



March 6, 2021

[Project Name]

Author

Final Commissioning

Report

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# Executive Summa/y:

*[ insert overview of the project and works completed / issues outstanding etc]*





# Outstdnding wo/Ls:

*works]*

*[ insert overview of any works that are outstanding relating to the testing and commissioning*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Ref** | **Description of Works** | **Comments** | **Next step** | **Responsible** |
|  |  |  |  |  |
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Sat urday , 6 M arch 20 21 4 Fi nal Comm i s s ioni ng R ep ort

# P/oject Info/mdtion:

The below details specific information relating to the project for reference.

*[ can be gotten from the Commissioning Plan]*

|  |  |
| --- | --- |
| **Project Information** |  |
| Project Name |  |
| Project Address |  |
| Green Building Certificate Type |  |
| Construction Dates |  |
| Defects Liability Period |  |

# Desc/iption of P/oject

*Provide description of the building, what will be used for, construction type etc*

***[ can be gotten from the Owners Project Requirements / Project Specifications]***

# Systems Ove/view:

*Provide description of the buildings systems design and equipment.*

***[ can be gotten from the Basis of Design Document / Project Specifications]***

# Design Pd/dmete/s:

*Provide tables of all design parameters that have been used by the MEP Designer to identify what the systems have been designed to.*

*Cover all Temperatures / Humidity / Timers / Lux Levels etc*

***[ can be gotten from the Basis of Design Document / Project Specifications]***

# Commissioning P/ocess:

*Provide an explanation of the Commissioning Process utilized [ ASHRAE, BSRIA etc] for the project.*

*Provide full update on the Commissioning Documentation required for the Process*



***[ can be gotten from the latest Weekly Report]***

|  |  |  |
| --- | --- | --- |
| **Commissioning Stage** | **Status** | **Comments** |
| Pre- Design Stage [ 1] |  |  |
| Design Stage [ 2] |  |  |
| Construction Stage [ 3] |  |  |
| Pre- Construction [ 3a] |  |  |
| Construction [ 3b] |  |  |
| Commissioning [ 3c] |  |  |
| Occupancy & Operations [ 4 ] |  |  |
| Continuous Commissioning [ 5] |  |  |

## Commissioning Documentdtion

P/e-Design Stdge [1]

|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Commissioning Team Organigram |  |  |
| Owners Project Requirement [ OPR] |  |  |
| Basis of Design [ BOD] |  |  |
| Commissioning Scope [ Cx A] |  |  |
| Commissioning Budget |  |  |
| Initial Commissioning Plan |  |  |
| Commissioning Issue Tracker |  |  |
| Commissioning Weekly Report Template |  |  |



|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Commissioning Monthly Report Template |  |  |
| Commissioning Final Report Template |  |  |
| System Manual Template |  |  |
| Factory Report Template |  |  |
| Method Statement Testing Document Template |  |  |
| Acceptance Requirement Specified |  |  |
| Training Requirements Identified |  |  |

Design Stdge [2]

|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Owners Project Requirement [ OPR] Updated |  |  |
| Basis of Design [ BOD] Updated |  |  |
| Commission ability Review Report |  |  |
| Construction Check Lists |  |  |
| Testing Procedure Template |  |  |
| Onsite Final Testing Document Template |  |  |
| Training Programme Developed |  |  |
| O&M Requirements |  |  |
| Final Commissioning Scope [ Cx A] |  |  |
| Final Commissioning Budget |  |  |



|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Commissioning Specification |  |  |
| Commissioning Plan Updated |  |  |
| Commissioning I tems in Tender Docs |  |  |

Const/uction Stdge [3]

P/e-Const/uction Stdge [3d]

|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Owners Project Requirement [ OPR] Updated |  |  |
| Basis of Design [ BOD] Updated |  |  |
| Commission ability Review Report Updated |  |  |
| Issues Logs Updated |  |  |
| Commissioning Plan Updated |  |  |
| Commissioning Kick Off Meeting Minutes |  |  |
| Initial Commissioning Programme |  |  |
| Commissioning Filing System |  |  |
| BMS Graphic Document |  |  |
| BMS Points Schedule |  |  |
| Electrical Discrimination Document |  |  |
| Training Requirements Updated |  |  |
| Training Programme Updated |  |  |



Const/uction Stdge [3 b]

|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Owners Project Requirement [ OPR] Updated |  |  |
| Basis of Design [ BOD] Updated |  |  |
| Issues Logs Updated |  |  |
| Commission ability Review Report Updated |  |  |
| Commissioning Material Submissions Approved |  |  |
| Commissioning Plan Updated |  |  |
| Final Commissioning Programme |  |  |
| Draft Operating and Maintenance Manual [ O&M] |  |  |
| Testing Procedures |  |  |
| Integrated Scripts |  |  |
| Building Enclosure Document |  |  |

Commissioning Stdge [ 3c]

|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Owners Project Requirement [ OPR] Updated |  |  |
| Basis of Design [ BOD] Updated |  |  |
| Issues Logs Updated |  |  |
| Commission ability Review Report Updated |  |  |
| Commissioning Plan Updated |  |  |



|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Operating and Maintenance Manual [ O&M] |  |  |
| Integrated Testing Reports |  |  |
| Final Site Testing Documents |  |  |
| Systems Manual |  |  |
| Training Report |  |  |
| Seasonal Testing |  |  |

Occupdncy & Ope/dtion Stdge [4]

|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Owners Project Requirement [ OPR] Updated |  |  |
| Basis of Design [ BOD] Updated |  |  |
| Issues Logs Updated |  |  |
| Commissioning Plan Updated |  |  |
| Operating and Maintenance Manual [ O&M] |  |  |
| Seasonal Testing Report |  |  |
| Performance Evaluation Report |  |  |
| Lessons Learned Schedule |  |  |
| Final Commissioning Report |  |  |
| Systems Manual Updated |  |  |

Continuous Commissioning Stdge [5]



|  |  |  |
| --- | --- | --- |
| **Document** | **Status** | **Comments** |
| Owners Project Requirement [ OPR] Updated |  |  |
| Basis of Design [ BOD] Updated |  |  |
| Issues Logs Updated |  |  |
| Commissioning Plan Updated |  |  |
| Operating and Maintenance Manual [ O&M] |  |  |
| Performance Evaluation Report |  |  |
| Lessons Learned Schedule |  |  |
| Final Commissioning Report |  |  |
| Systems Manual Updated |  |  |
| Handover Certificate |  |  |

# Commissioning Tedm Info/mdtion:

*. . Words that could be included..*

The Commissioning Team was made up of a group of project team members, whose coordinated actions were responsible for implementing the commissioning process.

The overall management of the Commissioning Team on the project was composed of the following people:

***[Information can be added to the below table from the Commissioning Organigram***

***/ Team List located in the Commissioning Plan]***

|  |  |
| --- | --- |
| **Role** | **Company** |
| [ add] | [ add] |
| [ add] | [ add] |



|  |  |
| --- | --- |
| **Role** | **Company** |
| [ add] | [ add] |
| [ add] | [ add] |
| [ add] | [ add] |

The Cx A role was to operate as a 3 rd Party consultant reviewing and inspecting the Testing and Commissioning processes with the General Contractor leading the



coordination and day to day control of the overall Testing and Commissioning works to align with the master construction programme and the Owners

requirements.

All documentation, factory testing, site testing, and any HLT / IST works were inspected to provide advice and feedback to the Client.

The Cx A also reviewed and inspected the accuracy of the commissioning

records/ results presented by the General Contractor and the acceptance checking of any corrective actions. The validation was conducted in line with the below

section.

The Cx A role was not to be responsible for the testing and commissioning as was the responsibility of the General Contractor.

# Submittdl Sdmpling Rdte:

The General/ Main Contractor was responsible for installing and starting up 100% of the MEP& F/ ELV Systems and assemblies.

They were also responsible for, along with the Owners representatives where

required, verifying adherence to the project design and specifications by the use of a quality- based sampling method.

Quality based sampling allowed for an unbiased evaluation of OPR achievement at during the construction and commissioning activities.

The sampling rate that was utilized during this project varied depending upon the factors as shown in the tables below.

## Commissioning Document Submittdl Sdmpling Rdte:

*The below table details the documents that would be expected to be issued by the General/ Main Contractor for review by the Clients Commissioning Representative.*

***[Add the tables from the commissioning plan sample rate section]***

## Onsite Testing / Witnessing Sdmpling Rdte:

*The below table details the documents that would be expected to be issued by the General/ Main Contractor for review by the Clients Commissioning Representative.*

***[Add the tables from the commissioning plan sample rate section]***

# Commissioning Reldted P/oject Documents:

The following table details the documentation that is included for reference in the Appendices.



|  |  |  |
| --- | --- | --- |
| **Appendix** | **Description** | **Notes** |
| 1 | Owners Project Requirements [ OPR] | Final Version |
| 2 | Basis Of Design Document [ BOD] | Final Version |
| 3 | Construction Commissioning Plan | Final Version |
| 4 | Commissioning Specification | Final Version |
| 5 | Cx Process Stage Completion Sign Off |  |
| 6 | BMS Systems Specification |  |
| 7 | Control Logic Specification |  |
| 8 | Electrical Systems Specification |  |
| 9 | ELV Systems Specification |  |
| 10 | Fire Systems Specification |  |
| 11 | Mechanical Systems Specification |  |
| 12 | Public Health & Drainage Systems Specification |  |



|  |  |  |
| --- | --- | --- |
| **Appendix** | **Description** | **Notes** |
| 13 | Other Systems Specification |  |
| 14 | Final Commissioning Focused Design Review Report | Design Stage |
| 15 | Final Commissioning Focused Construction Review Report | Construction Stage |
| 16 | Commissioning / Site Reports | Daily, Weekly / Monthly |
| 17 | Commissioning Meeting Minutes |  |
| 18 | Workshop Meeting Minutes |  |
| 19 | Factory Testing Method Statement Tracker | Individual |
| 20 | Final Factory Testing Reports | Individual |
| 21 | Site Acceptance Testing Method Statement Tracker | Individual |
| 22 | Site Acceptance Testing Trackers and Observations Including  Outstanding I tems |  |
| 23 | Site Testing Documents | For all Systems and Equipment |
| 24 | Fire Integrated Systems Testing Report |  |
| 25 | Electrical Integrated Test Report |  |
| 26 | Mechanical Integrated Test Report |  |
| 27 | Building Enclosure Test Report |  |
| 28 | Seasonal Testing Procedures |  |



|  |  |  |
| --- | --- | --- |
| **Appendix** | **Description** | **Notes** |
| 29 | Seasonal Testing Reports |  |
| 30 | Calibration Log Of Equipment |  |
| 31 | Final Client Training Report | Include all training materials and reports |
| 32 | Systems Manual |  |
| 33 | Operating & Maintenance Manuals |  |
| 34 | Performance Evaluation Report |  |
| 35 | Lesson Learnt Document |  |

# Appendices

*The following appendices are to be completed by attaching the relevant f inal documentation.*





# Appendix 1 – OPR





# Appendix 2 – BOD





Appendix 3 – Commissioning Pldn





Appendix 4 – Commissioning Specificdtion





Appendix 5 – Stdge Sign Offs





Appendix 6 – BMS Specificdtion





Appendix 7 – Cont/ol Logics





Appendix 8 – Elect/icdl Specificdtion





Appendix 9 – Elv Specificdtion





Appendix 10 – Fi/e Systems Specificdtion





Appendix 11 – Mechdnicdl Specificdtion





Appendix 12 – Public Hedlth Specificdtion





Appendix 13 – Othe/ Specificdtion





Appendix 14 – Design Stdge Cx Review





Appendix 15 – Const/uction Stdge Cx Review





Appendix 16 – Commissioning Repo/ts





# Appendix 17 – Cx Meeting Minutes





Appendix 18 – Wo/Lshop Minutes





Appendix 1e – Fdcto/y Test Method Stdtement T/dcLe/





Appendix 20 – Fdcto/y Testing Repo/ts





Appendix 21 – Site Test Method Stdtement T/dcLe/





Appendix 22 – Site Test / Obse/vdtion T/dcLe/





# Appendix 23 – Site Test Documents





Appendix 24 – Integ/dted Testing Repo/t [Fi/e]





Appendix 25 – Integ/dted Testing Repo/t [Elect/icdl]





Appendix 26 – Integ/dted Testing Repo/t [Mechdnicdl]





Appendix 27 – Building Enclosu/e Test Repo/t





Appendix 28 –Sedsondl Testing P/ocedu/es





Appendix 2e – Sedsondl Testing Repo/ts





Appendix 30 – Cdlib/dtion Log of Equipment





Appendix 31 –Findl T/dining Repo/t





Appendix 32 –Systems Mdnudl





Appendix 33 –Ope/dting & Mdintendnce Mdnudl





Appendix 34 – Pe/fo/mdnce Evdludtion Repo/t





Appendix 35 – Lessons Led/ned Document





- END OF REPORT-

