1. Purpose
The intent of this guideline is to provide guidance in the identification and management of backlog maintenance items related to building assets and their supporting infrastructure.

This guideline forms part of the Asset management and maintenance policy (QH-POL-354:2015) and Asset management and maintenance standard (QH-IMP-354-1:2015).

All departments (as defined in Section 8 of the Financial Accountability Act 2009) must comply with the requirements of the Maintenance Management Framework (MMF) which includes the policy requirements to monitor and review maintenance performance, collect and retain relevant asset information and maintenance reporting capability.

2. Scope
This guideline applies to all employees, contractors and consultants within the Department of Health divisions and commercialised business units (DoH-CBUs).

This guideline does not apply to health technology equipment or information communication technology equipment.

This guideline can be used by Hospital and Health Services either as it is, by re-branding or as a base for a Hospital and Health Service specific guideline.

3. Requirements
3.1 Identifying backlog maintenance
Backlog maintenance is maintenance that is necessary to prevent the deterioration of an asset or its function but which has not been carried out. The review and management of backlog maintenance is crucial in assessing maintenance demand to inform the overall maintenance strategies and to identify and manage associated risks.

It is a mandatory requirement to use the Computerised Maintenance Management System (CMMS) to manage, record and maintain information on the backlog maintenance for all building assets and their supporting infrastructure that are owned by DoH-CBUs. Backlog maintenance items can be identified by reviewing the maintenance deficiencies from condition assessments, technical investigations and maintenance work requests recorded within the CMMS. Works identified through the condition assessment process as priority 1 deficiencies should be considered for immediate funding. Such items are generally of an urgent nature and therefore should be addressed as soon as possible. For further information refer to the Condition assessment guideline.

3.2 Risk management
All backlog maintenance activities should have a risk assessment completed and the results recorded in CMMS. The risk assessment must follow the Department of Health risk management framework, and risk treatments implemented to ensure the safety of staff, visitors and patients. The CMMS integrated backlog maintenance risk assessment tool aligns with the Department of Health risk analysis matrix. For further guidance on risk management governance refer to the Risk Management Policy (QH-POL-070:2015), Risk Management Standard (QH-IMP-070-1:2015), Risk Assessment and Treatment Guideline (QH-GDL-070-1-1:2015) and AS/NZS ISO 31000:2009 Risk management - Principles and guidelines.
3.3 Recording unfunded backlog maintenance

There are two ways to record backlog maintenance items in the CMMS, either against a condition assessment item or a work order. A business process flowchart for identifying and recording backlog maintenance is provided in Appendix 1.

To record a deficient condition assessment item as backlog maintenance the following details need to be entered into the backlog process data fields within the work management tab in the CMMS:

- risk rating by selecting the corresponding consequence and likelihood of an event occurring
- risk comments
- estimated cost to address the item
- cost estimate category (category 3 cost estimates are recommended for funding requests)
- backlog status of BACK for unfunded items.

For information on cost categories refer to the *Capital Works Management Framework (CWMF)* - Policy Advice Note *Estimate Categories and Confidence Levels*.

To record a maintenance work request as backlog maintenance the following details need to be entered into the backlog process data fields within the job details tab in the CMMS:

- risk rating by selecting the corresponding consequence and likelihood of an event occurring
- risk comments
- estimated cost to address the item
- cost estimate category (category 3 cost estimates are recommended for funding requests)
- backlog status of BACK for unfunded items.

3.4 Reviewing and funding backlog maintenance

The risk of not carrying out backlog maintenance works should be reviewed periodically based on the risk rating of the item in accordance with the risk management framework. Backlog maintenance items identified within the CMMS, must also be reviewed for funding consideration based on criticality, when developing the annual Asset Management and Maintenance Plan. Where risk treatments are adopted in lieu of funding backlog maintenance items, the items must be rerated and the projected risk rating updated against the backlog item in the CMMS. For further information refer to the Asset management and maintenance planning guideline.

Backlog maintenance and lifecycle replacement items requiring capital funding may meet the funding criteria for the Priority Capital Program. In these cases, requests for funding assistance should be submitted to the Priority Capital Program for funding consideration.

3.5 Recording funded backlog maintenance

Once funding has been allocated to address a backlog maintenance item, the backlog status in the CMMS must be updated. Where condition assessment items have previously been identified as unfunded backlog maintenance in the CMMS, the following process should be followed:

- remove all backlog process data from the condition assessment item
- create a maintenance assessment work order linked to the condition assessment item
- assign an activity type (LR – lifecycle replacement or CB – condition-based assessment)
- reassess the risk of the item
- populate the backlog process data fields within the job details tab including risk assessment details and risk comments, update cost estimate and cost estimate category
- enter funded backlog status (BFND - HHS funded, BANA - corporate funded or BMRP - Backlog Maintenance Remediation Program).
It is important to remove the backlog process data from the work management tab of the deficient assessment item. This is necessary to prevent the backlog information being recorded in two locations in the CMMS which will duplicate the item in backlog maintenance reporting. Where unfunded backlog maintenance items have been identified and recorded against a maintenance work request and funding has been allocated, this process should be followed:

- reassess the risk of the item
- update the backlog process data fields within the job details tab including risk assessment details and risk comments, update cost estimate and cost estimate category
- enter funded backlog status (BFND - HHS funded, BANA - corporate funded or BMRP - Backlog Maintenance Remediation Program).

### 3.6 Recording completed backlog maintenance

Once the status of the work order is updated to technically complete in the CMMS, the works are deemed to be complete for backlog maintenance purposes and are no longer reflected in the backlog maintenance values. In instances where there is a corresponding deficient condition assessment item, it will need to be updated to reflect its revised relative condition rating.

The funded backlog status should not be removed from the work order backlog process data, as this is used to identify the expenditure against backlog maintenance for key performance indicator 6 within the Decision Support System. For further information refer to the *Benchmarking and performance indicators* guideline.

### 4. Supporting documents

**Related references/information**

- Asset management and maintenance policy (QH-POL-354:2015)
- Asset management and maintenance standard (QH-IMP-354-1:2015)
- Asset management and maintenance planning guideline
- AS/NZS ISO 31000:2009 Risk management - Principles and guidelines
- Benchmarking and performance indicator guideline (QH-GDL-354-1-3:2017)
- Capital Works Management Framework
- Capital Works Management Framework - Policy Advice Note Estimate Categories and Confidence Levels
- Maintenance Management Framework
- Risk Assessment and Treatment Guideline (QH-GDL-070-1-1:2015)

### 5. Definitions

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backlog maintenance</td>
<td>Maintenance that is necessary to prevent the deterioration of an asset or its function but which has not been carried out.</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Computerised Maintenance Management System (CMMS)</td>
<td>The CMMS (SAP Plant Maintenance Module) is Queensland Health’s corporate asset maintenance system which is used to identify, manage and maintain the buildings and associated infrastructure. It is a module within FAMMIS. The CMMS provides comprehensive reporting on all aspects of maintenance activities and performance.</td>
</tr>
<tr>
<td>Condition assessment</td>
<td>A technical inspection by a competent assessor to evaluate the physical state of building elements and services and to assess the maintenance needs of the facility.</td>
</tr>
<tr>
<td>Finance and Materials Management Information System (FAMMIS)</td>
<td>A computer based integrated business management solution which utilises SAP enterprise resource planning software and contains financial, asset accounting, materials management and maintenance information.</td>
</tr>
<tr>
<td>Risk management</td>
<td>Systemic processes to identify, analyse, assess and treat risks that may impact an organisation’s objectives.</td>
</tr>
<tr>
<td>Risk treatment</td>
<td>Any process that involves actions which manage/modify risk. (Based on AS/NZS ISO 31000:2009)</td>
</tr>
<tr>
<td></td>
<td>A risk treatment is an approved task/activity/program/project or other initiative that when implemented/completed will reduce the likelihood and/or consequence of the current level of risk. A risk treatment may also be to improve, maintain or monitor the effectiveness of current controls.</td>
</tr>
<tr>
<td></td>
<td>Once implemented/completed the risk treatment may become a risk control.</td>
</tr>
</tbody>
</table>

### Version Control

<table>
<thead>
<tr>
<th>Version</th>
<th>Date</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>19 December 2017</td>
<td>New document</td>
</tr>
</tbody>
</table>
## Business process flow for backlog maintenance

### Business Process Flow - Deferred Maintenance (Backlog) Management from Assessment Items

<table>
<thead>
<tr>
<th>Assessment</th>
<th>Deficiency Evaluation</th>
<th>Backlog Assignment</th>
<th>Funding</th>
<th>Work Order Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complete Assessment Process for Functional Location / Equipment and upload / enter data into CMMS</td>
<td>Run transaction ZPM3233 – Change/Display Assessment Item List Parameters: Exit From Date – Current (3 yr) reporting period Assessment Plant – XX Assessment Item Type – CDN Assessment Item Status - DFCT</td>
<td>Complete; Consequence, Likelihood, Risk Comments &amp; Estimated Repair Cost</td>
<td><strong>YES</strong> Funding Available</td>
<td><strong>YES</strong> Remove Risk Assessment and Backlog Details from the Assessment Item</td>
</tr>
<tr>
<td><strong>YES</strong> Is Required Standard still Deficient?</td>
<td>Evaluate Deficiency Results - determine District Priorities - assess further action</td>
<td>enter Backlog Status – BACK – Unfunded Backlog</td>
<td><strong>NO</strong> Await Funding</td>
<td><strong>NO</strong> Create MAS Work Order from the Assessment Item</td>
</tr>
<tr>
<td><strong>NO</strong> End Process</td>
<td>Proceed to Work Order</td>
<td><strong>YES</strong> Reassess Deficiency Risk and update if required</td>
<td><strong>YES</strong> Update Work Order Backlog Status to BFND – District Funded BANA – Corporate Funded Enter Risk Assessment Details</td>
<td><strong>YES</strong> Create MAS Work Order from the Assessment Item</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>YES</strong> Process MAS Work Order to completion</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><strong>YES</strong> TECO MAS Work Order</td>
</tr>
</tbody>
</table>

**Critical:** it is important to remove the Backlog Status and Risk Assessment details from the Assessment Item before creating the Work Order, then re-entering them into the Work Order. If this is not done then the information can be reported on twice which inflates the actual Backlog liability.