finalizing Vehicle Washing Areas	791	01-Aug-20	30-Sep-22	A 29090, A305950	FS
DE-08-01	Additional time for Delivery on Site	120	01-Oct-22	28-Jan-23	A 29090, A305950	FS, FF
DE-08-02	Additional time for Installation	60	29-Jan-23	29-Mar-23	A 29090, A305950	FS
DE-09	Delay in Swimming Pool works at recreation Centre	309	26-Aug-20	30-Jun-21	A 6600	FS

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>	<b>Activities Affected</b>	<b>Relationship</b>
DE-10	Delay in finalising and Delivery of Diesel Pump	218	01-Sep-20	06-Apr-21	A305920	FS
DE-10-01	Additional time for Shop drawing, MAS and Procurement	30	07-Apr-21	06-May-21	A305920	FS
DE-11	Delay due to Stoppage of Works as per Instruction of the Consultant due to Changes in Drawings in LPG Yard Works	408	14-Sep-20	26-Oct-21	A 21650, A 22700, A 23220, A 23740, A 24000, A 24520, A 24710, A 25760, A 26280, A 26800, A 27060, A 27580,	FS
DE-12	Delay in Commencement of Rendering Plant Installation Works	469	14-Sep-20	26-Dec-21	A8170	FS
DE-13	Delay of Central Laboratory works and MAS approval	629	16-Sep-20	06-Jun-22	A 1470	FS
DE-14	Delay in delivery of RO Tanks due to COVID-19	187	01-Oct-20	05-Apr-21	A1360	FS
DE-15	Modification of Rendering Plant Control Panel room size	439	25-Oct-20	06-Jan-22	A 22290	FS
DE-16	Delay in Provision of Clearance in Accommodation Building for MEP Works	632	15-Dec-20	07-Sep-22	A3058710	FS
DE-17	DELAY IN APPROVAL OF VARIATION FOR BOREWELL PUMP POWER SUPPLY	229	11-Aug-21	27-Mar-22	A305010	FS
DE-17-01	Additional time considered for Procurement and delivery	42	28-Mar-22	08-May-22	A305010	FS
DE-17-02	Additional time considered for installation	21	09-May-22	29-May-22	A305010	FS
DE-18	Delay in Provision of Design Parameters of Silo/Bins	134	29-Jul-20	09-Dec-20	A8140	FS
DE-19	Delay in Commencement of Feed mill 'A' Frame for Silo Erection	198	25-Oct-20	10-May-21	A1760	FS

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>	<b>Activities Affected</b>	<b>Relationship</b>
DE-19-01	Additional time for Shop drawing, MAS and Procurement	30	11-May-21	09-Jun-21	A1760	FS
DE-19-02	Additional time for Delivery on Site	60	10-Jun-21	08-Aug-21	A1760	FS
DE-19-03	Additional time for Installation	30	09-Aug-21	07-Sep-21	A1760	FS
DE-20	Delay in commencement of Central Kitchen Works	184	30-Jun-20	30-Dec-20	CK6210	FS
DE-21	DELAY DUE TO CHANGES IN ROOF AND FLOOR PLAN IN REVISED DRAWINGS IN CENTRAL KITCHEN	410	07-Sep-20	21-Oct-21	CK6720	FS
DE-21-01	Additional time for preparation of Shop drawings	30	22-Oct-21	20-Nov-21	CK6720	FS
DE-22	DELAY DUE TO STOPPAGE OF WORKS DUE TO NON- AVAILABILITY OF MEP DETAIL SERVICE DRAWINGS OF CENTRAL KITCHEN	168	25-Feb-21	11-Aug-21	CK6660	FS
DE-23	Delay in Approval of Steel Structure Shop Drawings of Central Kitchen area works	106	11-Aug-21	24-Nov-21	CK6660	FS
DE-23-01	Additional time for Procurement and Delivery	60	25-Nov-21	23-Jan-22	CK6660	FS
DE-24	Delay in receipt of 11 KV Schematic Layout Drawing	197	01-Aug-20	13-Feb-21	A1370	FS
DE-25	Delay in finalizing location of Poles due to clash with LPG Yard	547	31-Aug-20	28-Feb-22	A7860	FS
DE-26	DELAY IN RECEIPT OF ARCHITECTURAL DRAWINGS FOR EXTERNAL WORKS	153	10-Sep-20	09-Feb-21	A 30155	FS
DE-27	Delay due to revised Equipment Support Drawings and approval of Variations	480	13-Jun-20	05-Oct-21	A2035	FS
DE-28A	Delay in Provision of clearance for MEP works in Zone 1A and 1B	206	24-Jun-20	15-Jan-21	A1783, A1807	FS

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>	<b>Activities Affected</b>	<b>Relationship</b>
DE-28B	Delay in Provision of Clearance for Equipment Supports in Zone 2 and 3	182	24-Sep-20	24-Mar-21	A1831, A1855	FS
DE-29	Supply of Pipe, duct and Cable Tray support for Mavitec Works	585	15-Aug-20	22-Mar-22	A2023	FS
DE-29-01	Additional time for Shop drawing, MAS and Procurement	30	23-Mar-22	21-Apr-22	A2023	FS
DE-29-02	Additional time for Delivery on Site	60	22-Apr-22	20-Jun-22	A2023	FS
DE-29-03	Additional time for Installation	30	21-Jun-22	20-Jul-22	A2023	FS
DE-30	Supply and Installation of Control Cables and Cable Tray for Evaporators in Chilling Area 1 & 2 in Processing Plant	737	15-Aug-20	21-Aug-22	A2023	FS
DE-30-01	Additional time for Shop drawing, MAS and Procurement	30	22-Aug-22	20-Sep-22	A2023	FS
DE-30-02	Additional time for Delivery on Site	60	21-Sep-22	19-Nov-22	A2023	FS
DE-30-03	Additional time for Installation	30	20-Nov-22	19-Dec-22	A2023	FS
DE-31	Delay due to Supply and Installation of Weather Proof DB in Processing Plant	320	27-Sep-20	12-Aug-21	A1783	FF
DE-31-01	Additional time for Shop drawing, MAS and Procurement	30	13-Aug-21	11-Sep-21	A1783	FF
DE-31-02	Additional time for Delivery on Site	60	12-Sep-21	10-Nov-21	A1783	FF
DE-31-03	Additional time for Installation	30	11-Nov-21	10-Dec-21	A1783	FF
DE-32	Delay in Commencement of Polythene sheet and Plywood for Bolidt flooring protection (Processing Plant)	232	28-Sep-20	17-May-21	A1786	FS
DE-32-01	Additional time for Shop drawing, MAS and Procurement	30	18-May-21	16-Jun-21	A1786	FS
DE-32-02	Additional time for Delivery on Site	60	17-Jun-21	15-Aug-21	A1786	FS

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>	<b>Activities Affected</b>	<b>Relationship</b>
DE-32-03	Additional time for Installation	30	16-Aug-21	14-Sep-21	A1786	FS
DE-33	Delay in Commencement and Finalisation of Hot water CIP system (Processing Plant)	210	14-Oct-20	11-May-21	A 28840	FS
DE-33-01	Additional time for Shop drawing, MAS and Procurement	30	12-May-21	10-Jun-21	A 28840	FS
DE-33-02	Additional time for Delivery on Site	60	11-Jun-21	09-Aug-21	A 28840	FS
DE-33-03	Additional time for Installation	30	10-Aug-21	08-Sep-21	A 28840	FS
DE-34	Supply and Installation of Processing Plant SS Support as per changes in Equipment support drawings	415	26-Oct-20	14-Dec-21	A3057750	FS
DE-34-01	Additional time for Shop drawing, MAS and Procurement	30	15-Dec-21	13-Jan-22	A3057750	FS
DE-34-02	Additional time for Delivery on Site	60	14-Jan-22	14-Mar-22	A3057750	FS
DE-34-03	Additional time for Installation	30	15-Mar-22	13-Apr-22	A3057750	FS
DE-35	Additional Cable Trays for MEYN Control Panel	437	27-Oct-20	06-Jan-22	A2026	FS
DE-35-01	Additional time for Shop drawing, MAS and Procurement	30	07-Jan-22	05-Feb-22	A2026	FS
DE-35-02	Additional time for Delivery on Site	60	06-Feb-22	06-Apr-22	A2026	FS
DE-35-03	Additional time for Installation	30	07-Apr-22	06-May-22	A2026	FS
DE-36	Supply and Installation of isolators for MEYN Equipment's	587	27-Oct-20	05-Jun-22	A2026	FS
DE-36-01	Additional time for Shop drawing, MAS and Procurement	30	06-Jun-22	05-Jul-22	A2026	FS
DE-36-02	Additional time for Delivery on Site	60	06-Jul-22	03-Sep-22	A2026	FS
DE-36-03	Additional time for Installation	30	04-Sep-22	03-Oct-22	A2026	FS
DE-37	Supply and Installation of Cut up and Packing	400	11-Nov-20	15-Dec-21	A1882, A3057950	FS

<b>DE No.</b>	<b>Delay event</b>	<b>Duration</b>	<b>Start date</b>	<b>Finish date</b>	<b>Activities Affected</b>	<b>Relationship</b>
	equipment additional utility Services					
DE-37-01	Additional time for Shop drawing, MAS and Procurement	30	16-Dec-21	14-Jan-22	A1882, A3057950	FS
DE-37-02	Additional time for Delivery on Site	60	15-Jan-22	15-Mar-22	A1882, A3057950	FS
DE-37-03	Additional time for Installation	30	16-Mar-22	14-Apr-22	A1882, A3057950	FS
DE-38	Supply and Installation of Cut up and Packing equipment additional electrical Services	573	11-Nov-20	06-Jun-22	A1882, A3057950	FS
DE-38-01	Additional time for Shop drawing, MAS and Procurement	30	07-Jun-22	06-Jul-22	A1882, A3057950	FS
DE-38-02	Additional time for Delivery on Site	60	07-Jul-22	04-Sep-22	A1882, A3057950	FS
DE-38-03	Additional time for Installation	30	05-Sep-22	04-Oct-22	A1882, A3057950	FS
DE-39	Delay in Feed mill readiness for equipment Installation Works	490	29-Jun-20	31-Oct-21	A305500	FS
DE-40	Delay in feed mill MEP works due to non-availability of Work access					
DE-40A	Production Building	490	29-Jun-20	31-Oct-21	A1130	FS
DE-40B	Raw material Building	211	29-Jun-20	25-Jan-21	A1200	FS
DE-40C	Truck Intake Building	457	29-Jun-20	28-Sep-21	A1260	FS
DE-40D	Cleaning Building	428	29-Jun-20	30-Aug-21	A1320	FS
DE-40E	Finishing Good store	292	29-Jun-20	16-Apr-21	A1380	FS
DE-40F	Boiler House	490	29-Jun-20	31-Oct-21	A3057530	FS
DE-40G	Compressor Room	316	29-Jun-20	10-May-21	A3057800	FS
DE-40H	Flat store	541	29-Jun-20	21-Dec-21	A1080	FS
DE-41	Delay in Interim Payments	777	15-Aug-20	30-Sep-22		
DE-41A	Suspension of Works on account of Delay in Payment	396	01-Oct-22	31-Oct-23	Pending and not started activities	FS

DE No.	Delay event	Duration	Start date	Finish date	Activities Affected	Relationship
DE-41B	Additional time for re-mobilization and Initiation of Procurement	25	01-Nov-23	25-Nov-23	Pending and not started activities	FS

## 6.2. WINDOW SLICE/ WINDOW DURATION

493. Based on available records, overall Project duration and Delay events, the Contractor has taken the Delay Analysis in 5 Windows for reasonable accuracy of the analysis.

### 494. Windows

#### **Window 01 – From Start (i.e., 12 May 2020) to 31 March 2021**

The Planned completion date of the Project was 11 March 2021. The first window analyses the impact of delays at the end of planned completion date.

#### **Window 02 – From 31 March 2021 to 30 September 2021 (6 months)**

#### **Window 03 – From 30 September 2021 to 31 March 2022 (6 months)**

#### **Window 04 – From 31 March 2022 to 30 September 2022 (6 months)**

#### **Window 05 – From 30 September 2022 to 31 October 2023 (Period of Suspension of Works)**

## 6.3. WINDOW ANALYSIS

### 6.3.1. Time Slice No.1 – Period from 12 May 2020 to 31 March 2021

#### 495. Description

First period of analysis taken for the period commencing 12 May 2020

The analysis is based on delay events from 12 May 2020 to 31 March 2021

Time slice no.1 consists of baseline programme of Data Date 12 May 2020

#### 496. Delay Events for Time slice no.1

497. The delays impacting upon the programme in this period are depicted in the screenshot below.

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
DELAY EVENTS		324	12-May-20	31-Mar-21
Delay in Mobilization		69	12-May-20	19-Jul-20
DE 01-1000	Delay in Mobilization	69	12-May-20*	19-Jul-20
Delay in MAS Submission and Approval		69	12-May-20	19-Jul-20
DE 02-1000	Delay in MAS Submission and Approval	69	12-May-20*	19-Jul-20
Delay in Shop Drawing Submission and Approval		324	12-May-20	31-Mar-21
DE 03-1000	Delay in Shop Drawing Submission and Approval	324	12-May-20*	31-Mar-21
Delay in Procuring SS 316 grade mil finish MAS		266	09-Jul-20	31-Mar-21
DE 04-1000	Delay in MAS and Procuring SS 316 grade mil f	209	09-Jul-20*	02-Feb-21
DE 04-1010	Additional time for Delivery of Material on Site	57	03-Feb-21*	31-Mar-21
Delay of Aeration Tank in WWTP Area Works,		117	10-Jul-20	03-Nov-20
DE 05-1000	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20*	03-Nov-20
Delay in Rendering Plant Works		182	01-Oct-20	31-Mar-21
DE 06-1000	Delay in Rendering Plant Works	182	01-Oct-20*	31-Mar-21
Delay in Weighbridge No 2 and No 3 located near by the feed mill area		184	29-Sep-20	31-Mar-21
DE 07-1000	Delay in Weighbridge No 2 and No 3 located n	184	29-Sep-20*	31-Mar-21
Delay in Finalizing Vehicle Washing Areas		243	01-Aug-20	31-Mar-21
DE 08-1000	Delay in Finalizing Vehicle Washing Areas	243	01-Aug-20*	31-Mar-21
Delay in Swimming Pool works at recreation Centre		218	26-Aug-20	31-Mar-21
DE 09-1000	Delay in Swimming Pool works at recreation Ce	218	26-Aug-20*	31-Mar-21
Diesel Pump Delivery and Installation		212	01-Sep-20	31-Mar-21
DE 10-1000	Delay in finalising and Delivery of Diesel Pump	212	01-Sep-20*	31-Mar-21
Variation/ Additional Work		275	30-Jun-20	31-Mar-21
DE 11-1000	Delay due to Stoppage of Works as per Instruc	199	14-Sep-20*	31-Mar-21
DE 20-1000	Delay in commencement of Central Kitchen Wo	184	30-Jun-20*	30-Dec-20
DE 21-1000	DELAY DUE TO CHANGES IN ROOF AND FL	206	07-Sep-20*	31-Mar-21
DE 22-1000	DELAY DUE TO STOPPAGE OF WORKS DUE	35	25-Feb-21*	31-Mar-21
Delay in Rendering Plant Installation Works		199	14-Sep-20	31-Mar-21
DE 12-1000	Delay in Commencement of Rendering Plant Ins	199	14-Sep-20*	31-Mar-21
Delay of Central Laboratory works and MAS approval		197	16-Sep-20	31-Mar-21
DE 13-1000	Delay of Central Laboratory works and MAS app	197	16-Sep-20*	31-Mar-21

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
□ Delay in delivery of RO Tanks due to Covid 19		182	01-Oct-20	31-Mar-21
DE 14-1000	Delay in delivery of RO Tanks due to Covid 19	182	01-Oct-20*	31-Mar-21
□ Modification of Rendering Plant Control Panel room size		158	25-Oct-20	31-Mar-21
DE 15-1000	Modification of Rendering Plant Control Panel r	158	25-Oct-20*	31-Mar-21
□ Delay in Provision of Clearance in Accomodation Building for MEP Works		107	15-Dec-20	31-Mar-21
DE 16-1000	Delay in Provision of Clearance in Accomodatio	107	15-Dec-20*	31-Mar-21
□ Delays in Feed Mill Works		276	29-Jun-20	31-Mar-21
DE 18-1000	Delay in Provision of Design Parameters of Silo,	134	29-Jul-20*	09-Dec-20
DE 19-1000	Delay in Commencement of Feed mill 'A' Frame	158	25-Oct-20*	31-Mar-21
DE 39-1000	Delay in Feedmill readiness for equipment Instal	276	29-Jun-20*	31-Mar-21
DE 40A-1000	Delay in MEP Works in Production Building	276	29-Jun-20*	31-Mar-21
DE 40B-1000	Delay in MEP Works in Raw material Building	211	29-Jun-20*	25-Jan-21
DE 40C-1000	Delay in MEP Works in Truck Intake Building	276	29-Jun-20*	31-Mar-21
DE 40D-1000	Delay in MEP Works in Cleaning Building	276	29-Jun-20*	31-Mar-21
DE 40E-1000	Delay in MEP Works in Finishing Good store	276	29-Jun-20*	31-Mar-21
DE 40F-1000	Delay in MEP Works in Boiler House	276	29-Jun-20*	31-Mar-21
DE 40G-1000	Delay in MEP Works in Compressor Room	276	29-Jun-20*	31-Mar-21
□ Delays in External Works		243	01-Aug-20	31-Mar-21
DE 24-1000	Delay in receipt of 11 KV Schematic Layout Dra	197	01-Aug-20*	13-Feb-21
DE 25-1000	Delay in finalizing location of Poles due to clash	213	31-Aug-20*	31-Mar-21
DE 26-1000	DELAY IN RECEIPT OF ARCHITECTURAL DF	153	10-Sep-20*	09-Feb-21
□ Delays in Processing Plant		292	13-Jun-20	31-Mar-21
DE 27-1000	Delay due to revised Equipment Support Drawin	292	13-Jun-20*	31-Mar-21
DE 28A-1000	Delay in Provision of clearance for MEP works i	206	24-Jun-20*	15-Jan-21
DE 28B-1000	Delay in Provision of Clearance for Equipment S	182	24-Sep-20*	24-Mar-21
DE 29-1000	Supply of Pipe, duct and Cable Tray support fo	229	15-Aug-20*	31-Mar-21
DE 30-1000	Supply and Installation of Control Cables and Ca	229	15-Aug-20*	31-Mar-21
DE 31-1000	Delay in Supply and Installation of Weather Pro	186	27-Sep-20*	31-Mar-21
DE 32-1000	Delay in Commencement of Polythene sheet an	185	28-Sep-20*	31-Mar-21
DE 33-1000	Delay in Commencement and Finalisation of Ho	169	14-Oct-20*	31-Mar-21
DE 34-1000	Supply and Installation of Processing Plant SS	157	26-Oct-20*	31-Mar-21

Activity ID	Activity Name	Original Duration	Start	Finish
DE 35-1000	Additional Cable Trays for MEYN Control Panel	156	27-Oct-20*	31-Mar-21
DE 36-1000	Supply and Installation of isolators for MEYN Ec	156	27-Oct-20*	31-Mar-21
DE 37-1000	Supply and Installation of Cut up and Packing e	141	11-Nov-20*	31-Mar-21
DE 38-1000	Supply and Installation of Cut up and Packing e	141	11-Nov-20*	31-Mar-21
□ Delay in Interim Payments		229	15-Aug-20	31-Mar-21
DE 41-1000	Delay in Interim Payments	229	15-Aug-20*	31-Mar-21

498. The delay events in the snapshot above are used for time slice no.1 with a cut-off date of 31 March 2021. The Delay events are sliced for the period between 12 May 2020 to 31 March 2021. The delay event activities are linked to the updated activities affected due to the delay

event and the impact is measured for the particular time slice. The relationships for delay events are as shown in Section 6.1 of this report.

#### 499. Entitlement Programme, -W01A

500. Programme W01A shows that when all the delays noted above are entered into the analysis, the completion of project is impacted as shown below.

Project Milestone		Contract Completion (a)	Completion Date with delay insertion W01A (b)	Impacted completion date after delay insertion W01B (c)	Delay (in days)	
Sr No	Description				Client(d= b-a)	Contractor (e = c-b)
1	Window 1	11-Mar-21	13-Dec-21	13-Dec-21	277	0

501. The analysis has calculated that completion date has been impacted by 277 Calendar days (Cumulative Impact of all delay events) in this period.

The Client is culpable for 277 days in this period.

The Contractor has delayed for 0 days in this period.

502. The snippet of Longest path is presented below:

Activity ID	Activity Name	Original Duration	Start	Finish	Actual Start	Actual Finish	Activity % Complete	Total Float
- A'Namaa TIA - B2 (i)-W01B		406	26-Aug-20 A	13-Dec-21	26-Aug-20			-237
PROJECT MILESTONE		0	13-Dec-21	13-Dec-21				-277
A1030	Project Finish	0		13-Dec-21*			0%	-277
DELAY EVENTS		218	26-Aug-20 A	31-Mar-21	26-Aug-20			-277
Delay in Swimming Pool works at recreation Centre		218	26-Aug-20 A	31-Mar-21	26-Aug-20			-277
DE 09-1000	Delay in Swimming Pool works at recreation Ce	218	26-Aug-20 A	31-Mar-21	26-Aug-20		99.7%	-277
MILESTONE-5		257	31-Mar-21	13-Dec-21				-277
RECREATION CENTRE		215	31-Mar-21	01-Nov-21				-277
+ SUBSTRUCTURE		94	31-Mar-21	03-Jul-21				-277
+ SUPERSTRUCTURE		45	03-Jul-21	17-Aug-21				-277
+ FINISHING WORKS		76	17-Aug-21	01-Nov-21				-277
HANDING OVER		42	01-Nov-21	13-Dec-21				-277
A 30260	Site Cleaning	7	01-Nov-21	08-Nov-21			0%	-277
A 30270	De-Mobilisation	5	08-Nov-21	13-Nov-21			0%	-277
A 30280	RDP Inspection & Approval	7	13-Nov-21	20-Nov-21			0%	-277
A 30320	Attending Snags	19	23-Nov-21	12-Dec-21			0%	-277
A 30330	Final Handing Over	1	12-Dec-21	13-Dec-21			0%	-277

503. The detailed critical path is attached as Annexure 01<sup>202</sup> and Annexure 02<sup>203</sup>.

<sup>202</sup> Annexure 01 - Longest Path - W01A

<sup>203</sup> Annexure 02 - Longest Path - W01B

### 6.3.2. Time Slice No.2 – Period from 31 March 2021 to 30 September 2021

#### 504. Description

First period of analysis taken for the period commencing 31 March 2021

The analysis is based on delay events from 31 March 2021 to 30 September 2021

Time slice no.2 consists of baseline programme of Data Date 31 March 2021

#### 505. Delay Events for Time slice no.2

506. The delays impacting upon the programme in this period are depicted in the screenshot below.

Activity ID	Activity Name	Original Duration	Start	Finish
DELAY EVENTS		507	12-May-20 A	30-Sep-21
Delay in Mobilization		69	12-May-20 A	19-Jul-20 A
DE 01-1000	Delay in Mobilization	69	12-May-20 A	19-Jul-20 A
Delay in MAS Submission and Approval		69	12-May-20 A	19-Jul-20 A
DE 02-1000	Delay in MAS Submission and Approval	69	12-May-20 A	19-Jul-20 A
Delay in Shop Drawing Submission and Approval		507	12-May-20 A	30-Sep-21
DE 03-1000	Delay in Shop Drawing Submission and Approval	507	12-May-20 A	30-Sep-21
Delay in Procuring SS 316 grade mil finish MAS		269	09-Jul-20 A	03-Apr-21
DE 04-1000	Delay in MAS and Procuring SS 316 grade mil f	209	09-Jul-20 A	02-Feb-21 A
DE 04-1010	Additional time for Delivery of Material on Site	60	03-Feb-21 A	03-Apr-21
Delay of Aeration Tank in WWTP Area Works,		117	10-Jul-20 A	03-Nov-20 A
DE 05-1000	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20 A	03-Nov-20 A
Delay in Rendering Plant Works		271	01-Oct-20 A	28-Jun-21
DE 06-1000	Delay in Rendering Plant Works	271	01-Oct-20 A	28-Jun-21
Delay in Weighbridge No 2 and No 3 located near by the feed mill area		367	29-Sep-20 A	30-Sep-21
DE 07-1000	Delay in Weighbridge No 2 and No 3 located n	367	29-Sep-20 A	30-Sep-21
Delay in Finalizing Vehicle Washing Areas		426	01-Aug-20 A	30-Sep-21
DE 08-1000	Delay in Finalizing Vehicle Washing Areas	426	01-Aug-20 A	30-Sep-21
Delay in Swimming Pool works at recreation Centre		309	26-Aug-20 A	30-Jun-21
DE 09-1000	Delay in Swimming Pool works at recreation Ce	309	26-Aug-20 A	30-Jun-21
Diesel Pump Delivery and Installation		248	01-Sep-20 A	06-May-21
DE 10-1000	Delay in finalising and Delivery of Diesel Pump	218	01-Sep-20 A	06-Apr-21
DE 10-1010	Additional time for Shop drawing, MAS and Proc	30	07-Apr-21*	06-May-21
Variation/ Additional Work		458	30-Jun-20 A	30-Sep-21
DE 11-1000	Delay due to Stoppage of Works as per Instruc	382	14-Sep-20 A	30-Sep-21
DE 17-1000	DELAY IN APPROVAL OF VARIATION FOR B	51	11-Aug-21*	30-Sep-21
DE 20-1000	Delay in commencement of Central Kitchen Wo	184	30-Jun-20 A	30-Dec-20 A
DE 21-1000	DELAY DUE TO CHANGES IN ROOF AND FL	389	07-Sep-20 A	30-Sep-21
DE 22-1000	DELAY DUE TO STOPPAGE OF WORKS DUE	168	25-Feb-21 A	11-Aug-21
DE 23-1000	Delay in Approval of Steel Structure Shop Draw	51	11-Aug-21*	30-Sep-21

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
	Delay in Rendering Plant Installation Works	382	14-Sep-20 A	30-Sep-21
DE 12-1000	Delay in Commencement of Rendering Plant Inst	382	14-Sep-20 A	30-Sep-21
	Delay of Central Laboratory works and MAS approval	380	16-Sep-20 A	30-Sep-21
DE 13-1000	Delay of Central Laboratory works and MAS app	380	16-Sep-20 A	30-Sep-21
	Delay in delivery of RO Tanks due to Covid 19	187	01-Oct-20 A	05-Apr-21
DE 14-1000	Delay in delivery of RO Tanks due to Covid 19	187	01-Oct-20 A	05-Apr-21
	Modification of Rendering Plant Control Panel room size	341	25-Oct-20 A	30-Sep-21
DE 15-1000	Modification of Rendering Plant Control Panel r	341	25-Oct-20 A	30-Sep-21
	Delay in Provision of Clearance in Accomodation Building for MEP Works	290	15-Dec-20 A	30-Sep-21
DE 16-1000	Delay in Provision of Clearance in Accomodatio	290	15-Dec-20 A	30-Sep-21
	Delays in Feed Mill Works	459	29-Jun-20 A	30-Sep-21
DE 18-1000	Delay in Provision of Design Parameters of Silo,	134	29-Jul-20 A	09-Dec-20 A
DE 19-1000	Delay in Commencement of Feed mill 'A' Frame	198	25-Oct-20 A	10-May-21
DE 19-1010	Additional time for Shop drawing, MAS and Proc	30	11-May-21*	09-Jun-21
DE 19-1020	Additional time for Delivery on Site	60	10-Jun-21*	08-Aug-21
DE 19-1030	Additional time for Installation	30	09-Aug-21*	07-Sep-21
DE 39-1000	Delay in Feedmill readiness for equipment Instal	459	29-Jun-20 A	30-Sep-21
DE 40A-1000	Delay in MEP Works in Production Building	459	29-Jun-20 A	30-Sep-21
DE 40B-1000	Delay in MEP Works in Raw material Building	211	29-Jun-20 A	25-Jan-21 A
DE 40C-1000	Delay in MEP Works in Truck Intake Building	457	29-Jun-20 A	28-Sep-21
DE 40D-1000	Delay in MEP Works in Cleaning Building	428	29-Jun-20 A	30-Aug-21
DE 40E-1000	Delay in MEP Works in Finishing Good store	292	29-Jun-20 A	16-Apr-21
DE 40F-1000	Delay in MEP Works in Boiler House	459	29-Jun-20 A	30-Sep-21
DE 40G-1000	Delay in MEP Works in Compressor Room	316	29-Jun-20 A	10-May-21
DE 40H-1000	Delay in MEP Works in Flat Store	459	29-Jun-20 A	30-Sep-21
	Delays in External Works	426	01-Aug-20 A	30-Sep-21
DE 24-1000	Delay in receipt of 11 KV Schematic Layout Dra	197	01-Aug-20 A	13-Feb-21 A
DE 25-1000	Delay in finalizing location of Poles due to clash	396	31-Aug-20 A	30-Sep-21
DE 26-1000	DELAY IN RECEIPT OF ARCHITECTURAL DF	153	10-Sep-20 A	09-Feb-21 A

Activity ID	Activity Name	Original Duration	Start	Finish
	Delays in Processing Plant	475	13-Jun-20 A	30-Sep-21
DE 27-1000	Delay due to revised Equipment Support Drawin	475	13-Jun-20 A	30-Sep-21
DE 28A-1000	Delay in Provision of clearance for MEP works i	206	24-Jun-20 A	15-Jan-21 A
DE 28B-1000	Delay in Provision of Clearance for Equipment S	182	24-Sep-20 A	24-Mar-21 A
DE 29-1000	Supply of Pipe, duct and Cable Tray support fo	412	15-Aug-20 A	30-Sep-21
DE 30-1000	Supply and Installation of Control Cables and Ca	412	15-Aug-20 A	30-Sep-21
DE 31-1000	Delay in Supply and Installation of Weather Pro	320	27-Sep-20 A	12-Aug-21
DE 31-1010	Additional time for Shop drawing, MAS and Proc	30	13-Aug-21*	11-Sep-21
DE 31-1020	Additional time for Delivery on Site	19	12-Sep-21*	30-Sep-21
DE 32-1000	Delay in Commencement of Polythene sheet an	232	28-Sep-20 A	17-May-21
DE 32-1010	Additional time for Shop drawing, MAS and Proc	30	18-May-21*	16-Jun-21
DE 32-1020	Additional time for Delivery on Site	60	17-Jun-21*	15-Aug-21
DE 32-1030	Additional time for Installation	30	16-Aug-21*	14-Sep-21
DE 33-1000	Delay in Commencement and Finalisation of Ho	210	14-Oct-20 A	11-May-21
DE 33-1010	Additional time for Shop drawing, MAS and Proc	30	12-May-21*	10-Jun-21
DE 33-1020	Additional time for Delivery on Site	60	11-Jun-21*	09-Aug-21
DE 33-1030	Additional time for Installation	30	10-Aug-21*	08-Sep-21
DE 34-1000	Supply and Installation of Processing Plant SS	340	26-Oct-20 A	30-Sep-21
DE 35-1000	Additional Cable Trays for MEYN Control Panel	339	27-Oct-20 A	30-Sep-21
DE 36-1000	Supply and Installation of isolators for MEYN Ec	339	27-Oct-20 A	30-Sep-21
DE 37-1000	Supply and Installation of Cut up and Packing e	324	11-Nov-20 A	30-Sep-21
DE 38-1000	Supply and Installation of Cut up and Packing e	324	11-Nov-20 A	30-Sep-21
Delay in Interim Payments		412	15-Aug-20 A	30-Sep-21
DE 41-1000	Delay in Interim Payments	412	15-Aug-20 A	30-Sep-21

507. The delay events in the snapshot above are used for time slice no.2 with a cut-off date of 30 September 2021. The Delay events are sliced for the period between 31 March 2021 to 30 September 2021. The delay event activities are linked to the updated activities affected due to the delay event and the impact is measured for the particular time slice. The relationships for delay events are as shown in Section 6.1 of this report.

#### 508. Entitlement Programme, -W02A

509. Programme W02A shows that when all the delays noted above are entered into the analysis, the completion of project is impacted as shown below.

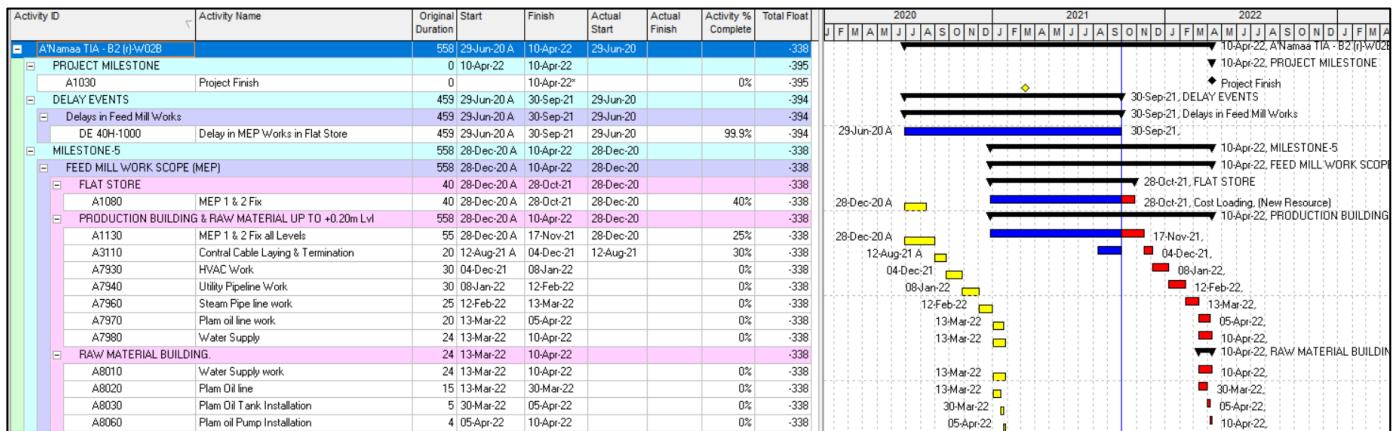
Project Milestone		Contract Completion (a)	Completion Date with delay insertion W02A (b)	Impacted completion date after delay insertion W02B (c)	Delay (in days)	
Sr No	Description				Client(d= b-a)	Contractor (e = c-b)
1	Window 2	13-Dec-21	27-Apr-22	10-Apr-22	135	-17

510. The analysis has calculated that completion date has been impacted by 135 Calendar days (Cumulative Impact of all delay events) in this period.

The Client is culpable for 135 days in this period.

The Contractor has mitigated 17 days in this period.

511. The snippet of Longest path is presented below:



512. The detailed critical path is attached as Annexure 03<sup>204</sup> and Annexure 04<sup>205</sup>.

### 6.3.3. Time Slice No.3 – Period from 30 September 2021 to 31 March 2022

#### 513. Description

First period of analysis taken for the period commencing 30 September 2021

The analysis is based on delay events from 30 September 2021 to 31 March 2022

Time slice no.3 consists of baseline programme of Data Date 30 September 2021

#### 514. Delay Events for Time slice no.3

515. The delays impacting upon the programme in this period are depicted in the screenshot below.

<sup>204</sup> Annexure 03 - Longest Path - W02A

<sup>205</sup> Annexure 04 - Longest Path - W02B

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
DELAY EVENTS		707	12-May-20 A	31-Mar-22
Delay in Mobilization		69	12-May-20 A	19-Jul-20 A
DE 01-1000	Delay in Mobilization	69	12-May-20 A	19-Jul-20 A
Delay in MAS Submission and Approval		69	12-May-20 A	19-Jul-20 A
DE 02-1000	Delay in MAS Submission and Approval	69	12-May-20 A	19-Jul-20 A
Delay in Shop Drawing Submission and Approval		689	12-May-20 A	31-Mar-22
DE 03-1000	Delay in Shop Drawing Submission and Approval	689	12-May-20 A	31-Mar-22
Delay in Procuring SS 316 grade mil finish MAS		269	09-Jul-20 A	03-Apr-21 A
DE 04-1000	Delay in MAS and Procuring SS 316 grade mil finish MAS	209	09-Jul-20 A	02-Feb-21 A
DE 04-1010	Additional time for Delivery of Material on Site	60	03-Feb-21 A	03-Apr-21 A
Delay of Aeration Tank in WWTP Area Works,		117	10-Jul-20 A	03-Nov-20 A
DE 05-1000	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20 A	03-Nov-20 A
Delay in Rendering Plant Works		271	01-Oct-20 A	28-Jun-21 A
DE 06-1000	Delay in Rendering Plant Works	271	01-Oct-20 A	28-Jun-21 A
Delay in Weighbridge No 2 and No 3 located near by the feed mill area		419	29-Sep-20 A	21-Nov-21
DE 07-1000	Delay in Weighbridge No 2 and No 3 located near by the feed mill area	419	29-Sep-20 A	21-Nov-21
Delay in Finalizing Vehicle Washing Areas		608	01-Aug-20 A	31-Mar-22
DE 08-1000	Delay in Finalizing Vehicle Washing Areas	608	01-Aug-20 A	31-Mar-22
Delay in Swimming Pool works at recreation Centre		309	26-Aug-20 A	30-Jun-21 A
DE 09-1000	Delay in Swimming Pool works at recreation Centre	309	26-Aug-20 A	30-Jun-21 A
Diesel Pump Delivery and Installation		248	01-Sep-20 A	06-May-21 A
DE 10-1000	Delay in finalising and Delivery of Diesel Pump	218	01-Sep-20 A	06-Apr-21 A
DE 10-1010	Additional time for Shop drawing, MAS and Procuring	30	07-Apr-21 A	06-May-21 A

Activity ID	Activity Name	Original Duration	Start	Finish
Variation/ Additional Work		640	30-Jun-20 A	31-Mar-22
DE 11-1000	Delay due to Stoppage of Works as per Instructions	408	14-Sep-20 A	26-Oct-21
DE 17-1000	DELAY IN APPROVAL OF VARIATION FOR B	229	11-Aug-21 A	27-Mar-22
DE 17-1010	Additional time considered for Procurement and	4	28-Mar-22*	31-Mar-22
DE 20-1000	Delay in commencement of Central Kitchen Works	184	30-Jun-20 A	30-Dec-20 A
DE 21-1000	DELAY DUE TO CHANGES IN ROOF AND FL	410	07-Sep-20 A	21-Oct-21
DE 21-1010	DELAY DUE TO CHANGES IN ROOF AND FL	30	22-Oct-21*	20-Nov-21
DE 22-1000	DELAY DUE TO STOPPAGE OF WORKS DUE TO	168	25-Feb-21 A	11-Aug-21 A
DE 23-1000	Delay in Approval of Steel Structure Shop Drawings	106	11-Aug-21 A	24-Nov-21
DE 23-1010	Additional time for Procurement and Delivery	60	25-Nov-21*	23-Jan-22
Delay in Rendering Plant Installation Works		469	14-Sep-20 A	26-Dec-21
DE 12-1000	Delay in Commencement of Rendering Plant Installation	469	14-Sep-20 A	26-Dec-21
Delay of Central Laboratory works and MAS approval		562	16-Sep-20 A	31-Mar-22
DE 13-1000	Delay of Central Laboratory works and MAS approval	562	16-Sep-20 A	31-Mar-22
Delay in delivery of RO Tanks due to Covid 19		187	01-Oct-20 A	05-Apr-21 A
DE 14-1000	Delay in delivery of RO Tanks due to Covid 19	187	01-Oct-20 A	05-Apr-21 A
Modification of Rendering Plant Control Panel room size		439	25-Oct-20 A	06-Jan-22
DE 15-1000	Modification of Rendering Plant Control Panel room size	439	25-Oct-20 A	06-Jan-22
Delay in Provision of Clearance in Accommodation Building for MEP Works		472	15-Dec-20 A	31-Mar-22
DE 16-1000	Delay in Provision of Clearance in Accommodation Building for MEP Works	472	15-Dec-20 A	31-Mar-22

## Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
-	Delays in Feed Mill Works	629	29-Jun-20 A	21-Dec-21
DE 18-1000	Delay in Provision of Design Parameters of Silo,	134	29-Jul-20 A	09-Dec-20 A
DE 19-1000	Delay in Commencement of Feed mill 'A' Frame	198	25-Oct-20 A	10-May-21 A
DE 19-1010	Additional time for Shop drawing, MAS and Proc	30	11-May-21 A	09-Jun-21 A
DE 19-1020	Additional time for Delivery on Site	60	10-Jun-21 A	08-Aug-21 A
DE 19-1030	Additional time for Installation	30	09-Aug-21 A	07-Sep-21 A
DE 39-1000	Delay in Feedmill readiness for equipment Instal	490	29-Jun-20 A	31-Oct-21
DE 40A-1000	Delay in MEP Works in Production Building	490	29-Jun-20 A	31-Oct-21
DE 40B-1000	Delay in MEP Works in Raw material Building	211	29-Jun-20 A	25-Jan-21 A
DE 40C-1000	Delay in MEP Works in Truck Intake Building	457	29-Jun-20 A	28-Sep-21 A
DE 40D-1000	Delay in MEP Works in Cleaning Building	428	29-Jun-20 A	30-Aug-21 A
DE 40E-1000	Delay in MEP Works in Finishing Good store	292	29-Jun-20 A	16-Apr-21 A
DE 40F-1000	Delay in MEP Works in Boiler House	490	29-Jun-20 A	31-Oct-21
DE 40G-1000	Delay in MEP Works in Compressor Room	316	29-Jun-20 A	10-May-21 A
DE 40H-1000	Delay in MEP Works in Flat Store	541	29-Jun-20 A	21-Dec-21
-	Delays in External Works	577	01-Aug-20 A	28-Feb-22
DE 24-1000	Delay in receipt of 11 KV Schematic Layout Dra	197	01-Aug-20 A	13-Feb-21 A
DE 25-1000	Delay in finalizing location of Poles due to clash	547	31-Aug-20 A	28-Feb-22
DE 26-1000	DELAY IN RECEIPT OF ARCHITECTURAL DF	153	10-Sep-20 A	09-Feb-21 A
-	Delays in Processing Plant	657	13-Jun-20 A	31-Mar-22
DE 27-1000	Delay due to revised Equipment Support Drawir	480	13-Jun-20 A	05-Oct-21
DE 28A-1000	Delay in Provision of clearance for MEP works i	206	24-Jun-20 A	15-Jan-21 A
DE 28B-1000	Delay in Provision of Clearance for Equipment S	182	24-Sep-20 A	24-Mar-21 A
DE 29-1000	Supply of Pipe, duct and Cable Tray support fo	585	15-Aug-20 A	22-Mar-22
DE 29-1010	Additional time for Shop drawing, MAS and Proc	9	23-Mar-22*	31-Mar-22
DE 30-1000	Supply and Installation of Control Cables and Ca	594	15-Aug-20 A	31-Mar-22
DE 31-1000	Delay in Supply and Installation of Weather Pro	320	27-Sep-20 A	12-Aug-21 A
DE 31-1010	Additional time for Shop drawing, MAS and Proc	30	13-Aug-21 A	11-Sep-21 A
DE 31-1020	Additional time for Delivery on Site	60	12-Sep-21 A	10-Nov-21

Activity ID	Activity Name	Original Duration	Start	Finish
DE 31-1030	Additional time for Installation	30	11-Nov-21*	10-Dec-21
DE 32-1000	Delay in Commencement of Polythene sheet an	232	28-Sep-20 A	17-May-21 A
DE 32-1010	Additional time for Shop drawing, MAS and Proc	30	18-May-21 A	16-Jun-21 A
DE 32-1020	Additional time for Delivery on Site	60	17-Jun-21 A	15-Aug-21 A
DE 32-1030	Additional time for Installation	30	16-Aug-21 A	14-Sep-21 A
DE 33-1000	Delay in Commencement and Finalisation of Ho	210	14-Oct-20 A	11-May-21 A
DE 33-1010	Additional time for Shop drawing, MAS and Proc	30	12-May-21 A	10-Jun-21 A
DE 33-1020	Additional time for Delivery on Site	60	11-Jun-21 A	09-Aug-21 A
DE 33-1030	Additional time for Installation	30	10-Aug-21 A	08-Sep-21 A
DE 34-1000	Supply and Installation of Processsing Plant SS	415	26-Oct-20 A	14-Dec-21
DE 34-1010	Additional time for Shop drawing, MAS and Proc	30	15-Dec-21*	13-Jan-22
DE 34-1020	Additional time for Delivery on Site	60	14-Jan-22*	14-Mar-22
DE 34-1030	Additional time for Installation	17	15-Mar-22*	31-Mar-22
DE 35-1000	Additional Cable Trays for MEYN Control Panel	437	27-Oct-20 A	06-Jan-22
DE 35-1010	Additional time for Shop drawing, MAS and Proc	30	07-Jan-22*	05-Feb-22
DE 35-1020	Additional time for Delivery on Site	54	06-Feb-22*	31-Mar-22
DE 36-1000	Supply and Installation of isolators for MEYN Ec	521	27-Oct-20 A	31-Mar-22
DE 37-1000	Supply and Installation of Cut up and Packing e	400	11-Nov-20 A	15-Dec-21
DE 37-1010	Additional time for Shop drawing, MAS and Proc	30	16-Dec-21*	14-Jan-22
DE 37-1020	Additional time for Delivery on Site	60	15-Jan-22*	15-Mar-22
DE 37-1030	Additional time for Installation	16	16-Mar-22*	31-Mar-22
DE 38-1000	Supply and Installation of Cut up and Packing e	506	11-Nov-20 A	31-Mar-22
Delay in Interim Payments		594	15-Aug-20 A	31-Mar-22
DE 41-1000	Delay in Interim Payments	594	15-Aug-20 A	31-Mar-22

516. The delay events in the snapshot above are used for time slice no.3 with a cut-off date of 31 March 2022. The Delay events are sliced for the period between 30 September 2021 to 31 March 2022. The delay event activities are linked to the updated activities affected due to the delay event and the impact is measured for the particular time slice. The relationships for delay events are as shown in Section 6.1 of this report.

#### 517. Entitlement Programme, -W03A

518. Programme W03A shows that when all the delays noted above are entered into the analysis, the completion of project is impacted as shown below.

Project Milestone		Contract Completion (a)	Completion Date with delay insertion W03A (b)	Impacted completion date after delay insertion W03B (c)	Delay (in days)	
Sr No	Description				Client(d= b-a)	Contractor (e = c-b)
1	Window 3	10-Apr-22	05-Oct-22	05-Oct-22	178	0

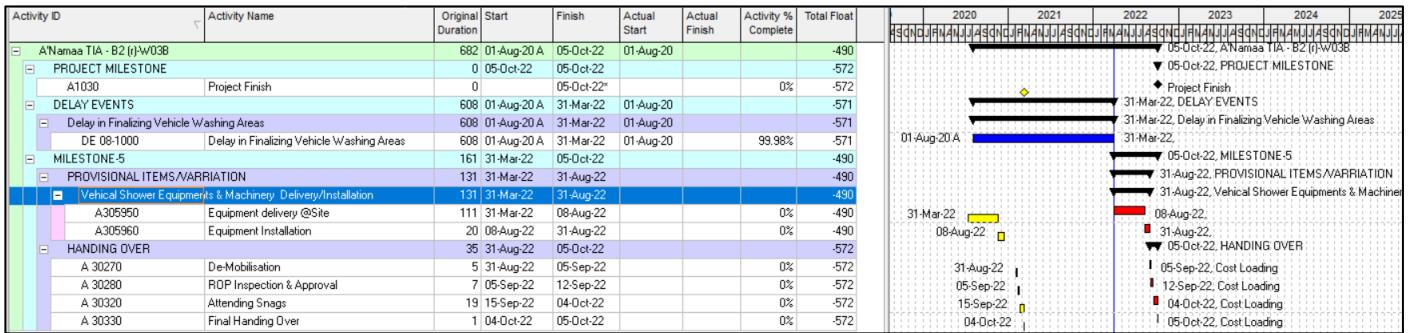
519. The analysis has calculated that completion date has been impacted by 178 Calendar days (Cumulative Impact of all delay events) in this period.

Contractor's Request for Extension of Time (Interim EOT-2)

The Client is culpable for 178 days in this period.

The Contractor has delayed 0 days in this period.

520. The snippet of Longest path is presented below:



521. The detailed critical path is attached as Annexure 05<sup>206</sup> and Annexure 06<sup>207</sup>.

#### 6.3.4. Time Slice No.4 – Period from 31 March 2022 to 30 September 2022

##### 522. Description

First period of analysis taken for the period commencing 31 March 2022

The analysis is based on delay events from 31 March 2022 to 30 September 2022

Time slice no.4 consists of baseline programme of Data Date 31 March 2022

##### 523. Delay Events for Time slice no.4

524. The delays impacting upon the programme in this period are depicted in the screenshot below.

<sup>206</sup> Annexure 05 - Longest Path - W03A

<sup>207</sup> Annexure 06 - Longest Path - W03B

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
DELAY EVENTS		952	12-May-20 A	19-Dec-22
Delay in Mobilization		69	12-May-20 A	19-Jul-20 A
DE 01-1000	Delay in Mobilization	69	12-May-20 A	19-Jul-20 A
Delay in MAS Submission and Approval		69	12-May-20 A	19-Jul-20 A
DE 02-1000	Delay in MAS Submission and Approval	69	12-May-20 A	19-Jul-20 A
Delay in Shop Drawing Submission and Approval		841	12-May-20 A	30-Aug-22
DE 03-1000	Delay in Shop Drawing Submission and Approval	841	12-May-20 A	30-Aug-22
Delay in Procuring SS 316 grade mil finish MAS		269	09-Jul-20 A	03-Apr-21 A
DE 04-1000	Delay in MAS and Procuring SS 316 grade mil f	209	09-Jul-20 A	02-Feb-21 A
DE 04-1010	Additional time for Delivery of Material on Site	60	03-Feb-21 A	03-Apr-21 A
Delay of Aeration Tank in WWTP Area Works,		117	10-Jul-20 A	03-Nov-20 A
DE 05-1000	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20 A	03-Nov-20 A
Delay in Rendering Plant Works		271	01-Oct-20 A	28-Jun-21 A
DE 06-1000	Delay in Rendering Plant Works	271	01-Oct-20 A	28-Jun-21 A
Delay in Weighbridge No 2 and No 3 located near by the feed mill area		419	29-Sep-20 A	21-Nov-21 A
DE 07-1000	Delay in Weighbridge No 2 and No 3 located n	419	29-Sep-20 A	21-Nov-21 A
Delay in Finalizing Vehicle Washing Areas		791	01-Aug-20 A	30-Sep-22
DE 08-1000	Delay in Finalizing Vehicle Washing Areas	791	01-Aug-20 A	30-Sep-22
Delay in Swimming Pool works at recreation Centre		309	26-Aug-20 A	30-Jun-21 A
DE 09-1000	Delay in Swimming Pool works at recreation Ce	309	26-Aug-20 A	30-Jun-21 A
Diesel Pump Delivery and Installation		248	01-Sep-20 A	06-May-21 A
DE 10-1000	Delay in finalising and Delivery of Diesel Pump	218	01-Sep-20 A	06-Apr-21 A
DE 10-1010	Additional time for Shop drawing, MAS and Proc	30	07-Apr-21 A	06-May-21 A
Variation/ Additional Work		699	30-Jun-20 A	29-May-22
DE 11-1000	Delay due to Stoppage of Works as per Instruc	408	14-Sep-20 A	26-Oct-21 A
DE 17-1000	DELAY IN APPROVAL OF VARIATION FOR B	229	11-Aug-21 A	27-Mar-22 A
DE 17-1010	Additional time considered for Procurement and	42	28-Mar-22 A	08-May-22
DE 17-1020	Additional time considered for installation	21	09-May-22*	29-May-22
DE 20-1000	Delay in commencement of Central Kitchen Wo	184	30-Jun-20 A	30-Dec-20 A
DE 21-1000	DELAY DUE TO CHANGES IN ROOF AND FL	410	07-Sep-20 A	21-Oct-21 A

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
DE 21-1010	DELAY DUE TO CHANGES IN ROOF AND FL	30	22-Oct-21 A	20-Nov-21 A
DE 22-1000	DELAY DUE TO STOPPAGE OF WORKS DUE	168	25-Feb-21 A	11-Aug-21 A
DE 23-1000	Delay in Approval of Steel Structure Shop Draw	106	11-Aug-21 A	24-Nov-21 A
DE 23-1010	Additional time for Procurement and Delivery	60	25-Nov-21 A	23-Jan-22 A
■ Delay in Rendering Plant Installation Works		469	14-Sep-20 A	26-Dec-21 A
DE 12-1000	Delay in Commencement of Rendering Plant Inst	469	14-Sep-20 A	26-Dec-21 A
■ Delay of Central Laboratory works and MAS approval		629	16-Sep-20 A	06-Jun-22
DE 13-1000	Delay of Central Laboratory works and MAS app	629	16-Sep-20 A	06-Jun-22
■ Delay in delivery of RO Tanks due to Covid 19		187	01-Oct-20 A	05-Apr-21 A
DE 14-1000	Delay in delivery of RO Tanks due to Covid 19	187	01-Oct-20 A	05-Apr-21 A
■ Modification of Rendering Plant Control Panel room size		439	25-Oct-20 A	06-Jan-22 A
DE 15-1000	Modification of Rendering Plant Control Panel r	439	25-Oct-20 A	06-Jan-22 A
■ Delay in Provision of Clearance in Accomodation Building for MEP Works		632	15-Dec-20 A	07-Sep-22
DE 16-1000	Delay in Provision of Clearance in Accomodatio	632	15-Dec-20 A	07-Sep-22
■ Delays in Feed Mill Works		629	29-Jun-20 A	21-Dec-21 A
DE 18-1000	Delay in Provision of Design Parameters of Silo	134	29-Jul-20 A	09-Dec-20 A
DE 19-1000	Delay in Commencement of Feed mill 'A' Frame	198	25-Oct-20 A	10-May-21 A
DE 19-1010	Additional time for Shop drawing, MAS and Proc	30	11-May-21 A	09-Jun-21 A
DE 19-1020	Additional time for Delivery on Site	60	10-Jun-21 A	08-Aug-21 A
DE 19-1030	Additional time for Installation	30	09-Aug-21 A	07-Sep-21 A
DE 39-1000	Delay in Feedmill readiness for equipment Instal	490	29-Jun-20 A	31-Oct-21 A
DE 40A-1000	Delay in MEP Works in Production Building	490	29-Jun-20 A	31-Oct-21 A
DE 40B-1000	Delay in MEP Works in Raw material Building	211	29-Jun-20 A	25-Jan-21 A
DE 40C-1000	Delay in MEP Works in Truck Intake Building	457	29-Jun-20 A	28-Sep-21 A
DE 40D-1000	Delay in MEP Works in Cleaning Building	428	29-Jun-20 A	30-Aug-21 A
DE 40E-1000	Delay in MEP Works in Finishing Good store	292	29-Jun-20 A	16-Apr-21 A
DE 40F-1000	Delay in MEP Works in Boiler House	490	29-Jun-20 A	31-Oct-21 A
DE 40G-1000	Delay in MEP Works in Compressor Room	316	29-Jun-20 A	10-May-21 A
DE 40H-1000	Delay in MEP Works in Flat Store	541	29-Jun-20 A	21-Dec-21 A

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
- Delays in External Works		577	01-Aug-20 A	28-Feb-22 A
DE 24-1000	Delay in receipt of 11 KV Schematic Layout Drawings	197	01-Aug-20 A	13-Feb-21 A
DE 25-1000	Delay in finalizing location of Poles due to clash	547	31-Aug-20 A	28-Feb-22 A
DE 26-1000	DELAY IN RECEIPT OF ARCHITECTURAL DF	153	10-Sep-20 A	09-Feb-21 A
- Delays in Processing Plant		920	13-Jun-20 A	19-Dec-22
DE 27-1000	Delay due to revised Equipment Support Drawings	480	13-Jun-20 A	05-Oct-21 A
DE 28A-1000	Delay in Provision of clearance for MEP works in the building	206	24-Jun-20 A	15-Jan-21 A
DE 28B-1000	Delay in Provision of Clearance for Equipment Installation	182	24-Sep-20 A	24-Mar-21 A
DE 29-1000	Supply of Pipe, duct and Cable Tray support fittings	585	15-Aug-20 A	22-Mar-22 A
DE 29-1010	Additional time for Shop drawing, MAS and Procurement	30	23-Mar-22 A	21-Apr-22
DE 29-1020	Additional time for Delivery on Site	60	22-Apr-22*	20-Jun-22
DE 29-1030	Additional time for Installation	30	21-Jun-22*	20-Jul-22
DE 30-1000	Supply and Installation of Control Cables and Control Boxes	737	15-Aug-20 A	21-Aug-22
DE 30-1010	Additional time for Shop drawing, MAS and Procurement	30	22-Aug-22*	20-Sep-22
DE 30-1020	Additional time for Delivery on Site	60	21-Sep-22*	19-Nov-22
DE 30-1030	Additional time for Installation	30	20-Nov-22*	19-Dec-22
DE 31-1000	Delay in Supply and Installation of Weather Protection	320	27-Sep-20 A	12-Aug-21 A
DE 31-1010	Additional time for Shop drawing, MAS and Procurement	30	13-Aug-21 A	11-Sep-21 A
DE 31-1020	Additional time for Delivery on Site	60	12-Sep-21 A	10-Nov-21 A
DE 31-1030	Additional time for Installation	30	11-Nov-21 A	10-Dec-21 A
DE 32-1000	Delay in Commencement of Polythene sheet and Membrane	232	28-Sep-20 A	17-May-21 A
DE 32-1010	Additional time for Shop drawing, MAS and Procurement	30	18-May-21 A	16-Jun-21 A
DE 32-1020	Additional time for Delivery on Site	60	17-Jun-21 A	15-Aug-21 A
DE 32-1030	Additional time for Installation	30	16-Aug-21 A	14-Sep-21 A
DE 33-1000	Delay in Commencement and Finalisation of Hoist	210	14-Oct-20 A	11-May-21 A
DE 33-1010	Additional time for Shop drawing, MAS and Procurement	30	12-May-21 A	10-Jun-21 A
DE 33-1020	Additional time for Delivery on Site	60	11-Jun-21 A	09-Aug-21 A
DE 33-1030	Additional time for Installation	30	10-Aug-21 A	08-Sep-21 A
DE 34-1000	Supply and Installation of Processing Plant SS	415	26-Oct-20 A	14-Dec-21 A

Activity ID	Activity Name	Original Duration	Start	Finish
DE 34-1010	Additional time for Shop drawing, MAS and Procurement	30	15-Dec-21 A	13-Jan-22 A
DE 34-1020	Additional time for Delivery on Site	60	14-Jan-22 A	14-Mar-22 A
DE 34-1030	Additional time for Installation	30	15-Mar-22 A	13-Apr-22
DE 35-1000	Additional Cable Trays for MEYN Control Panel	437	27-Oct-20 A	06-Jan-22 A
DE 35-1010	Additional time for Shop drawing, MAS and Procurement	30	07-Jan-22 A	05-Feb-22 A
DE 35-1020	Additional time for Delivery on Site	60	06-Feb-22 A	06-Apr-22
DE 35-1030	Additional time for Installation	30	07-Apr-22*	06-May-22
DE 36-1000	Supply and Installation of isolators for MEYN Electrical	587	27-Oct-20 A	05-Jun-22
DE 36-1010	Additional time for Shop drawing, MAS and Procurement	30	06-Jun-22*	05-Jul-22
DE 36-1020	Additional time for Delivery on Site	60	06-Jul-22*	03-Sep-22
DE 36-1030	Additional time for Installation	30	04-Sep-22*	03-Oct-22
DE 37-1000	Supply and Installation of Cut up and Packing equipment	400	11-Nov-20 A	15-Dec-21 A
DE 37-1010	Additional time for Shop drawing, MAS and Procurement	30	16-Dec-21 A	14-Jan-22 A
DE 37-1020	Additional time for Delivery on Site	60	15-Jan-22 A	15-Mar-22 A
DE 37-1030	Additional time for Installation	30	16-Mar-22 A	14-Apr-22
DE 38-1000	Supply and Installation of Cut up and Packing equipment	573	11-Nov-20 A	06-Jun-22
DE 38-1010	Additional time for Shop drawing, MAS and Procurement	30	07-Jun-22*	06-Jul-22
DE 38-1020	Additional time for Delivery on Site	60	07-Jul-22*	04-Sep-22
DE 38-1030	Additional time for Installation	30	05-Sep-22*	04-Oct-22
- Delay in Interim Payments		777	15-Aug-20 A	30-Sep-22
DE 41-1000	Delay in Interim Payments	777	15-Aug-20 A	30-Sep-22

525. The delay events in the snapshot above are used for time slice no.4 with a cut-off date of 30 September 2022. The Delay events are sliced for the period between 31 March 2022 to 30 September 2022. The delay event activities are linked to the updated activities affected due to the delay event and the impact is measured for the particular time slice. The relationships for delay events are as shown in Section 6.1 of this report.

#### 526. Entitlement Programme, -W04A

527. Programme W04A shows that when all the delays noted above are entered into the analysis, the completion of project is impacted as shown below.

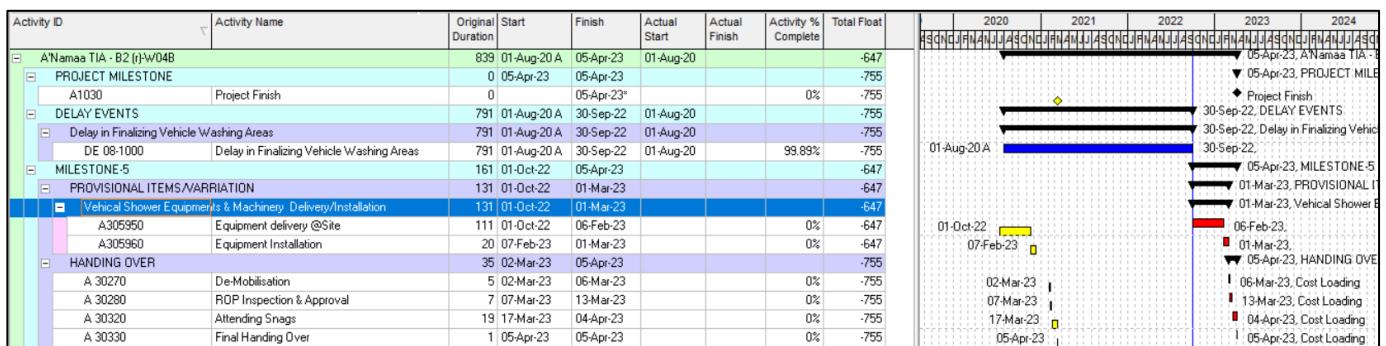
Project Milestone		Contract Completion (a)	Completion Date with delay insertion W04A (b)	Impacted completion date after delay insertion W04B (c)	Delay (in days)	
Sr No	Description				Client(d= b-a)	Contractor (e = c-b)
1	Window 4	05-Oct-22	05-Apr-23	05-Apr-23	182	0

528. The analysis has calculated that completion date has been impacted by 182 Calendar days (Cumulative Impact of all delay events) in this period.

The Client is culpable for 182 days in this period.

The Contractor has delayed 0 days in this period.

529. The snippet of Longest path is presented below:



530. The detailed critical path is attached as Annexure 07<sup>208</sup> and Annexure 08<sup>209</sup>.

#### 6.3.5. Time Slice No.5 – Period from 30 September 2022 to 31 October 2023

##### 531. Description

<sup>208</sup> Annexure 07 - Longest Path - W04A

<sup>209</sup> Annexure 08 - Longest Path - W04B

First period of analysis taken for the period commencing 30 September 2022

The analysis is based on delay events from 30 September 2022 to 31 October 2023

Time slice no.4 consists of baseline programme of Data Date 30 September 2022

### 532. Delay Events for Time slice no.5

533. The delays impacting upon the programme in this period are depicted in the screenshot below.

Activity ID	Activity Name	Original Duration	Start	Finish
DELAY EVENTS		1293	12-May-20 A	25-Nov-23
Delay in Mobilization		69	12-May-20 A	19-Jul-20 A
DE 01-1000	Delay in Mobilization	69	12-May-20 A	19-Jul-20 A
Delay in MAS Submission and Approval		69	12-May-20 A	19-Jul-20 A
DE 02-1000	Delay in MAS Submission and Approval	69	12-May-20 A	19-Jul-20 A
Delay in Shop Drawing Submission and Approval		841	12-May-20 A	30-Aug-22 A
DE 03-1000	Delay in Shop Drawing Submission and Approv	841	12-May-20 A	30-Aug-22 A
Delay in Procuring SS 316 grade mil finish MAS		269	09-Jul-20 A	03-Apr-21 A
DE 04-1000	Delay in MAS and Procuring SS 316 grade mil f	209	09-Jul-20 A	02-Feb-21 A
DE 04-1010	Additional time for Delivery of Material on Site	60	03-Feb-21 A	03-Apr-21 A
Delay of Aeration Tank in WWTP Area Works,		117	10-Jul-20 A	03-Nov-20 A
DE 05-1000	Delay of Aeration Tank in WWTP Area Works,	117	10-Jul-20 A	03-Nov-20 A
Delay in Rendering Plant Works		271	01-Oct-20 A	28-Jun-21 A
DE 06-1000	Delay in Rendering Plant Works	271	01-Oct-20 A	28-Jun-21 A
Delay in Weighbridge No 2 and No 3 located near by the feed mill area		419	29-Sep-20 A	21-Nov-21 A
DE 07-1000	Delay in Weighbridge No 2 and No 3 located n	419	29-Sep-20 A	21-Nov-21 A
Delay in Finalizing Vehicle Washing Areas		971	01-Aug-20 A	29-Mar-23
DE 08-1000	Delay in Finalizing Vehicle Washing Areas	791	01-Aug-20 A	30-Sep-22
DE 08-1010	Additional time for Delivery on Site	120	01-Oct-22*	28-Jan-23
DE 08-1020	Additional time for Installation	60	29-Jan-23*	29-Mar-23
Delay in Swimming Pool works at recreation Centre		309	26-Aug-20 A	30-Jun-21 A
DE 09-1000	Delay in Swimming Pool works at recreation Cen	309	26-Aug-20 A	30-Jun-21 A
Diesel Pump Delivery and Installation		248	01-Sep-20 A	06-May-21 A
DE 10-1000	Delay in finalising and Delivery of Diesel Pump	218	01-Sep-20 A	06-Apr-21 A
DE 10-1010	Additional time for Shop drawing, MAS and Proc	30	07-Apr-21 A	06-May-21 A
Variation/ Additional Work		699	30-Jun-20 A	29-May-22 A
DE 11-1000	Delay due to Stoppage of Works as per Instruc	408	14-Sep-20 A	26-Oct-21 A
DE 17-1000	DELAY IN APPROVAL OF VARIATION FOR B	229	11-Aug-21 A	27-Mar-22 A
DE 17-1010	Additional time considered for Procurement and	42	28-Mar-22 A	08-May-22 A
DE 17-1020	Additional time considered for installation	21	09-May-22 A	29-May-22 A

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
DE 20-1000	Delay in commencement of Central Kitchen Wo	184	30-Jun-20 A	30-Dec-20 A
DE 21-1000	DELAY DUE TO CHANGES IN ROOF AND FL	410	07-Sep-20 A	21-Oct-21 A
DE 21-1010	DELAY DUE TO CHANGES IN ROOF AND FL	30	22-Oct-21 A	20-Nov-21 A
DE 22-1000	DELAY DUE TO STOPPAGE OF WORKS DUE	168	25-Feb-21 A	11-Aug-21 A
DE 23-1000	Delay in Approval of Steel Structure Shop Draw	106	11-Aug-21 A	24-Nov-21 A
DE 23-1010	Additional time for Procurement and Delivery	60	25-Nov-21 A	23-Jan-22 A
■ Delay in Rendering Plant Installation Works		469	14-Sep-20 A	26-Dec-21 A
DE 12-1000	Delay in Commencement of Rendering Plant In	469	14-Sep-20 A	26-Dec-21 A
■ Delay of Central Laboratory works and MAS approval		629	16-Sep-20 A	06-Jun-22 A
DE 13-1000	Delay of Central Laboratory works and MAS ap	629	16-Sep-20 A	06-Jun-22 A
■ Delay in delivery of RO Tanks due to Covid 19		187	01-Oct-20 A	05-Apr-21 A
DE 14-1000	Delay in delivery of RO Tanks due to Covid 19	187	01-Oct-20 A	05-Apr-21 A
■ Modification of Rendering Plant Control Panel room size		439	25-Oct-20 A	06-Jan-22 A
DE 15-1000	Modification of Rendering Plant Control Panel r	439	25-Oct-20 A	06-Jan-22 A
■ Delay in Provision of Clearance in Accomodation Building for MEP Works		632	15-Dec-20 A	07-Sep-22 A
DE 16-1000	Delay in Provision of Clearance in Accomodatio	632	15-Dec-20 A	07-Sep-22 A
■ Delays in Feed Mill Works		629	29-Jun-20 A	21-Dec-21 A
DE 18-1000	Delay in Provision of Design Parameters of Silo,	134	29-Jul-20 A	09-Dec-20 A
DE 19-1000	Delay in Commencement of Feed mill 'A' Frame	198	25-Oct-20 A	10-May-21 A
DE 19-1010	Additional time for Shop drawing, MAS and Proc	30	11-May-21 A	09-Jun-21 A
DE 19-1020	Additional time for Delivery on Site	60	10-Jun-21 A	08-Aug-21 A
DE 19-1030	Additional time for Installation	30	09-Aug-21 A	07-Sep-21 A
DE 39-1000	Delay in Feedmill readiness for equipment Instal	490	29-Jun-20 A	31-Oct-21 A
DE 40A-1000	Delay in MEP Works in Production Building	490	29-Jun-20 A	31-Oct-21 A
DE 40B-1000	Delay in MEP Works in Raw material Building	211	29-Jun-20 A	25-Jan-21 A
DE 40C-1000	Delay in MEP Works in Truck Intake Building	457	29-Jun-20 A	28-Sep-21 A
DE 40D-1000	Delay in MEP Works in Cleaning Building	428	29-Jun-20 A	30-Aug-21 A
DE 40E-1000	Delay in MEP Works in Finishing Good store	292	29-Jun-20 A	16-Apr-21 A
DE 40F-1000	Delay in MEP Works in Boiler House	490	29-Jun-20 A	31-Oct-21 A

Contractor's Request for Extension of Time (Interim EOT-2)

Activity ID	Activity Name	Original Duration	Start	Finish
DE 40G-1000	Delay in MEP Works in Compressor Room	316	29-Jun-20 A	10-May-21 A
DE 40H-1000	Delay in MEP Works in Flat Store	541	29-Jun-20 A	21-Dec-21 A
- Delays in External Works		577	01-Aug-20 A	28-Feb-22 A
DE 24-1000	Delay in receipt of 11 KV Schematic Layout Dra	197	01-Aug-20 A	13-Feb-21 A
DE 25-1000	Delay in finalizing location of Poles due to clash	547	31-Aug-20 A	28-Feb-22 A
DE 26-1000	DELAY IN RECEIPT OF ARCHITECTURAL DF	153	10-Sep-20 A	09-Feb-21 A
- Delays in Processing Plant		920	13-Jun-20 A	19-Dec-22
DE 27-1000	Delay due to revised Equipment Support Drawin	480	13-Jun-20 A	05-Oct-21 A
DE 28A-1000	Delay in Provision of clearance for MEP works i	206	24-Jun-20 A	15-Jan-21 A
DE 28B-1000	Delay in Provision of Clearance for Equipment S	182	24-Sep-20 A	24-Mar-21 A
DE 29-1000	Supply of Pipe, duct and Cable Tray support fo	585	15-Aug-20 A	22-Mar-22 A
DE 29-1010	Additional time for Shop drawing, MAS and Proc	30	23-Mar-22 A	21-Apr-22 A
DE 29-1020	Additional time for Delivery on Site	60	22-Apr-22 A	20-Jun-22 A
DE 29-1030	Additional time for Installation	30	21-Jun-22 A	20-Jul-22 A
DE 30-1000	Supply and Installation of Control Cables and Ca	737	15-Aug-20 A	21-Aug-22 A
DE 30-1010	Additional time for Shop drawing, MAS and Proc	30	22-Aug-22 A	20-Sep-22 A
DE 30-1020	Additional time for Delivery on Site	60	21-Sep-22 A	19-Nov-22
DE 30-1030	Additional time for Installation	30	20-Nov-22*	19-Dec-22
DE 31-1000	Delay in Supply and Installation of Weather Pro	320	27-Sep-20 A	12-Aug-21 A
DE 31-1010	Additional time for Shop drawing, MAS and Proc	30	13-Aug-21 A	11-Sep-21 A
DE 31-1020	Additional time for Delivery on Site	60	12-Sep-21 A	10-Nov-21 A
DE 31-1030	Additional time for Installation	30	11-Nov-21 A	10-Dec-21 A
DE 32-1000	Delay in Commencement of Polythene sheet an	232	28-Sep-20 A	17-May-21 A
DE 32-1010	Additional time for Shop drawing, MAS and Proc	30	18-May-21 A	16-Jun-21 A
DE 32-1020	Additional time for Delivery on Site	60	17-Jun-21 A	15-Aug-21 A
DE 32-1030	Additional time for Installation	30	16-Aug-21 A	14-Sep-21 A
DE 33-1000	Delay in Commencement and Finalisation of Ho	210	14-Oct-20 A	11-May-21 A
DE 33-1010	Additional time for Shop drawing, MAS and Proc	30	12-May-21 A	10-Jun-21 A
DE 33-1020	Additional time for Delivery on Site	60	11-Jun-21 A	09-Aug-21 A

Activity ID	Activity Name	Original Duration	Start	Finish
DE 33-1030	Additional time for Installation	30	10-Aug-21 A	08-Sep-21 A
DE 34-1000	Supply and Installation of Processing Plant SS	415	26-Oct-20 A	14-Dec-21 A
DE 34-1010	Additional time for Shop drawing, MAS and Proc	30	15-Dec-21 A	13-Jan-22 A
DE 34-1020	Additional time for Delivery on Site	60	14-Jan-22 A	14-Mar-22 A
DE 34-1030	Additional time for Installation	30	15-Mar-22 A	13-Apr-22 A
DE 35-1000	Additional Cable Trays for MEYN Control Panel	437	27-Oct-20 A	06-Jan-22 A
DE 35-1010	Additional time for Shop drawing, MAS and Proc	30	07-Jan-22 A	05-Feb-22 A
DE 35-1020	Additional time for Delivery on Site	60	06-Feb-22 A	06-Apr-22 A
DE 35-1030	Additional time for Installation	30	07-Apr-22 A	06-May-22 A
DE 36-1000	Supply and Installation of isolators for MEYN Ec	587	27-Oct-20 A	05-Jun-22 A
DE 36-1010	Additional time for Shop drawing, MAS and Proc	30	06-Jun-22 A	05-Jul-22 A
DE 36-1020	Additional time for Delivery on Site	60	06-Jul-22 A	03-Sep-22 A
DE 36-1030	Additional time for Installation	30	04-Sep-22 A	03-Oct-22
DE 37-1000	Supply and Installation of Cut up and Packing e	400	11-Nov-20 A	15-Dec-21 A
DE 37-1010	Additional time for Shop drawing, MAS and Proc	30	16-Dec-21 A	14-Jan-22 A
DE 37-1020	Additional time for Delivery on Site	60	15-Jan-22 A	15-Mar-22 A
DE 37-1030	Additional time for Installation	30	16-Mar-22 A	14-Apr-22 A
DE 38-1000	Supply and Installation of Cut up and Packing e	573	11-Nov-20 A	06-Jun-22 A
DE 38-1010	Additional time for Shop drawing, MAS and Proc	30	07-Jun-22 A	06-Jul-22 A
DE 38-1020	Additional time for Delivery on Site	60	07-Jul-22 A	04-Sep-22 A
DE 38-1030	Additional time for Installation	30	05-Sep-22 A	04-Oct-22
Delay in Interim Payments		1198	15-Aug-20 A	25-Nov-23
DE 41-1000	Delay in Interim Payments	777	15-Aug-20 A	30-Sep-22
DE 41-1010	Suspension of Works on account of Delay in P.	396	01-Oct-22*	31-Oct-23
DE 41-1020	Additional time for re-mobilization and Initiation c	25	01-Nov-23*	25-Nov-23

534. The delay events in the snapshot above are used for time slice no.5 with a cut-off date of 31 October 2023. The Delay events are sliced for the period between 30 September 2022 to 31 October 2023. The delay event activities are linked to the updated activities affected due to the delay event and the impact is measured for the particular time slice. The relationships for delay events are as shown in Section 6.1 of this report.

#### 535. Entitlement Programme, -W05A

536. Programme W05A shows that when all the delays noted above are entered into the analysis, the completion of project is impacted as shown below.

Project Milestone		Contract Completion (a)	Completion Date with delay insertion W05A (b)	Impacted completion date after delay insertion W05B (c)	Delay (in days)	
Sr No	Description				Client(d= b-a)	Contractor (e = c-b)
1	Window 5	05-Apr-23	30-May-24	30-May-24	421	0

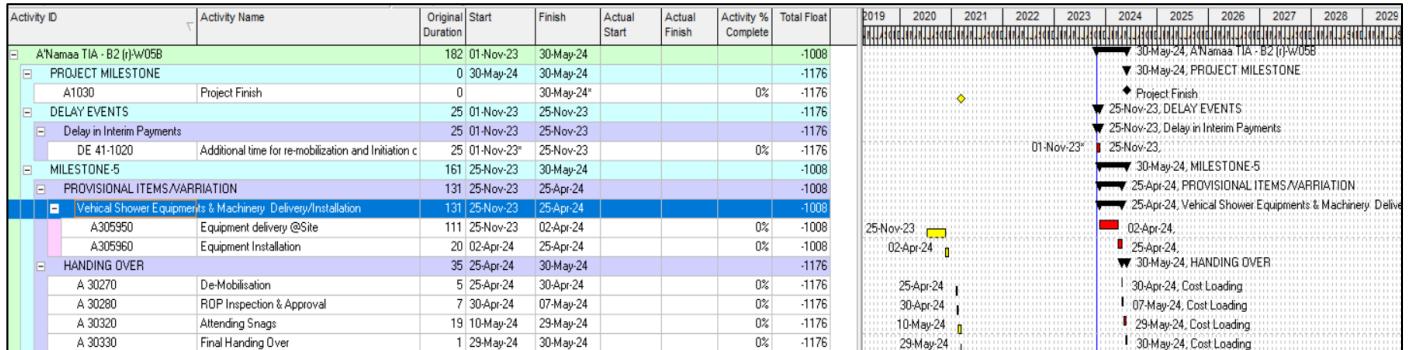
537. The analysis has calculated that completion date has been impacted by 421 Calendar days (Cumulative Impact of all delay events) in this period.

The Client is culpable for 421 days in this period.

Contractor's Request for Extension of Time (Interim EOT-2)

The Contractor has delayed 0 days in this period.

538. The snippet of Longest path is presented below:



539. The detailed critical path is attached as Annexure 09<sup>210</sup> and Annexure 10<sup>211</sup>.

<sup>210</sup> Annexure 09 - Longest Path - W05A

<sup>211</sup> Annexure 10 - Longest Path - W05B

## **PART-7**

### **7. SUMMARY AND CONCLUSION**

540. The delay events considered in this analysis are of the Employer's/ Client's risk events, therefore, these delayed events are beyond the Contractor's reasonable control and responsibility, hence, are not attributable to the Contractor.
541. The Delay Analysis is performed with "**Time Impact Analysis with Windows**" methodology, and the delay events are considered with cut-off date as 30 September 2022. Further the Works were suspended till the cut-off date of this report 31 March 2023. However, the Window-05 of Delay Analysis is considered up to 31 October 2023 as the Employer asked the Contractor to submit the Additional time taken to complete the remaining Works provided the Works resume on 01 November 2023.
542. The Methodology used in this EOT exercise is based upon the globally accepted standards and is properly supported by analysis, with reference of relevant correspondence/documents.
543. The Contractor's entitlement for EOT for Project completion is calculated as 1176 days, which comes out to be till 30 May 2024 considering the execution of Works resume as on 01 November 2023. Therefore, the Contractor, under Clause 8.4, General conditions of Contract Agreement and other relevant conditions of the Contract, is hereby claiming its entitlement for:
- a. An Extension of Time for Completion of Contract for 1176 days, i.e., up to 30 May 2024.
  - b. Relief from Delay Damages in accordance with the Clause 8.7, General Conditions of the Contract Agreement.
  - c. Cost of additional expenses to the Contractor, related to extended Contract duration, submitted under separate report.
544. The Summary of the Delay Analysis is presented below:

Contractor's Request for Extension of Time (Interim EOT-2)

RESULTS OF DELAY ANALYSIS - TIWA															
Window No	Input Programme	Input Programme DD	Progress Cut off	Window Duration	Action Taken (Step 1)	Base Prog Finish	Impacted Finish (Step 1)	Updated Finish (Step 2)	Delay after Impact	Delay after Updates	Contractor's Mitigation	Contractor's Delay	EOT Entitlement	Entitlement up to	
1	U1A	12-May-20	31-Mar-21	323	Add Delay Events	11-Mar-21	13-Dec-21	13-Dec-21	277	0	0	0	277	13-Dec-21	
2	U2A	31-Mar-21	30-Sep-21	183	Add Delay Events	13-Dec-21	27-Apr-22	10-Apr-22	135	-17	17	0	118	10-Apr-22	
3	U3A	30-Sep-21	30-Mar-22	181	Add Delay Events	10-Apr-22	05-Oct-22	05-Oct-22	178	0	0	0	178	05-Oct-22	
4	U4A	30-Mar-22	30-Sep-22	184	Add Delay Events	05-Oct-22	05-Apr-23	05-Apr-23	182	0	0	0	182	05-Apr-23	
5	USA	30-Sep-22	31-Mar-23	182	Add Delay Events	05-Apr-23	30-May-24	30-May-24	421	0	0	0	421	30-May-24	
										1193	-17	17	0	1176	
										39.77	-0.57	0.57	0.00	39.20	

545. The Contractor reserves his rights under the Contract Agreement, as required, to review, assess and submit further submissions for the same and/or different events, including costs and/or reimbursement, within the same and/or different periods of time, which may give rise to further delays to the works and the completion date.