Schedule 1 (Contract Details)

Item	Description	Detail	
Item 1	Principal (clause 1.1)	Name: ABN: Address:	New South Wales Land and Housing Corporation 24 960 729 253 4 Parramatta Square, 12 Darcy Street, Parramatta, New South Wales 2150
Item 2	Contractor (clause 1.1)	Name: ABN: Address:	Firecorp Australia Pty Ltd 88 101 279 725 27 Holden Street, Ashfield, New South Wales 2131
Item 3	Contractor's Representative (clause 1.1)	Name: Email:	Ravishankar Shivaram, Senior Project Manager ravi.s@firecorp.com.au
Item 4	Guarantor (clause 1.1)	Name: ABN: Address:	Not applicable Not applicable Not applicable
Item 5	Allocated Contract Area(s) (clause 1.1)	Contract Area 1 Contract Area 2 Contract Area 4 Contract Area 5 Contract Area 6 Contract Area 7 Contract Area 8 Contract Area 9A Contract Area 12 Contract Area 13	
Item 6	Alternative Contract Area(s) (clause 1.1)	Contract Area 3 Contract Area 9B Contract Area 10 Contract Area 11	
Item 7	Key Personnel (clause 1.1)	Name: Role:	Eduardo Ermilio Director
		Name: Role:	Ravishankar Shivaram Senior Project Manager
		Name: Role:	Andres Tejada Quality, WHS, Environmental and Compliance Manager / **Accredited Practitioner (Fire Safety)**
		Name: Role:	Snehal Patel Project Manager and Supervisor
Item 8	Maintenance Works Commencement Date (clause 1.1)	1 July 2024	

Item 9	Invoicing Methodology (clause 11.2)	Option 1 – Contractor Invoice	☒
		Option 2 – RCTI	☐
Item 10	Inspection liquidated damages (per inspection) (clause 8.5(a)(i))	[redacted]	
Item 11	Rate of liquidated damages (per day) (clause 8.5(a)(iv)) (applicable from commencement of Contract Year 1 through to end of Contract Year 10)		
Item 12	Principal Plans, Policies and Procedures (clause 1.1)	The Principal's plans, policies and procedures include: (a) Fire Safety Manual; and (b) New South Wales Land and Housing Corporation Contractor's Code of Conduct, and as otherwise set out in the Schedules.	
Item 13		Option 1	☐

	IT Requirements and SUI Options (clause 9.1)	Option 2 ☒ Contractor has requested to operate a hybrid model in accordance with Schedule 12 (IT Requirements).
Item 14	Home Building Licence Number (clause 31.9(b))	180397C, being the Contractor's home building licence number (with 627695 being the Contractor's nominated supervisor's (Eduardo Ermilio) licence number).
Item 15	Amount of Security (clause 12.1)	[redacted]
Item 16	Time for submission of an organisation chart (clause 19.2)	The Contractor will initially provide a proposed organisation within 28 days after the Date of Contract and will provide a revised and updated organisation chart no later than 30 days before the Maintenance Works Commencement Date.
Item 17	Dispute Panel (clause 36.3)	Principal – Head of Housing Portfolio, LAHC Contractor – Ravishankar Shivaram, Senior Project Manager
Item 18		Attention: Head of Portfolio Management, LAHC

	Notice details of the Principal (clause 9)	Address: Email:	4 Parramatta Square, 12 Darcy Street, Parramatta, New South Wales 2150 HomesNSW-HP-PortfolioManagementExecUnit@homes.nsw.gov.au
Item 19	Notice details of the Contractor (clause 9)	Attention: Address: Phone: Email:	Ravishankar Shivaram, Senior Project Manager 27 Holden Street, Ashfield, New South Wales 2131 0412 930 970 ravi.s@firecorp.com.au

Note regarding Insurance and Indemnity

This contract has been signed with the Firecorp Australia Pty Ltd Current Insurance coverage.

Our coverage is limited by the "COMBINED BROADFORM LIABILITY & PROFESSIONAL INDEMNITY POLICY" attached.

Please note that we will incorporate "New South Wales Land and Housing Corporation noted as a Principal" in the policy.

Schedule 2 (Maintenance Works)

1 Purpose and Application

This Schedule sets out a high-level description of the types of Maintenance Works which the Contractor may be required to perform in response to a Work Order. The detailed requirements and specifications for the Maintenance Works are set out in other Contract Documents.

2 Assignment of Maintenance Works

2.1 Responsive Maintenance

Responsive Maintenance Works are those Maintenance Works which the Principal includes in a Work Order designated as "Responsive Maintenance Works" (**Responsive Maintenance Works**).

Responsive Work Orders will typically be issued by the Principal in response to a request for Maintenance from or on behalf of a Tenant, Tenant advocate or from other stakeholders.

2.2 Programmed Maintenance

Programmed Maintenance Works are those Maintenance Works which the Principal includes in a Work Order designated as "Programmed Maintenance Works" (**Programmed Maintenance Works**).

Programmed Works are typically those Maintenance Works which are contemplated by the relevant Programmed Works Plan for the relevant Property.

2.3 Work Classifications

The Principal may issue a Work Order with any Work Priority Code (and with any Work Classification). A non-exhaustive list of Work Classifications is set out in the table below. The Principal amend Work Classifications or add new Work Classifications at any time and from time to time.

Work Classification	Description
AFSS	Typically used in Work Orders which relate to the production of a Fire Safety Statement for a Property.
Scope & Quote	Typically used to designate Work Orders which require the Contractor to investigate a Property and provide guidance to the Principal on the nature of any Maintenance Work required

2.4 Scope and Specifications

The specifications in relation to the Responsive Maintenance Works are set out in:

(a) Maintenance Work Specification;

(b) the Principal Plans, Policies and Procedures; and

(c) the Contractor Plans, Policies and Procedures.

3 Work Priority Codes

3.1 General

The Principal may issue a Work Order with any Work Priority Code. The table below sets out a non exhaustive list of Work Priority Codes and an indication of how different faults could be allocated to a Work Priority Code by the Principal.

Work Priority Code	General Description of Works
4H	A Work Order may be issued with a Work Priority Code of '4H' in the following circumstances: (a) all alarms or detectors within an entire floor are isolated, missing, off or broken; (b) hydrant: (i) outlets are discharging into any area of the Property; or (ii) systems are disabled in any area of the Property; (c) a sprinkler or drencher head has been activated; (d) no available water supply to the Property or in any area of the fire system; or (e) the 'fire indicator panel' is off or damaged such that its not operational.
24H	A Work Order may be issued with a Work Priority Code of '24H' in the following circumstances: (a) missing or broken alarm in an SOU; (b) missing or broken 'visual alarm device'; (c) damaged fire doors; (d) broken or missing emergency lights; (e) issues relating to 'fire hose reels'; (f) the fire indicator panel has an associated fault with an interconnected system or detector; or (g) leaking sprinkler or drencher heads.
5D	A Work Order may be issued with a Work Priority Code of '5D' in the following circumstances: (a) missing or broken fire extinguishers or fire extinguisher cabinets; (b) missing or damaged signage fire doors, fire shutters in common areas; (c) missing or broken fire blankets; or (d) a 'door hold open device' will not hold open the door.
10D	A Work Order may be issued with a Work Priority Code of '10D' in the following circumstances:

Work Priority Code	General Description of Works
	(a) graffiti; (b) delamination of door skin in the entryway to an SOU; (c) partially discharged extinguisher; (d) obstructed access to an extinguisher; or (e) missing block plans (e.g. for sprinkler systems).
18D	A Work Order may be issued with a Work Priority Code of '18D' for missing maintenance tags or signage.

Schedule 3 (Operational Requirements)

1 Work Order Procedure

1.1 Performance and Specified Steps

In respect of each Work Order, the Contractor must:

(a) for any Work Order which includes a Date for Work Order Commencement, not commence the performance of the Maintenance Works the subject of that Work Order prior to the Date for Work Order Commencement;

(b) for any Work Order, if the Maintenance Works are likely to result in a loss of power, gas, sewerage or water in any SOU, comply with section 1.16;

(c) for Work Orders which require Maintenance Works to performed at a Non-Residential Property, arrange an appointment with the relevant contact (as advised by the Principal) for that Property;

(d) for Responsive Work Orders which require Maintenance Works to be performed in one or more Occupied SOUs:

(i) make all reasonable attempts (and at least two separate attempts, appropriately spaced apart) to contact the relevant Tenants within the time period in column 2 of Attachment A which corresponds to the Work Priority Code for that Work Order (including by physically attending the relevant SOUs);

(ii) where it is able to make contact with the relevant Tenants (including where any Tenant responds to any prior attempt):

(A) arrange an appointment with the Tenant for the Contractor to attend the Property (which must be within the time period in column 3 of Attachment A which corresponds to the Work Priority Code for that Work Order); and

(B) immediately (and in any event on the same day the appointment is arranged):

(I) provide to the Principal all of the information required to be included in the relevant Confirmation Notification; and

(II) prepare and issue a Confirmation Notification to the relevant Tenant; or

(iii) where the Contractor is unable to make contact with or otherwise arrange an appointment with one or more of the Tenants within the time period in column 2 of Attachment A which corresponds to the Work Priority Code for that Work Order (if any) the Contractor must:

(A) record and evidence each of its attempts in accordance with section 5.1;

(B) notify the Principal; and

(C) comply with any directions from the Principal regarding the relevant Work Order in such circumstances, which may include:

(I) ceasing to attempt to contact the Tenants;

(II) contacting the Tenants by another means; or

(III) attending the Site during an appointment time scheduled by the Principal with the relevant Tenants;

(e) for Programmed Work Orders which require Maintenance Works to be performed in one or more Occupied SOUs:

(i) issue a Notice of Work to each Occupied SOU not less than 21 days prior to the earlier of:

(A) the date upon which the Contractor plans to attend those SOUs to perform the Maintenance Works; and

(B) the Date for Works Completion; and

(ii) make reasonable attempts to confirm an appointment time with the Tenants of each Occupied SOU; and

(iii) physically attend the relevant SOUs on the date contemplated in the Notice of Work, and where it is unable to gain access to the SOU, on one further occasion not less than 48 hours after that date; and

(f) where the Contractor is unable to:

(i) make contact with a Tenant;

(ii) arrange an appointment with a Tenant; or

(iii) is otherwise unable to gain access to the relevant SOU,

each in accordance with the steps in section 1.1(e), the Contractor must:

(iv) record and evidence each of its attempts in accordance with section 5.1;

(v) notify the Principal; and

(vi) comply with any directions from the Principal regarding the relevant Programmed Work Orders in circumstances where the appointment date cannot be arranged prior to the relevant Date for Works Completion, which may include:

(A) ceasing to attempt to contact the Tenants;

(B) contacting the Tenants by another means; or

(C) attending the Site during an appointment time scheduled by the Principal with the relevant Tenants; or

(g) attend the relevant Property and commence performance of the relevant Maintenance Works:

(i) during the date and time or (time period) either as agreed with the relevant Tenants or as reasonably directed by the Principal; or

(ii) for Work Orders which require Maintenance Works to be performed in Vacant SOUs, Common Areas or Non-residential Properties, attend the Site and commence performance of the relevant Maintenance Works within the time period:

(A) in column 3 of Attachment A which corresponds to the Work Priority Code for that Work Order (if any); or

(B) which an experienced and competent contractor, acting in accordance with Good Industry Practices and the intent to complete the Work Order within the time period in column 4 of Attachment A which corresponds to the Work Priority Code for that Work Order, would have attended the Site and commenced the performance of the SoR Items in the relevant Work Order; and

(h) for any Work Order:

(i) while attending the Property, comply with its obligations under section 3;

(ii) where it identifies the need for:

(A) Type 1 Supplementary Works, comply with section 1.10; or

(B) Type 2 Supplementary Works, comply with section 1.11; and

(iii) promptly notify the Principal once it has satisfied paragraphs (a) – (e) (inclusive) in the definition of "Works Completion" in the General Terms;

(iv) achieve Works Completion on or before the Date for Works Completion;

(v) provide to the Principal (unless otherwise directed, via the SUI) the evidence required by section 5.2 within:

(A) the time period in column 5 of Attachment A which corresponds to the Work Priority Code for that Work Order; or

(B) if no Work Priority Code is included on the Work Order, within 9 days of the date upon which Works Completion is achieved; and

(vi) (except where the Principal will issue an RCTI) submit a Contractor Invoice for the Work Order in accordance with clause 11.3 of the General Terms within:

(A) the time period in column 6 of Attachment A which corresponds to the Work Priority Code for that Work Order; or

(B) if no Work Priority Code is included on the Work Order, within 10 days of the date upon which Works Completion is achieved,

and otherwise comply with its obligations in clause 11 of the General Terms.

1.2 Proactive Approach

(a) The steps set out in section 1.1 are not an exhaustive list of steps that the Contractor is or may be required to take to carry out and complete a Work Order.

(b) Without in any way limiting the Contractor's obligations under the Contract, including each of the Specified Steps required to be taken under section 1.1, the Contractor must at all times:

(i) take a pragmatic, flexible, adaptable, conscientious and common sense approach to the performance of Works Orders and the delivery of the Maintenance Works; and

(ii) take proactive steps to ensure that Work Orders are carried out as efficiently as possible.

1.3 Expertise

(a) The Contractor must consider the SoR Items included in any Work Order and, using its expertise, advise the Principal if it considers that the Maintenance Works or any part thereof could contravene any applicable regulation, code, or Good Industry Practise.

(b) Where the Contractor considers that additional or alternative Maintenance Works would have a 'better off overall' impact on the functionality and/or life of an asset within a Property, the Contractor may notify the Principal, identifying the specific Maintenance Works which the Contractor considers would have such an impact.

1.4 SoR Item Quantities

If at any time during the performance of a Work Order the Contractor becomes aware that the quantities of one or more SoR Items in that Work Order are greater than the quantities required to perform the Maintenance Works, the Contractor must promptly notify the Principal.

For example, where the Principal issues a Work Order to the Contractor which contains an SoR Item for the replacement of 3 Exit Lights but upon attendance at the Property, it becomes apparent to the Contractor that only 2 Exit Lights need to be replaced, the Contractor is to identify this discrepancy to the Principal prior to the achievement of Works Completion and in any event before the Contractor submits a Contractor Invoice (or the Principal issues a RCTI) for the Work Order.

1.5 Attendance

The Contractor must not attend an Occupied SOU unless an appointment has been made with the relevant Tenant in accordance with section 1.1, except where:

(a) the relevant Work Order has a Work Priority Code for which 'NA' is stated in column 2 of Attachment A; or

(b) the Contractor is attempting to make an appointment with a Tenant in accordance with its obligations under this Schedule.

1.6 Residential Tenancies Act

The Contractor must ensure that it, at all times, complies with the requirements of the RTA, as if the Contractor was a 'landlord' for the purposes of the RTA.

1.7 Issuance Time

(a) The time of issue of a Work Order is taken to be:

(i) where the Work Order is issued on the SUI, the time that the Work Order is issued to the Contractor on the SUI, as recorded in the SUI; or

(ii) where the Work Order is issued via email pursuant to clause 8.2(b) of the General Terms, the time that the email was sent to the Contractor, as recorded in the Principal's email server.

(b) Where a Work Order does not include a Date for Work Order Commencement, the Date for Work Order Commencement is the time of issue as determined under section 1.7(a).

1.8 Work Order Modification

The Principal may, at any time prior to Works Completion of the Work Order:

(a) vary, amend or cancel a Work Order; and

(b) vary, amend or cancel any one or more of the SoR Items in a Work Order.

1.9 Work Priority Code Modification

The Principal may, at any time and from time to time by notice in writing to the Contractor, vary, amend, omit or add to the list of Work Priority Codes set out in Attachment A.

These changes will apply for Work Orders issued anytime after 11.59pm on the day which is 2 Business Days after the date of the Principal's notice.

1.10 Type 1 Supplementary Works Procedure

Where, in respect of a Work Order, the Contractor identifies that Type 1 Supplementary Works are required, it must:

(a) document and evidence the need for Type 1 Supplementary Works;

(b) perform the relevant SoR Items to satisfy the need for the Type 1 Supplementary Works;

(c) document and evidence the performance of the additional SoR Items (which constituted Type 1 Supplementary Works); and

(d) include such evidence in its documentation submitted to the Principal under section 1.1(h)(v).

The Contractor will not be entitled to claim for any SoR Items it purports to perform as Type 1 Supplementary Works, if:

(e) the total amount payable for those SoR Items is greater than the Type 1 Supplementary Works Threshold; and/or

(f) it does not comply with its obligations under this section 1.10.

1.11 Type 2 Supplementary Works Procedure

Where the Contractor identifies that Type 2 Supplementary Works are required, it must:

(a) document and evidence the need for Type 2 Supplementary Works and send such evidence to the Principal on the SUI;

(b) contact the Principal (via telephone or such other means as directed by the Principal from time to time) to:

(i) identify the Work Order and the need for Type 2 Supplementary Works; and

(ii) confirm receipt of the evidence uploaded under section 1.11(a) and provide any further evidence which may be requested;

(c) perform additional SoR Items to satisfy the requirement for Type 2 Supplementary Works included in any revised Work Order issued by the Principal;

(d) comply with any directions given by the Principal to:

(i) perform only some or all of the SoR Items included in the Work Order and to make safe the Site and demobilise; or

(ii) not perform or complete the SoR Items allocated to the Work Order and to make safe the Site and demobilise;

(e) document and evidence the performance of the additional SoR Items (if any) which were included in a revised Work Order as Type 2 Supplementary Works; and

(f) include evidence of such performance in its documentation submitted to the Principal under section 1.1(h)(v).

1.12 Type 2 Supplementary Works Outcomes

Where the Principal issues a direction:

(a) under section 1.11(d)(i), the Contractor must not perform any SoR Items in addition to those in the Work Order issued by the Principal; or

(b) under section 1.11(d)(ii), the Principal may amend or cancel the Work Order.

1.13 Type 2 Supplementary Works Claims

The Contractor will not be entitled to claim for any SoR Items it performs as Type 2 Supplementary Works, unless:

(a) it complies with its obligations under section 1.11; and

(b) the Principal has included those SoR Items it performs as Type 2 Supplementary Works in a revised Work Order.

1.14 Identifying other Maintenance Works (other than Supplementary Works)

(a) The Contractor must take a “multi-trade” approach to the performance of the Maintenance Works and its obligations under the Contract.

(b) If, while on Site, the Contractor identifies any aspect of the Site or any other part of a Property which may require Maintenance Works, the Contractor must:

(i) where practicable document such aspects, including (if appropriate) through photographs; and

(ii) as soon as reasonably practicable, inform the Principal and provide relevant evidence and documentation.

(c) A practical example is set out in section 1.15 for guidance.

(d) The Contractor must ensure that, in any interactions with Tenants relating to any potential Maintenance Works not included in a Work Order, it:

(i) subject to clause 8.10 of the General Terms, complies with the Principal's Plans, Policies and Procedures;

(ii) does not make any comments or representations to the Tenant regarding the need or time frame for any potential Maintenance Works; and

(iii) otherwise directs the Tenant to contact the Principal.

1.15 Practical Example of Supplementary Works and 'other' Maintenance Works

While attending the Property to fix a smoke alarm, the Contractor notices mould on the ceiling.

The Contractor captures an image of the mould and uploads it to the SUI, so that the Principal may take appropriate action.

The rectification of the mould is not Supplementary Works, however, the Contractor still has an obligation to notify the Principal of the issue in accordance with section 1.14 (and comply with its other obligations in section 1.14).

1.16 Utility Outages

(a) Upon receipt of a Work Order which will or may require the disconnection of any power, gas, sewerage or water at a Property, the Contractor must:

(i) take all reasonable steps to inform the Tenants in each SOU in the relevant Property of the expected outage, the date of the outage, its duration and the reason for the outage (including by physically attending each SOU);

(ii) perform a risk assessment, which must consider any Tenants (of which the Contractor is aware) who may have requirements for uninterrupted power, gas, sewerage or water;

(iii) inform the Principal prior to commencing the performance of the Maintenance Works and in any event, prior to disconnecting any power, gas, sewerage or water including confirmation of whether the Contractor has the agreement of each affected Tenant or not and comply with any reasonable direction from the Principal (except where the Maintenance Works or the disconnection is required to manage a threat to life or potential threat to life, in which case the Contractor must inform the Principal as soon as possible after the relevant Maintenance Works or disconnection is performed); and

(iv) in accordance with section 5.1, immediately report any objection to the disconnection received from a Tenant to the Principal and comply with the Principal's directions regarding the same.

(b) Where a Work Order will result in outages to any power, gas, sewerage or water over multiple days, the Contractor must:

(i) ensure that the power, gas, sewerage or water (as applicable) are reinstated;

(ii) if the relevant Maintenance Work was performed in an SOU, ensure that bathrooms, toilets, kitchens, laundries, bedrooms and any appliances, lights, power, water or drainage (as applicable for the Site) are safe and otherwise returned to a state consistent with its state prior to the performance of the Maintenance Works; and

(iii) ensure that all security measures (including access doors, windows, fences and gates) are closed or secured (as applicable to the Maintenance Works),

prior to departing Site each day.

(c) The Contractor must not disable or disconnect a Property's fire system (including fire alarm monitoring, fire alarm circuits, sound systems, suppressions systems and ancillary equipment) for more than four hours without the express consent of the Principal. The Contractor must coordinate each disablement or disconnection occurrence with the Principal and the relevant fire authorities.

(d) Where one or more Tenants will require temporary facilities (e.g. power produced by a generator or portable toilet facilities), the Principal may direct the Contractor to provide such facilities.

(e) Notwithstanding any other section of this Schedule, where one or more Tenants requires temporary accommodation:

(i) the Principal may organise (either directly or through a third party) the provision of such accommodation and advise the Contractor of the dates for which accommodation has been organised;

(ii) the Contractor must complete the relevant Maintenance Works which require the disconnection of any power, gas, sewerage or water during the period for which alternative accommodation has been organised; and

(iii) where the Contractor fails to complete such Maintenance Works within the period of which alternative accommodation was organised and such failure was not caused or contributed to by a Relief Event, the Principal may recover as a debt due and payable from the Contractor any additional cost it incurs for the provision accommodation beyond the original period.

1.17 Custom or Specialised components

Where an SoR Item in a Work Order specifies the components, parts, equipment, appliances, plant or materials (together for the purposes of this section 1.17, the **Components**) which are to be used, and it is not possible to procure those named Components within the time period for the completion of the Work Order because:

(a) those Components are custom or specialised in nature; and

(b) the Components are not available for purchase (from any vendor) at the time the Work Order is received; or

(c) the Components have prolonged manufacture or delivery timeframes (which make it impossible for the Contractor to perform the SoR Item within the time period allowed),

then the Contractor must:

(d) provide details to the Principal of the relevant issues;

(e) as soon as practicable, contact the Principal to confirm:

(i) the steps it has taken to procure the relevant Components;

(ii) whether alternative components may be suitable for the performance of the SoR Items; and

(iii) the earliest date (if any) which the Contractor could receive the Components; and

(f) comply with any reasonable directions of the Principal.

1.18 Contractor's Equipment

(a) The Contractor must ensure all Contractor's Equipment:

(i) is fit for purpose;

(ii) is in a safe and operational condition; and

(iii) where required, has passed its periodic inspections, or compliance or maintenance checks including any NATA certification.

(b) If the Maintenance Works requires the use of specialised equipment (for example elevated work platforms, scaffolding or scissor lifts), the Contractor must before commencing the relevant Maintenance Works provide to the Principal:

(i) a work methodology describing how the specialised equipment will be used, how it will be installed, and how long it will be at the Property;

(ii) a completed risk assessment (which will include how the safety and convenience of the Tenants and the general public will be maintained);

(iii) any 'safe work method statements' and 'safe work instructions';

(iv) where applicable, copies of operator licenses and associated qualifications for the use of or installation of the equipment; and

(v) any other specific requirements to ensure compliance with current Safe Work NSW requirements (i.e., working at heights, confined space, etc.).

1.19 Replacement

(a) If the Contractor considers that a component or system in a Property is beyond economical repair, the Contractor must prepare and issue a report (in the Approved Form) to the Principal detailing the condition of the faulty component / system.

(b) Any product or work must be of at least the same standard as the product or work which it replaces or interfaces with, and in any event, must comply with the Maintenance Works Specification.

1.20 Work by other contractors

The Contractor acknowledges and agrees that:

(a) other contractors (including those not engaged by the Principal) may perform works within each Property throughout the Term and that such works may include modification of fire systems; and

(b) the performance of any works by such contractors does not affect the obligations of the Contractor under this Contract.

2 Additional Information

2.1 Work Order Information

In accordance with the General Terms, each Work Order will include:

(a) the address of the Property (as applicable) where the Maintenance Works are to be carried out;

(b) (if applicable) the identity and contact details of the relevant Tenants;

(c) (if applicable) a Date for Work Order Commencement;

(d) (if applicable) the Date for Works Completion;

(e) (if applicable) the specific SoR Items comprising the scope of the Maintenance Works covered by the Work Order;

(f) (if applicable) a description of the Additional Maintenance Works comprising the scope of the Maintenance Works covered by the Work Order; and

(g) a designation as to whether the Work Order is a Responsive Work Order or a Programmed Work Order.

2.2 Additional Work Order Information

The Principal may, either within a Work Order or following the issuance of a Work Order, provide to the Contractor additional information in relation to that Work Order. Such information may include:

(a) a reference to whether the Work Order relates to an Escalated Matter;

(b) a Work Priority Code;

(c) specific contact name(s) and/or telephone number(s) for the Principal that will be used for that particular Work Order;

(d) person alerts as detailed in section 2.4;

(e) property alerts as detailed in section 2.5;

(f) tenant information as detailed in section 2.6;

(g) the maintenance request relevant to the Work Order as detailed in section 2.7;

(h) access information as detailed in section 2.8;

(i) specific Portfolio requirements, including the requirements of other entities which may be involved in the ownership, management or maintenance of a Property; and

(j) any other information which the Principal considers may be relevant to the Work Order, its contextual background or the Contractor's performance of its obligations in relation to that Work Order.

2.3 Work Order Contact Details

Where a Work Order:

(a) does not include specific contact name(s) and/or telephone number(s) for the Principal that will be used for that particular Work Order, the Contractor is to contact the Principal in accordance with the General Terms; or

(b) includes specific contact name(s) and/or telephone number(s) for the Principal that will be used for that particular Work Order, the Contractor must use that number for all telephone correspondence in connection with that Work Order (unless directed otherwise by the Principal).

2.4 Person Alerts

(a) The Principal may include an alert with a Work Order in relation to person(s) who may be in attendance or in the vicinity of the relevant Property.

(b) The Contractor is to take all appropriate steps to ensure that it undertakes the Maintenance Works in a way that effectively manages and caters for the subject matter of the person alert.

2.5 Property Alerts

(a) Where appropriate, the Principal may include an alert with a Work Order in relation to any aspect, characteristic or condition of a Property or its surrounds.

(b) The Contractor is to take all appropriate steps to ensure that it undertakes the Maintenance Works in a way that effectively manages and caters for the contents of the property alert.

2.6 Tenant Information

(a) The Principal may provide to the Contractor information in relation to any Property that may be relevant to engagement with the Tenant.

(b) The Contractor is to take all appropriate steps to ensure that it undertakes the Maintenance Works in a way that effectively manages and caters for that information.

(c) The Contractor must provide information to the Principal if it considers that any Tenant profile should be updated to enable the Principal to retain complete, accurate and useful records.

2.7 Maintenance Requests

(a) The Principal may provide to the Contractor the maintenance request relevant to the Work Order (or any part of such maintenance request).

(b) The Contractor is to take all appropriate steps to ensure that it undertakes the Maintenance Works in a way that effectively manages and caters for the contents of such information.

2.8 Access Information

(a) The Principal may provide to the Contractor information in relation to the means of access to the specific Property or part of a Property.

(b) The Contractor is to take all appropriate steps to ensure that it undertakes the Maintenance Works in a way that effectively manages and caters for the contents of such information.

3 Obligations during Site Attendance

3.1 Message Cards

Where the Contractor either:

(a) attends an SOU to discuss actual or potential Maintenance Works with the Tenant (including attempting to make an appointment for the performance of such); or

(b) attempts to attend an Occupied SOU at the relevant appointment time for the performance of Maintenance Work,

but the Tenant is not available, the Contractor must:

(c) leave a Message Card;

(d) record the Contractor's attempted visit in the SUI; and

(e) retain a record of the Message Card left at the SOU (including an image of the Message Card at the SOU).

3.2 Unattended SOU

(a) The Contractor must not commence or continue work in an Occupied SOU where the Tenant (who must be over the age of 18) is not present in the SOU.

(b) If the Tenant departs the SOU while the Contractor is on Site, the Contractor must depart from the SOU, inform the Principal, and arrange another appointment with the Tenant.

3.3 Supervision

The Contractor must:

(a) assess and provide the level of supervision appropriate to the scope of the Work Order;

(b) provide (as appropriate) Tenants with contact details of relevant supervisory personnel; and

(c) ensure that any apprentices, trainees and all other personnel deployed on the Work Order receive the appropriate level of supervision at each Property in accordance with Good Industry Practices.

3.4 Identification

(a) The Contractor must ensure that any Personnel attending a Property are readily identifiable while on site including by ensuring that person attending carries an identification card issued by the Contractor.

(b) Any identification card issued by the Contractor must:

(i) comply with AS 4718 for card type ID-1 save that no card is required to be machine-readable;

(ii) clearly display the:

(A) Contractor's ABN, registered business name and contact number;

(B) the name of the person to whom the card is issued and the business entity that person works for (where that entity is not the Contractor);

(C) a colour photograph and copy of the signature of the person to whom the card is issued;

(D) an expiry date for the card;

(E) a card registration number; and

(F) indicate that the holder is engaged on behalf of the NSW Land and Housing Corporation.

(c) The Contractor must record and track the issuance, use and return of all identification cards.

3.5 Due Diligence

(a) Where an SoR Item involves work which may require the Contractor to perform due diligence prior to commencing Maintenance Works on Site, the Contractor is required to perform that due diligence prior to commencing the Maintenance Works.

(b) The time and cost associated with such investigations is included in the relevant SoR Price.

3.6 Site Layout

The Contractor must ensure appropriate site demarcation, barricades, and WHS and/or environmental protocols are used.

3.7 Utilities and Facilities

(a) The Contractor must provide the equipment, consumables and plant to generate power on site, where power is required for the performance of the Maintenance Works.

(b) The Contractor must not:

(i) use, or seek to use, any property of any Tenant (for example, the Contractor must, where appropriate, provide its own vacuum cleaner and power to operate a vacuum cleaner, and must not seek to use a vacuum cleaner belonging to the relevant Tenant); and

(ii) use the washroom facilities of a Tenant.

3.8 Furniture & Tenant Property

The Contractor must carefully move (and reinstate following completion of the Maintenance Works) furniture or other items (e.g. whitegoods) which may hinder the performance of the Maintenance Works or which may become soiled or damaged as a result of the performance of the Maintenance Works. The Contractor must, when making an appointment to the Tenant, to the extent it is possible to do so, identify the locations in which the Contractor expects to work such that the Tenant is prompted to move personal property out of the vicinity.

3.9 No Obstruction

The Contractor must take all measures necessary to:

(a) avoid unnecessary interference with the passage of people and/or vehicles;

(b) keep all relevant Tenants informed of the status of power, gas, water and sewerage utilities in the Property;

(c) prevent nuisance, unreasonable noise and disturbance;

(d) minimise inconvenience to Tenants; and

(e) (as appropriate to the Work Order) keep the Site safe, clean and tidy (including by regularly removing used packaging, rubbish and keeping tools and materials together).

Where it is not possible to perform the Maintenance Works the subject of a Work Order without blocking property access for Tenants or vehicles, the Contractor must inform the Principal and comply with any reasonable direction of the Principal in relation to that Work Order.

3.10 Cause of Maintenance Works

If, while on Site, the Contractor identifies or has reason to suspect that the need for the performance Maintenance Works was caused by:

(a) work performed by any third party; or

(b) vandalism, sabotage or tampering by any person,

the Contractor must notify the Principal, including by providing any relevant evidence or details.

3.11 Identification of other issues

(a) If, while on Site, the Contractor identifies or has reason to suspect anything which should be brought to the attention of the Principal, the Contractor must:

(i) where practicable document such aspects, including (if appropriate) through photographs; and

(ii) as soon as reasonably practicable, inform the Principal and provide relevant evidence and documentation.

(b) The types of issues which are to be brought to the Principal's attention include:

(i) illegal additions, structures or activities;

(ii) health and safety issues;

(iii) threat to life or person;

(iv) hazards;

(v) significant asset damage; and

(vi) any deleterious or poor conditions.

Worked Example

While attending the Property to perform a fire door assessment, the Contractor becomes aware of the fact that a Tenant is hoarding excessive amounts of material or rubbish to the point where it is reasonably considered to be a hazard to health and safety.

The Contractor contacts the Principal to communicate the nature of the hoarding/excessive rubbish.

The Principal enquires whether the Contractor considers it is appropriate to take a photo of the property, the Contractor indicates that it does not, and instead describes the location and extent of the hoarding/excessive rubbish.

The Contractor proceeds to perform the SoR Items contained in the Work Order and no further action is required from the Contractor in respect of that Work Order.

4 Incidents

4.1 Notification

(a) The Contractor must promptly, and in any event within 1 hour of its Personnel becoming aware, notify the Principal of any:

(i) circumstance, occurrence, event, incident or altercation which may:

(A) lead to a complaint from a Tenant;

(B) require reporting to or investigation by any Responsible Authority, industry body or law enforcement agency; or

(C) otherwise require investigation by the Contractor or the Principal; or

(ii) complaint (of any kind) which it or its Personnel receive from a Tenant.

(b) The Contractor must, in response to an incident complete any forms or documents (as reasonably directed by the Principal) in the Approved Form. The Principal may require the use of online reporting tools or portals for the submission of reports and notifications which relate to the Work Health and Safety Requirements.

4.2 Investigation

The Contractor must:

(a) investigate, in accordance with Good Industry Practices, any circumstance, occurrence, event, incident or altercation which would have required a notification to the Principal under section 4.1(a)(i);

(b) cooperate with any law enforcement agency;

(c) allow the Principal:

(i) access to any Personnel; and

(ii) the opportunity to participate in any investigation; and

(d) provide the Principal with a copy of any document or report produced as a result of any investigation (which should include, where appropriate, the steps which the Contractor will take to avoid another similar circumstance, occurrence, event, incident or altercation).

4.3 Imminent Threat to Life

Where the Contractor considers that there may be an imminent threat to the life of any person, it must take all appropriate steps including immediately contacting emergency services and informing the Principal including via telephone.

5 Records and Reports

5.1 Record of Interactions

The Contractor must:

(a) notify the Principal each time it attempts to contact a Tenant without success and for any reason, including providing contemporaneous evidence of each attempt (where appropriate or requested); and

(b) notify the Principal each time it successfully contacts (or receives contact from) a Tenant, recording all relevant information including:

(i) the name of the Contractor's Personnel who makes contact;

(ii) the name of the Tenant;

(iii) the reason for the contact;

(iv) the outcome of the contact; and

(v) any other information which may be specified by the Principal (acting reasonably) as being required from time to time.

5.2 Documentation

The Contractor is to fully document its performance of the SoR Items in the relevant Work Order, including by:

(a) recording photographic evidence (date and time stamped) including:

(i) the condition of the Site prior to performing the Work Order;

(ii) the completed SoR Items;

(iii) any matters or issues identified in section 3.11; and

(b) recording and retaining the details of any equipment used to test systems (including any NATA certifications or calibration reports);

(c) providing technical specifications, datasheets, test results and certificates for all materials used in the Maintenance Works, and where reasonably requested by the Principal, operational manuals and drawings; and

(d) providing system or component test records, installation certificates and any other relevant information that substantiates the performance of the SoR Items.

5.3 Retention

The Contractor must produce and maintain accurate records, logs, statements, and reports in accordance with Standards of Routine Service for fire safety systems outlined in the Australian Standards AS1851-2012 and Schedule 4 (Servicing Requirements).

5.4 SUI

All information recorded by the Contractor must be:

(a) provided to the Principal in accordance with clause 9 of the General Terms;

(b) with respect to photographs:

(i) taken digitally and have file names that reference the relevant Property and Work Order;

(ii) taken using a camera which is capable of recording the GPS coordinates at the time the image was captured, such that the location data is recorded and stored as part of the metadata for the image;

(iii) dated and time-stamped when the photograph is taken, in a form that is not capable of being altered; and

(iv) taken at a minimum 5MP resolution.

6 Inspections

6.1 Contractor's Inspection and Audit

The Contractor must ensure that a qualified supervisor (employed by the Contractor) carries out a physical quality inspection of the Maintenance Works in each month, for at least 10% of all Work Orders for which Works Completion is achieved in the relevant month, prior to submitting a Contractor Invoice (or the Principal issuing a RCTI) for those Work Orders.

6.2 Property Inspection

The Contractor must ensure that it plans and programs its inspections of each Property in a manner which causes the least impact to Tenants, including by scheduling inspections outside of ordinary working hours.

6.3 Observation Notices

(a) Without limiting the Principal's rights under this Contract or otherwise at law (including the right to issue a Defects Notice), where the Principal attends a Site (including during the course of the Contractor carrying out Maintenance Works) and considers that an aspect of the Maintenance Works may not comply with the requirements of the Contract, the Principal may issue an observation notice to the Contractor (**Observation Notice**).

(b) The Contractor must consider the content of any Observation Notice and take any steps required to ensure that the Maintenance Works are completed in accordance with the requirements of the Contract.

6.4 Participation during Principal's Inspections

(a) Where reasonably directed by the Principal, the Contractor must:

(i) attend and participate in; and

(ii) procure that any of its Personnel nominated by the Principal attend and participate in,

any Pre-Completion Inspection or Post Work Inspection, at the date and time nominated by the Principal. For the purposes of this section, participation includes the submission of documents or responses to questions.

(b) The Principal is not required to involve the Contractor in any Pre-Completion Inspection or Post Work Inspection.

(c) The Contractor acknowledges and agrees that it will, and will procure that its Personnel will, participate in any inspection by the Principal in an open, honest and transparent manner.

7 Defects Procedure

7.1 Performance

Upon receipt of either a Defect Notice under clause 21 of the General Terms or a notice from the Principal that the Contractor has failed to rectify a Defect the subject of a Defect Notice (a **Follow Up Notice**) the Contractor must:

(a) for Occupied SOUs:

(i) contact the Tenant to:

(A) arrange an appointment with the Tenant for the Contractor to attend the SOU; and

(B) immediately (and in any event on the same day the appointment is arranged):

(I) notify the Principal of the date and time or (time period) agreed with the Tenant; and

(II) prepare and issue a Confirmation Notification to the Tenant; and

(ii) attend the Site and commence performance of the Maintenance Works during the date and time agreed with the Tenant;

(b) for Vacant SOUs or Common Areas, attend the Site and commence performance of the relevant Maintenance Work within the time period which an experienced and competent contractor, acting in accordance with Good Industry Practices and the intent to complete the Maintenance Works by the time stated in the Defect Notice, would have attended the Site and commenced the Maintenance Work; and

(c) for any Property (whether Occupied or Vacant):

(i) while attending the Property, comply with its obligations under section 3; and

(ii) complete the performance of the Maintenance Work required by the Defect Notice or the Follow Up Notice:

(A) by the time stated in the Defect Notice or the Follow Up Notice; or

(B) where no time is stated in either the Defect Notice or the Follow Up Notice, within a reasonable period having regard to the nature of the Defect or the contents of the Follow Up Notice; and

(iii) immediately notify the Principal upon completion of the Maintenance Work the subject of the Defect Notice or Follow Up Notice:

(iv) provide to the Principal the evidence required by section 5.2 on the SUI promptly upon completion of the Maintenance Work the subject of the Defect Notice or Follow Up Notice.

7.2 No modification

This section 7 does not limit or otherwise affect the Contractor's other obligations regarding any Defects or a Defect Notice.

Attachment A

1 Work Priority Codes

Column 1	*Column 2*	*Column 3*	*Column 4*	*Column 5*	*Column 6*
Work Priority Code	**Period for making Appointment with Tenant**	**Period for commencing work on Site**	**Period for Works Completion**	**Period for submission of documentation following Works Completion**	**Period for submission of Contractor Invoice following Works Completion**
4H	NA	2 hours	4 hours	4 days	5 days
24H	NA	10 hours	24 hours	4 days	5 days
5D	24 hours	2 days	5 days	4 days	5 days
10D	3 days	5 days	10 days	4 days	5 days
18D	5 days	10 days	18 days	4 days	5 days

2 Interpretation

In this Attachment A:

(a) a reference to a day is a reference to a calendar day and a reference to an hour is a period of 60 minutes;

(b) a period of time in:

(i) column 2, column 3 and column 4 is a period commencing on the later of the time the relevant Work Order is issued and the Date for Work Order Commencement (if any); and

(A) if that period is expressed as hours, the period commences at the time the Work Order is issued rounded to the nearest minute; or

(B) if that period is expressed as days, the date that the Work Order is issued is day 0 and the following day is ‘day 1’; and

(ii) column 5 and column 6 is a period commencing at the achievement of Works Completion for the relevant Work Order where the date that Works Completion is achieved is day 0 and the following day is 'day 1';

(c) the relevant period determined in column 5:

(i) is the final time by which the Contractor must have submitted all of its documentation and records, as required by the Contract; and

(ii) does not limit or otherwise affect the Contractor's obligations to submit contemporaneous updates throughout the performance of the Maintenance Works under any Work Order;

(d) a time period of 'NA' in column 2 means that the Principal has informed the Tenant that the Contractor will attend within the time in Column 3.

3 Work Programs

A summary of the types of Maintenance Works which may be issued under each Work Priority Code is set out in Schedule 2 (Maintenance Works).

4 Advanced Notice

The Principal may, from time to time, discuss potential Maintenance Works which it may issue to the Contractor as Programmed Maintenance Works in a future Quarter. Any such discussions, including the provision of information as part of such discussions, does not in any way affect the operation of this Schedule or any other provision of this Contract.

5 'Working' hours

The Contractor is responsible for managing, planning and programming the performance of the Maintenance Works to ensure that the Maintenance Works can be completed within required time periods and at all times in accordance with all applicable Laws, including those Laws relating to the use of power tools and other plant and equipment during certain hours, or the performance of construction work on certain days or during certain hours.

6 Modification

If the Principal varies, amends, omits or adds a Work Priority Code, and that requires a consequential amendment to this Attachment A, the Principal will provide to the Contractor a revised Attachment A, following which that revised Attachment A will form part of these Operational Requirements (and will replace any previous iteration of Attachment A).

Schedule 4 (Servicing Requirements)

Contents

1.1 CONTRACTOR SERVICING REQUIREMENTS

1.1.1 Routine Servicing

References in this Schedule to 'routine servicing' or 'servicing' activities are references to the requirements of AS:1851 and Appendix A. Any 'routine servicing' or 'servicing' forms part of Programmed Maintenance Works, accordingly the Contractor must include such activities in the Programmed Works Plan and must otherwise comply with this Schedule when carrying out any routine servicing or servicing (or any other Programmed Maintenance Works).

1.1.2 Australian Standard Servicing

AS1851:2012 incorporating Amendment No.1 is the primary basis for ongoing routine servicing (inspection, testing, preventive maintenance and survey) of fire protection systems and equipment, except where varied by this document. In addition, AS2293.2:2019 requirements shall also apply to emergency lighting and exit signs. If during the Term these Australian Standard are further amended or superseded, the revised standard shall take precedence including any additional commentary or specific variations imposed by the Principal from time to time.

It shall be noted that these standards provide the minimum basis of Programmed Maintenance Works, and where additional or superseding requirements are present in or by legislation, specific site conditions, or manufacturer's documentation, these shall take precedence. Any contradictions which require greater frequency or cost to the Principal must be referred by the Contractor to the Principal for review and determination.

Frequency of routine servicing shall be at minimum in accordance with Table 0-1 and Table 0-2.

Table 0-1 – ROUTINE SERVICE FREQUENCIES FOR ESSENTIAL FIRE SAFETY MEASURES

AS1851 Section reference		Monthly	Three-monthly	Six-monthly	Yearly	Five-yearly	Ten-yearly	Twenty-five-yearly	Thirty-yearly
2	Automatic fire sprinkler systems	✓	-	✓	✓	✓	✓	✓	✓
3	Fire pumpsets	✓	-	✓	✓	✓	-	-	-
4	Fire hydrant systems	✓Note1	-		✓	✓	-	-	-
	Hydrant valves	-	-	✓	✓	-	-	-	-
5	Water storage tanks for fire protection systems	✓	-	✓	✓	-	✓	-	-
6a	Fire detection and alarm systems (including Smoke and heat alarms – excluding alarms inside SOU) Note2	✓	-	✓	✓	✓	-	-	-
6b	Fire detection and alarm systems (Smoke and heat alarms – inside SOU only) Note2	-	-	-	✓	-	-	-	-
9	Fire hose reels	-	-	✓	✓	-	-	-	-
10	Portable and wheeled fire extinguishers	-	-	✓	✓	✓	-	-	-

11	**Fire blankets**	-	-	✓	-	-	-	-	-
12a	**Passive fire and smoke systems (other than doors)**	-	-	✓	✓	-	-	-	-
12b	**SOU entry doors – (including fire, smoke, solid-core)** Note4	-	-	-	✓ Note3	-	-	-	-
12c	**All other FSM doors – (including fire, smoke, solid-core, and fire safety doors)** Note4	-	✓ Note5	✓	✓	-	-	-	-
13	**Fire and smoke control features of mechanical services**	✓	✓	✓	✓	✓	-	-	-

Note:

- The above section references are groups of similar essential fire safety systems in accordance with AS1851. For servicing frequencies of specific systems or component types within these groups, the contractor shall refer to AS1851 unless varied as detailed below.
- Section 7 (Special hazards), Section 8 (Delivery lay fat fire hose), and Section 14 (Emergency planning in facilities) have been removed from the table as they are not applicable to the Portfolio
- Note 1: Where pumpsets are fitted.
- Note 2: Smoke and heat alarms within SOU only are permitted to be served at the reduced frequency of 12-month intervals, in lieu of 6-month internals.
- Note 3: As permitted by under AS1851 – Section 12.2.1, Hinged and pivoted door sets (fire, smoke or solid core) serving as entry doors to private residential apartments, are to be serviced yearly in lieu of 6-montly.
- Note 4: Refer to Section 1.1.7 for routine servicing requirements for solid-core and fire life safety doors
- Note 5: Where horizontal sliding doors are fitted.

Table 0-2 – ROUTINE SERVICE FREQUENCIES – Emergency lighting and exit signs for buildings (Table A1 – AS2293.2:2019)

	System	Monthly	Three-monthly	Six-monthly	Yearly	Five-yearly	Ten-yearly	Twenty-five-yearly	Thirty-yearly
1	**Emergency lighting and exit signs for buildings**	-	-	✓	✓	-	✓	-	-

Table 0-3 – FREQUENCY TOLERANCES (Table 1.11 (B) – AS1851)

Frequency	Tolerance
Monthly	5 working days
Three-monthly	10 working days
Six-monthly	1 month
Yearly	2 months
Five-yearly	3 months
Ten-yearly	6 months

Twenty-five-yearly	6 months
Thirty-yearly	6 months

Note:

- The table is the maximum tolerance allowed before or after the required service date which the Principal will accept.
- The tolerance schedule is not intended to require additional routine service activities to be carried out (e.g. six monthly routines carried out at five or seven monthly intervals).

1.1.3 Systems interface test (AFSS Witness testing)

As per guidance in AS1851 – Section 1.12, where fire protection systems are interfaced to other systems, 'end-to-end' tests shall be conducted to confirm that each interface operates in accordance with the approved design. Tests shall take into account all fire protection systems that interface with other systems to ensure that all systems function in accordance with the approved design. This test shall be the responsibility of the Contractor to coordinate and conduct, including the attendance of the required APFS to witness the required testing such that the APFS is able to assess all required FSM for the Property.

Where the fire safety systems within the Property are required to interface with other systems which are not fire safety systems but are required to operate (or cease operation) on fire alarm, such as air handling systems or audio systems, it is the responsibility of the Contractor to witness that these systems operate correctly during the system interface test. Where such systems exist, these systems shall also form part of the SFSS contract, and the routine servicing of these system shall also be the responsible of the SFSS contractor. Examples of these systems are as follows:

- Carpark mechanical ventilation systems, which contains a supply air smoke detection system.
- Centralised air conditioning system spanning multiple fire compartments which must stop on fire alarm
- Automatic gas shutoff for centralised boilers or cooking equipment which must shutoff on fire alarm
- Centralised audio-visual systems which must auto shut off on fire alarm to permit correct operation of BOWs or EWIS

1.1.4 Monthly common area inspections

This inspection as required by Section 1.5.1.1 is in addition to any standard monthly servicing activities of required fire safety systems and consists of a visual inspection only of all common areas as detailed in Table 0-4, and as applicable to the subject Property type. Any damage or impairment of a fire safety system identified during the inspection shall be noted on the form and entered into the SUI. The inspection also includes housekeeping issues, such as illegal storage of goods where they may impact life systems in a fire scenario. In addition, any safety concerns regarding items outside of the SFSS contract shall also be recorded by Contractor. Examples of such issues include:

- Building structural issues (i.e., cracked slabs or walls)
- Health and amenity issues (i.e., damaged or impaired common area toilets, or drug paraphernalia)
- Security issues (i.e., damaged card readers, locksets, windows, etc)

Where repairs or replacement of SFSS systems are required as a result of damage being identified, the details of the location, quantity and any required parts or labour shall be detailed such that the repair or replacement can be undertaken under an SOR without an additional inspection being required.

Table 0-4 – Monthly – Common Area inspections

Item No.	Item [Note 2]	Action required and pass/fail requirement	Records	
			Pass/Fail	Comment [Note 1]
Monthly – General inspection				
1.1	Entry lobby	VISUALLY inspect entry lobby for damage or impairment to fire safety systems		
1.2	Stairs (Internal, external, Fire isolated & Non-fire isolated)	VISUALLY inspect all required stairs and associated systems for damage or impairment to fire safety systems		
1.3	Carpark	VISUALLY inspect carpark area for damage or impairment to fire safety systems		
1.4	Garbage room	VISUALLY inspect garbage room for damage or impairment to fire safety systems including garbage chute system		
1.5	Auxiliary use area (use as required)	VISUALLY inspect auxiliary use areas for damage or impairment to fire safety systems. Detail inspected areas below:		
		a)		
		b)		
		c)		
1.6	General – "housekeeping"	During the visual inspection (item 1.1 to 1.5), is there any items that have been identified, related to "housekeeping" which pose a threat to fire safety of the Property or occupants.		
1.7	General – Other safety concerns	During the visual inspection (item 1.1 to 1.5), is there any items that have been identified, related to general safety concerns which pose a threat to life safety of the Property or occupants. [Note 3 Note 4]		

Note:

- Note 1: Where repairs or replacement are required as a result of damage being identified, the details of the required parts or labour shall be detailed in the comments.
- Note 2: Where a Property or Properties is served by an automatic sprinkler, hydrant, smoke detection system or mechanical systems, the inspection and check of these systems shall be conducted as part of the standard AS1851 methodology.
- Note 3: Should an issue be identified which poses an immediate threat it shall be reported directly to the relevant emergency service and the Principal.
- Note 4: Where 'means of egress or escape' from a Property is compromised, the Contractor shall complete a Means of Egress report (refer Schedule 10 (Reporting Templates)) and submit to the Principal as soon as possible.

1.1.5 Nominated fire safety systems

1.1.5.1 Garbage room chute closure systems

Whilst not a EFSM as defined by the relevant NSW Legislation there are a number of Properties which contain a garbage room chute "closure" system which serve a fire protection purpose and require routine servicing and annual assessment. These systems typically consist of a metal panel system which when initiated by a fusible link or manual activation, is moved by counterweights across the base of the chute opening to provide fire separation between the garbage room and chute. Some system also include a sprinkler or drencher head within the unit. A typical example of these systems can be seen in Figure 0-1 & Figure 0-2.

Where installed these systems shall have routine servicing conducted on the metal panel system including the fusible link in line with AS1851 recommended intervals for sliding fire doors. This is summarised in Table 0-5. The required servicing activities shall be conducted in accordance with Table 0-6.

Where a sprinkler or drencher head is installed in conjunction with the chute system, this shall be routinely serviced in accordance with relevant section of AS1851 – Section 2.

Annual assessment of this measure on the Fire Safety Statement as capable of performing its intended design functionality shall be conducted by the Contractor. The documented design functionality being:

- When activated, the sliding panel prevents the passage of garbage from the shaft into the garbage room compartment.
- The drencher system and associated head meets design standard as documented on the building block plan.

Noting that as the measure is not a EFSM under the relevant legislation, accreditation for this measure by the APFS is not available. As such the minimum qualification shall be that the person holds an accreditation for fire doors. Assessment of the associated drencher or sprinkler shall be covered under the applicable Automatic Fire Suppression Measure as detailed on the Property Fire Safety Schedule.

The following tables provide the required service internals for this system and the service activities required:

Table 0-5 – Garbage room chute closure system – Service intervals

	System	Monthly	Three-monthly	Six-monthly	Yearly	Five-yearly	Ten-yearly	Twenty-five-yearly	Thirty-yearly
-	**Garbage room chute closure systems (excluding associated sprinkler or drencher)**		✓	✓	✓				

Table 0-6 – Three monthly and Six monthly service schedule – Garbage room chute closure systems

Item No.	Item	Action required and pass/fail requirement	Records		
			Result	Pass/Fail	Comments
THREE-MONTHLY					
1.1	Frictional forces, operation and self-closing ability	SIMULATE a full operational test (mechanically and electronically) as appropriate to ensure correct automatic closing of the panel is achieved. CHECK operation to ensure the panel fully closes from the fully open position and from one intermediary position.			
SIX-MONTHLY					
1.2	Location	INSPECT against schedules to ensure that chute system has been added, removed or modified.			
1.3	Clearances and overlaps in the closed position	INSPECT clearances and overlaps of metal panel remains consistent			
1.4	Restraint brackets and interlocking steel sections	INSPECT restraint brackets and/or interlocking steel sections are fixed adequately and functional.			
1.5	Hardware	INSPECT hardware is securely attached with steel fitting appropriate to the mounting substrate			
1.6	Automatic operations	**(2)** CHECK fusible links, where fitted, are intact and unpainted.			
		(b) CHECK pulley cables are free from fraying, kinks, excessive stretching and corrosion.			
		€ CHECK pulleys are free to rotate.			
		(d) REPLACE all fusible links every 5 years from the date of manufacture. NOTE: In lieu of replacing all fusible links, a representative sample may be tested as per Section 2.			
		(e) PERFORM a full operational test (mechanically and electrically) as appropriate to ensure correct automatic closing of the door is achieved.			
		(f) CHECK operation to ensure the door fully closes from one intermediary position.			

1.7	Panel guides, stops and restraints	INSPECT slab-mounted guides and stops and all travel-limiting devices at panel open and close locations are adequate and soundly mounted.			
1.8	Panel	(a) INSPECT panel is free from any delamination, any other damage and all perimeter edge capping is complete and sound.			
		(b) CHECK panel is clear from non-approved fittings, fixings and attachments and not impeded by grime or rubbish build up.			

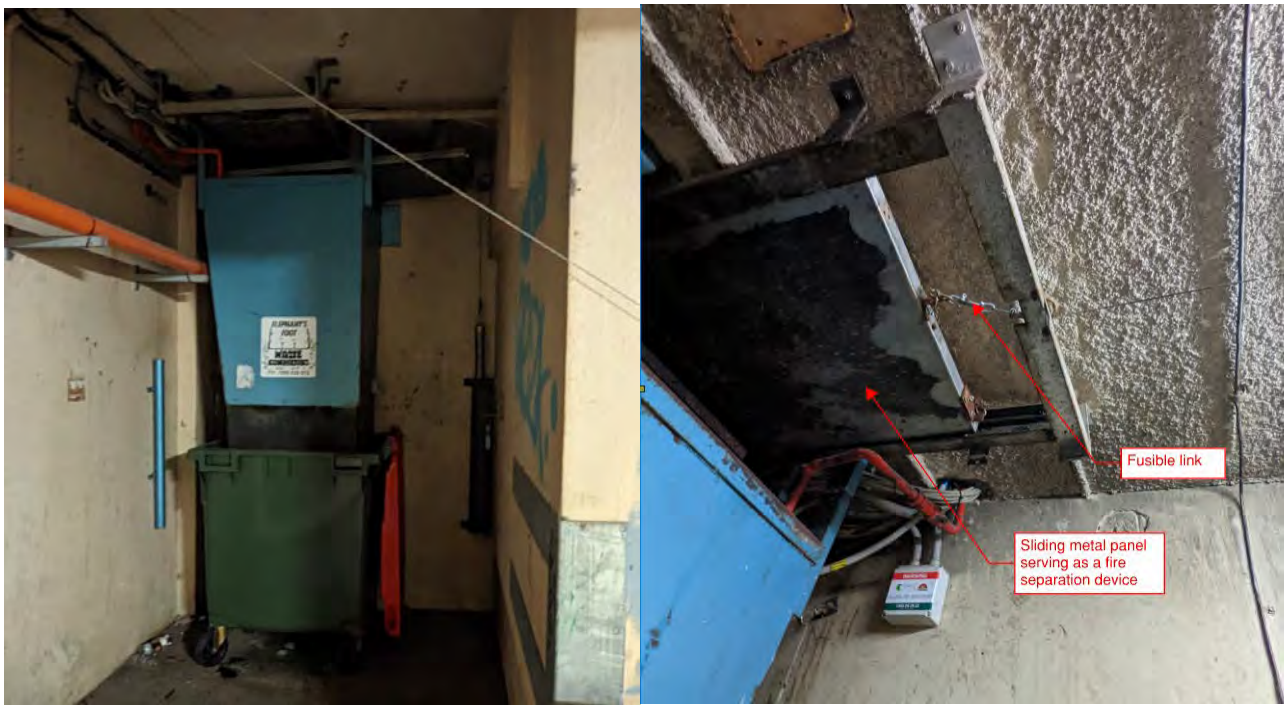

Figure 0-1 – Garbage room chute systems

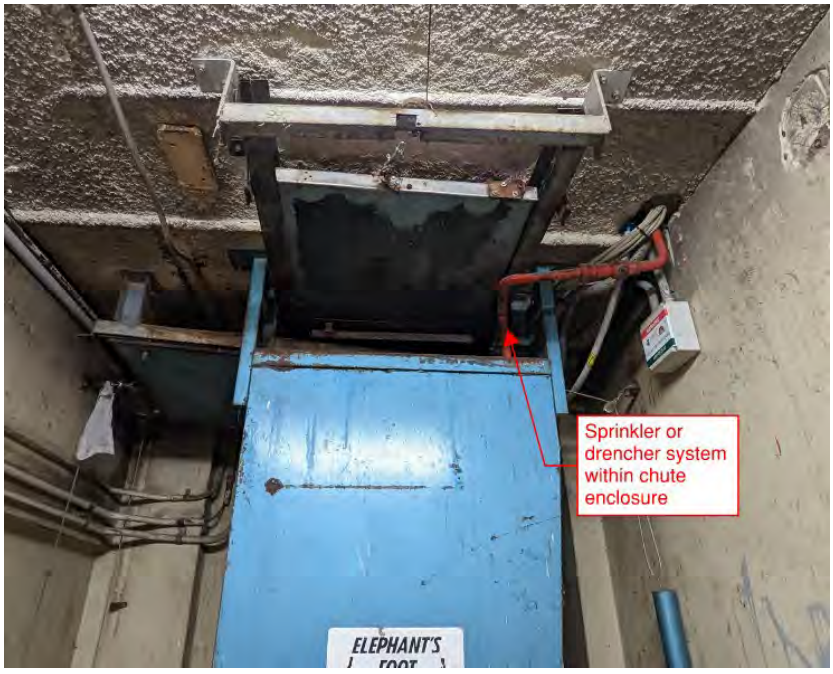

Figure 0-2 - Garbage room chute syst–m - Sprinkler or drencher system.

1.1.5.2 Life Safety Signs

Where currently installed in a Property, the Contractor is required to maintain the Life Safety Signs installed within the Property. These signs are generally located on the internal side of all SOU entry doors, but common area signs may also be installed in some Properties. These signs shall provide occupants with key information regarding exit paths and fire safety measures within the Property to assist the occupants in the event of an evacuation. Life Safety Signs require routine servicing and annual assessment.

The following tables provide the required service internals for this system and the service activities required:

Table 0-7 – Life Safety Signs – Service intervals

System		Monthly	Three-monthly	Six-monthly	Yearly	Five-yearly	Ten-yearly	Twenty-five-yearly	Thirty-yearly
-	**Life Safety Signs**			-	✓				

Table 0-8 - Six monthly service schedule – Life Safety Signs

Item No.	Item	Action required and pass/fail requirement	Records		
			Result	Pass/Fail	Comments
SIX-MONTHLY					
1.1	Sign	INSPECT rear of SOU door to ensure sign is still installed and is legible			
1.2	Continuity	INSPECT sign is still applicable to the Property layout and location of relevant fire safety features.			
1.3	Fixings	CHECK sign is still adequately fixed to the door. If sign has become detach it shall be refixed using an appropriate adhesive or fixing type.			

1.1.5.3 Radiant heat attenuation screens

As permitted by the Principal FSM radiant heat attenuation screens are permitted to be utilised where windows are located within 3 m of a boundary, in lieu of either a fire rated, or drencher protected, window. Design and compliance of these units are in accordance with the FSM guidance.

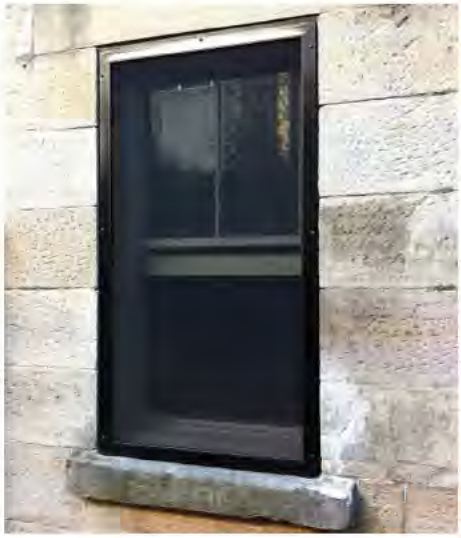

Figure 0-3 - Radiant heat attenuation screen

The following tables provide the required service internals for this system and the service activities required:

Table 0-9 – Radiant heat attenuation screens – Service intervals

System		Monthly	Three-monthly	Six-monthly	Yearly	Five-yearly	Ten-yearly	Twenty-five-yearly	Thirty-yearly
-	**Radiant heat attenuation screens**			✓	✓				

Table 0-10 - Six monthly service schedule – Radiant heat attenuation screens

Item No.	Item	Action required and pass/fail requirement	Records		
			Result	Pass/Fail	Comments
SIX-MONTHLY					
1.1	Location	INSPECT heat attenuation screen location against drawings or asset register. Ensure no screens have been added, removed or relocated.			
1.2	Integrity	INSPECT screen to ensure frame and mesh is intact with no damage to the mesh wires.			
1.3	Fixings	CHECK screen is still adequately fixed to the wall using the required fixing type. If screen has become detached it shall be refixed using an appropriate fixing type.			

1.1.6 Fire Engineered Solutions

Other than the fire engineering solutions documented above, due to the nature of Performance Solutions (fire engineered solutions), being tailored for individual Properties, there is no way uniformly to categorise them by extent or complexity. Unless detailed otherwise in the Performance Solution, the contractor shall make an assessment to determine the primary EFSM measures to which the Performance Solution applies or which

form a requirement of the Performance Solution and routinely service those measures in line with the procedures detailed above and in accordance with the relevant Work Order. If any anomalies are identified these shall be referred to the Principal for review and determination. Where a specific report is not available, the contractor shall refer to Fire Safety Compliance Certificate (FSCC) or Statement Of Adequacy (SOA) document issued by the Principal, as a baseline for the upgrade work conducted and in conjunction with the Principal determine a suitable routine servicing frequency and activity program, and to be included in the Programmed Works Plan. Where the Contractor believes that an undocumented Performance Solution may apply to a Property, they shall refer this to the Principal, including any required supporting evidence or documentation for determination.

1.1.7 Solid-core and fire life safety doors

Any solid-core doors or doors in the path of travel to an exit (excludes door internal to an SOU), shall be routinely serviced and inspected in accordance with the requirements of AS1851 – Table 12.4.4 (hinged and pivoted smoke doors) and in accordance with the relevant Work Order. Servicing frequency shall be in accordance with Table 0-1.

1.1.8 Additional servicing requirements where past records are not available

Where servicing records are not available for routine service activities encompassing monthly to yearly frequency activities, the Contractor shall conduct these activities prior to the relevant AFSS Due Date. This shall ensure these records are available for the consideration of the APFS when endorsing the relevant EFSM.

Where servicing records are not available for routine service activities encompassing the 5-to-30-year activities, these shall be conducted in a staged manner to ensure that the servicing baseline can be re-established. The required periods based on activity frequency are as follows:

- Five (5) year service activity, these shall be conducted on or before the end of Contract Year 2.
- Ten to thirty (10-30) year service activity these shall be conducted on or before the end of Contract Year 5.

Should the Contractor identify that these additional services are required in order to re-establish this baseline, the Contractor shall provide this advice including supporting evidence (photos, service records, etc) to the Principal for review and consideration. If it is determined that this additional servicing activity is necessary, the Principal will subsequently engage the contractor for these works under the relevant SoR Item.

Note: Where wet sprinkler or drencher heads are exposed to harsh conditions (close to ocean, pools, garbage rooms, etc) additional visual inspection may determine if the formal testing normally required at twenty-five (25) year periods under AS1851 – Table 2.4.2.4 – Item 4.18 may be required to be conducted earlier than the allotted first five (5) year period of the contract.

1.2 ROUTINE SERVICING – ACTIVITES

The following detailed the activities required as part of the routine servicing and inspection under the Contract for the EFSM and other associated systems. This includes activities unique to the Principal's requirements in addition to activities required under AS1851:2012.

1.2.1 Australian standard inspection activities

AS1851 and AS2293.2 includes a broad range of potential check, inspection and other activities depending on the outcome and findings of the routine service schedule. Whilst all check and inspect activities are included with in the base SOR, these additional activities can be divided into two categories:

1. Activities (basic parts & labour) that are **included** within the routine inspection SoR Item (Marked in GREEN)
2. Activities **not included** in the routine service and requiring Supplementary Works request (Marked in RED)

A summary of all AS1851 servicing activities and the associated categories (GREEN/RED) as included in Appendix B.

Worked Example

The following worked example is provided for guidance only on the application of activities marked as GREEN or RED while performing routine service. They are not intended to cover all possible work included in the routine service activity, but rather illustrate what will be considered as reasonable.

"Activities deemed included in routine servicing SOR" - GREEN.

SFSS08050 (or SOR as applicable to building type) includes routine monthly inspection of the Sprinkler System of the Building.

One of the associated activities, as detailed in Table 0-11, the item (No.1.1) involves an inspection of the control valve assembly area for a sprinkler system to make sure it is unobstructed and free from any condition impacting its operation.

If the valve is obstructed by rubbish or requires lubrication for free operation, it is deemed that the removal and clearing of this rubbish or the lubrication of the valve is included within the SOR item for the monthly service SFSS08050 (or SOR as applicable to building type) includes.

While performing the above routine service, damage to the valve is noted which needs repair or replacement, then this will be recorded as a defect, and request for the Supplementary Work Order to perform necessary repair or replacement using the applicable separate SOR.

"additional activity to be performed using separate SOR" - RED

As detailed in Table 0-11, the item (No.1.2) while checking the sprinkler spare cabinet (through routine servicing SOR SFSS08050 (or SOR as applicable to building type)) if replenishing of spare sprinklers (RED) is necessary then the separate SOR can be used for restocking, through requesting Supplementary Works i.e. replenishing of sprinkler spare is **not** deemed included in SOR SFSS08050 (or SOR as applicable to building type) marked RED.

Table 0-11 - WORKED EXAMPLE

TABLE 2.4.2.1
MONTHLY ROUTINE SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS WET PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
1.1	Control valve assembly	CHECK that control valve assembly area is unobstructed and free of any condition that may adversely affect the operation or access.	Any activity deemed included
1.2	Sprinkler spares, sprinklers and sprinkler spanner	CHECK that there are spare sprinklers of appropriate quantity and type including a matching sprinkler spanner for each type of sprinkler fitted, available.	
1.3	Signage	CHECK for damage, legibility and appropriate location of required signage.	
1.4	Fire brigade booster connection	CHECK that the booster connection or enclosure is unobstructed and for any condition that may adversely affect the operation or access. CHECK that the booster connection coupling type is as per the local fire brigade requirements.	Any activity deemed included

1.2.2 Other servicing activities

1.2.2.1 Cleaning

The Contractor is responsible for general cleaning of the areas directly associated with EFSM, such that the EFSM remain suitable for brigade or occupant usage and can perform as required in the event of a fire scenario. This includes, where applicable to removal and appropriate disposal of waste generated by the public, Property occupants or the Contractor as a result of Maintenance Works. Contractor shall ensure that all cleaning activities are conducted in accordance with any relevant Contract requirements and associated legislative or WHS requirements. Where occupant waste or items impede path of travel compliance, this is not deemed to be the responsibility of the SFSS Contractor and shall be referred to the Principal.

1.2.3 Other fire safety systems

1.2.3.1 Garbage room chute systems

All activities detailed within Table 0-6 are deemed to be included within the applicable routine inspection SoR Item for this system.

1.2.3.2 Life Safety Signs

All activities detailed within Table 0-7 are deemed to be included within the applicable routine inspection SoR Item for this system.

1.2.3.3 Heat attenuation screens

All activities detailed within section 1.1.5.3 are deemed to be included within the applicable routine inspection SoR Item for this system.

1.2.3.4 Building specific fire engineered solutions

As detailed in Section 1.1.6, where Property specific fire engineered solutions apply the EFSM component forming part of the fire engineered solution shall be maintained in accordance with the relevant AS1851 activities.

1.3 REPAIR OR REPLACEMENT ACTIVITIES

Where repair or replacement is required, the Principal from time to time may issue an instruction for repair or replacement works to be conducted in accordance with the FSM manual [5,6] or any other documented fire engineered solutions.

1.4 SERVING RECORDS AND DELIVERABLES

The documentary evidence produced through the routine servicing and inspection activities conducted under this Contract is intended to support the responsible entity to satisfy both the Contractors and the Principal's regulatory obligations under the relevant NSW Legislation. Should the Accredited Practitioner (Fire Safety) engaged by the Contractor require additional supporting evidence, in order appropriately assess a relevant FSM on the Fire Safety Statement it is the responsibility of the Contractor to ensure this additional documentation or records are obtained at each service.

As detailed in Section 1.1.8, the Contractor is responsible for ensuring sufficient routine service records are available for all systems, within the periods stated. The Principal will not accept a lack of servicing records after the Maintenance Works Commencement Date as a reason for refusing to endorse a fire safety measure within a Property.

1.4.1 Bar Coding

The Contractor must install a bar code reference number tag on each Component nominated in Table 0_11. The Contractor must maintain the bar code references and provide details in the SUI.

Bar code labels on operable items must be located in a position where they are easily visible. For example, if located on a door, they must not require the door to be opened to gain access to the bar code. Bar codes must not be located in positions where they affect the operation or maintenance of Components. For example a bar code for an exit light should not be placed on the ceiling where it could potentially interfere with painting work.

The bar codes must be maintained throughout the Term and must be protected where exposed to weather.

The Contractor must replace any missing or damaged barcodes with another barcode of the same number as the one it replaces. This may be done at the next scheduled service after the missing bar code is identified.

Where new components are installed the Contractor must install a new barcode number and provide details in the SUI. The old barcode identifying the replaced Component must not be used again.

1.4.2 Bar Code System

The Contractor must have the ability to scan all items into a format that is suitable to the SUI. This bar code system and all associated data shall become the property of the Principal at expiry or termination of the Contract. The bar code system must be referenced within the log book system and Service reports as required.

1.4.3 Recommended Bar Code Format

The Principal prefers the Bar Code 39 symbology but would also accept the Contractor proposing an alternative coding symbology, if the Contractor can justify the change.

Each data character encoded in a Code 39 symbol is made up of 5 bars and 4 spaces for a total of 9 elements.

The symbol includes:

- beginning quiet zone;
- start character;
- encoded data;
- stop character;
- end quiet zone; and
- code 39 does not normally include a check character.

Example: H-SFSS XXXX 000001 (Housing SFSS contract – post code – plant item number 000001)

The bar codes must be capable of being re-printed for that plant item if the original bar code gets removed.

Label Specification:

- size: Min 40mm x 15mm;
- printing: lamination to prevent ageing;
- facestock: durable photographic paper or equivalent robust material;
- adhesive: high strength acrylic;
- symbology: code 39; and
- barcode density 9.4cpi.

1.4.4 Minimum required records for Fire Safety Measures

AS1851 provides the minimum requirements for records, logs and deliverables associated with routine servicing of fire safety systems. The following section details any additional requirements beyond this minimum. It should be noted that the Contractor and their associated APFS shall in addition to the below, also retain any required records to satisfy their own Quality Assurance system and any legislative or professional requirements.

As part of the SFSS Contract the AS1851 required "summary of records" prescriptively required to be kept as a physical copy onsite shall be replaced with a digital copy through the SUI. For all other types of record systems including logbook, tags and labels, the physical record must still be utilised and maintained onsite with a digital copy also entered into the SUI.

The required routine service records under the Contractor are detailed in Table 0-12. All other requirements for routine service records shall be in accordance with AS1851 – Section 1.16.

Table 0-12 - ROUTINE SERVICING RECORDS

Section No. (AS1851)	Systems or equipment	Service Records			
		Logbooks	Tags	Labels [Note5]	Summary Records
2	Automatic fire sprinkler systems	✓ + IT	-	Barcode	-
3	Fire pumpsets	✓ + IT	-	Barcode	-
4	Fire hydrant systems	✓ + IT	-	Barcode	-
4	Fire hydrant valves		✓	✓+ Barcode	IT
5	Water storage tanks for fire protection systems	✓ + IT	-	Barcode	-
6	Fire detection and alarm systems	✓ + IT	-	Barcode	-
9	Fire hose reels	-	✓	✓+ Barcode	IT

10	Portable and wheeled fire extinguishers	-	✓	✓ + Barcode	IT
11	Fire blankets	-	✓ + IT	✓ + Barcode	IT
12	Passive fire and smoke systems	✓ + IT	-Note1	✓ + Barcode	IT
13	Smoke and heat control features of mechanical services	✓ + IT	-	IT	-
14Note2	Emergency lighting and exits signs	✓ + IT	-	IT + Barcode	-
15 Note3	Garbage room chute systems	✓ + IT	-	✓ + IT	-
16 Note3	Life safety signs	-	-	IT	IT
17 Note3	Radiant heat attenuation screens	*	-	✓ + IT	IT

Note:

- Note1: There is no requirement for servicing tags for fire door leaves or frames under the Contract or AS1851. Where it is identified that a fire door leaf or frame is missing the statutory compliance tag (AS1905.1), the contractor shall conduct the fire door auditing procedure as detailed in the FSM. This shall be conducted under relevant SoR Items and a compliance tag installed where deemed appropriate.
- Note2: AS2293.2 – Standard requirement
- Note3: 1.1.5 - Nominated fire safety systems
- Note4: IT refers to the SUI
- Note5: Refer to Section 1.4.1 for detail regarding labels and barcoding.

1.4.5 Location of onsite records

All logbooks required to be kept on a Property shall be kept at a minimum in a secure location which is not accessible to the Property occupants or other members of the general public but is available for access through means of a 003 (Fire brigade key). Location shall be shielded from moisture or contamination. The following locations are recommended in order of preference:

1. Fire Control Room (FCR)
2. Pumpset room
3. FIP/FDCIP cupboard
4. Main switch board room
5. Security office
6. Metal lockable (003 key) cabinet in common area

Logbooks kept onsite shall be maintained for a period not less than seven (7) years onsite in accordance with AS1851 requirements.

1.4.6 Templates

The following templates are directly applicable to SFSS and are a minimum requirement for Contractors to complete as part of their fulfilment of the Contract activities. Where requested, these templates may require the additional input of onsite photos or videos as applicable to the system or works:

- Service Report – As documented in AS1851, AS2293.2 and Section 1.1.5 as applicable.
- Monthly Report – Table 0-4
- Annual Fire Safety Statement (AFSS) – Current - Version 4 – Effective 1 September 2022
- LAHC Internal Annual Fire Safety Statement (LIAFS–) – Schedule 10 (Reporting Templates)
- Yearly Condition Report – Schedule 10 (Reporting Templates)
- Means of Egress – Schedule 10 (Reporting Templates)

Note: The above listed templates and as detailed in Appendix A and/or Schedule 10 (Reporting Templates), are currently in force at time of tender. Should a subsequent revision be issued by the Principal or mandated by NSW Fair Trading, this shall take precedence.

1.4.7 Photographic and Video evidence

As detailed in Section 1.4.6 and Appendix A, there is a requirement for the Contractor to record and submit photographic or video evidence as part of the required routine servicing deliverables. This requirement does not replace any additional requirements the Contractor may have to capture or retain media, to satisfy any statutory or regulator obligations whilst conducting routine servicing or Fire Safety Schedule inspection.

The Contractor is responsible for ensure that any photographs or video are in the correct format and quality, as required by the SUI. In addition, the Contractor shall retain any media captured or produced during the execution of the Contractor for the period of the Contract, including after submission through the SUI.

1.5 CONTRACTOR REQUIREMENTS

1.5.1.1 Monthly common area inspections

The requirements and activities associated with monthly inspections required under clause 6 of the General Terms are detailed in Section 1.1.4.

1.5.1.2 Expectation for Quality Management

In addition to any industry, company or other accreditation body requirements for documentation and site inspections for which an APFS must have access to or conduct in order to satisfy their requirements to assess measures on a Fire Safety Statement, there is an expectation for active involvement of the Accredited Practitioner (Fire Safety). Regardless of whether the APFS is an employee of the SFSS Contractor or a subcontracted APFS, the accredited individual shall maintain on going communication with the team conducting the routine servicing to ensure the following:

- The appropriate level of service and baseline documentation is maintained throughout the life of the Contract, sufficient to satisfy the APFS requirements to assess the measures.

The APFS shall keep the team abreast of any industry changes regarding Fire Safety Statement or associated regulation and legislative changes which may impact on going assessment of fire safety systems.

1.5.2 Documentation from other contractors as part of separate works

Where separate contractors are engaged by the Principal to complete other works within a Property and are likely to modify or impact existing fire safety systems within the building, these contractors shall be responsible for the compliance of these works such the fire safety system shall meet or exceed the established standard of performance. These contactors are also responsible for ensuring the appropriate compliance documents for the work and updated baseline data (where applicable) are lodged within the SUI when the works are completed. This information shall be automatically disseminated through the SUI to the incumbent SFSS contractor review and acceptance. The SFSS contractor shall be responsible for informing the relevant APFS of this updated work and documentation and if required flagging any issues or concerns with the Principal prior to the AFSS Due Date.

1.6 NOMENCLATURE

Table 0-13 - Acronyms

ACRONYM	EXPANSION
ABCB	Australian Building Codes Board
AFSS	Annual Fire Safety Statement
AHJ	Authority Having Jurisdiction
APFS	Accredited Practitioner Fire Safety
AS	Australian Standard
ASE	Alarm Signalling Equipment
BCA	Building Code of Australia
BOWS	Building Occupant Warning System
DtS	Deemed-to-Satisfy
EFSM	Essential Fire Safety Measure
ELV	Extra Low Voltage
EPA	Environmental Protection Authority
EWIS (EWS)	Emergency Warning & Intercom System
FDCIE	Fire Detection Control and Indicating Equipment
FCC	Fire Control Centre
FCR	Fire Control Room
FER	Fire Engineering Report
FFCP	Fire Fan Control Panel
FHR	Fire Hose Reel
FIP	Fire Indicator Panel
FPAA	Fire Protection Association Australia
FPAS	Fire Protection Accreditation Scheme
FRL	Fire Resistance Level
FRNSW	Fire Rescue NSW
FSA	Fire Safety Assessment
FSM	Fire Safety Manual (LAHC)
FSS	Fire Safety Schedule
FSCC	Fire Safety Compliance Certificate
HVAC	Heat Ventilation and Air Conditioning
LIAFSS	Land (and Housing Corporation) Internal Fire Safety Statement
NCC	National Construction Code
SOR	Schedule Of Rate
SOA	Statement of Adequacy
SOU	Single Occupancy Unit

RIS	Rise In Storey
WHS	Workplace Health and Safety
WIP	Warden Intercom Point

Table 0-14 - Definitions

TERM	Explanation
003 key	Key type used to provide access to fire safety systems for attending NSW Fire and Rescue. Also known as a Fire Brigade Key.

1.7 REFERENCES

1. ABCB, "Building Code of Australia, Volume One", CanPrint Communications, Canberra 2016 .
2. ABCB, "Guide to the BCA 2019", CanPrint Communications, Canberra 2016 .
3. Ahmed, R., Quagila, C., "LAHC – Fire Doorsets Audit Criteria", 2020/179 R2.1, Stephen Grubits & Associates, 24th September 2020.
4. Fire Protection Association Australia, "Fire Protection Accreditation Scheme (FPAS)", Version 4, 1st July 2020
5. Ginstrup, I, Salmonsson, T., "NSW Land & Housing Corporation – Fire Safety Manual – Volumes 1", RED Fire Engineers Pty Ltd, Rev 1, 27th September 2017.
6. Ginstrup, I, Salmonsson, T., "NSW Land & Housing Corporation – Fire Safety Manual – Volumes 14 – Performance Solutions", RED Fire Engineers Pty Ltd, Rev 1, 27th September 2017.
7. Grubits, S., Quaglia, C., Vistnes, J., "Alternative Solutions Report – Reduction of Fire Resistance Levels", Report 2005/394.4 R2.0, Stephen Grubits & Associates, 23rd March 2007.
8. Quaglia, C., Viktor, Y., "LAHC Fire Doors to Residential Units – Fire Engineering Opinion Report", Report 2020/179 R1.1, Stephen Grubits & Associates, 7th May 2020.
9. Standards Australia, "AS1851.1:2012 (+A1) – Routine service of fire protection systems and equipment", Homebush 2016

APPENDIX A - ROUTINE SERVICING ACTIVITIES

Note:

- This table contains only the routine service items applicable to fire safety systems contained within the types of buildings applicable to the portfolio. It is not an exhaustive copy of AS1851:2012 (+A1) or AS2293.2:2019.
- GREEN means routine inspection and any other activities which are deemed included within the relevant routine servicing SOR i.e., "activities deemed included in routine servicing SOR". In other words, where an inspection activity is likely to consist of replacing basic parts or provision of labour, this has been marked in GREEN with "activity deemed included in routine servicing SOR", in the table below. It is deemed that the relevant SOR item pertaining to the specific routine servicing allows for all associated labour or material to complete this activity.
- RED means any activity other than 'Check' (part of routine servicing SOR item) that can be performed (if required) using separate relevant SOR i.e. "additional activity to be performed using separate SOR". Such activity (marked in RED) can be conducted, as deemed necessary, requesting Supplementary Works.

SECTION 2 AUTOMATIC FIRE SPRINKLER SYSTEMS

TABLE 2.4.2.1

MONTHLY ROUTINE SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS WET PIPE SYSTEMS

tem No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
1.1	Control valve assembly	CHECK that control valve assembly area is unobstructed and free of any condition that may adversely affect the operation or access.	Any activity deemed included
1.2	Sprinkler spares, sprinklers and sprinkler spanner	CHECK that there are spare sprinklers of appropriate quantity and type including a matching sprinkler spanner for each type of sprinkler fitted, available.	
1.3	Signage	CHECK for damage, legibility and appropriate location of required signage.	
1.4	Fire brigade booster connection	CHECK that the booster connection or enclosure is unobstructed and for any condition that may adversely affect the operation or access. CHECK that the booster connection coupling type is as per the local fire brigade requirements.	
1.5	Main stop valves and alarm cocks	INSPECT each main stop valve and alarm cock for each control assembly is secured in the open position and the main stop valve is correctly labelled. NOTES: **'Text deleted'**	Any activity deemed included
1.6	Pump starting devices isolating valve	CHECK that each isolating valve to each automatic pump start device is locked in the open position.	
1.7	Pressure switches	CHECK each pressure switch and ensure that the cover is in place, correctly labelled, securely mounted and free from any condition likely to adversely affect its function.	
1.8	Alarm signalling equipment (ASE) (stand-alone)	CHECK the alarm signalling equipment to ensure that it is securely mounted, free from any condition likely to adversely affect its function and is not indicating alarm, fault, loss of connection, or isolated.	Any activity deemed included
1.9	Sprinkler system interface to other systems	CHECK the sprinkler system alarm interface with other systems is not isolated, inhibited or disabled.	
1.10	Water supply stop valves	(a) OPERATE (two full turns) all water supply stop valves (including backflow prevention stop valves but excluding underground key- operated valves) and verify they are fully open, secure in the open position (relaxed ¼ turn if appropriate) and are correctly labelled. NOTES: 1 Where more than 12 water supply stop valves are distributed throughout a high-rise building, forming part of a combined sprinkler/hydrant system, the actions under actions (a) and (b) may be conducted on a rotating basis. 2 The period between testing of all water supply stop valves should not exceed 3 months.	Any activity deemed included
		(b) VERIFY that the valve position indicators are securely mounted and indicate correctly.	
		(c) **'Text deleted'**	
1.11	System pressure gauge readings before alarm function test	(a) RECORD reading from each pressure gauge.	
		(b) VERIFY pressure gauge readings are within the ranges required.	

1.12	Control assembly, alarm gong, alarm-initiating device, fire brigade alarm test and DSEP/DBEP strobes (Alarm function test)	(a) OPERATE each alarm valve by opening each 15 mm test valve or 10 mm for residential sprinkler systems serving buildings up to 4 storeys in height. Where more than 12 control assemblies are distributed throughout a high-rise building forming part of a combined sprinkler/hydrant system, and initiate the fire brigade alarm, testing may be conducted on a rotating basis. The period between testing of all control assemblies shall not exceed 3 months.	
		(b) RECORD time(s) to operation of alarm gong(s) and verify that time does not exceed 180 s for general systems or 90 s for residential sprinkler systems.	
		(c) RESET the alarm test valve on completion of each test.	
		(d) Where multiple control valve assemblies are separately identified at an FIP, only one transmission from the FIP to the monitoring station is required.	
1.13	Alarm signal	VERIFY the correct operation of each alarm signal. Where the system is monitored ensure the alarm has activated the alarm signalling equipment.	
1.14	DSEP/DBEP strobe indicator	INSPECT for the correct operation of each DSEP/DBEP strobe indicator, where fitted.	
1.15	System pressure gauge readings after alarm valve test	(a) RECORD reading from each pressure gauge.	
		(b) VERIFY pressure gauge readings are within the ranges required.	
1.16	Pump starting devices function test— Compression ignition drivers (diesel) and electric motor drivers	(a) TEST each automatic pump starting device and pump operation by reducing the applied water pressure to the starting device and run pump, in accordance with Section 3. Where more than one starting device is installed, including the manual starting device, the test may be carried out on a rotating basis. The period between the exercising of each starting device is not to exceed 3 months. Where this would require the pump to start more than 5 times in succession, the period may be extended to 6 months.	
		(b) RECORD the pump cut-in pressures and verify that they are within the ranges required.	Any activity deemed included
1.17	Manual pump start device, function test	TEST each manual pump starting device and pump operation in accordance with Section 3.	
1.18	Water supply tanks— Atmospheric or pressure	Perform routine service in accordance with Section 5.	
1.19	Foam water sprinkler systems—foam concentrate	CHECK that the concentrate level is correct and level indicator reads correctly.	

2.4.2.2 *Six-monthly service schedule*

Routine service of wet pipe systems on a six-monthly basis shall be carried out in accordance with Table 2.4.2.2.

TABLE 2.4.2.2
SIX-MONTHLY ROUTINE SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS WET PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
2.1	Monthly service	COMPLETE all monthly service activities, as listed in Table 2.4.2.1.	
2.2	Floor/zone indication test (where fitted)	(a) OPERATE each flow switch test arrangement (automatic or manual).	
		(b) VERIFY correct flow switch indication at the CIE.	
2.3	Underground key- operated and subsidiary valves	(a) Except where owned by the water supply authority, OPERATE (two full turns) all underground key-operated valves and verify they are fully open, secure in the open position (relaxed ¼ turn if appropriate) and are correctly labelled. NOTE: Where underground key-operated valves are owned by the water supply authority, the owner should arrange for the water supply authority to test the valve(s) to confirm the valve(s) is operational and in the correct position.	
		(b) OPERATE all subsidiary stop valves (floor isolation valves, tail-end valves).Ensure that they are fully open and, where applicable, secured in the open position and are correctly labelled. NOTE: **'Text deleted'**.	
2.4	Valve-monitoring device test	Test each valve monitor by operating the valve and VERIFY the correct indication at the CIE.	
2.5	Pressure gauge readings before main drain test	RECORD reading from each pressure gauge. VERIFY pressure gauge readings are within the ranges required.	
2.6	Main drain valve water supply test—Town main supply only	(a) OPEN the sprinkler control assembly main drain valve without pump(s) running. In the case of grouped valve sets, open one only.	

		(b) VERIFY that residual water supply pressure, with drain valve open, is within 10% of the original value recorded.	
		(c) CLOSE main drain valve and record time for pressure recovery.	
		(d) VERIFY that the time for pressure recovery aligns with previously recorded value. NOTE: Where the building exceeds four storeys in height, care should be taken to ensure that the static head of the installation does not excessively elevate the residual pressure reading.	
2.7	Water supply (river, lake, etc.) strainers/screens	CHECK suction inlet strainer(s) or screen(s) for any condition likely to affect its function. Where blocked, CLEAN the suction inlet strainers or screens.	Any activity deemed included

2.4.2.3 *Yearly service schedule*

Routine service of wet pipe systems on a yearly basis shall be carried out in accordance with Table 2.4.2.3.

TABLE 2.4.2.3
YEARLY ROUTINE SERVICE SCHEDULE AUTOMATIC FIRE SPRINKER SYSTEMS WET PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
3.1	Monthly and six- monthly service	COMPLETE all monthly and six-monthly service activities, as listed in Tables 2.4.2.1 and 2.4.2.2.	
3.2	Pressure- reducing valve test	(a) OPERATE all pressure-reducing valves and verify correct operation under flow conditions.	
		(b) VERIFY that pressure readings on the low pressure side of the valves are within the range stated at the pressure-reducing valve station.	
3.3	Pressure-relief valve test	OPERATE pressure-relief valve and note operating pressure is within the range stated on the nameplate provided at the reducing valve station. NOTES: 1 This test of the pressure-relief valve may be carried out using a portable test apparatus. 2 Inappropriate settings for pressure-relief valves can result in very large quantities of water flowing to waste. Ensure settings are maintained to have pressures as identified and not higher than allowed by system component rated working pressures.	
3.4	Water supply tanks— Atmospheric or pressure	Perform routine service in accordance with Section 5.	
3.5	Water supply proving test	(a) CONDUCT a water supply test, subject to limitations imposed by the water agency controlling the supply source. The test may be a combination of physical testing and calculation as necessary.	
		(i) Discharge water through the flow- measuring device at the flow corresponding to the hydraulically most favourable duty flow. Record the flowing pressure.	
		(ii) Reduce the water flow through the flow measuring device to that corresponding to the most unfavourable duty point. Record the flowing pressure.	
		(iii) Shut off water flow to flow-measuring device. Record static pressure.	
		(b) VERIFY that the system flow and pressure requirements are satisfied.	
		(c) COMPLETE a water supply test report in accordance with AS 2118.1. NOTE: This test should be conducted by substituting the installation and below stop valve pressure gauges with calibrated gauges of known accuracy. Where pumpsets are fitted, the water supply flow test should be performed combined with the pumpset load test requirements in Section 3.	
3.6	Alarm valve— Remote test valve	(a) OPERATE the alarm valve by opening each remote test valve.	
		(b) RECORD time(s) to operation of alarm gong(s) and verify that time does not exceed 360 s for AS 2118.1 and 180 s for AS 2118.4 systems.	
		(c) CLOSE remote test valve(s) and verify that alarm valve has reseated.	
3.7	Anti-freeze solution test (where applicable)	(a) DRAW a sample of anti-freeze solution.	
		(b) VERIFY correct specific gravity and top up to correct solution level.	Any activity deemed included
3.8	Sprinkler system interface control test (fire trips)	(a) CONDUCT a functional system test via the pressure switch or flow switch with each interfaced system.	
		(b) VERIFY that the interface functions as required.	

3.9	Water motor alarm gong	CLEAN the strainer and lubricate the external gong mechanism.	Any activity deemed included
3.10	Water motor direct brigade alarm	CLEAN the strainer.	Any activity deemed included
3.11	Alarm signalling equipment (ASE) (Standalone)	Where an ASE is standalone and is connected to a power supply unit and batteries: (a) CHECK the batteries for any condition likely to adversely affects its function *and* (b) Where the battery has not been replaced in the previous two years, VERIFY the battery condition by carrying out a battery discharge test in accordance with Appendix F.	
3.12	Tank quick fill (reduced capacity or break tank)	CONDUCT a water supply test through a flow- measuring device or other appropriate methods that the flow corresponds to the required quick fill-rate.	
3.13	Spray booths and ducts	INSPECT accumulated spray residue on sprinklers and reapply protective medium (petroleum jelly/paper bags). NOTE: The required frequency of inspection depends upon the amount of spraying being done and could be accomplished at the same time as the cleaning of booth.	Any activity deemed included
3.14	Kitchen hoods and ducts	INSPECT all sprinklers inside kitchen hoods and ducts and CLEAN if necessary to remove accumulated grease and any other foreign matter and verify that the sprinkler head is appropriate for this application.	Any activity deemed included
3.15	Foam water sprinkler systems—Foam concentrate	DRAW a sample and verify condition in accordance with NFPA 11 (pH, specific gravity, sediment, expansion ratio, 25% drain time).	
3.16	Foam concentrate strainer (where fitted)	CHECK and clean foam concentrate strainer (fitted upstream of proportioning device).	Any activity deemed included
3.17	Survey—Pipes and hangers	CHECK that exposed water distribution system, including pipework, pipe supports and valves, appear free from corrosion and damage, not subject to external loads and pipework is properly supported.	
3.18	Survey— Sprinkler condition	CHECK sprinklers for any condition, including physical damage, contamination, and paint on operating elements or cover plates, likely to adversely affect their function. NOTE: Sprinkler frames may be painted as part of the manufacturing process; however, the heat response elements should not be painted as this will delay or prevent operation and paint accumulated at the seat of the sprinkler may affect operation. Minor spatter on the fusible elements may be acceptable but operation should be checked if doubt exists.	Any activity deemed included
3.19	Survey— Escutcheons, cover plates or guards	CHECK for poorly fitting or missing escutcheons or cover plates, damaged guards, and attachment of foreign material.	Any activity deemed included
3.20	Survey— Sprinkler obstructions	CHECK for obstructions likely to impede sprinkler discharge and for adequate clear space below sprinklers.	
3.21	Survey— Unprotected areas	(a) CHECK for presence of unprotected areas such as mezzanines, platforms and building extensions.	
		(b) CHECK for sprinkler spacing and location relative to wall, bulkhead and partition alterations and the introduction of fixtures and fittings shielding sprinkler discharge.	
		(c) CHECK for the need to install sprinkler guards.	
3.22	Survey— Sprinkler compatibility	CHECK that sprinklers within a compartment are of similar operating characteristics (e.g. area coverage, RTI and temperature rating).	
3.23	Survey— Sprinkler ambient conditions	CHECK for localized changes in ambient temperatures, which may require different sprinkler temperature ratings (e.g. exposure to freezing or high temperature conditions).	
3.24	Survey— External sprinklers	CHECK for new building structures, yard storage or the like, exposing unprotected openings, non-fire resistant walls that may require the provision for external sprinklers.	
3.25	Survey— Occupancy	CHECK that sprinkler design remains applicable for the occupancy hazard classification and the category of storage involved.	
3.26	Survey—Storage heights, encapsulation	(a) CHECK that sprinkler design remains applicable for storage heights. If height limits are exceeded, check for in-rack (intermediate) sprinklers.	
		(b) CHECK for shrink wrapping (encapsulation) where not employed previously.	
3.27	Survey—Site documentation (where required)	(a) CHECK that block plans and emergency instructions contain the required details.	
		(b) CHECK that up-to-date sprinkler plans are available on site.	

2.4.2.4 *Five-yearly, ten-yearly, twenty-five yearly and thirty-yearly service schedule*

Routine service of wet pipe systems on a five-yearly, ten-yearly, twenty-five year and thirty year basis shall be carried out in accordance with Table 2.4.2.4.

TABLE 2.4.2.4

FIVE-YEARLY, TEN-YEARLY, TWENTY-FIVE-YEARLY AND THIRTY-YEARLY ROUTINE SERVICE SCHEDULE AUTOMATIC FIRE SPRINKER SYSTEMS WET PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
FIVE-YEARLY			
4.1	Monthly, six- monthly and yearly service	COMPLETE all monthly, six-monthly and yearly service activities, as listed in Tables 2.4.2.1, 2.4.2.2 and 2.4.2.3.	
4.2	Alarm valve (wet)	FIT new alarm valve seating or port seating (perishable items), check and clean annular groove and outlet ports, polish and lubricate seating spindle/shaft, and check operation of compensator valve if fitted. Fit a new alarm valve faceplate gasket.	
4.3	Main drain and test valve	(a) For screw-down style valves, EXAMINE seating and fit new washers.	Any activity deemed included
		(b) For packed gland variants, FIT new gland packing.	Any activity deemed included
		(c) For ball valves, CHECK for leakage and replace if leaking.	
4.4	Alarm cock plug type	REMOVE alarm cock barrels, clean, lap in, grease and reinstall. For packed gland variants, fit new gland packing.	
~~4.5~~	~~Jacking pump (where fitted)~~	~~INSPECT hand pump seatings and FIT new pump washers and path cock washers. FIT new gland packing. For electric jacking pumps, maintain as per manufacturer's instructions.~~	-
4.6	Retard chambers (where fitted)	CLEAN orifice, check seals and overhaul, where indicated, by a functional test.	Any activity deemed included
4.7	Stop valves	(a) FIT new gland packing and lubricate spindle.	Any activity deemed included
		(b) For ball and butterfly valves, CHECK for leakage and replace if necessary.	
4.8	Water supply non-return valves	RENEW water supply non-return valve seatings and gaskets.	
4.9	Water motor alarm gong	CLEAN strainer on inlet line, clear water jet, flush drain, renew gasket, check operation of main spindle and striker, remove excess grease and then lubricate.	Any activity deemed included
4.10	Water motor direct brigade alarm (where fitted)	CLEAN out well of direct brigade alarm, clear water jet, renew gasket, flush drain pipe, remove gear train, check operation of main spindle, remove excess grease and then lubricate.	Any activity deemed included
4.11	Gauges	CHECK all pressure gauges against a master gauge of known accuracy. Verify that the reading of the gauge under test is within ☐30 kPa of the reading of the master gauge at the nominal pressure.	
4.12	Special valves (other than alarm valves)	OVERHAUL all pressure-reducing valves, pressure- relief valves, tail-end system valves, and any other special valves that are installed in accordance with suppliers' specifications.	
4.14	Water supply tanks— Atmospheric	Perform routine service in accordance with Section 5.	
4.17	Water supply tanks—Pressure	Perform routine service in accordance with Section 5.	
TEN-YEARLY, TWENTY-FIVE YEAR AND THIRTY-YEAR			
4.18	Sprinklers	Subject the sample sprinklers to the following tests conducted by a registered testing authority: (a) Release temperature.	
		(b) Functional test.	
		(c) Leak resistance test—Maximum system design pressure test. REMOVE and TEST a representative sample of sprinklers at the following intervals: (i) Dry pendent sprinklers (representative sample), every 10 years. (ii) All other sprinklers (not less than 14 samples), at 25 years, then every 10 years. NOTE: For all the above sprinklers, using ISO 6182-6, ISO 6182-7 and ISO 6182-12 component Standards, sample sprinklers should be selected from the range of site environmental conditions to which the system(s) is subjected (i.e. office, factory, boiler house environments, etc.). Should one or more sprinklers fail any of the above tests, further sampling and testing should be conducted until the results can be considered truly representative. The extent of sprinkler replacement, if any, will be dependent on the results of testing.	

4.19	Multiple jet controller (MJC)	At 30 years and every 10 years thereafter: (a) Single MJC installed for alarm purposes only or to control a group of distributors, CHECK in situ for evidence of paint loading, corrosion, etc. Replace if necessary.	
		(b) Multiple MJC installed for alarm purposes only or to control groups of distributors, REPLACE a representative sample. Subject the sample to the following tests conducted by a registered testing laboratory: (i) Leak resistance test. (ii) Maximum system design pressure test (nominally 1200 kPa or 2000 kPa). (iii) Functional test. Use ISO 6182-1. NOTE: Should the sample MJC fail any of the above tests, further sampling and testing should be conducted until the results can be considered truly representative.	

2.4.3 Dry pipe system service schedules

2.4.3.1 *Monthly service schedule*

Routine service of dry pipe systems on a monthly basis shall be carried out in accordance with Table 2.4.3.1.

TABLE 2.4.3.1
MONTHLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS DRY PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
1.1	Monthly service	COMPLETE all monthly wet pipe service activities listed in Table 2.4.2.1 that are applicable to a dry pipe system.	
1.2	System air pressure	CHECK system air pressure is reading within the range required.	
1.3	System air desiccator or dryer	CHECK desiccant condition and replace if necessary.	
1.4	Air compressor oil level	CHECK oil level and visually assess condition of oil.	Any activity deemed included
1.5	Air compressor	VERIFY that air compressor operates at specified cut-in and cut-out pressures.	
1.6	Low air pressure alarms(s)	VERIFY: (a) Low air pressure alarm operates at predetermined levels.	
		(b) Low air pressure alarm(s) visual indicator and sounders are operational.	
1.7	Local alarm and fire brigade test simulation (in lieu of Item 1.12, Table 2.4.1.1)	SIMULATE operation of dry pipe alarm valve and OPERATE local and fire brigade alarms through the bypass valve(s). Where the system is monitored, ensure the alarm has activated the alarm signalling equipment. (Refer to manufacturer's operating manual.) NOTE: Where multiple control valve assemblies are separately identified at an FIP, only one transmission from the FIP to the monitoring station is required.	
1.8	Air receiver condensate	DRAIN condensate from condensate trap.	

2.4.3.2 *Six-monthly service schedule*

Routine service of dry pipe systems on a six-monthly basis shall be carried out in accordance with Table 2.4.3.2.

TABLE 2.4.3.2
SIX-MONTHLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS DRY PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
2.1	Monthly and six- monthly service	COMPLETE all monthly service activities listed in Table 2.4.3.1 and all six-monthly wet pipe service activities listed in Table 2.4.2.2 that are applicable to a dry pipe system.	
2.2	Alarm valve and auxiliaries, local alarm and fire brigade alarm test (in lieu of Item 1.12 in Table 2.4.2.1)	(a) Where fitted, CLOSE isolation valve located above alarm valve (to prevent entry of water into system piping).	
		(b) OPERATE each alarm valve by releasing air from system.	
		(c) CHECK for correct operation of alarms and accelerator or exhauster.	
		(d) RECORD time(s) to operation of alarms gong(s) and verify that these do not exceed 180 s.	

		(e) VERIFY correct operation of the fire brigade alarms from each control assembly or group of control assemblies. Where the system is monitored, ensure the alarm has activated the alarm signalling equipment. NOTE: Where multiple control valve assemblies are separately identified at an FIP, only one transmission from the FIP to the monitoring station is required.	
		(f) Where an isolation valve has not been fitted above the alarm valve, the main stop valve should be mostly closed, enabling a partial test of the alarm valve. NOTE: Consider full testing at the first opportunity (at which time the isolation test valve should be installed).	
2.3	Installation pressure	RESTORE system air pressure and verify the alarm has reseated.	
2.4	FIP/ASE	RESTORE FIP/ASE to operational status.	
2.5	Pressure gauge readings	(a) RECORD reading from each pressure gauge. (b) VERIFY pressure gauge readings are within the ranges required.	
2.6	Control assemblies resetting	RESET and SECURE all valve and alarms cocks in the open position or the closed position, as labelled.	

2.4.3.3 *Yearly service schedule*

Routine service of dry pipe systems on a five-yearly basis shall be carried out in accordance with Table 2.4.3.3.

TABLE 2.4.3.3
YEARLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS DRY PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
3.1	Monthly and six- monthly service	COMPLETE all monthly and six-monthly service activities listed in Tables 2.4.3.1 and 2.4.3.2 and all yearly wet pipe service activities listed in Table 2.4.2.3 that are applicable to a dry pipe system.	
3.2	System air desiccators or dryer	REPLACE the desiccators.	
3.3	Survey—Pipes and hangers	CHECK that the water distribution pipe work is correctly pitched to drain.	Any activity deemed included

2.4.3.4 *Five-yearly service schedule*

Routine service of dry pipe systems on a five-yearly basis shall be carried out in accordance with Table 2.4.3.4.

TABLE 2.4.3.4
FIVE-YEARLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS DRY PIPE SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
4.1	Monthly, six-monthly and yearly service	COMPLETE all monthly, six-monthly and yearly service activities, listed in Tables 2.4.3.1, 2.4.3.2 and 2.4.3.3.	
4.2	Wet pipe systems five yearly service	COMPLETE all five-yearly wet pipe service activities listed in Table 2.4.2.4 that are applicable to a dry pipe system.	
4.3	Valve overhaul	FIT new dry pipe valve seats and seals. FIT new faceplate gasket (perishable items).	
4.4	Accelerator/exhauster	FIT new seals as appropriate. CHECK and CLEAN operating mechanism. FIT a new faceplate.	

2.4.5 Pre-action system

2.4.5.1 *Monthly service schedule*

Routine service of pre-action systems on a monthly basis shall be carried out in accordance with Table 2.4.5.1.

TABLE 2.4.5.1 MONTHLY SERVICE SCHEDULE
AUTOMATIC FIRE SPRINKLER SYSTEMS PRE-ACTION SYSTEMS

Item No.	Item	Action required and pass/fail requirement	

			Inspection only (green), activity required (red)
1.1	Monthly service activities	COMPLETE all monthly wet pipe service activities listed in Table 2.4.2.1 that are applicable to a pre-action system.	
1.2	Pressure gauge readings	CHECK that all pressure gauge readings are within the ranges required and RECORD readings from each pressure gauge.	
1.3	Air compressor oil level (where fitted)	(a) CHECK oil level is correct and visually assess condition of oil.	
		(b) CHECK regulator is locked and set in the correct position.	
1.4	Electrical detection	INSPECT and TEST in accordance with Section 6.	
1.5	Air compressor (where fitted)	VERIFY that air compressor operates at specified cut-in and cut-out pressures.	
1.6	Nitrogen supply (where fitted)	(a) CHECK cylinder contents per pressure gauge.	
		(b) CHECK regulator is locked and set in correct position.	
1.7	Solenoid valve(s)	TEST solenoid valves for correct operations.	
1.8	Low air pressure alarms(s)	VERIFY: (a) Low air pressure alarm operates at predetermined levels.	
		(b) Low air pressure alarm(s) visual indicator and sounders are optional.	
1.9	Local alarm and fire brigade test simulation in lieu of Item 1.12 in Table 2.4.2.1	(a) GENERATE a test of the alarm signalling equipment and local alarm in accordance with the manufacturer's operating manual. NOTE: Where fitted, bypass valve may be used for this test.	
		(b) VERIFY correct operation of the fire brigade alarm from each pre-action valve or group of pre-action valves. Where the system is monitored, ensure the alarm has activated the alarm signalling equipment. NOTE: Where multiple pre-action valve assemblies are separately identified at the FIP, only one transmission from the FIP to the monitoring station is required.	

2.4.5.2 *Six-monthly service schedule*

Routine service of pre-action systems on a six-monthly basis shall be carried out in accordance with Table 2.4.5.2.

TABLE 2.4.5.2

SIX-MONTHLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS PRE ACTION SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
2.1	Monthly service activities	COMPLETE all monthly service activities listed in Table 2.4.5.1 and all six-monthly wet pipe service activities listed in Table 2.4.2.2 that are applicable to a pre-action system.	
2.2	Pre-action valve and auxiliaries, local alarm and fire brigade alarm test (in lieu of Item 1.12 in Table 2.4.2.1)	(a) Where fitted, CLOSE isolation valve located above pre-action valve (prevents entry of water into system piping).	
		(b) OPERATE each pre-action valve by releasing the system via electrical detection subsystem.	
		(c) CHECK for correct operation of alarm.	
		(d) RECORD time(s) to operation of alarms and verify that these do not exceed 180 s.	
		(e) OBSERVE correct operation of the fire brigade alarms from each pre-action valve or group of pre-action assemblies. Where the system is monitored, ensure the alarm has activated the alarm signalling equipment. NOTE: Where multiple pre-action valve assemblies are separately identified at an FIP, only one transmission from the FIP to the monitoring station is required.	
		(f) Where an isolation valve has not been fitted above the alarm valve, the main stop valve should be closed, enabling a partial test of the alarm valve. NOTE: Consider full testing at the first opportunity (at which time the isolation test valve should be installed).	
2.3	Installation supervisory air pressure	RESET pre-action valve and restore supervisory air pressure.	

2.4	Electrical control unit (and FIP/ASE)	RESTORE units to operational status.	
2.5	Pressure gauge readings	(a) RECORD readings from each pressure gauge.	
		(b) VERIFY pressure gauge readings are within the ranges required.	
2.6	Valve and cocks	SECURE all valves and alarm cocks in the open position or the closed position as labelled.	

2.4.5.3 *Yearly service schedule*

Routine service of pre-action systems on a yearly basis shall be carried out in accordance with Table 2.4.5.3.

TABLE 2.4.5.3
YEARLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS PRE-ACTION SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
3.1	Monthly and six- monthly service	COMPLETE all monthly and six-monthly service activities, listed in Tables 2.4.5.1 and 2.4.5.2.	
3.2	Yearly service activities	COMPLETE all yearly wet pipe service activities listed in Table 2.4.2.3 that are applicable to a pre-action system.	
3.3	Air receiver condensate	DRAIN condensate from: (a) Condensate trap.	
		(b) Air compressor receiver.	
3.4	Survey—Installation	CHECK that sprinkler piping and detection installations are properly secured throughout the protection area.	
3.5	Survey—Design	CHECK that pre-action sprinkler protection covers full extend of special hazard area.	

2.4.5.4 *Five yearly service schedule*

Routine service of pre-action systems on a five-yearly basis shall be carried out in accordance with Table 2.4.4.4.

TABLE 2.4.5.4
FIVE-YEARLY SERVICE SCHEDULE AUTOMATIC FIRE SPRINKLER SYSTEMS PRE-ACTION SYSTEMS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
4.1	Monthly, six-monthly and yearly service	COMPLETE all monthly, six-monthly and yearly service activities, listed in Tables 2.4.5.1, 2.4.5.2 and 2.4.5.3.	
4.2	Five yearly service	COMPLETE all five-yearly wet pipe service activities listed in Table 2.4.2.4 that are applicable to a pre-action system.	
4.3	Valve overhaul	FIT new pre-action valve seats and seals. CHECK and CLEAN operating mechanism. FIT new cover plate gasket.	Any activity deemed included

SECTION 3 FIRE PUMPSETS

3.4 ROUTINE SERVICE SCHEDULES

3.4.1 Fire pumpsets—Monthly service schedule

TABLE 3.4.1
MONTHLY SERVICE SCHEDULE FIRE PUMPSETS

Item No.	Item	Action required and pass/fail requirement	Inspection only (green), activity required (red)
1.1	Pump areas	(a) CHECK that pump areas are unobstructed, not used for storage and lighting is adequate.	Any activity deemed included