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|  | **TMF –** | **Mechanical Services** |  |

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| **ITP Number:** | ITP/NWPA/ XXXX | **Revision Number:** | 0 |

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| **Author (Mandatory)** | | | | **Reviewer & Approver (Mandatory)** | | | |
| **Name** |  | | | **Name** |  | | |
| **Position** | Site Engineer | | | **Position** | Project Engineer | | |
| **Signature** |  | **Date** |  | **Signature** |  | **Date** |  |

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| **Additional Reviewer (If Applicable)** | | | | **Authorisation (Mandatory)** | | | |
| **Name** |  | | | **Name** |  | | |
| **Position** |  | | | **Position** | Quality Co-ordinator / Engineer (Delete as applicable) | | |
| **Signature** |  | **Date** |  | **Signature** |  | **Date** |  |

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| **AMS Number:** | AMS/NWPA/ | **AMS Title:** |  | | |
| **Work Lot Number:** | WLD/NWPA/ | [**Work Lot Description:**](https://johnholland-my.sharepoint.com/personal/dwhitfield3_jhg_com_au/Documents/NWPA%27/ITPs/0) | |  | |
| **Design Package:** | NWP-DPK- | | | **Associated Design Packages:** |  |

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| ***PE:*** Project Engineer ***QM:*** Quality Manager ***CR****: Community Relations Advisor* | ***\*Other codes may be added as required*** | |
|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |

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| **Item No.** | | **Operational Activities** | **Verification** | | | **Inspection** | | | | **Records & Comments** |
| **Specification Reference** | **Acceptance Criteria** | **Test / Inspection Method & Frequency** | **Subcontractor** | | **Project Team** | | **KEY:**   **= Applicable**  **X = Not Applicable**  **X and** **are to be initialled** |
| **Key** | **Sign Date** | **Key** | **Sign Date** |
| **1.0** | | **PRELIMINARIES** *- Prior To Commencement of Work –* ***Master Worklot Records (if applicable)*** | | | | | | | | |
| 1.1 | | Preliminary activities completed | * JH-MPR-SQE-006   Managing SQE Risks | * All ‘pre-construction’ authorisations and checks completed and recorded in Pre-Commencement Checklist in PPW as part of the AMS establishment | * Prior to works commencing |  |  | **PE (H)** |  | [ ] Pre-Commencement Checklist completed in PPW  PPW Record No.: AMS/NWPA/00 |
| 1.2 | | Work Lot Map | * NWP-000-NWA-PRO-XQA-   0003 - Work Lot Management Procedure | * Work Lot Map attached to Work Lot | * Per work lot |  |  | **SE (H)** |  | [ ] Work Lot Map |
| **2.0** | | **MATERIAL COMPLIANCE** *- Prior To Commencement of Work –* ***Master Worklot Records (if applicable)*** | | | | | | | | |
|  | 2.1 | Calibration Certificates | * JH-MPR-QUA-010 * Process Control | * Confirm that external equipment calibration and testing facilities are registered in PPW * External equipment calibration meets contract requirements for each item of test equipment | * Visual check with certificates, ITP, checklist or inspection report |  |  | **SE (H)**  **QA (R)** |  | [ ] Record of visual inspection [ ] Calibration Certificates |
|  | |
| 2.2 | | Shop Drawing Approval | * IFC Drawings | * Mechanical shop drawings have been reviewed and approved by NWPA | * Prior to works commencing |  |  | **PE (H)** |  | [ ] Approved Shop drawings |

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| ***PE:*** Project Engineer ***QM:*** Quality Manager ***CR****: Community Relations Advisor* | ***\*Other codes may be added as required*** | |
|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |

# *NOTE:*

***1. All preliminary records have been reviewed and approved. ITP signed at sections 1 to 3 and uploaded to Master lot with all preliminary records. Works may proceed onsite.***

Date:

Site Engineer Signature:

Site Engineer Name:

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| Project Engineer Name: |
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| Project Engineer Signature: |
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|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |

**Item No.**

**Operational Activities**

**Specification**

**Verification**

**Acceptance Criteria Test / Inspection**

**Inspection**

**Project Team**

**Subcontractor**

**Records & Comments**

**KEY:**

 **= Applicable**

**Reference**

**Method & Frequency**

**Key**

**Sign Date**

**Key**

**Sign Date**

**X = Not Applicable**

**X and** **are to be initialled**

* 1. **CONSTRUCTION ACTIVITIES** *- Prior To Commencement and During Works –* ***Sub-lot Records (if applicable)***

## 4.1

Inspection of incoming materials:

* NWP-000-NWA-PLN-  Materials conform to IFC drawings and
* Visual check with written

[ ] Ductwork Installation

* + All mechanical Units – ERV, AC, DX, IEC, fans etc.
  + Grilles

XPM-0022

* JH-MPR-PMA-007 -

Material Control

Specifications

* Qty conform to purchase order requirements

notes in Delivery docket,

ITP, checklist or inspection report.

Checklists

[ ] Ductwork Insulation

Checklists

* + Pipework
* Project Requirement  Free of defects, transportation damage
* Upon Delivery

[ ] Grille Installation Checklists

* + Ductwork

Specification

and/or imperfections

**SE**

**(H)**

**SF**

**(H)**

[ ] Mech Electrical Installation

Checklists

[ ] Controls Installation

Checklists

[ ] FCU Installation Checklists

4.2

Mechanical Equipment Installation  IFC Drawings

* + - AS 1668
    - AS 3000
    - Manufacturer Requirements
    - All pipe work and duct work has been installed as per design specifications and relevant standards
    - As per each equipment

**SF**

**(W)**

**SE (S)**

[ ] Ductwork Installation

Checklists

[ ] Ductwork Insulation

Checklists

[ ] Grille Installation Checklists

[ ] Mech Electrical Installation

Checklists

[ ] Controls Installation

Checklists

[ ] FCU Installation Checklists

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|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |

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| **Item No.** | | **Operational Activities** | **Verification** | | | **Inspection** | | | | **Records & Comments** |
| **Specification Reference** | **Acceptance Criteria** | **Test / Inspection Method & Frequency** | **Subcontractor** | | **Project Team** | | **KEY:**   **= Applicable**  **X = Not Applicable**  **X and** **are to be initialled** |
| **Key** | **Sign Date** | **Key** | **Sign Date** |
| **5.0** | | **TESTING AND COMMISSIONING REQUIREMENTS** *– Post Construction Works –* ***Sub-lot Records (if applicable)*** | | | | | | | | |
|  | 5.1 | Refrigeration Pressure Testing | * IFC Drawings * AS 1668 * AS 3000 * Manufacturer Requirements | * Pressure testing should be in accordance with the design specifications and relevant standards | * As per each air conduiting unit | **SF (R)** |  | **SE (R)** |  | [ ] HHW Pipework Install  Checklist  [ ] Refrigeration Pipework  Install Checklist |
|  | |
| 5.2 | | System Commissioning | * IFC Drawings * AS 1668 * AS 3000 * Manufacturer Requirements | * Mechanical systems are tested to perform in accordance with the design specifications and relevant standards | * As per each equipment | **SF (R)** |  | **SE (R)** |  | [ ] Mechanical Commissioning  Checklists |

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| ***PE:*** Project Engineer ***QM:*** Quality Manager ***CR****: Community Relations Advisor* | ***\*Other codes may be added as required*** | |
|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |

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| **Item No.** | **Operational Activities** | **Verification** | | | **Inspection** | | | | **Records & Comments** |
| **Specification Reference** | **Acceptance Criteria** | **Test / Inspection Method & Frequency** | **Subcontractor** | | **Project Team** | | **KEY:**   **= Applicable**  **X = Not Applicable**  **X and** **are to be initialled** |
| **Key** | **Sign Date** | **Key** | **Sign Date** |
| **6.0** | **COMPLETION REQUIREMENTS** *– Post Construction Works –* ***Sub-lot Records (if applicable)*** | | | | | | | | |
| 6.1 | Works Completion Inspection (with Subcontractor) | * NWP-000-NWA-PRO-XDC-   0002 –Outstanding Works, Works Completion and Defect Management Procedure | * Works completed in accordance with IFC Dwg and Specifications * Inspection completed & recorded prior to releasing activity | * Visual Inspection with Subcontractor at the end of work activity prior to signing off ITP |  |  | **PE (H)** | Refer to CHK241 | [ ] NWPA Completion Checklist –  CHK/NWPA/00241 |
| 6.2 | Close out NCR(s) | * NWP-000-NWA-PLN-XPM-   0022 Quality Management Plan | * All out of tolerances notified via NCR reporting system * All NCR’s applicable to the works to be raised in a timely manner and, if applicable, designer confirmation to be obtained. | * Prior to closing and signing ITP |  |  | **PE (H)**  **QM (H)** | Refer to CHK241 | [ ] NWPA Completion Checklist – CHK/NWPA/00241 |
| 6.3 | Relevant DCN(s) and RFI(s): | * NWP-000-NWA-PLN-XPM-   0006 Design and Engineering Management Plan | * Design/Construction Queries or clarifications relating to this ITP are addressed and closed. * All ‘parts’ of RFI are included * All ‘supporting evidence’ is included | * DCNs and RFIs closed and linked to NCRs where applicable |  |  | **PE (H)** | Refer to CHK241 | [ ] NWPA Completion Checklist –  CHK/NWPA/00241 |
| 6.4 | Redline Marked-up Drawings | * NWP-000-NWA-GUD-XDM-   0002 Red Line Guidelines | * Redline drawing to be produced & maintained by engineers to include all changes made during construction * Redline to use latest IFC version of the design drawings and be marked- up in red pen, to identify any variations * RFI, DCR, ECW and Client Wavers to be referenced in redlines (as required) | * Completion of Works |  |  | **PE (H)** | Refer to CHK241 | [ ] NWPA Completion Checklist –  CHK/NWPA/00241 |

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| ***PE:*** Project Engineer ***QM:*** Quality Manager ***CR****: Community Relations Advisor* | ***\*Other codes may be added as required*** | |
|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |

# *NOTE:*

* + 1. ***ITP to be signed at sections 1 to 3 and uploaded to Master lot with all preliminary verification records prior to works commencing on site.***
    2. ***Completed ITP and all verification records in sections 1 to 3 to be scanned into relevant Master Worklot and referenced in accordance with NWP-000-NWA-PRO-XQA-0003;***
    3. ***Completed checklists and all verification records in sections 4 to 6 to be uploaded into relevant Sub Work-lots***
    4. ***All applicable verification records must be legible, signed/ initialled and dated where required.***

# *NOTE:*

***If Master and Sub-lots are not in use – please attach signed ITP and all verification records from sections 1-6 to the applicable Worklot***

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|  | ITP-NWPA-XXXX TMF - Mechanical Services | |  | | | | |