THE GOODS SHED
INITIAL CONSERVATION MANAGEMENT PLAN

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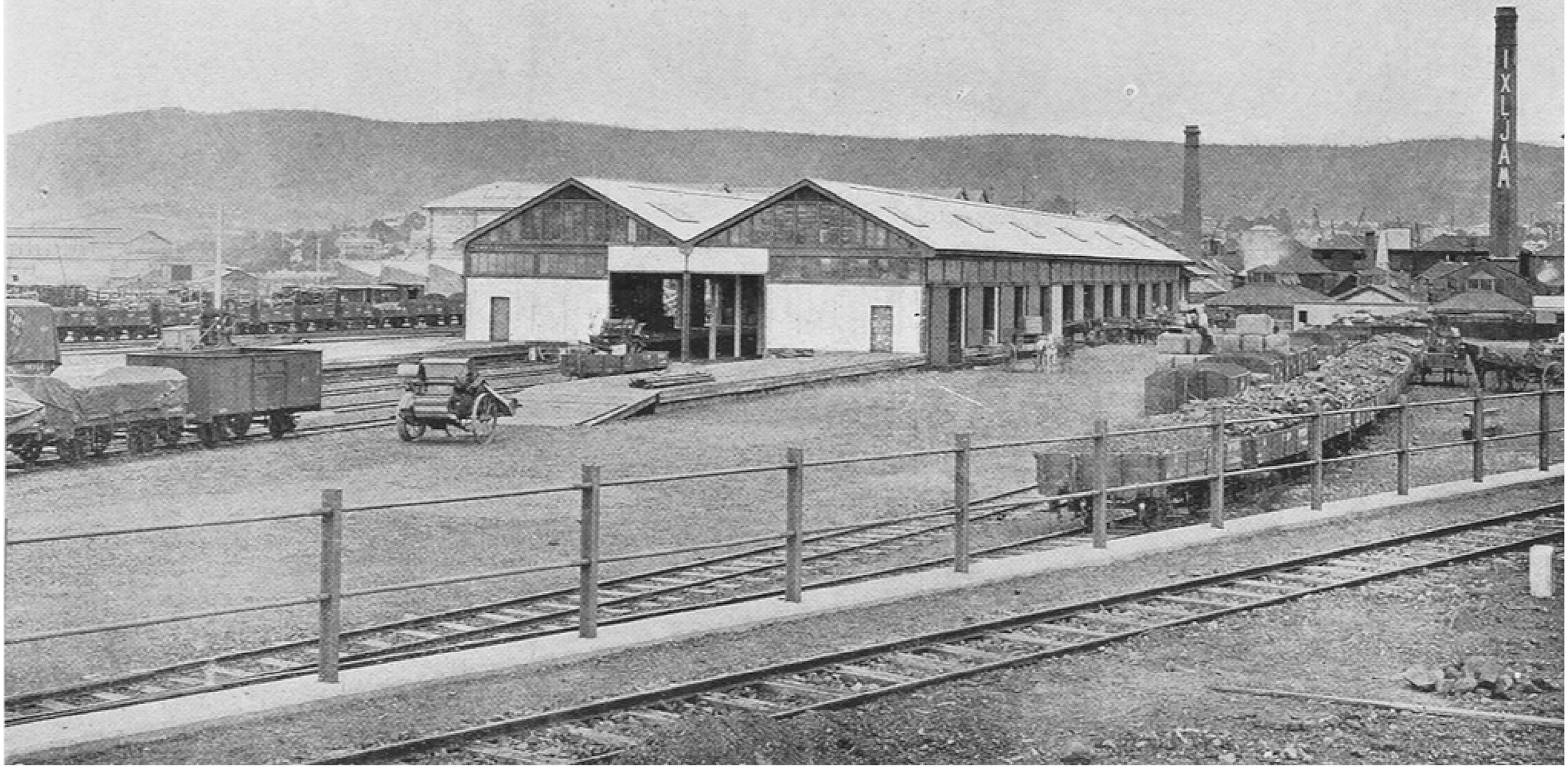

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ACKNOWLEDGMENT OF COUNTRY

Purcell acknowledge the Traditional Custodians of Country throughout Australia and pay our respects to Elders past, present, and emerging.

We respectfully acknowledge and pay respect to the muwinina people, the traditional and original owners of the land, skies and waterways of this project, and the Palawa people of lutruwia/Tasmania the continuing custodians, of Country.

How to Use this Document

A Conservation Management Plan is a guide to managing change. It is intended to enable the heritage place's significance to be retained now and into its future.

When Developing Proposals for Change

- Understand the History and Significance of the of the area affected (Section 3 and Section 4), read the Conservation Policies and Management Actions (Sections 5-7).
- If further information is required to make informed decisions, commission a more detailed study for the area in question, ensuring an adequate level of understanding of the area's history, significance, and the impact of the works before continuing to develop the proposals. Follow the Change Management Process (Section 6).

The CMP needs to evolve, be reviewed, and updated, as changes occur to the Goods Shed; in the statutory framework and management regime; and when new opportunities or risks emerge. Updates could be in the form of an addendum document to state what actions have been taken since the last update, how these comply with the Conservation Philosophy and Policies, and what the next steps are going forward. These addendums should be filed appropriately so that they can be incorporated into a more comprehensive review of the CMP when appropriate.

Understanding the Place

Sections 1 to 4 of the CMP contain the background information necessary to understand the history, significance, and values of the Goods Shed. When read and understood, this information allows those who manage and maintain the Goods Shed to appreciate what, in heritage terms, is important about it, why it needs to be conserved, and where change is appropriate. These Sections should be read thoroughly by those involved in the management and care of the place, as well as those developing strategies for, and making decisions about, changes to the place.

These sections should be reviewed whenever new information relating to the history, and significance, of the place is found. They should also be reviewed when change occurs to ensure the site description and other information remains up to date. These sections been drafted with the intention that they retains validity beyond the implementation of any works associated with the dismantling and relocation of the Goods Shed, as is currently proposed, and can continue to assist an understanding of the place.

These Sections include:

- The location; heritage context; and a description of the place containing details of the building and its features;
- An assessment of significant views and vistas;
- A historical overview;
- A comparative analysis of the Goods Shed with other similar significant properties; and,
- An assessment of historic cultural heritage significance.

Change Management Guidance

Sections 5 to 7 provide a change management process and conservation framework to guide the practical application of knowledge gained from the understanding of the place when planning and managing:

- The dismantling, relocation and adaptive reuse of the Goods Shed;
- the day-to-day use and maintenance of the Goods Shed;
- the prioritisation of addressing issues that arise, and
- the future development of proposals for change.

These sections should be used as guidance and as a tool to inform decision-making. They identifies the potential opportunities for, and risks to, the place (at the time of authorship) which have informed a strategy for conservation and managed change. Reference should be made to here when change is planned, to guide appropriate strategies for managing change and prioritising the order in which issues are addressed.

These sections set out:

- A Change Management process;
- Conservation policies and management actions;
- Issues and opportunities; and
- Implementation.

HOW TO USE THIS DOCUMENT

For ease of use this document has been produced to be read on-screen as a PDF. It contains a series of features that makes it easer to navigate betwen the sections.

- The contents page allows users to navigate directly to the required section by clicking on the entry.
- The buttons along the bottom of each page will allow you to navigate to the following sections:

Introduction **Understanding** **Illustrated History** **Cultural Heritage Significance** **Sources**

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Introduction to the Goods Shed and the Conservation Management Plan (CMP)

The Goods shed was completed in 1915 as part of the much-needed major expansion works on Macquarie Point to form a dedicated Goods Yard adjacent to the Hobart Port to handle the transport and distribution of imported and exported goods. It was expanded over time to meet the increased demand for goods transport and shipping. It remained in this use even with the decline of rail transport, being adapted for road transport use in the mid-1980s.

Purcell was commissioned by the Macquarie Point Development Company to produce this Conservation Management Plan (CMP) to guide the dismantling, relocation and adaptive reuse of the Goods Shed proposed as part of the wider Macquarie Point Stadium proposal. It is recognised that, with respect to the Macquarie Point Stadium proposal, the alternative to relocation is demolition of the Goods Shed, which would result in a loss of its heritage values.

A detailed understanding of heritage sites is key to identifying their potential for change and development, and their conservation for the future. This CMP provides that understanding. It also includes clear, and robust, advice and policies, to guide the ongoing use, conservation, and maintenance of the heritage significance and values of the Red Shed.

Summary History

The following summary history is distilled from the Tasmanian Heritage Register (THR) datasheet:

> *Macquarie Point, on the western side of the Derwent estuary, was occupied by Tasmanian Aboriginal people of what, in the present day, are known as the South East nation.*
>
> *In mid-February 1804, Lieutenant-Governor David Collins established the British colony of Hobart Town, beside the bay he named Sullivans Cove. In the centre of the cove was a small island, which was named Hunter's Island. …*
>
> *A rocky reef extended northwards from the mouth of the rivulets to a promontory with a small hill at its centre. In the 1810s this promontory was named Macquarie Point. Over the next two-and-a-half decades the sand bar and Hunter's Island disappeared under extensive land reclamation. …*
>
> *During the 1850s there had been much talk in Tasmania about building a railway line from Hobart to Launceston. Eventually in March 1872, an English company – the Tasmanian Main Line Railway (TMLR) Company – signed a contract with the Colonial Government to build the line. …*
>
> *The first through passenger service from Hobart to Launceston operated on the occasion of the line's 1st November 1876 official opening. The TMLR Company began utilising the 1840s-constructed Royal Engineers building (THR 2280), close to the Hobart terminus, as its headquarters. …*
>
> *In 1885, the colony's railway operations began to be referred to collectively as the Tasmanian Government Railways, and were more familiarly thereafter known as the 'TGR'. … In late 1890 the government took over the TMLR Company, and from that time until 1978 managed and operated most of Tasmania's railway network. …*
>
> *The process of land reclamation alongside Macquarie Point continued. A seawall of stone built out into the Derwent enclosed a large area that became the City of Hobart's refuse tip. This was largely filled by 1904, and the Hobart Railway Goods Shed was built on this fill in the next decade.*
>
> *Following the relocation of slaughtering operations to Derwent Park in 1909, the government determined that the Macquarie Point areas occupied by the septic tanks, municipal tip and now-redundant slaughter yards would become Hobart's expanded railway goods yard , containing a new large Goods Shed building. A separate new Round House for locomotives would also be built nearby , on the former drill yard site. Construction of these new rail facilities commenced in late 1911, as part of broader expansion plans for Hobart's waterfront. An intended parallel outcome of this scheme was connecting the rail network directly with Sullivans Cove to service interstate and international export markets, and this would involve the construction of new pier and wharf facilities within the cove by the Hobart Marine Board.*
>
> *Between 1914 and 1915, construction of the Hobart Railway Goods Shed began. The 300-foot (approximately 91 metre) long, timber-framed Goods Shed building was sited at the southern boundary of the expanded railyards. …*
>
> *The railyards reorganisation works also included, between the new goods yards and the existing station building, construction of a 41-road locomotive Round House with electric-powered central turntable. … Hobart's new rail and coal yards, and the Round House, were completed by June 1915, … followed by the Goods Shed in December. …*
>
> *The new railyards and Goods Shed handled a wide variety of products from all over Tasmania – including the export of fruit – and from 1922 onwards both the raw materials to and the finished chocolate from the Cadbury chocolate factory at the northern Hobart suburb of Claremont. …*
>
> *Across a period of time between late 1946 and mid-1949, substantive alterations and additions were made to the Hobart Goods Shed. …*
>
> *From the late 1950s and throughout the 1960s, a series of alterations were made to the office areas within the Goods Shed. These included the addition of mezzanine rooms within the volume of the west-side gabled roof in the mid-1960s. … Nevertheless, photographs of the Goods Shed's exterior taken in the late 1960s indicate there had been little change to the building's external appearance since 1915. The available evidence also indicates that at some point between 1963 and 1983 the timber decking and sub-floor framing of the Shed's internal platforms were replaced by concrete slabs.[01] At a later time, in the northern 1946-to-1949-built portion of the building, this concrete floor was then broken up and removed, and concrete-slab paving installed at ground level….*
>
> *In 1978 the Federally-funded and operated Australian National Railways assumed control of the TGR. … The Transport Act 1978 abolished the former TGR, effective 1st November 1978. …*
>
> *Across the State, most railway station buildings, housing, and sheds were removed or sold. … This process also occurred at the Hobart railyards during the 1980s, with the removal of the majority of the rail buildings, including the locomotive Round House. … Hobart's Goods Shed, however, was retained.*

At about this time, *[mid-1980 s]* the Hobart Railway Goods Shed was converted into a transit warehouse for road transport use. *Most of the loading bay openings were filled in, with a few others replaced by roller shutters. The building's exterior was reclad in pre-painted corrugated steel sheeting and, on the Evans Street frontage, new aluminium-framed windows were installed. …*

Other substantive changes were made to the Goods Shed's interior . The pit between the platforms was filled with sand and re-surfaced with concrete pavers. Most of the recessed loading docks on the former platforms were filled with concrete slabs. The office partitions at the Shed's southern end were again reorganised , and the office area expanded northwards into the former goods-handling area. …

01 Further research indicates that the concrete floor and framing dates to 1946-49 when the building was raised and extended: TA, TC10/1/10430

Operations at the Macquarie Point railway goods yard ceased and were relocated to Brighton in 2014....

In the late 2010s, the office areas of the Hobart Railway Goods Shed were again renovated , and new toilet facilities were installed in the 1990s brick extension on the Shed's eastern side. From 2019, personnel from the Macquarie Point Development Corporation (the 'MPDC') have occupied the offices in the Shed. ...

In recent years the Goods Shed has also been adapted for use in a range of community events including concerts, art exhibitions, theatre performances, and product launches. In 2021 the MPDC issued a Request for Proposals seeking venue management and commercial lessors. ... The Hobart Railway Goods Shed, together with the 1870s-built former Hobart Railway Station (THR 2187) building, about 500 metres to the Goods Shed's north-west – and which at the time of preparing this datasheet in 2023 is part of the ABC Broadcast Centre – are the only substantive purpose-built remnants of the formerly extensive Hobart terminus and railyards complex.

Historic Cultural Heritage Significance

The Tasmanian Heritage Register (THR) datasheet contains the following non-statutory summary Statement of Significance:

> *The Hobart Railway Goods Shed is a notable example in Tasmania of the development of rail transport from World War I onwards and was integral to the railway system's cartage of general goods up until the 1970s.*
>
> *The Goods Shed building's conversion in the 1980s to a transit warehouse for road transport is illustrative of broader changes in Tasmania during the later decades of the 20th century. The Hobart Railway Goods Shed is rare in the Tasmanian context, illustrating a historical function which is no longer practised, and it is an unusually extensive building within its class of place.*[02]

The Goods Shed is significant because it is important to Tasmania's History (criterion a) and it demonstrates rare, uncommon, or endangered, aspects of Tasmania's heritage (criterion b).

Project Context

The Macquarie Point Development Corporation (MPDC), on behalf of the Crown in Right of Tasmania have proposed the construction of a multipurpose stadium at Macquarie Point known as the Macquarie Point Multipurpose Stadium project.

The Goods Shed is nominated for dismantling and partial relocation as part of the wider Macquarie Point Multipurpose Stadium proposal. The MPDC objective is to give preference to the relocation of the original form of the Goods Shed, with demolition of the lesser significant 1940s addition.

> *As part of the Stadium development, it is proposed that the Goods Shed will be carefully relocated to the northern side of the site. In this location, the Shed will be aligned to another former rail line in a similar location to where the Train Maintenance shed once stood, as part of the Hobart Rail Yards. In this location the Shed will retain its original relationship to rail tracks, and will continue to be a part of the site's story. While no longer present on the site, the intention is to interpret the former rail tracks through inlays and details in the paving on the northern plaza.*
>
> *The Shed structure will be celebrated as part of the northern entry to the Stadium. It will be distinct and clearly identifiable adjacent to the Stadium, and accessible as a unique event space. It will provide new hospitality uses to support Stadium patrons on Event Day, and will also be available for functions throughout the week. By integrating the Stadium and the Goods Shed, new purpose will be ascribed to the historic Shed and promote greater engagement from users who may not otherwise visit the building. The alternative - complete separation of the Shed - could compound its redundancy on the site.*[03]

The MPDC have established the following principles for the Goods Shed Relocation:

- *preservation and connection to place and original use*
- *stand alone and legible*
- *retains relationship to former rail track*
- *use allows for original facade openings to be reinstated*
- *evolution of purpose*
- *continuity of use*[04]

While subject to detailed design and construction methodologies it, it is recognised that, with respect to the Macquarie Point Stadium proposal, the alternative to relocation is demolition of the Goods Shed, which would result in a loss of its heritage values.

It is to be noted that as part of the Stadium Development, further work, or reports (such as Heritage Impact Assessments), will be produced in response to design proposals, and consultation with Heritage Tasmania will occur as required as part of the process.

Key Messages of the CMP

01 The Goods Shed should be retained and relocated rather than demolished.

02 The adaptive reuse of the place should be underpinned by its long term care and conservation and retain sufficient fabric and details to communicate its historic cultural heritage significance.

03 The dismantling, relocation and reconstruction of the Goods Shed should be informed by proven methodologies and ensure the conservation and maintenance of significant fabric.

04 Public access should be prioritized as part of any future use.

05 Future uses should be managed in accordance with the recommendations of this CMP, especially with respect to principles for fitout, signage and operations.

02 Tasmanian Heritage Council (THC), Tasmanian Heritage Registry (THR) Datasheet, 'Hobart Railway Goods Shed', THR ID Number 10995, report date: Thursday, November 07, 2024.

03 'Macquarie Point Multipurpose Stadium Project of State Significance Stadium Design Description', August 2024, p.46

04 'Macquarie Point Multipurpose Stadium Project of State Significance Stadium Design Description', August 2024, p.50

1.1 Purpose and Methodology of the Conservation Management Plan (CMP)

Macquarie Point Development Corporation commissioned Purcell to review and update the 2021 Conservation Management Plan (2021 CMP)[05] for The Goods Shed, Hobart. This updated CMP is intended to guide the proposed relocation and adaptive reuse of the Goods Shed as part of the wider Macquarie Point Stadium proposal, being identified as part of the hospitality offering. The CMP will address the building's immediate functional requirements and provide a comprehensive strategy for the conservation, preservation, and ongoing management of the Goods Shed's historical and cultural values and architectural features.

Our methodology for this CMP is founded on establishing an understanding of the values and significance of the place. The CMP's policies, management actions, and change management process will initially support the dismantling and relocation of the Goods Shed. Following reconstruction and adaptive reuse it will further support the daily operations, continued use, and future change, of the Goods Shed. We will develop a detailed understanding of the issues affecting the places' significance and the options that will best mitigate impacts to its heritage values while providing clear guidance to support continued use and sensitive change.

This CMP uses the process, and principles, in *The Burra Charter: The Australia ICOMOS Charter for Places of Cultural Significance, 2013*, and James Semple Kerr's Conservation Plan.[06]

Purcell team members visited the site in July 2022, April 2024, and January 2025. The site was analysed and photographed at these site visits. All images were taken at these site visits unless otherwise cited.

1.1.1 Key Aims of the CMP

01 to guide the dismantling, relocation and adaptive reuse of the building;

02 to address the building's immediate functional and operational requirements for its proposed future use; and

03 to support, in the long-term the communication of its historical and cultural values and its ongoing conservation once relocated.

1.1.2 Existing Information and Resources

- Austral Tasmania, 'Built Heritage Assessment for the Macquarie Point Site', for Macquarie Point Development Corporation, 13 May 2015.
- Austral Tasmania, 'Macquarie Point Development Project Historical Summary', for the Department of Economic Development, Tourism and the Arts, 15 January 2013.
- Macquarie Point Development Corporation (MPDC), 'The Goods Shed Conservation Management Plan' (2021 CMP), Version 2, June 2021.
- AECOM, 'Condition and Remaining Life Assessment Report', for Cox Architecture, 30 April 2025, included at Appendix A.
- AECOM, 'Structural Compliance Assessment Report', for Cox Architecture, 07 May 2025, included at Appendix B.

A list of all sources referenced is included at Section 8.0.

1.1.3 Limitations and Gaps in Knowledge

The Scope is limited to the built features of the Goods Shed and does not include community consultation; indigenous, moveable, engineering, or sub-surface cultural heritage; landscape assessment; assessment of the archaeological values and potential of the site; ecology; interpretation; historic urban landscapes; streetscape, or comparative analysis, preparation of a moveable heritage inventory; or historic paint, materials, and decorative finishes investigations.

1.2 Study Area and Scope

The Study area and scope for this CMP are limited to the Goods Shed only and does not include the land on which it stands. The THR registered boundary is described on the Central Plan Register (CPR) 11428 as:

01. For the purpose of s15(4)(6) of the Historic Cultural Heritage Act 1995, Lot 1 represents the registered boundary for 'Hobart Railway Goods Shed, #10995 on the Tasmanian Heritage Register.

02. Lot 1 is the partial parcel of FR's 179192/3 & 45404/1, the boundary of which is marked by a heavy black line and described below.[07]

The brief is to update the 2021 Conservation Management Plan for the Macquarie Point Goods Shed. The update is specifically to consider, assess and make recommendations in response to the proposed relocation of the building as part of the Macquarie Point Multipurpose Stadium proposal.

The updated Conservation Management Plan must provide overarching guidance for the dismantling, relocation, future use, conservation and management of the Goods Shed by the Macquarie Point Development Corporation and any future owner and asset manager.

The Conservation Management Plan must clearly define the heritage values of the place; articulate the relative significance of the building and its key components; provide conservation policies; and a procedure for managing heritage values during works of dismantling, relocating and re-erecting the Goods Shed.

05 Macquarie Point Development Corporation (MPDC), 'The Goods Shed Conservation Management Plan' (2021 CMP), Version 2, June 2021.

06 JS Kerr, & National Trust of Australia (New South Wales), *Conservation plan : a guide to the preparation of conservation plans for places of European cultural significance*, Sydney : National Trust of Australia (NSW), 2000.

07 Heritage Tasmania, Central Plan Register (CPR) 11428, 11/12/2023.

1.3 Terminology

The conservation terminology used in this report is of a specific nature and is defined within '*The Burra Charter*: *The Australia ICOMOS Charter for Places of Cultural Significance*', 2013 (the *Burra Charter*).

The Goods Shed is oriented approximately 28 degrees from north. For simplicity, in this description the front of the building, which faces Evans Street, will be described as the south end, and the other sides also described as cardinal directions (the rear as north, and sides as east and west).

1.3.1 Abbreviations

AHD	Australian Heritage Database
CMP	Conservation Management Plan
DNRE	Department of Natural Resources and Environment Tasmania
HCHA 1995	Historic Cultural Heritage Act 1995
HIA	Heritage Impact Assessment
HIPS 2015	Hobart Interim Planning Scheme 2015
HT	Heritage Tasmania
MPDC	Macquarie Point Development Corporation
N/A or n/a	Not applicable
N.D. or n.d.	Not dated
PID	Property ID
TA	Tasmanian Archives
THC	Tasmanian Heritage Council
THR	Tasmanian Heritage Register

1.3.2 Definitions

The *Historic Cultural Heritage Act* 1995 (HCHA 1995), section 3 includes the following definitions:

Historic cultural heritage significance means its significance in terms of the registration criteria significance

Place includes:

(a) a site, precinct or parcel of land; and
(b) any building or part of a building; and
(c) any shipwreck; and
(d) any item in or on, or historically or physically associated or connected with, a site, precinct or parcel of land where the primary importance of the item derives in part from its association with that site, precinct or parcel of land; and
(e) any equipment, furniture, fittings and articles in or on, or historically or physically associated or connected with, any building or item.

The *Burra Charter* provides the following definitions:

1.1 ***Place*** *means a geographically defined area. It may include elements, objects, spaces and views. Place may have tangible and intangible dimensions.*[08]

1.2 ***Cultural significance*** *means aesthetic, historic, scientific, social or spiritual value for past, present or future generations.*

Cultural significance is embodied in the place itself, its fabric, setting, use, associations, meanings, records, related places and related objects.

Places may have a range of values for different individuals or groups.

Explanatory notes:
The term cultural significance is synonymous with cultural heritage significance and cultural heritage value.

Cultural significance may change over time and with use.

Understanding of cultural significance may change as a result of new information.

1.11 ***Compatible use*** *means a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.* [09]

1.1.2 ***Setting*** *means the immediate and extended environment of a place that is part of or contributes to its cultural significance and distinctive character.*[10]

Explanatory notes:
Setting may include: structures, spaces, land, water and sky; the visual setting including views to and from the place, and along a cultural route; and other sensory aspects of the setting such as smells and sounds. Setting may also include historical and contemporary relationships, such as use and activities, social and spiritual practices, and relationships with other places, both tangible and intangible.[11]

08 *The Burra Charter, Article 1.1, p 2.*

09 *Burra Charter, Article 1.11, p 3.*
10 *Burra Charter, Article 1.12, p 3.*
11 *Burra Charter, Article 1.1.2*

The following additional terms are used in this CMP:

Asset	An item of property
Asset Management	The system and process of developing, operating maintaining and upgrading an asset over its lifecycle.
Asset Management System	The method by which Asset Management is delivered
Cyclical Maintenance	Routine maintenance requiring repetition at regular intervals to keep an asset in appropriate condition, supported by regular inspections.
Heritage Asset	A place or asset which is assigned cultural value. For this CMP, heritage assets are the built features of the Goods Shed.
Periodic Inspection	A regular survey or audit of condition based on a recurrent inspection program.

1.4 Measurement Units

Many historical documents have measurements in imperial units such as miles and acres. These have been converted to metric units and, where possible, both are shown in the text. Set out below are conversions for some imperial measurement units that may be found in the history and description of the place.

1.5.1 Distance

Imperial		Metric
1 inch		2.54 centimetres
1 foot		30.48 centimetres
1 yard		91.44 centimetres
1 rod	5 1/2 yards or 16 1/2 feet	5.0292 metres
1 link		20.12 centimetres
1 chain	66 feet	20.1168 metres
1 mile	5,280 feet or 1,760 yards	approximately 1.6 kilometres

1.5.2 Area

Imperial		**Metric**
1 square rod	1 perch or 30 square yards	25.29 m²
1 rood	40 square rods or 1/4 acre	Approx. 1011.7 m²
1 acre	4,840 square yards or 160 perches	Approx. 0.405 hectare

2.1 Location and Heritage Context

The Goods Shed is located at 10 Evans St, on land at Macquarie Point that was reclaimed incrementally. It is within the Macquarie Point Development Site, which is south of the Cenotaph, west of the Hobart Port, north of Sullivan's Cove and northeast of Hobart's CBD. The surrounding area has a large concentration of highly significant heritage places, some of which are related to the Goods Shed.

01 The 'Hobart Goods Shed', THR 10995 (shaded red).

02 'Former Hobart Railway Station', THR 2187.

03 'Red Shed', Sullivans Cove Planning Scheme 1997, (SCPS), PART E. 22, Schedule 1, Table 1, Ref No. 126.

04 'Hobart Gas Works complex (incl. chimney)', THR 2464.

05 'Royal Engineers Building and Stone Post', THR 2280

06 Hobart Rivulet Domain Diversion Tunnel (approximate location dashed white)

07 Hobart Port

08 'Henry Jones & Co. IXL Jam Factory', THR 11961

09 '41 Hunter Street (UTAS Centre for the Arts, formerly part of H. Jones & Co.)' THR 2397

10 'Cenotaph, Anzac Parade and Queen's Battery', THR 7137

11 'Tasmanian Museum and Art Gallery Complex', THR 6648 incorporating Customs House

12 'Victoria Dock and Constitution Dock' THR 12022

13 The Elizabeth St Pier

Figure 01: Location and context of the Goods Shed. The approximate Macquarie Point Development Site boundary outlined in red. The Goods Shed shaded red. Related heritage places numbered red, other surrounding heritage places numbered blue, see adjacent list for heritage place details (Source: Google Earth Pro, Airbus Imagery, 16 January 2024, detail).

2.2 Setting

The THR datasheet describes the setting (in 2023) as follows:

> *The Hobart Railway Goods Shed is situated about 600 metres to the north-east of the city's GPO, within the waterfront promontory known as Macquarie Point. At the time of writing in 2023: to the Goods Shed's immediate east, north and west are the extensive asphalt, concrete and gravel-paved areas of the now largely-cleared former railyards. Further to the east are the large storage buildings of Macquarie Wharf, and further to the north is the escarpment of the hill upon which are located the Cenotaph, Anzac Parade and Queen's Battery (THR 7137).*
>
> *The Goods Shed's southwest-facing elevation is coincident with its cadastral parcel's Evans Street site boundary , and on the opposite side of this roadway are sited the Evans Street- facing buildings of both the UTAS Centre for the Arts, formerly part of H Jones & Co (THR 2397) and of the Henry Jones & Co IXL Jam Factory (THR 11961).*
>
> *The Hobart Railway Goods Shed and the railyards which surrounded it had relationships with a range of other places nearby, including buildings and sites such as the former Hobart Railway Station (THR 2187) and the Royal Engineers building (THR 2280). Other nearby historic features – such as the Hobart Gas Works (THR 2464), the Hobart Rivulet, and the former Hunter Island and Old Wharf areas – are also closely linked to the history of this place.*[12]

The Goods Shed has a functional relationship with the 'Red Shed' through their colocation and similar functions, although the 'Red Shed' appeared on the site in the 1950s. There is also a functional relationship with the Elizabeth Street Pier (Sullivans Cove).

The main change to the setting since 2023 is that the Site has undergone contamination remediation works to prepare the site for future construction of the Stadium. The site has been cleared, and contaminated material removed.

2.3 Heritage Listings

The Goods Shed is included in the following Statutory[13] and Non-Statutory Heritage Registers[14]:

2.3.1 Summary of statutory registrations

The Goods Shed is not currently included on, or nominated to, the World, National, or Commonwealth Heritage Lists.

The 'Hobart Railway Goods Shed' was included on the Tasmanian Heritage Register on 24 April 2024 with THR ID 10995.[15] The listing includes Certificate of Titles (PID): 45404/1 (9126826) and 179192/3 (9126826), as identified on CPR 11428.[16]

The 'Hobart Railway Goods Shed' is a Place of Cultural Heritage Significance (Ref No. 125) as indicated by its inclusion in the *Sullivans Cove Planning Scheme 1997*, PART E. 22, Schedule 1, Table 1 Places of Cultural Heritage Significance.

2.3.2 Summary of non-statutory registrations

The Register of the National Estate (RNE) was established under the *Australian Heritage Commission Act 1975*. It included places of local and state significance of natural, Indigenous, and historic heritage. The level of statutory protection was limited to actions taken by Commonwealth agencies. In February 2007 the RNE was closed, places can no longer be added or removed. The RNE ceased its role as a statutory register on 19 February 2012 when references to the RNE were removed from the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The RNE continues to exist as a non-statutory archive.[17]

The Goods Shed is not included on the RNE.

12 THC, THR Datasheet, 'Hobart Railway Goods Shed', p 4.

13 As accessed through the UNESCO, 'World Heritage List', Australian Heritage Council (AHC), 'Australian Heritage Database' (AHD), and Heritage Tasmania (HT), 'Search the Tasmanian Heritage Register' [websites], accessed 15 January 2025.

14 NB: the National Trust list (in Tasmania) was rescinded by the Tasmanian Government and no longer has statutory force, Tasmanian National Trust, 'Tasmanian National Trust Register Historic Buildings listed by the Tasmanian National Trust' [website], 27/06/2016.

15 Tasmanian Government Gazette, Vol. CCCXLII, No. 22383, Wednesday 24 April 2024, p 241.

16 Accessed through LISTMaps, 06/12/2024.

17 Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW), 'Register of the National Estate – archive' [website], last updated: 03 October 2021.

2.4 Significant Views

The following section assesses current and historic key views that contribute to the setting of the Goods Shed. The section acts as visual record of the views currently available to, from, and within, the Goods Shed and assists in understanding how the place relates to its setting and which views are significant.

Views to, and from, the Goods Shed may be significant because they contextualise and explain the location within Hobart, they may maintain an important function of the place, or they may illustrate the ongoing evolution of the place's use and purpose.

Current views of the Goods Shed are mainly available from Evans Street (from adjacent to the Gas Works to the north side of the Cruise Terminal); from Davey Street (from adjacent to the Gas Works); likely from the upper level of the Royal Engineer's building (THR 2280, not accessed); from the Cenotaph (THR 7137) and surrounding escarpment to the north of the Goods Shed; and on the approaches along the former rail lines adjacent to the TasWater sewerage treatment plant (planned to be relocated).[18] Historically some of these views would likely have been obstructed or partially obstructed by other buildings or infrastructure on the Railway Yards site.

As a functioning part of the industrial railway and ports operations, the Goods Shed was built to be used, rather than as a 'beautiful', iconic, or landmark, building. However, its presence on Evans Street for over 100 years makes it a familiar sight and part of the streetscape. It can also be partially seen in views from the Cenotaph, although it does not contribute to the significance of views from the Cenotaph.

The main public views of the place would have been either from Evans Street or from the escarpment above the Goods Yard, now the cenotaph. These views would have contextualised the Goods Shed's function and location. The Goods Shed, and adjacent Hobart Port, Nos 1 and 2 Sheds on the Ocean Pier, and the Kings and Queens Piers, were vital to the transport and shipping of the Tasmanian Fruit and other Industry's produce. The IXL Jam Factory and nearby warehouses were located to utilise, and support, these industries.

Figure 02: View from near the Cenotaph the Goods and Red shed can be seen, with the Port beyond (left), former IXL Jam factory, Port Control Tower, and a docked cruise ship beyond (centre).

Figure 03: View along Evans Street, with the Goods Shed (left), the Red Shed beyond (left), the Former IXL Jam Factory (right), the Port Control Tower and a docked cruise ship beyond (right).

Figure 04: View from the south end of Evans Street, the Red Shed with the Goods Shed beyond, (right) and the Former IXL Jam Factory (left), the closer building now the TAS Centre for the Arts.

18 TasWater, 'Engagement plan to ensure no surprises for Hobartians' [online], 20 Sep 2024, accessed 29/11/2024

2.5 Description

2.5.1 Introduction

The following description is based on a site survey of the extant building fabric undertaken in July 2022, April 2024 and January 2025, as well as an examination of the available documentary evidence regarding the Place. It incorporates descriptions from the THR Datasheet, and the 2021 Goods Shed CMP.[19]

> *The building is a long two road shed of 29 bays length with a double trussed gabled roof … approximately 23 metres wide and 115 metres long.*[20]

> *The building as now found is mostly a combination of the original shed from deck up and the 1946-49 changes from the deck down.*[21]

Further information about the historic context and presentation of the Goods Shed is outlined in Section 3.2.5 and 3.2.6.

2.5.2 Roof and roof structure

The Goods Shed's roof is a pair of side-by-side gabled volumes, with ridges and a central valley-gutter parallel to the long sides.

The roof's exterior cladding was originally of galvanised corrugated iron, interspersed with glazed, timber framed skylights to the width of a structural bay, skylights being at every fourth bay. The skylights were broken into 6 vertical fixed panes (shown in the 1914 Goods Shed elevation, see Figure 48). The skylights were replaced with polycarbonate sheeting by 1965. The roof over the current office was replaced with new galvanized corrugated roof sheeting possibly in 1949, c.1984 and 2019.

In 2023 further new galvanised corrugated roof sheets and a rolled ridge capping (matching the original profile) were installed as a secondary roof over the existing roof. Galvanised gutters and a facia extension were installed.

This secondary roof was fixed to battens / top hats over the existing corrugated roof with acoustic and thermal insulation. It was installed as part of a proposal to adaptively reuse the Goods Shed which has been halted due to the current Stadium Development project.[22] Skylights were not incorporated into the new roof skin, the polycarbonate sheeting was removed, and the holes infilled with roof sheeting brought in from elsewhere.

> *The roof trusses are simple timber and steel trusses with five vertical steel tension rods and four diagonal timber members. They are a form of Howe Truss but not a usual design. The timber is Oregon that would have been imported from the United States or Canada as it was not available in Australia. The trusses have curved steel angle knee braces at each post junction with modest decorative detailing at their base.*[23]

> *At the Shed's perimeter walls, and at the mid-line of the building beneath the valley gutter, the ends of the roof-trusses are supported by heavy, square timber posts.*[24]

> *There are 6 timber purlins to each roof plane and the roofing is galvanised sheeting in short sheets. Diagonal timber braces are used from the underside of each truss back to the top wall plate.*[25]

In addition to the diagonal timber bracing there are five steel vertical tension rods in each truss.

Figure 05: The roof structural elements in 2022, showing the skylights, Howe trusses, bracing systems, and supporting central and peripheral timber posts on cement footings.

Figure 06: A similar view in 2024. The location of the translucent roof sheets can be seen as lighter patches in the roof. The lighter patches are roof sheeting brought in from off site to fill the void after removal of the corrugated polycarbonate skylights.

19 MPDC, 'The Goods Shed CMP', pp 9-28.
20 MPDC, 'The Goods Shed CMP', p 31.
21 MPDC, 'The Goods Shed CMP', p 31.
22 Purcell, 'Macquarie Point Goods Shed 41 Evans Street, nipaluna / Hobart Heritage Impact Assessment' (HIA), 4 August 2022.
23 MPDC, 'The Goods Shed CMP', p 31.
24 THC, THR datasheet, 'Hobart Railway Goods Shed', p 5.
25 MPDC, 'The Goods Shed CMP', p 31.

2.5.3 Exterior

The west, north and east elevations feature 1.2m-high horizontal bands of fixed windows within white-painted timber framing, with seven panes to each bay. Beneath this, the walls are clad with painted corrugated steel sheeting. There are two remaining of the original openings formerly occupied by timber sliding goods doors – and above one of these openings, on the Shed's west elevation, is what may be an original externally-mounted head-track.

The Evans Street (south) comprises two gables with three bays under each. Each gable is glazed with tall, narrow panes of textured glass panes within white-painted timber frames. The gable apexes have fine timber louvres above the windows. The Evans Street end has 4 sets of modern windows, with two sets under each gable. These are made up of a row of nine panes towards the middle, and five towards the outside, of each gable. The original window hoods (see Figure 46), that marked the offices spaces, were removed between 1965 (see Figure 31) and 1967.[26] There is a double paned window in the southern-most bay of the east and west walls (see Figure 06).

At the north end, the two gables are clad with corrugated sheeting. The western half has retained the original pattern of two outer bays with 1.2m-high horizontal bands of fixed windows within white-painted timber framing, with seven panes each bay and an opening, now infilled by a roller door, the full width of the middle bay. The eastern half is fully clad, with a metal double door within the infilled opening to the centre bay.

The cement structure that replaced the original timber footings is visible below the exterior walls on all elevations except for the southern-most two bays.

The base of the southern-most two bays' walls are clad in painted horizontal timber planks with small ventilation gaps. These two structural bays appear to have a timber sub-floor structure (see Figure 7). A set of stairs on the east side (second bay from the south end) leads to the main entrance to the offices.

> *The original external loading dock doors were timber sliding doors on steel tracks. One track remains however no doors remain. The perimeter walls are, and were, clad with vertical corrugated sheeting. Originally this was short sheet cladding in 10 foot lengths (i.e., approximately 3m).*[27]

Figure 07: The Evans Street (south) end and the east side of the Goods Shed. The toilet addition can be seen behind the shrubs (Source: Jim Gard'ner, GJM Heritage, 12/06/2024).

Figure 08: The north and west side, the left six bays are the 1946 extension, the right two bays without the over-clad roof are the office spaces with skylights.

Figure 09: The rear (north) and east side of the building. The 1946 extension is approximately from the down pipe to the north end of the building. The 1985 addition (extended in c.1990s) is the dark coloured portion towards the left.

26 As seen in consecutive aerial imagery, Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 02/12/2024: 17-02-1965 / Film 0442 / Frame 189 / Run 7 / Scale 3,960, Creative Commons Licence CC BY 3.0 AU DEED.

27 MPDC, 'The Goods Shed CMP', p 31.

2.5.4 Interior

Most of the interior, beyond the bays forming the current office, is unlined, with the timber structure mostly still visible. The walls in the main open area of the Goods Shed retain their original structural configuration, although the original loading docks and openings have largely been infilled. The bays that were not originally open have three full width horizontal rails, two vertical studs that divide the bay into thirds, and two diagonal braces on the outside third of each bay with a post on either side supporting the original openings, every second of which was a loading dock. Where the loading docks were infilled, the bays now have three full width horizontal rails.

The framing for the entry door to the west side of the north end is still present, as is the window framing on the west side in the northern most bay, although both are clad on the outside.

On the northern side of the internal wall separating the offices from the rest of the Goods Shed, there are board-marked concrete buffer blocks (see Figure 6).

The concrete floor at the northern end is at ground level, with a paved ramp up to the higher floor level in the main part of the shed (the previous floor level of the goods wagons).

The lower concrete floor has exposed the previously subfloor structure of concrete perimeter walls, and cross wall nibs.

> *The central hardwood columns appear to have been supported at ground level on concrete plinths (one remains visible). The perimeter columns - support a perimeter beam at roof level and a second perimeter beam below the clerestory windows that also aligns with the original door head height.*[28]

The central section of the floor where the tracks were, has been infilled with a mix of paved and bitumen finishes (seen as a darker area around the central posts).

Figure 10: View towards the Evans Street (south) end. The low wall (ahead) is a ramp providing accessible access. The ramp (near left) is to the 1946 extension. The left side with internal lining marks the toilet block addition. The exit door (right) is within an original opening.

Figure 11: View towards the Evans Street (south) end showing the board-marked concrete buffer blocks.

Figure 12: View away from the Evans Street end, ahead is the wall separating the 1946 addition, far right is a caged storage area. Left, the pattern of openings can be seen. The closest bay is a loading bay (yellow paint outlines where the dock opening on the floor was located). The pattern of bays can be seen in the alternating bays of diagonal bracing and horizontal bracing (former opening).

28 MPDC, 'The Goods Shed CMP', p 31.

Figure 13: From left to right, alternating bays with vertical and diagonal bracing, and either infills or horizontal girts only which were formerly openings.

Figure 14: The north end of the 1946 extension. Original openings can be seen in the timber framing. The cement structure that replaced the original timber footings is visible below the original walls.

Figure 15: The west side of the 1946 extension. Original openings can be seen in the timber framing. The windows above the roller door have been replaced by wire mesh and metal sheeting.

Figure 16: The east side of the 1946 extension. The middle two bays have been replaced from the floor up (including the windows) with sheet metal.

Figure 17: Meeting Room inside the office mezzanine, showing the exposed truss timbers in the wall.

Figure 18: Inside the roof space over the office, looking to the glazed gable windows on the Evens Street façade..

3.1 Chronology

The following brief chronology of the study area was extracted from the Macquarie Point Development Project Historical Summary,[29] the THR Datasheet, and the 2021 Goods Shed CMP.[30] It was updated and illustrations added.

Pre 1804

Aboriginal People reached Tasmania at least 42,000 years ago.[31] According to Ryan, the Aboriginal population of Tasmania was aligned within a broad framework of nine nations, with each nation comprising between six to fifteen clans.[32] The Goods Shed falls within the range of the Mouheneenner (Muwinina) clan of the South East Nation who occupied the land around present day Hobart.[33] It is believed that prior to the European's arrival the South East Nation probably consisted of seven individual clans. However, only four clans were definitively recorded by the early European settlers.[34]

1804

Lieutenant-Governor David Collins arrived with a party of convicts, military and free settlers and established Hobart.[35] Figure 19 provides an idea of what Sullivan's Cove might have looked like shortly after their arrival. There are 'tents and small cottages' on Hunter's Island, the Escarpment and further inland only.

Figure 19: Hunter Island (nipaluna / Hobart) in 1804. Foreground (right) likely the original shoreline (Source: 'View of Sullivan Cove 1804' possibly by George William Evans, SLNSW, *FL3217111*, detail).

1806 - 1810

The first land grants at Macquarie Point were issued for agriculture: 14 acres to Leonard Fosbrook, the Assistant Commissary [shaded green on Figure 20] on which he built a small cottage, and 24 acres to George Guest [shaded yellow on Figure 20]. The area became known as Fosbrook's Point. In 1810 William Collins acquired a small parcel of land on the mouth of the Rivulet, to the south of Fosbrook's land [shaded red on Figure 20], built a small wooden cottage and established a garden.[36]

1811

Governor Lachlan Macquarie arrived and renamed the site Macquarie Point. He later decreed that the new Government House would be located there.[37] Governor Macquarie also ordered Surveyor James Meehan to survey and lay out an ordered grid structure for Hobart, which still remains substantially intact.[38]

1814- c.1815

Fosbrook sold his 14 acres to Edward Lord [shaded green on Figure 20], who replaced Fosbrook's small cottage with a large sandstone and brick house.[39]

Figure 20: Location of land grants overlaid on a c.1824 plan: Fosbrook's (1806) shaded green, Guest's (1806). shaded yellow, Collin's (1810) shaded red, a proposed cut (never made) for Hobart Rivulet shaded blue, (Source: 'Hobart 12 - Plan of layout of Streets of Hobart', TA, AF394/1/10, detail, overlaid by Purcell).

29 Austral Tasmania, 'Macquarie Point Development Project (MPDP) Historical Summary', for the Department of Economic Development, Tourism and the Arts, 15 January 2013, pp 4-5.
30 MPDC, 'The Goods Shed CMP', pp 9-28.
31 University of Tasmania, 'Tasmanian Aboriginal oral traditions among the oldest recorded narratives in the world' [website], 14 Aug 2023.
32 L Ryan, *Tasmanian Aborigines: a History Since 1803*, Crow's Nest, NSW: Allen and Unwin, 2012, p 14, cited in Cultural Heritage Management Australia (CHMA), 'Desktop Aboriginal Heritage Assessment Report', for Purcell, 18 May 2024, p 9.
33 CHMA, 'Desktop Aboriginal Heritage Assessment Report', p 10.
34 CHMA, 'Desktop Aboriginal Heritage Assessment Report', p 10.
35 Austral Tasmania, 'MPDP Historical Summary', p 4.
36 Austral Tasmania, 'MPDP Historical Summary', p 4.
37 Austral Tasmania, 'MPDP Historical Summary', p 4.
38 F Bolt, 'James Meehan's survey of Hobart Town in 1811', *Papers and Proceedings of the Royal Society of Tasmania*, 1981, Vol 115, p 6, https://doi.org/10.26749/rstpp.115.5.
39 Austral Tasmania, 'MPDP Historical Summary', p 4.

1820-1821

The causeway was built to link Hunter Island with the mainland, creating the old wharf. This was the start of a progressive land reclamation around Sullivan's Cove.[40]

1821–1825

The Government acquired Lord's property, which was near the government stockyard (which later became the slaughterhouse, as shown in Figure 12). In 1825 the 'New Cut' to redirect the original course of the Hobart Rivulet to entered the Derwent behind the Hunter Street causeway was constructed [see Figure 21].[41]

1826-1827

The Government Lumber Yards were relocated to Macquarie Point, a road to them, and a slip for landing timbers, were constructed. The Colonial Engineer, John Lee Archer, took over Edward Lord's former house, with the Stable Yard and an adjacent garden to the north, as his home and offices [see Figure 21].[42]

Figure 21: 1828 plan showing the Government Domain, the grant labelled 'Mrs Collins'; the Lumber yard' the 'slip for landing timber', and Edward Lord's former house, stables, and garden. (Source: 'Hobart 9 - Chart of Sullivans Cove and part of Hobart Town showing the intended improvements, surveyor John Lee Archer', 30/04/1828, TA, AF394/1/169, detail).

1836 - 1852

The Royal Engineers took over the Lumber Yard in 1836. In 1846 They established their headquarters at Macquarie Point. Edward Lord's former house was used as barracks and a new office building was constructed. By 1852, the original landing slip had been replaced by a large stone structure known as the Engineers Jetty.[43]

1856

The Hobart Gas Company was established on Mrs Collins' land and expanded around the mouth of the Rivulet during the latter part of the nineteenth century.[44]

1856

Discussions on building a north - south railway began, but no action was taken.[45]

1858

New slaughter yards were constructed at Macquarie Point with slaughterhouses; stock and sale yards on reclaimed land, and new landing jetties.[46]

1860s

In the 1860s, Interest was rekindled in a north south railway. A rail route between Hobart and Launceston was surveyed in 1863. The railway's route was eventually decided by a Royal Commission during 1867-68.[47] The Royal Commission also decided on the site at Macquarie Point for the Station, and the route of the line skirting the Domain along the foreshore.[48]

1871

The Tasmanian Main Line Company won the contract for construction of the line between Hobart and Launceston although construction was delayed by disputes of the terms of agreement and the route. Legislation had to be passed to allow use of land on the Domain.[49]

1872

Construction works began on the Tasmanian Main Line Railway using imported British workers (called 'navvies'). Work began on cutting around the domain and laying rails. The Hobart Terminus was located on the old cricket ground, which was controversial.[50]

Figure 22: This plan shows the various uses of the Government Domain over time and the development of the Tasmanian Main Line Railway Company's Railway yard on Park Street (Source: 'Hobart 94 - Plan of Queens Domain, Hobart - surveyor Hall (Field Book 936)', 1848 (and updated), TA, AF394/1/95, detail).

1874

The first trains travelled between Hobart and Risdon on 16 September, where the rails ended. Tracklaying continued, extending the line northwards.[51]

40 Austral Tasmania, 'MPDP Historical Summary', p 4.
41 Austral Tasmania, 'MPDP Historical Summary', p 4.
42 Austral Tasmania, 'MPDP Historical Summary', p 4.
43 Austral Tasmania, 'MPDP Historical Summary', p 4.
44 Austral Tasmania, 'MPDP Historical Summary', p 22.
45 Austral Tasmania, 'MPDP Historical Summary', p 28.
46 Austral Tasmania, 'MPDP Historical Summary', p 4.
47 Tasmanian Government, 'Royal Commission into the Main Line Railway', 1867-68, TA, RC 20/2, cited in MPDC, 'The Goods Shed CMP', p 10.
48 Tasmanian Government, 'Royal Commission into the Main Line Railway', 1867-68, TA, RC 20/2, cited in MPDC, 'The Goods Shed CMP', p 10.
49 Austral Tasmania, 'MPDP Historical Summary', p 25.
50 Austral Tasmania, 'MPDP Historical Summary', p 28.
51 Austral Tasmania, 'MPDP Historical Summary', p 28.

1875

The Goods Shed, offices, Engine Shed and workshops were completed by August.[52]

1876

The completed main line railway was opened.[53]

Figure 23: The Hobart Railway Station with platform sheds behind, and horse and cart on the weighbridge, c.1890 (Source: Haldane Cotsworth, 'Hobart Railway Station showing weighbridge', c.1890, TA, AUTAS001125299479, WL Crowther Library, SD_ILS:187184, detail).

1880s-90s

A seawall was constructed off Macquarie Point as part of more land reclamation works. The Hobart Corporation used the enclosed area as a refuse tip and in doing so progressively created more land.[54]

1890

The Tasmanian Government Railways (TGR) took over the Tasmanian Main Line Railway Company.[55]

1891

Discussions were held about expanding the small, inefficient, and dangerous, Hobart passenger and goods station.[56] The Railway management moved into the Territorial Police Station (former Royal Engineers' building / Edward Lord's former house) and former Engineer's Yard, for their headquarters.[57]

1894-1895

The Tasmanian International Exhibition was held on the Domain in a grand, but temporary, building and landscaped area on Macquarie Point, where the Cenotaph is now.[58]

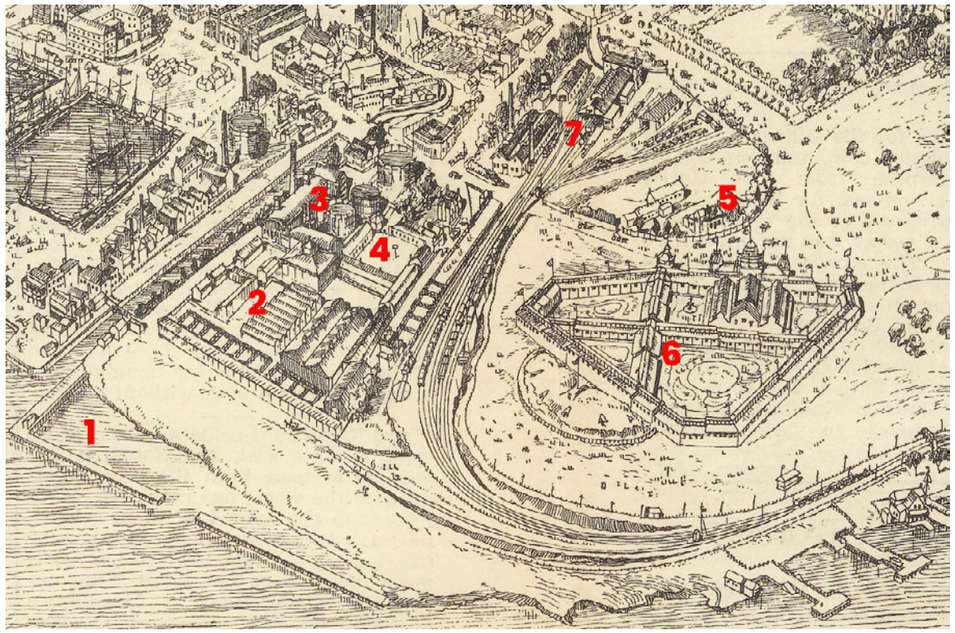


Figure 24: A wood engraving print showing: 1 - Seawall and basin; 2 - Slaughter Yards; 3 - Gasworks and Gasworks Straits; 4 - Drill Yard; 5 - Former Royal Engineer's Quarters; 6 - Exhibition Buildings and grounds; 7 - Hobart Railway Station; (Source: 'A bird's-eye view of Hobart, Tasmania', [Sydney]: Australian Town and Country Journal, 1894, TA, SD_ILS: 920758, detail, overlaid by Purcell).

Figure 25: Lithograph of the Tasmanian International Exhibition building (Source: Unknown artist and lithographer ,'Tasmanian International Exhibition Building, Domain, Hobart', 1894-95, Allport Library and Museum of Fine Arts, State Library of Tasmania, SD_ILS:100750).

52 MPDC, 'The Goods Shed CMP', p 11.
53 Austral Tasmania, 'MPDP Historical Summary', p 5.
54 Austral Tasmania, 'MPDP Historical Summary', p 5.
55 Austral Tasmania, 'MPDP Historical Summary', p 5.
56 MPDC, 'The Goods Shed CMP', p 13.
57 'HOBART AND THE SOUTH' [online], *Launceston Examiner* (Tas), Friday 5 June 1891, p 3; 'HOBART AND THE SOUTH' [online], *Launceston Examiner* (Tas), Thursday 9 April 1891, p 3; 'PARLIAMENT Of TASMANIA', *The Mercury* (Hobart, Tas.), Wednesday 9 September 1891, p 4; cited in MPDC, 'The Goods Shed CMP', p 13.
58 Austral Tasmania, 'MPDP Historical Summary', p 5.

1904-10

In 1909 The Macquarie Point slaughter yards were closed. Septic tanks, installed at the 1889 Sanitary Depot, were insufficient to cope with the demand by 1910. The tanks were abandoned, and raw sewage was pumped directly into the Derwent via an extended outfall pipe.[59]

1908

Planning for the Hobart Railway redevelopment began. A proposal was made to connect the rail lines with the wharf to support the interstate and international fruit export industry. In October £5,000 was provided to commence relocation of the engine shed and workshop over 1808-1809, but the works were delayed.[60]

1910

The Tasmanian Government Railways identified land to the rear of the gas works as their preferred location for expansion, then in use as a drill yard for volunteer forces, slaughter yards, septic tanks, and the municipal rubbish tip.[61]

1911

The Commonwealth transferred ownership of the old drill yard to the Tasmanian government. Early works, started at the beginning of 1911 to redevelop the site for the Roundhouse, included preparations for the Roundhouse and additional sidings for goods traffic.[62]

59 Austral Tasmania, 'MPDP Historical Summary', p 5.
60 MPDC, 'The Goods Shed CMP', p 13.
61 MPDC, 'The Goods Shed CMP', p 13.
62 MPDC, 'The Goods Shed CMP', p 14.

1914-15

Tasmanian Government Railways undertook major expansion works on Macquarie Point and constructed the Ocean Pier Goods Shed (completed February 1914), Roundhouse (completed June 1915) and electrically-driven turntable, the Goods Shed (completed December 1915), coal yards, and approximately 7.2km of rail line [see Figure 28].[63]

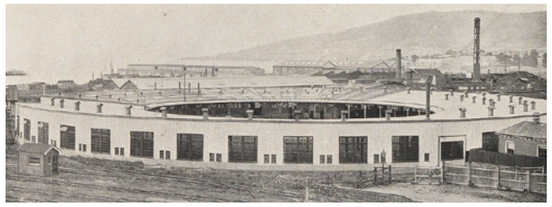


Figure 26: The new Locomotive Round House with the Goods Shed behind (Source: Beattie, '1 - Locomotive Round House', The Weekly Courier, 23 December, Insert 4(1), p 22, TA, SD_ILS:582993, detail).

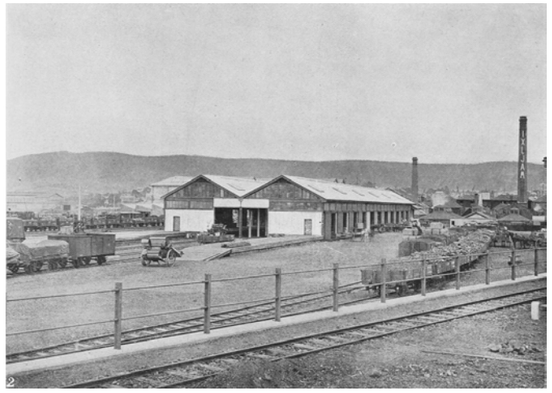


Figure 27: The new Goods Shed, with the Gas works and IXL Jam factory behind (Source: Beattie, '2 - New Goods Shed', The Weekly Courier, 23 December, Insert 4(2), p 22, TA, SD_ILS:582993, detail).

63 MPDC, 'The Goods Shed CMP', p 20.

1915-1918

The Domain Diversion Tunnel was constructed to redirect the course of the Hobart Rivulet under what is now the site of the Cenotaph. The old course of the Rivulet was filled in and Evans Street was created.[64]

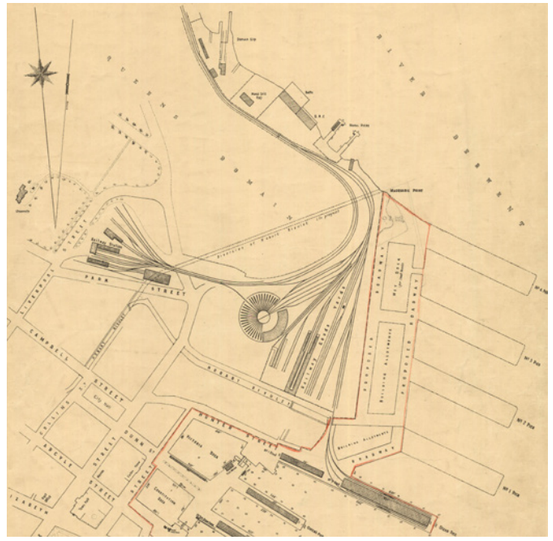


Figure 28: Plan of the area showing the proposed Domain diversion tunnel, proposed expansion of the Port new Railway Goods Yards, the new Goods Shed, Ocean Pier and Ocean Pier Goods Shed (since demolished), (Source: 'Hobart 132 - Plan of Hobart Harbour - surveyors Hutchinson & Walker', 1916, TA, AF394/1/133, detail).

64 Austral Tasmania, 'MPDP Historical Summary', p 5.

1920s-1937

The gas works plant underwent major reconstruction. More land was acquired on the Evans Street frontage where a tar and liquor tank and new purifiers were established. By 1937, an area of 6.5 acres had been reclaimed off Macquarie Point for oil storage use.[65]

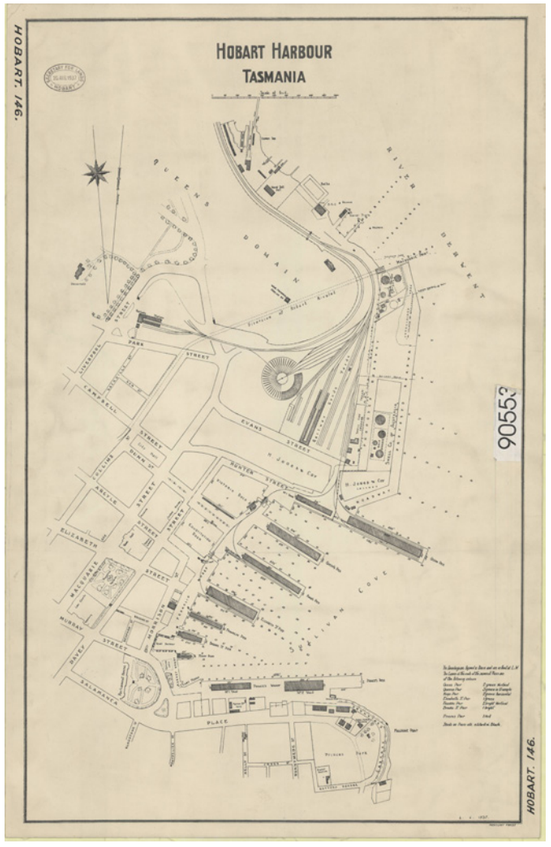


Figure 29: 1937 plan of Hobart Harbour showing the expanded railways workshops, Roundhouse, Goods Yards, and tracks to pier goods sheds (Source: Mercury Press, 'Hobart 146 - Plan of Hobart Harbour', 4/06/1937, TA, AF394/1/148, Detail).

65 Austral Tasmania, 'MPDP Historical Summary', p 5.

1946

The timber piers, timber decks and everything structural below it, were replaced with concrete slabs and blade walls. The northern end of the Goods Shed was extended by six bays (72 feet or approximately 22 metres), to its current length. Other renovations and alterations were made, including roof repairs after damage from an explosion at the Jones & Co jam factory.[66]

Figure 30: 1946 aerial view showing the expanded railways workshops, Roundhouse, Goods Shed, and tracks to Ocean Pier Shed No 2, Queen's King's and Elizabeth St Piers (Source: Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 16/05/2024: 16-03-1946 / Film 0015 / Frame 894 / Run 1/ Scale 7,920, Creative Commons Licence CC BY 3.0 AU DEED, detail).

1948

The Ocean Pier caught fire, resulting in the loss of the No 2 Shed and more than three quarters of the pier.

1949

By 1949 The Goods Shed's original timber piers were decayed to the point that they needed replacement. [67]

66 MPDC, 'The Goods Shed CMP', p 22.
67 'WATERFRONT FIRE', The Mercury (Hobart, Tas. : 1860 - 1954), 15 March 1948, p 2.

c.1950-1978

Massive reclamation works at Macquarie Point were carried out, resulting in the current Macquarie Wharf complex.[68]

1959

Changes were made to the offices. The umbrella roof, proposed in 1945, was constructed at the northern end of the Goods Shed.[69]

1964

Further alterations were made to the offices in 1964, and again in 1969 including installation of the first female's toilets.[70]

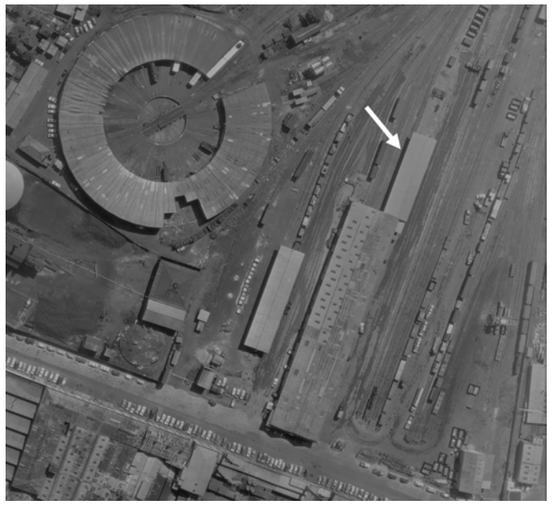


Figure 31: Aerial view from February 1965. The umbrella roof indicated by the white arrow (Source: Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 02/12/2024: 17-02-1965 / Film 0442 / Frame 189 / Run 7 / Scale 3,960, Creative Commons Licence CC BY 3.0 AU DEED, detail).

68 Austral Tasmania, 'MPDP Historical Summary', p 5.
69 MPDC, 'The Goods Shed CMP', p 24.
70 MPDC, 'The Goods Shed CMP', p 24.

1978

The Hobart gas works were closed. The last passenger train travelled between Wynyard and Hobart. The Australian National Railways took over the Tasmanian Government Railways. Over the coming years, services were rationalised, and most station buildings, housing and sheds were removed, including those at the Hobart Station site.[71]

1984

The Goods Shed was reworked for road transport use. This included construction of a small brick extension on the east side of the building for office space.[72]

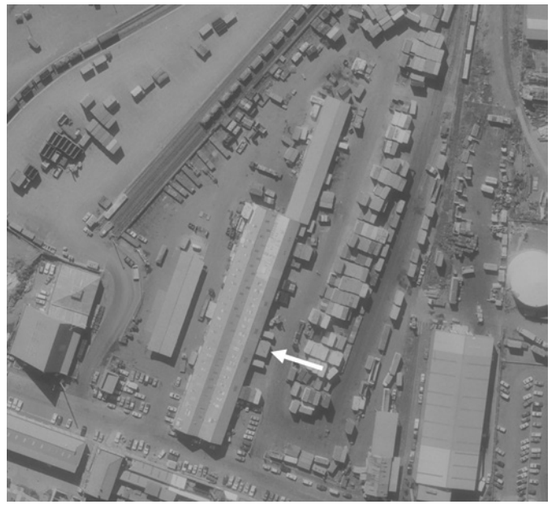


Figure 32: Aerial view from April 1985. The brick office extension indicated by the white arrow. Note the removal of the Roundhouse and tracks to the Goods Shed, and an increase in length of the umbrella roof. (Source: Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 16/05/2024: 12-04-1985 / Film 1035 / Frame 212 / Run 1/ Scale 10,000, Creative Commons Licence CC BY 3.0 AU DEED, detail).

71 Austral Tasmania, 'MPDP Historical Summary', p 5.
72 MPDC, 'The Goods Shed CMP', pp 31-32.

1990 - 1992

Between February and July a portion of the single bay extension closest to the Goods Shed was removed. Between 2 August 1990, and 2 February 1992, a lager, transverse gable structure had filled the gap, and the eastern brick office extension had been enlarged to the south (as seen in consecutive aerial imagery from 1990 and 1992).

Figure 33: Aerial view from February 1992. The transverse gable structure indicated by the white arrow. (Source: Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 16/05/2024: 12-04-1985 / Film 1035 / Frame 212 / Run 1 / Scale 10,000, Creative Commons Licence CC BY 3.0 AU DEED, detail).

2007

Investigations begin on relocating the Royal Hobart Hospital to the railyards site. The investigations found that although the railyards site was the preferred option, the costs associated with remediation and construction were too high.

2012

An Australian government grant of $50 million was provided to support the remediation of the railyards site.

2013

The Macquarie Point Development Corporation (the Corporation) was established by Parliament in 2013 and charged with the remediation and redevelopment of the old railyards site.[73]

2015

Between 6 March 2013 and 25 December 2015 the umbrella roof was demolished, although the transverse structure remained (as seen in consecutive aerial imagery from 2013 and 2015).

Figure 34: Aerial view from December 2015 showing the remaining transverse structure, some rail lines remaining including along the waterfront and the construction of Macq 01 beginning. (Source: Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 16/05/2024: 25-Dec-2015 / Resolution (cm) 10 / Accuracy (m) 0.30, Creative Commons Licence CC BY 3.0 AU DEED, detail).

2019

The Goods Shed office area was renovated to become an open plan office and facilities for the Corporation. The timber columns and trusses were retained as part of the renovations and are a design feature of the office.[74] New toilet facilities were installed in the extension on the eastern side of the building.

Figure 35: Aerial view from January 2019 showing the Bridge of Remembrance, Peace Promenade and removal of all railway tracks (Source: Land Tasmania, 'Aerial Photo Viewer v2' [website], accessed 16/05/2024: 04-Apr-2019 / Resolution (cm) 10 / Accuracy (m) 0.75, Creative Commons Licence CC BY 3.0 AU DEED, detail).

2023

Works were undertaken to install a secondary roof to the roof extent beyond the office area.

2024

Propsals are being developed for the dismantling, relocation and adaptive reuse of the Goods Shed, which will be directly impacted by the construction footprint of the proposed Macquarie Point Stadium. The Stadium proposal is currently being assessed as an inegrated assessment under the *State Policies and Projects Act* 1993.

Figure 36: Aerial view of the Study Area January 2024 showing the Bridge of Remembrance, Peace Promenade and removal of all railway tracks and the large shed adjacent to the Red Shed (Source: Google Earth Pro, Airbus, 16/01/2024, detail).

73 MPDC, 'The Goods Shed CMP', pp 31-32

74 MPDC, 'The Goods Shed CMP', pp 31-32.

3.2 Historical Overview

The following History is reproduced from the 2021 CMP [75] and reformatted to suit this document's layout and style. All references are as cited in the 2021 CMP except for replacement of IBID and Op Cit with a shortened form of the citation. It is not italicised for accessibility reasons. Any changes to the text are noted. Where possible, digital versions of the images used have been downloaded from inline sources and cited accordingly, if not available online, the images were used from the 2021 CMP.

To develop an understanding of the context and significance of the Goods Shed it is necessary to consider history of the broader Macquarie Point site setting.

3.2.1 The Aboriginal People of the Hobart Area and Contact History

Before European settlement, Ryan has described Tasmanian Aboriginal society as consisting of nine nations, each containing multiple social units or bands. Tribal boundaries could vary between well-defined borders based on geographical features, to broader transitional zones existing between two friendly tribes.[76]

During the Holocene, the western shore of the Derwent formed part of the lands of the South East nation. Their territory covered an area of approximately 3,100km2 to encompass the western shore of the Derwent north to New Norfolk, the D'Entrecasteaux Channel and Bruny Island, and south to South Cape, extending west to the Huon Valley. Ryan writes that prior to European contact, the area probably contained seven bands, each with about 70 to 80 people. The Hobart area was home to the Muwinina band. They knew the area as Nibberloone or Linghe. Unlike other groups, the South East nation may not have moved inland during Spring and Summer. Their lands provided sufficient food throughout the year, travelling up and down the coast with the seasons, and to outlying islands using bark catamarans. Seasonal changes would also bring new food such as seals, mutton birds and swan eggs.[77]

On colonisation in 1804, initial contact between the Muwinina and Europeans was positive. Although not visiting the settlement, the Aboriginal people were friendly with small groups of Europeans they met at more isolated areas. Such relations were not to last, with conflict over food resources one of the triggers in the deteriorating relationship.

The period 1804 to 1824 has been described as one of 'uneasy coexistence' between Aboriginal people and Europeans. Certainly, there were outbreaks of hostilities, but by comparison with what occurred post-1824, the first two decades since the coming of the Europeans were relatively calm.[78]

During the 1820s, the European population grew rapidly, accompanied by an explosion in the issuing of land grants over the most valuable grass plains. These actions created disputes over access to native game, hunting grounds and the connection of Aboriginal people with their traditional tribal lands. What followed was unprecedented violence.[79]

In October 1830, Lieutenant Governor Arthur commenced the failed 'Black Line' operation; an attempt to push the Oyster Bay and Big River people remaining in settled areas down to the Tasman Peninsula. More success was had by George Augustus Robinson who led a series of expeditions which enticed or coerced the remaining Aboriginal people to leave their country. In January 1832, Robinson arrived in Hobart Town in the company of 26 surviving members of the Big River nation.[80]

In 1847, the 47 remaining Aboriginal people at the mission on Flinders Island were transported to the former convict station at Oyster Cove, south of Hobart. Back on the Tasmanian mainland, the people would often leave Oyster Cove for weeks at a time to hunt, camp and collect traditional foods. Trips would also be made to Hobart. The connection to Hobart remains unbroken.[81]

3.2.2 Macquarie Point before the Railyards[82]

The European use and development of Macquarie Point began soon after colonisation, with farms established in 1806 over the promontory to supply the small town with vital food resources.

Prominent colonist Edward Lord constructed a large brick and stone house on the property in 1815. Strategically located, the Government had an early interest in the land, acquiring it in 1821. Several relatively short-lived public uses emerged, but these were only temporary. This changed in 1826 with the decision to construct a new Lumber Yard on the site. This consisted of a range of brick buildings, enclosing a large open square. Using a convict workforce, the Lumber Yard was far more than a place of timber processing, being the principle public works depot in the colony and where a wide range of skilled trades were practiced, including blacksmithing, carpentry and furniture production. The workshops surrounding the yard were used by turners, nailors, carpenters, sawyers, wheelwrights, tin smiths, armourers, painters, glaziers, coopers, saddlers, and harness makers.

The Lumber Yard continued to operate until the mid-1830s, then displaced by the arrival of the Royal Engineers, initially responsible for the design, construction and maintenance of all convict and military buildings, fortifications, and hospitals.

The Engineers made use of the existing buildings, converting Lord's house to become a barracks, and reconfiguring the Lumber Yard as the Engineers Yard. During the 1840s, their role expanded to include all civil government works. In response, a grand new headquarters was constructed, and survives to this day at 2 Davey Street.

The Royal Engineers served in Tasmania from 1835 to the early 1870s. With the end of transportation and the advent of self-government in 1856, greater responsibility for defence fell on the Tasmanian government, and a number of local militia groups were established. The old Lumber Yard became the drill yard for several Hobart volunteer groups.

Located outside of the town boundaries, Macquarie Point's industrial uses soon expanded. This began in 1856 with the construction of gas works, on land later corresponding with the former TasPorts Cold Store (on the south western corner of the site) and providing Hobart with gas lit streets and buildings by 1857, only the third place in Australia to manufacture gas. Other noxious industries soon emerged, including in 1858 with the construction of slaughter yards. Expansive in size, the slaughter yards required more land than was available at Macquarie Point; the solution to the problem was to carry out land reclamation, the first major phase of extending the Point to the east and into the Derwent. The slaughter yards remained at Macquarie Point until 1909, a cause of common complaint in Hobart. Adding to the mix, during the late nineteenth century, rubbish from the growing city was dumped into the Derwent off the slaughter yards. Timber piling, and later stone seawalls were erected to contain this rubbish, and over the years the basin was progressively filled. It came to be known as the 'Municipal Mud Hole', and the basin had largely been filled with rubbish by 1904. A large area of the eastern end of Macquarie Point was reclaimed through use as a rubbish dump.

75 MPDC, 'The Goods Shed CMP', pp 9-28.
76 Ryan, L, *The Aboriginal Tasmanians*, Allen & Unwin: St Leonards, 1996, p.12.
77 Ryan, L, *The Aboriginal Tasmanians*, pp.39-43.
78 Boyce, J, *Van Diemen's Land*, Black Inc.: Melbourne, 2008, pp. 67-68, 105-106; McFarlane, I, 'Frontier Conflict', in Alexander, A, (ed.), *The Companion to Tasmanian History*, Centre for Tasmanian Historical Studies, University of Tasmania: Hobart, 2005.
79 Boyce, *Van Diemen's Land*, pp.140-146.
80 Ryan, *The Aboriginal Tasmanians*, pp.157-158.
81 Gough, J, 'Oyster Cove', in Alexander, A, (ed.), *The Companion to Tasmanian History*, Centre for Tasmanian Historical Studies, University of Tasmania: Hobart, 2005, pp.261-262; Woolley, R, *A history of the Huon & far south: Before the orchards grew: Volume 1*, Huonville: Huon Valley Council, 2004, pp.27-28.
82 The following is summarised from: Austral Tasmania Pty Ltd, Macquarie Point Roundhouse Area Remediation Works: Archaeological Sensitivity Report, AT0290, prepared for MPDC, 13 May 2020.

3.2.3 The Establishment of the Tasmanian Main Line Railway

Discussions on building a north - south railway began as early as 1856 but nothing came of this early work. Interest was rekindled in the early 1860s, and in 1863 a survey was completed to link Hobart with Launceston by rail. After much deliberation, the route of the railway was finally decided during 1867-68 by a Royal Commission. However, the honour of establishing the first mechanically driven railway in Tasmania went to the Launceston and Western Railway Company which completed the 72 kilometres line between Launceston and Deloraine in 1871.[83]

The contract to construct the line connecting Hobart and Launceston was awarded to the Tasmanian Main Line Company in 1871, but considerable delays followed with disputes over the terms of the agreement and the proposed route. For the Hobart terminus, local aldermen pushed for the station site to be located within the city at the Market Place (now City Hall). The Royal Commission decided otherwise, nominating a site at Macquarie Point. Several routes for the railway to the Point were considered. One followed Park Street and would have required a tunnel to avoid the hill of the Domain. The second and adopted option skirted the Domain along the foreshore.[84]

Construction began in 1872, using many imported British workers, or 'navvies'.[85] By the end of the year, works had begun on cutting around the Domain, and by early January 1873, 20 men were employed, blasting away the stone. The Mercury was able to report by July that:

> *Very good progress is being made with the railway works in the domain. Nearly all the cutting has been done, with the exception of a portion between the lower cricket ground and the engineers' offices. The large body of earth which has been placed in the lower ground for the site of the railway station, is being covered with stone taken from the cutting. Going round by the line to MacGregor's ship-yards, the work of laying the rails has begun, and in a very short time the rails will have been laid on the route through the domain.*[86]

The site chosen for the Railway Station and yards was the old cricket ground on the Domain - a matter of some controversy. The Domain is precious to Hobartians and not surprisingly there was criticism for giving away what amounted to 'public commons' to the railways. These concerns were raised in Parliament, with Mr Jackson MHA arguing against granting part of the Domain, 'the only pleasure park the citizens had'.[87] Questions were asked whether the terminus could be located at the Engineers Yard and thus save the Domain.[88]

Legal issues also existed. Whilst the Main Line Company had the right to use Crown land, the Domain was subject to special legislation to prevent it being alienated.[89] As a result, amendments were passed to grant the Company land on the Domain. In its favour, the Company did attempt to respond to some of these concerns by trying to minimise visual impacts. They agreed that they would not construct buildings fronting Liverpool Street that were 'utilitarian in character', whilst the station building itself would be aesthetically pleasing. Landscaping works were also undertaken to preserve existing trees along Park Street as well as plant new ones around the grounds to screen the railyards.[90]

On 16 September 1874, trains departed Hobart for the first time successfully, travelling as far as Risdon - where the rails ended. Over the coming months, the laying of the track continued, and more trips were made, extending further northwards. By August the following year, the goods sheds, offices, engine shed, and workshops had been completed. The Tasmanian Main Line Railway Company finally opened the completed line in its entirety in 1876.[91]

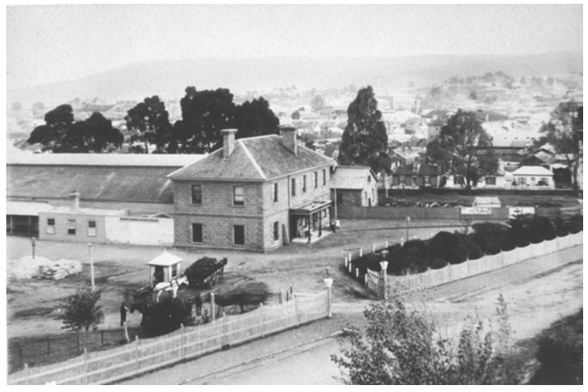


Figure 37: c.1890 photograph of the Hobart Railway Station building with platform sheds behind. The horse and cart is being weighed on the weighbridge (Source: H Cotsworth, 'Hobart Railway Station showing weighbridge', c.1890, TA, AUTAS001125299479, WL Crowther Library).

During the early years of operation, the rail complex was centred on its Liverpool Street site outside of Macquarie Point. The rail line snaked along the shore of the Derwent and the base of the hill where the Cenotaph is now located before reaching the station. Fronting the main complex was the impressive sandstone station building. To the rear were the railway platforms covered by canopies.

The railyards, good sheds and workshops were located elsewhere on the approximately 3-acre site (Figures 37 and 38).

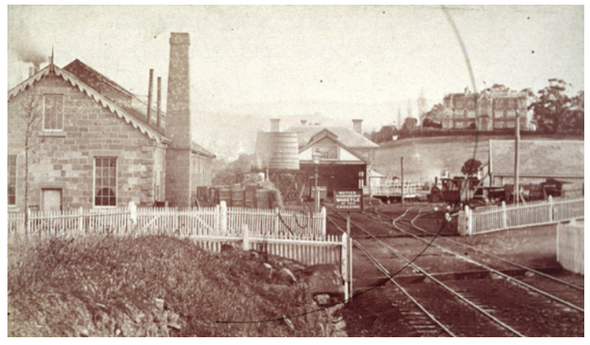


Figure 38: c.1880-90 photograph of the Hobart Railway Station complex, looking west. The building in the centre is the Station building with platforms behind, on the left is a sandstone workshop building. The High School, later University can be seen on the hill in the background (Source: 'Hobart Railway Station [with] High School in background, later University', c.1880-90, TA, AUTAS001126252154, Allport Library and Museum of Fine Arts)

83 Chamberlain, B, *Too Many Loose Rails*, B Chamberlain: Launceston, 1991, p.2; TA, RC 20/2, 1867-68, Royal Commission into the Main Line Railway; Clements, G, 'Railways', in Alexander, A, (ed.), *The Companion to Tasmanian History*, Centre for Tasmanian Historical Studies, University of Tasmania: Hobart, 2005.

84 *The Cornwall Chronicle*, Saturday 20 June 1868, p.5.

85 Conservation Services & McFie, P, *Heritage Report on the Old Cricket Ground Hobart Railway Terminus Site*, prepared for the Commonwealth Department of Housing & Construction and The Australian Broadcasting Corporation, July 1983, pp.9-10.

86 *The Mercury*, Monday 25 July 1873, p.2.

87 *The Mercury*, Thursday 25 January 1872, p.2.

88 *The Mercury*, Tuesday 12 November 1872, p.3.

89 *The Mercury*, Thursday 24 October 1872, p.2.

90 Conservation Services & McFie, *Heritage Report on the Old Cricket Ground Hobart Railway Terminus Site*, p.10.

91 Conservation Services & McFie, *Heritage Report on the Old Cricket Ground Hobart Railway Terminus Site*, p.11; Clements, 'Railways', in Alexander, A, (ed.), *The Companion to Tasmanian History*.

3.2.4 Expansion onto the Macquarie Point Site

In 1890 the government took over the Main Line, first under the control of the Tasmanian Government Railways. By this time, the Liverpool Street site was already too small, inefficient, and dangerous for the growing passenger and goods business. Discussions were first held in 1891 on expanding the railyard onto the Macquarie Point site, then in use as a drill yard for volunteer forces, slaughter yards, septic tanks, and the municipal rubbish tip. Whilst the railways did take over the former Engineers Headquarters building, plans for the development of a new railyard were postponed due to the redevelopment costs. Parochial arguments over whether the workshops should be in Hobart or Launceston also appear to have been a consideration, a question eventually resolved in Launceston's favour.[92]

It was to take several decades before definitive action was taken. By 1906 the new slaughter yards in Glenorchy were well advanced and the government again turned their attention to Macquarie Point for the expansion of the railyards.

The early twentieth century was a period of growth in railway traffic. The expansion of the closer settlement scheme led to increased agricultural production, and in particular orcharding, and as a result, a massive expansion in rail transport.[93] Passenger numbers in Hobart had increased by 21.8% in the period from 1891 to 1906-07, and goods traffic by 71.5%, or 31,900 tons. The old goods shed was inconveniently located, with trains unable to directly access the building, whilst the yard itself was a 'scene of marvellous confusion', with carts and carters making 'valiant attempts to load and unload trucks' with considerable delays. Danger was also present, with no signals and points to warn of the movement of trains.[94]

The government started planning for the redevelopment in 1908. Part of the scheme was to connect the rail lines with the wharf to service the booming interstate and international fruit export market. Early proposals suggested the acquisition and infilling of Victoria and Constitution docks to provide a terminus for the railway. The Marine Board opposed the concept, arguing against the costs involved as well as congestion that would be caused on the waterfront. The matter was eventually resolved in the favour of Marine Board, with the government deciding that the drill yard, slaughter yards and tip site would be given over for the development of the new railyards, sheds, and coal yards. In October 1908, £5,000 was provided as the first instalment for the removal of the engine shed and workshop to the Macquarie Point site. The works were to be carried out over 1908-09 but were again delayed.[95]

A more developed proposal was put forward in 1910. The Macquarie Point site posed certain difficulties for railway expansion. Towards its eastern end were the septic tanks operated by the Metropolitan Drainage Board. The location of these tanks was a constraint on railway development, as was the pollution they generated. The problem was so severe that when the tanks were being cleared out 'the railway men could scarcely do their work', despite being some distance away.[96]

The stability of the site was questionable. It was suggested that because the reclamation work was carried out by filling in the basin with Hobart's rubbish, the resulting land would be unstable. Until it settled, it could not be used to carry heavy wagons, nor take important buildings without the use of piles, a costly exercise.[97]

Ownership of the site was also problematic. Whilst the railways had possession of the Liverpool Street site and the slaughter yards, the old drill yard between the two remained in military ownership. It was not until December 1911 that the Commonwealth finally transferred the site to the Tasmanian government and works could commence. A second instalment of £5,000 was approved, with the Minister for Lands estimating that the total costs of creating new railyards and a new railway station would be between £30,000-£40,000.[98]

The location of the slaughter yards, septic tanks and municipal tip was to become the goods yard. The old drill yard was to be redeveloped as the roundhouse. John McCormick, the General Manager of the Railways Department reported his regret in the delays in establishing the new station yard with works finally commencing in 1911. Early works focussed on preparations for the roundhouse and laying additional sidings for goods traffic. It was anticipated that the new sidings would be available in time for the 1912 fruit season. This would somewhat alleviate difficulties in transporting agricultural produce, although the Minister warned that it would not be possible to improve the storage of general goods until the whole Hobart station was remodelled.[99]

92 Clements, 'Railways', in Alexander, A, (ed.), *The Companion to Tasmanian History*; Conservation Services & McFie, *Heritage Report on the Old Cricket Ground Hobart Railway Terminus Site*, p.9; *Launceston Examiner*, Friday 5 June 1891, p.3; *Launceston Examiner*, Thursday 9 April 1891, p. 3; *The Mercury*, Wednesday 9 September 1891, p.4; *The Mercury*, Friday 20 March 1908, p.5; *The Mercury*, Wednesday 25 March 1908, p.5.

93 TA, *Journals and printed papers of the Parliament of Tasmania*, 'Tasmanian Government Railways: Report for the Year ended June 30th 1910', Report No. 40, John Vail Government Printer: Hobart, 1910, p.3.

94 *The Examiner*, Saturday 15 September 1906, p.9; *The Mercury*, Monday 23 March 1908, p.5.

95 *The Mercury*, Saturday 11 April 1908, p.4; *The Mercury*, Wednesday 15 April 1908, p.6; *The Mercury*, Tuesday 13 October 1908, pp.5-6.

96 *The Mercury*, Thursday 2 June 1910, p.5.

97 *The Mercury*, Thursday 2 June 1910, p.5.

98 *Journals and printed papers of the Parliament of Tasmania*, 'Ministerial Statement of the Minister of Lands, Works, Railways and Agriculture, 1910', Report No. 6, John Vail Government Printer: Hobart, 1910, p.15, TA; *The Mercury*, Thursday 2 June 1910, p.5; 'Surrender and release in connection with retransfer to State of Tasmania of Old Drill Yard, Macquarie Street, Hobart, Tasmania - the Commonwealth of Australia to Our Sovereign Lord the King, 18 December 1911', NAA: P1325, 1380, 7806037; *The Mercury*, Tuesday 27 June 1911, p.4; *The Mercury*, Wednesday 11 October 1911, p.6

99 *Journals and printed papers of the Parliament of Tasmania*, 'Tasmanian Government Railways: Report for the Year ended June 30th 1911', Report No. 26, John Vail Government Printer: Hobart, 1911, p.3, THAO; *Journals and printed papers of the Parliament of Tasmania*, 'Ministerial Statement of the Minister of Lands, Works, Railways and Agriculture, 1911', Report No. 5, John Vail Government Printer: Hobart, 1911, p.16, TA.

The redevelopment of the railway site was one part of broader expansion plans for Hobart's waterfront. This included the construction of new wharf and jetty facilities within Sullivans Cove by the Marine Board, and the diversion of the Hobart Rivulet under what is now the Cenotaph Hill by way of a tunnel. The diversion would allow for the reclamation of the old Rivulet outfall (commonly known as Gasworks Straits) behind Hunter Street, which in time would become Evans Street (Figure 39).

Works were progressing well by mid-1913, giving the old tip site a 'quite respectable and business like appearance'. The old drill yard had been demolished, and foundations for the roundhouse commenced. The topography of the site posed certain challenges for establishing a railyard, with different levels between the Macquarie Point site, the railway station on Liverpool Street and the wharves. Because of these topographical challenges, it was necessary to establish high and low level areas within the railyards. The roundhouse was to be constructed on the high level, with the goods yard on the lower. A concrete retaining wall was built between the two, measuring some 160 metres in length, and in some places, 2.4-2.7 metres in height. Because it was located on reclaimed land, foundations had to be carried down for a considerable depth through many feet of rubbish before a solid base was reached. The wall was finished with a fence formed from old rails recycled from the Western Railway, joined by worn out boiler tubes. At the same time, the concrete septic tanks were in the process of being filled in, using sandstone taken from the railway cutting at Austins Ferry.

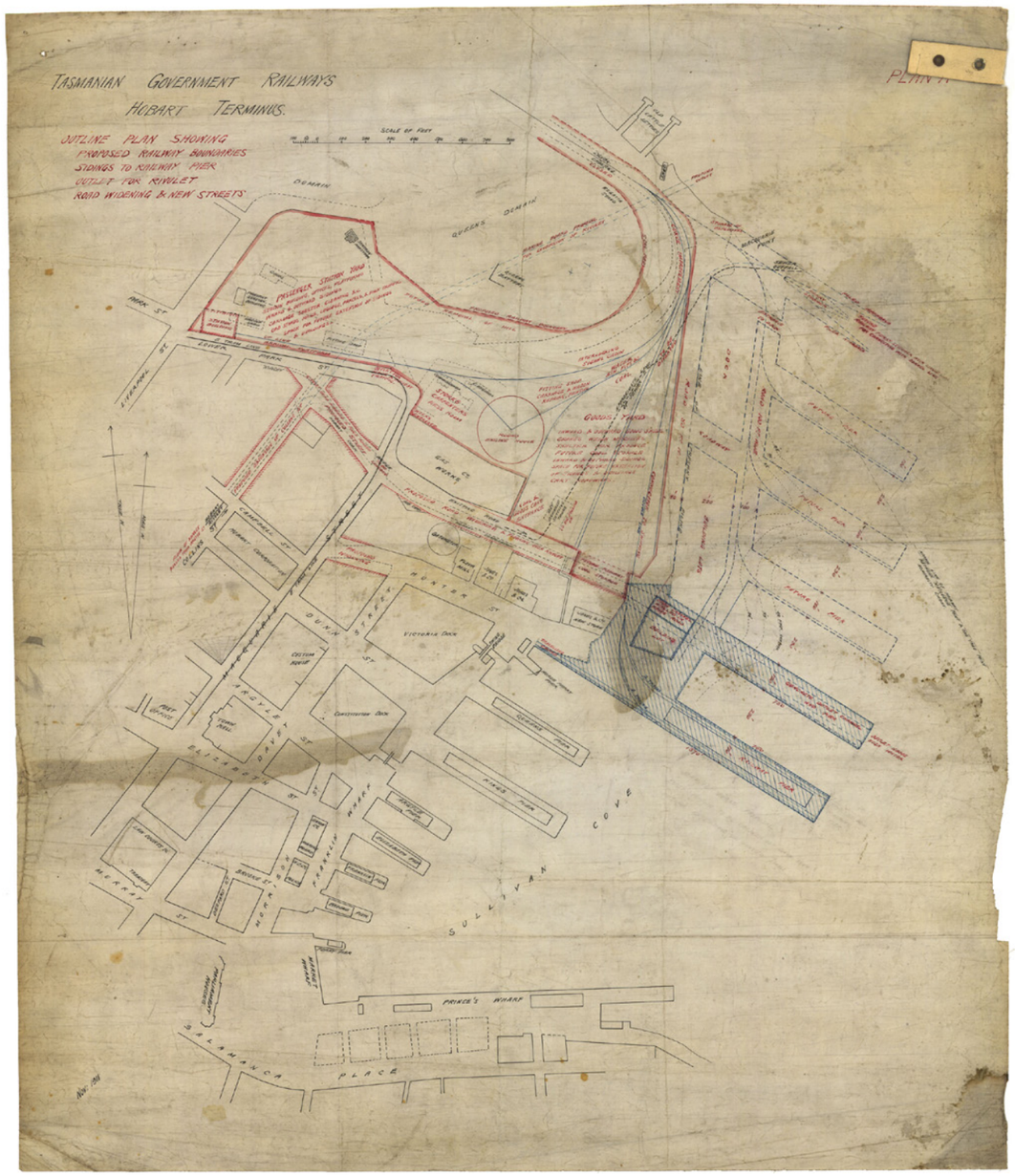


Figure 39: 1911 plan showing the intended waterfront works, including the Macquarie Point railyards, the construction of finger piers, the Hobart Rivulet diversion tunnel and reclamation works to form Evans Street. The projected finger piers off Macquarie Point were never constructed (Plan 7812366 (7101) - TGR - Hobart Terminus - outline plan showing proposed railway boundaries, sidings to railway pier, outlet for rivulet, road widening and new streets', 1911, TA, P1330/1/9420).

Meanwhile, the Marine Board was in the process of constructing the 140 metre long Ocean Pier. Rail lines extended on to the pier, crossing the Rivulet outfall by a temporary bridge before its course was filled to become Evans Street. It was hoped that the reclamation works and extension of the railway would be completed in time for the 1914 fruit season.[100]

The key areas of development in this period were the construction of the new goods shed, roundhouse, locomotive yards, coal yards and laying down some 7.2 kilometres of track. The scale of the works was quite an achievement, costing £24,700, and employing some 40 people during construction. Perhaps the greatest accomplishment was the construction of the locomotive roundhouse and electrically driven turntable, located on the site of the old drill yard (Figure 37). Reputedly the largest in Australia, the turntable could rotate engines 73 feet long (i.e., approx. 22 metres) weighing up to 120 tons and was able to accommodate the new Garratt engines. The roundhouse included 30 pits radiating out from the turntable and used for engine maintenance. The distinctive building also included lecture and classrooms for staff, sleeping quarters for drivers, dining and bathrooms.[101]

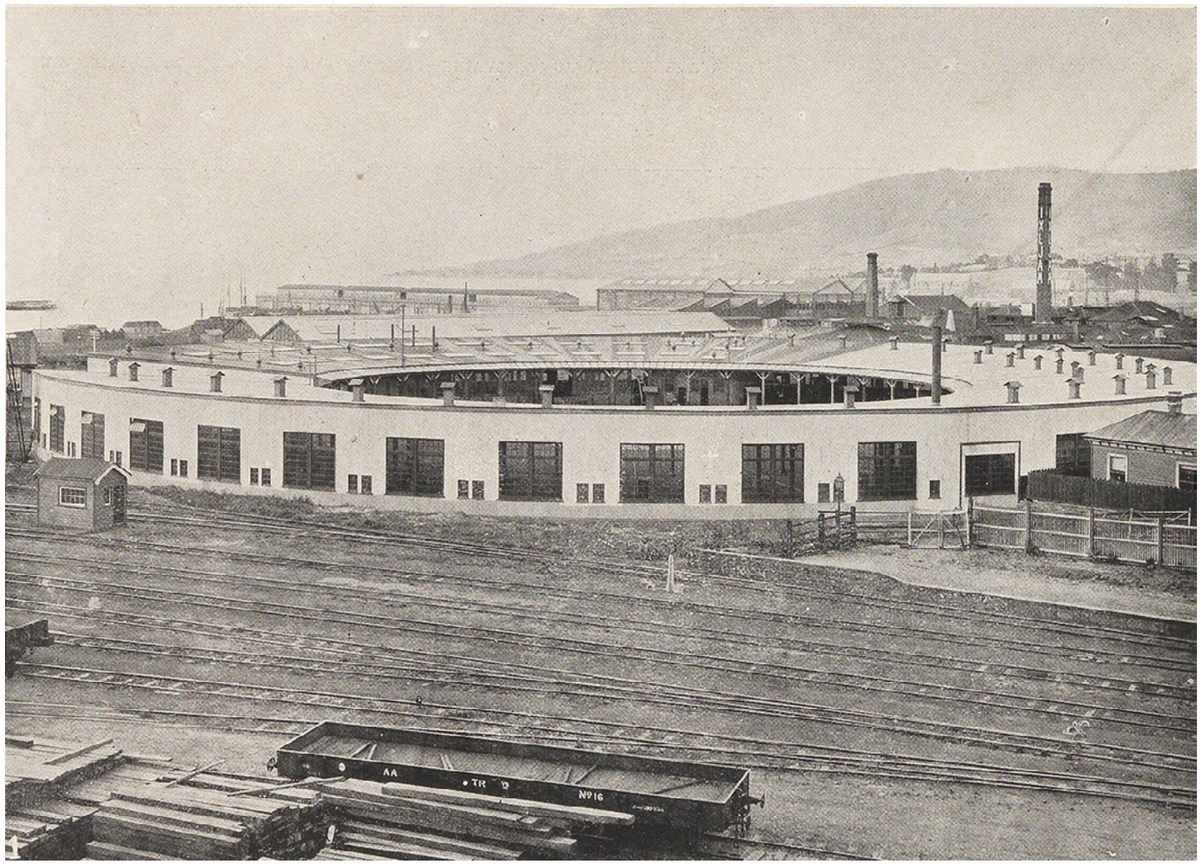


Figure 40: The completed roundhouse, 1915. The double gabled roof of the goods shed can be seen in the background (Beattie, '1 - Locomotive Round House', The Weekly Courier, 23 December, Insert 4(2), p 22, TA, SD_ILS:582993).

3.2.5 The Goods Shed

After the roundhouse, the Goods Shed was the second largest building project at the railyards. A single 1914 plan for the building has been retained in the archives, showing elevations, floor plans, and truss sections. Details from this plan are included in the following Figures.

The building was located on the southern end of the site, extending in a north easterly direction into the yards. Constructed on timber piers, the shed was originally 300 feet long (i.e. approximately 91.5 metres) formed from 25 bays, and 75 feet, 2 inches wide (i.e. approximately 23 metres). At the northern end of the building, external loading platforms were constructed with two additional sidings.

The shed was constructed as a timber framed building with timber decks and posts, using imported Oregon pine, and clad in corrugated iron. The use of imported North American softwood timbers was not unusual for the time. Oregon pine began to be imported to Tasmania during the late 1850s,[102] becoming a common construction material by the late nineteenth century, and frequently used in railway buildings. The plan also noted that the building was to be internally lined with hard wood boarding, although there is little physical evidence to suggest that this work was undertaken.

The roof was formed from two parallel gables, fitted with skylights. Two train lines entered the building through its northern end, running through the centre of the shed. The roof was supported by a line of king posts through the centre of the building between the two rail lines.

100 *The Mercury*, Saturday 11 January 1913, p.5; 'Hobart Yard Alterations - levels and setting out of roundhouse', 1913, NAA: 2213, B/b/13, 205709; *The Mercury*, Monday 4 August 1913, p.5; Scripps, L, *Hunter Street Roadway: Archival Investigation*, report prepared for the Hobart City Council, Hobart, 2004, p.26; *Journals and printed papers of the Parliament of Tasmania*, 'Report on the Workings of the Government Railways for the Year ended 30th June 1913', Report No. 44, John Vail Government Printer: Hobart, 1913, pp.4-5, TA.

101 *The Mercury*, Wednesday, 24 June 1914, p.6.

102 *Launceston Examiner*, Saturday 5 November 1859, p.2S

The outward platform, for transporting goods from the railyards to elsewhere was located on its western elevation, the inward line on its east. Sliding doors were located on each face of the building to provide loading bays: four on the eastern, inward side, and six on the western, outward side. Six recessed loading docks were cut into the floor on each platform to allow trucks to back directly into the shed.

A small office was centrally located on the inward platform, however most administrative functions were carried out in the larger office space at the southern end of the building. The office area was two bays wide with offices provided for both the inward and outward clerks, porters, and goods agent. External access was provided from Evans Street via a stair and central passage. At this stage, the Rivulet outfall had yet to be reclaimed, and the southern end of the building opened onto the narrow lane fronting the rivulet. The southern end of the building was arranged with 18-paned sash windows flanking central doors.

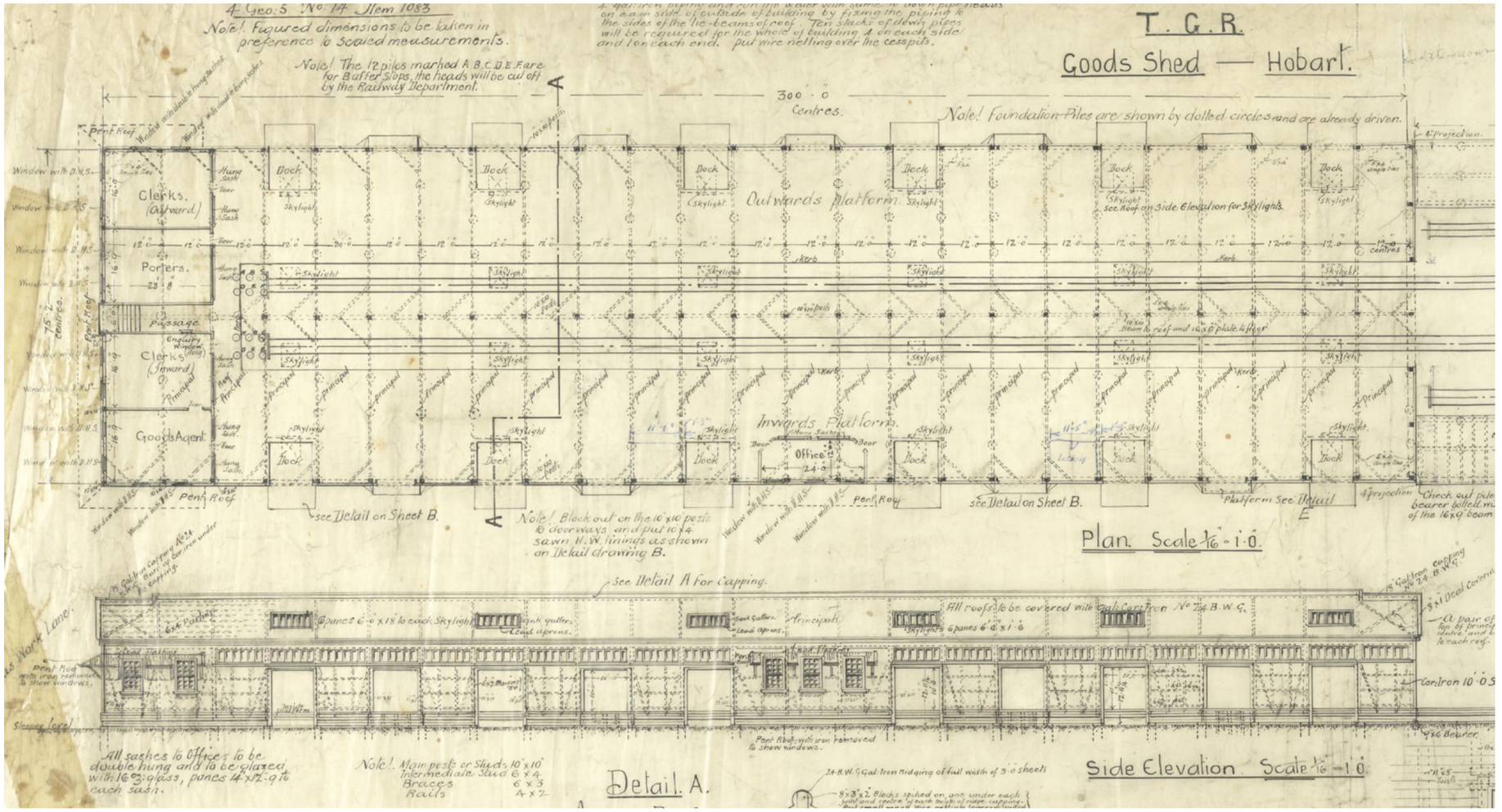


Figure 41: Detail from 1914 Goods Shed plan showing the floor plan and side elevation. The outward platform was located on the western side of the building, inward platform on its east, with two rail lines travelling through the centre of the building. Sliding doors were located on each long elevation, with six loading docks on each platform. The main office area was at the southern end of the shed. North to right of figure. (Source: TA, P1330/1/5596).

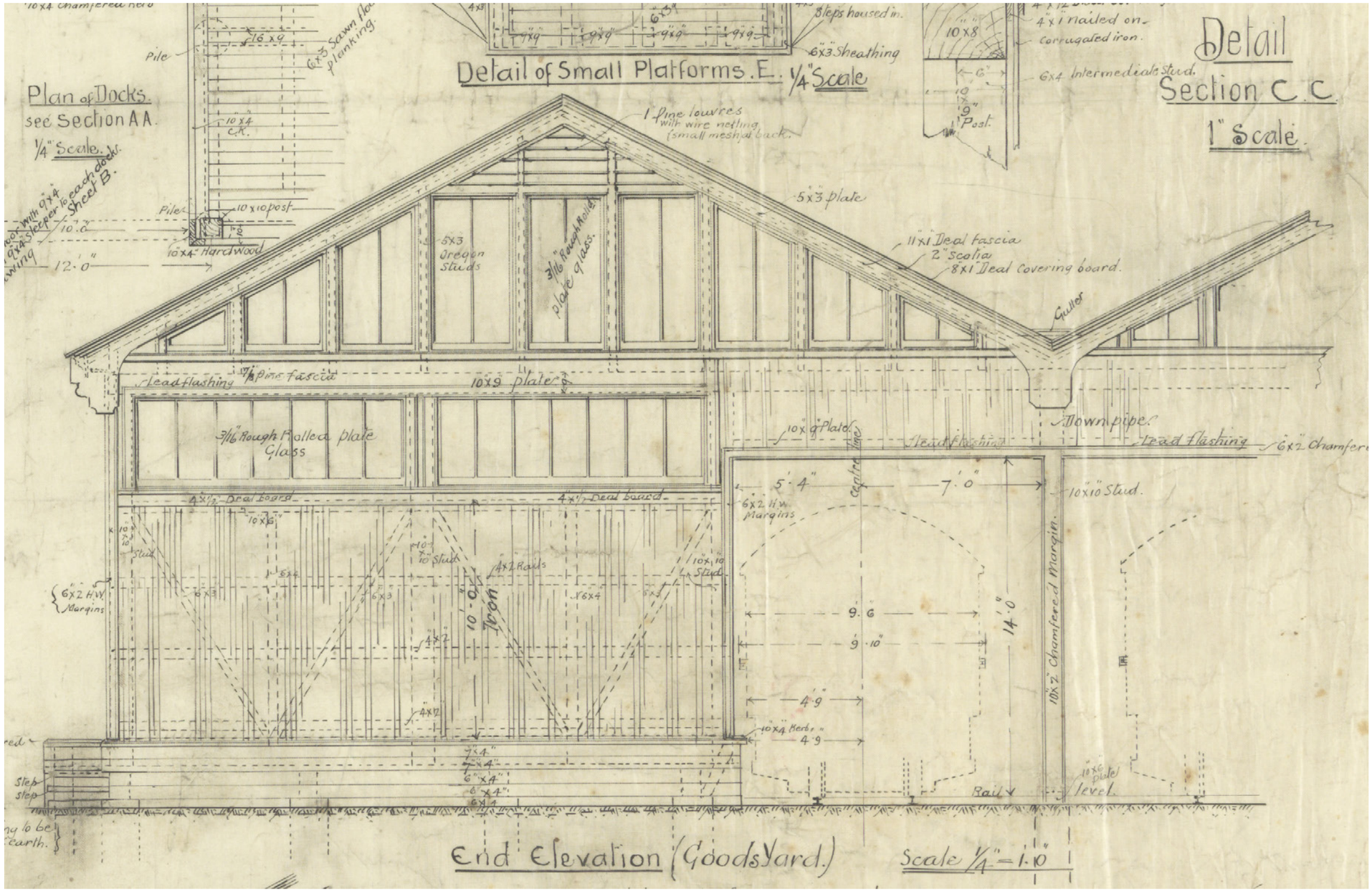


Figure 42: Detail from 1914 Goods Shed plan showing the northern elevation of the building, and the train entrance (Source: TA, P1330/1/5596).

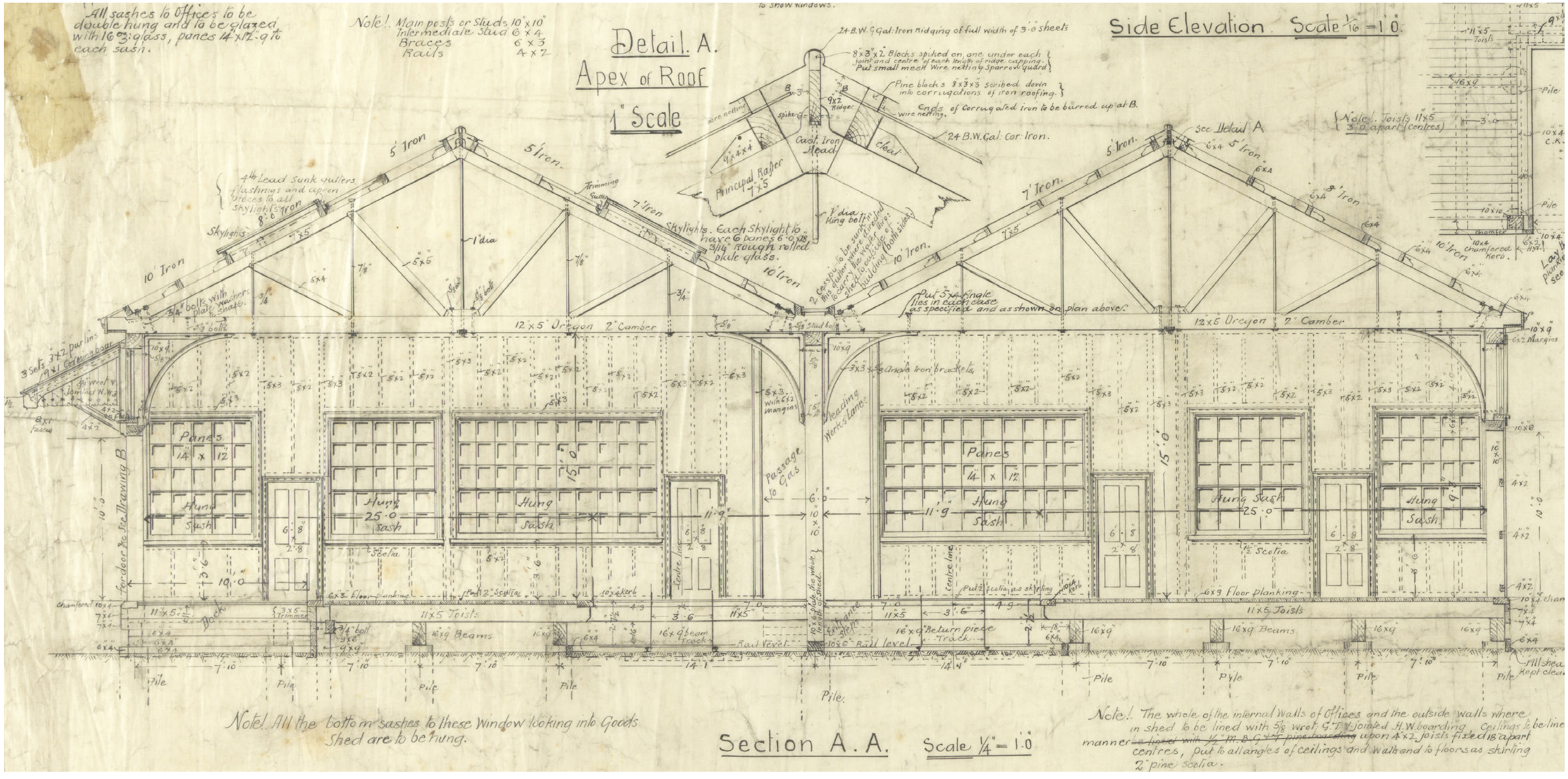


Figure 43: Detail from 1914 Goods Shed plan showing the internal southern end wall which divided the goods shed from the offices (Source: TA, P1330/1/5596).

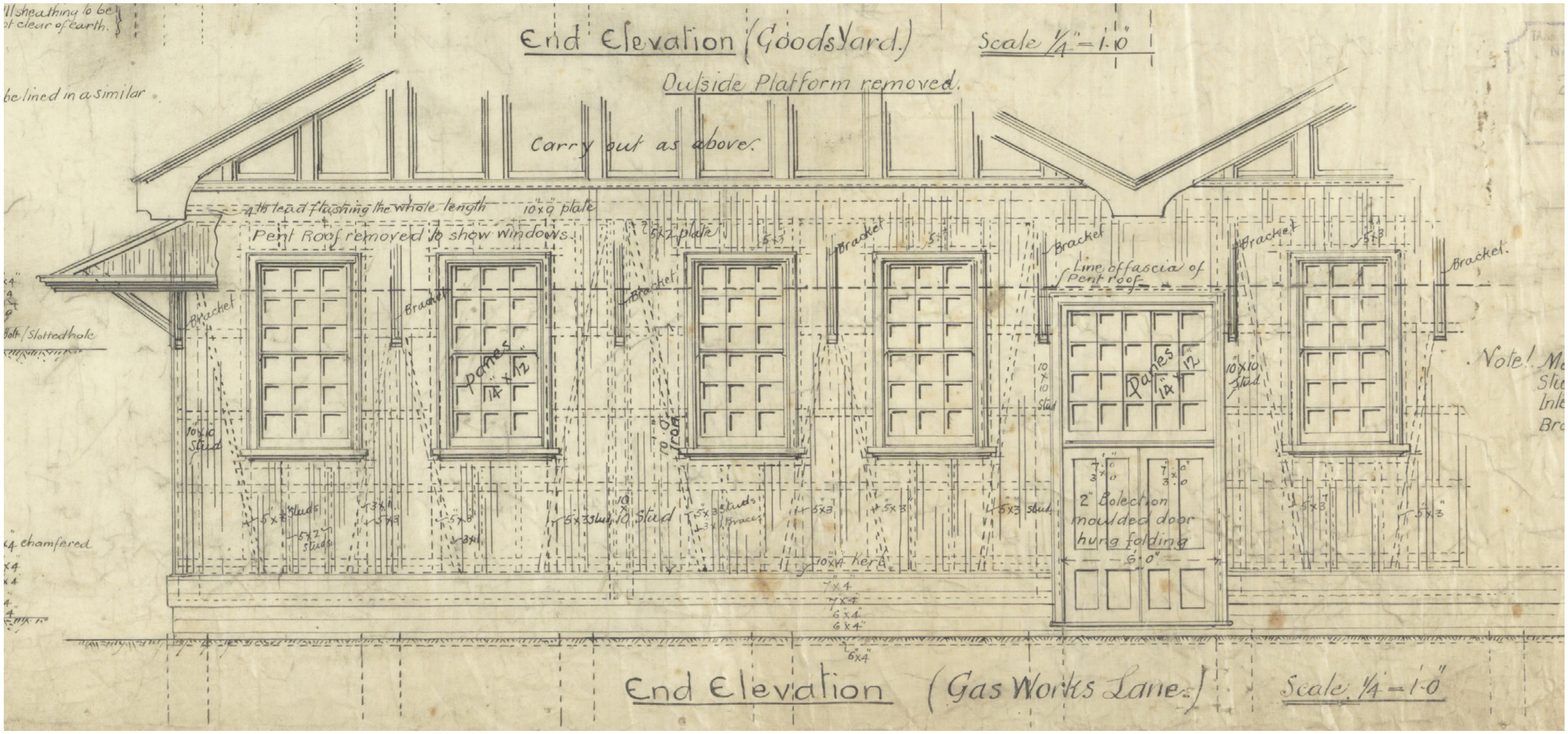


Figure 44: Detail from 1914 Goods Shed plan showing the southern end elevation, on what is now Evans Street (Source: TA, P1330/1/5596).

The new rail and coal yards, and the roundhouse were completed by June 1915, followed by the Goods Shed in December (Figures 42, 43, and 44). Some delays in completing the works were incurred due to the outbreak of the First World War.[103]

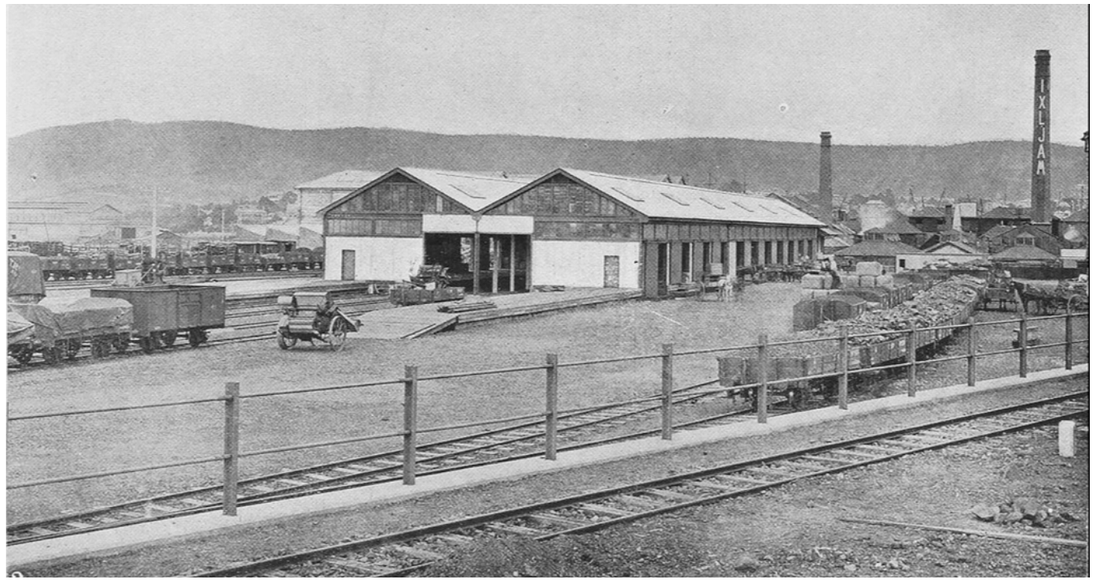


Figure 45: The completed Goods Shed, December 1915, looking south. Note also the concrete retaining wall dividing the upper and lower level yards, and using recycled rail lines and boiler tubes (Beattie, '2 - New Goods Shed', The Weekly Courier, 23 December, Insert 4(2), p 22, TA, SD_ILS:582993).

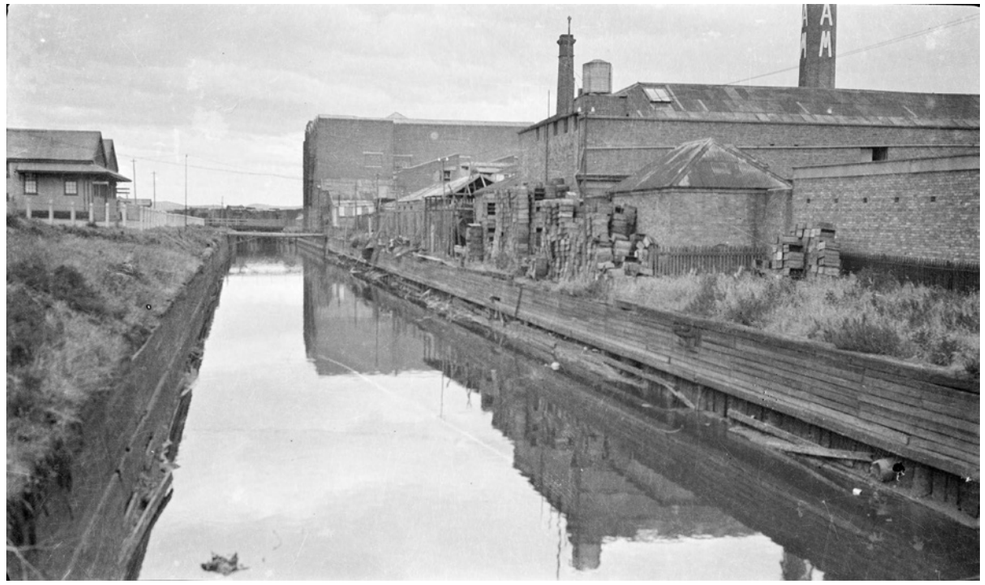


Figure 46: c.1915 photograph looking east along Gas Works Strait (now Evans Street), with the Goods Shed on the left with window hoods over the office space windows (James Chandler, 'Hobart Rivulet / Photographer', 1930, TA, NS1231/1/19).

103 *The Examiner*, Friday 24 December 1915, p.8

Figure 47: Detail from c.1926-1938 aerial photograph of Hobart, looking north, with key features indicated, 1 - Roundhouse, 2 - Goods Shed, 3 - Ocean Pier, 04 - Queen's Pier, 05 - King's Pier (Source: 'Hobart - aerial view over city bounded by wharves, Domain, Elizabeth and Collins Street looking towards wharves from above intersection of Collins and Elizabeth Street', 1920, TA, NS892/1/64).

The new facilities were an immediate success and desperately needed. The old goods shed was only capable of holding 12 trucks, whilst the new one could hold 30, with 15 on each platform. The total capacity of the yard had been expanded to nearly 200 trucks, whilst the extension of the line to Ocean Pier allowed for goods to be directly loaded onto the ships without having to be unloaded in the railyard. All fruit, wool and hop exports could be taken directly to the pier. Shipping imports of oil, and sometimes railway rails were also directly loaded onto the trucks from the pier.[104]

The new railyards and Goods Shed handled a wide variety of products from all over Tasmania. Most notable was the export of fruit, which was transported by rail from the main growing districts in the Derwent Valley, Southern Midlands, Lilydale, Scottsdale, Latrobe, and Spreyton. Considerable quantities also came from the Tamar Valley. Other products also made their way through the yard and shed onto the pier, including frozen rabbits, produce and chaff. Imported flour made its way by train from Hobart to the north, north east and north west of the state. New products were added in 1922 with the construction of the Cadbury chocolate factory at Claremont. A spur rail line was extended to the factory, with one line to offload the raw materials, whilst a second line in the packing room took the finished chocolate back to Hobart's warehouses and wharves for distribution and export.[105]

A distinctive feature of the Hobart yards was the produce auctions. This practice originated under the Main Line Railway Company and was continued on government acquisition. The system was originally envisaged as a way of bringing farmers into direct contact with consumers, and by default, popularising railway use. Auctioneers would sell chaff, potatoes and other produce straight from the trucks every morning at 10.00 o'clock. Except for Sydney, no other Australian capital city operated auctions from their railways.[106]

3.2.6 Later Changes to the Goods Shed

Over coming decades, multiple changes were made to the Goods Shed. Most of these were of a fairly minor nature, and were particularly concentrated at the southern end of the building in the office area, relating to office fit outs, toilet facilities, heating and lighting.

More major alterations were however carried out, beginning in the 1940s. Working on the site was difficult, it being reported that the condition of the yard and bays was 'shocking' with the men working ankle deep in water, mud and slush during rain periods. The condition of the building had also declined, with movements in the platforms in some locations, which prevented wagons from being opened.[107]

The original timber piers for the building had decayed by 1945, and the following year a decision was made to replace them with approximately 100 concrete blocks beneath the building. These works required the shed to be raised by 12 inches (i.e., approximately 30 cm) and the replacement of the timber deck and all structure below that with concrete slabs and blade walls.[108]

As part of the same program of works, the size of the shed was expanded at its northern end by a further 72 feet (i.e., approximately 22 metres), or six bays. The renewed building provided room for a total of 20 trucks on each platform. The extension matched the existing building and brought the shed to its current length (Figure 48). Plans were also prepared to construct an 'umbrella roof' over the northern end of the shed to allow for loading to take place in all weather conditions, but were deferred for cost reasons.[109]

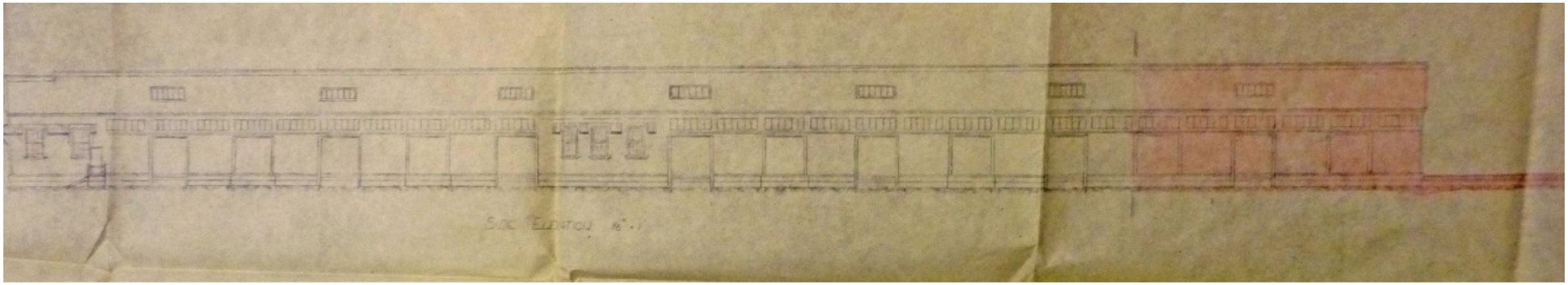


Figure 48: Detail from 1945 plan showing elevation of the Goods Shed. The proposed northern extension is shaded in red. North to right of figure (Source: 'Transport Department Tasmania Railway Branch. Hobart Alterations to Goods Shed', TA, TC10/1/10430, 45/330. Source: MPDC, 'The Goods Shed CMP', p 20).

104 *Journals and printed papers of the Parliament of Tasmania*, 'Report on the Workings of the Government Railways for the Year ended 30th June 1914, Report No. 30, John Vail Government Printer: Hobart, 1914, p.5, TA; *The Examiner*, Friday 24 December 1915, p.8.

105 *The Mercury*, Tuesday 18 April 1916, p.8.

106 *The Mercury*, Tuesday 18 April 1916, p.8; *The Mercury*, Saturday 3 March 1923, p.11.

107 'Resident Engineer to Secretary of Transport Department (Railway Branch)', 5 January 1944, TA, TC10/1/7251.

108 'Resident Engineer to Secretary of Transport Department (Railway Branch)', 5 January 1944, TA, TC10/1/7251.

109 MPDC, 'The Goods Shed CMP', p 22.

Office facilities at the southern end of the building were also substantially rebuilt, with the addition of a mezzanine on the western side, and installation of the first internal toilet. The timber office floor was also raised in height, although perhaps not successfully, with staff complaining of the uneven surface (Figure 49). The total cost for the new foundations, extension and office was some £6,050.[110]

Repairs were also needed following the explosion of a boiler at the adjacent Jones & Co jam factory which destroyed part of the goods shed roof. The extensive works were completed in June 1949.[111]

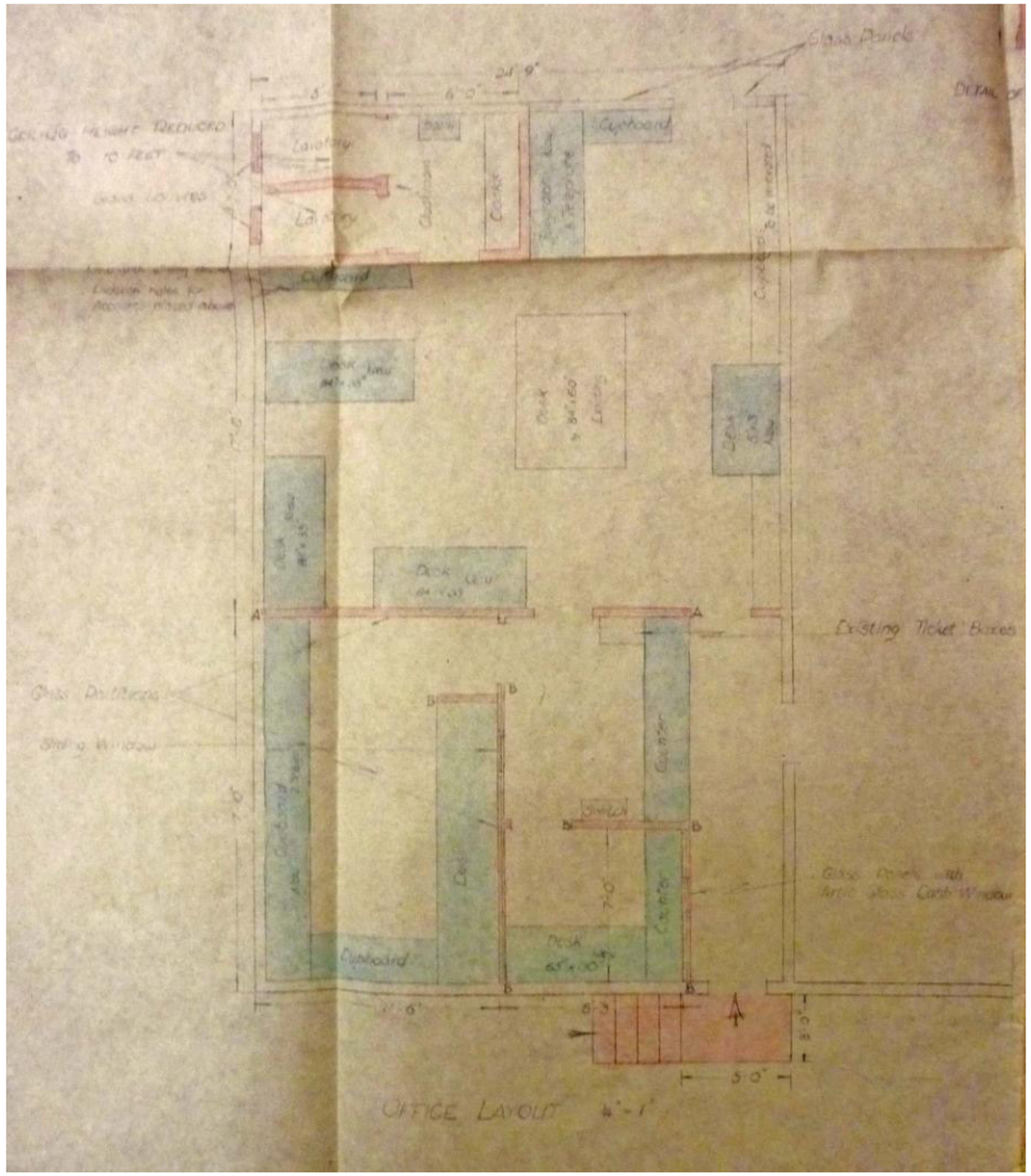


Figure 49: Detail from 1945 plan showing the new office fit out. North to right of figure (Source: 'Transport Department Tasmania Railway Branch. Hobart Alterations to Goods Shed', TA, TC10/1/10430, 45/330. Source: MPDC, 'The Goods Shed CMP', p 23).

110 MPDC, 'The Goods Shed CMP', p 22.

111 TA, TC10/1/10430, 45/330 - Hobart Goods shed repairs etc: 'Resident Engineer to Secretary of Transport Department (Railway Branch)', 14 June 1945; 'Resident Engineer to Secretary of Transport Department (Railway Branch)' 31 December 1945; 'General Superintendent of Transportation to General Manager Hobart', 9 September 1946; 'Chief Civil Engineer to Secretary of Transport Department (Railway Branch)', 28 June 1949.

Further changes were approved in 1959 in response to increased traffic and to provide adequate storage facilities. This included changes to the office and the construction of the 'umbrella roof' at the northern end of the shed, first proposed in 1945. The total cost of works was given as £6,400.[112]

More alterations were made to the office area in 1964 and 1969, including the installation of female toilets, suggesting that it was during this period that women were first employed in the office.[113] Two photographs of the exterior were taken during this period. Figure 41 shows the eastern elevation of the shed and suggests little change to the external appearance of the building since the earlier 1915 photograph (Figure 45). The second photograph shows the northern end of the building, and the 1946-49 extension. By comparing this with the 1915 photograph, it would appear that the original northern end wall was retained and incorporated into the new structure (Figure 51).[114]

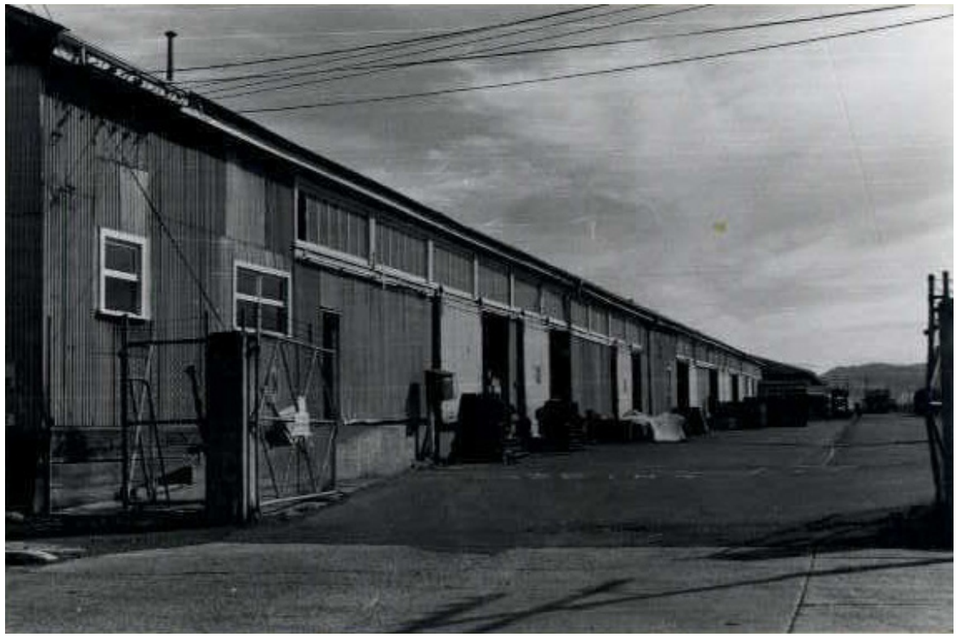


Figure 50: *1968 photograph showing the eastern elevation of the goods shed, taken from Evans Street (Source: 'Hobart Goods Shed', 6/11/1968, in 'Photographs-referred to as Holden Tour of Tas-Main (South) Line (NAA 2121/9 Barcode 4098644)', p 4, TA, P2121/1/4).*

Figure 51: *1968 photograph showing the northern end of the goods shed. Note the addition of the 'umbrella roof', constructed in c.1959 (Source: 'Hobart- Goods Yard', 6/11/1968, in 'Photographs-referred to as Holden Tour of Tas-Main (South) Line (NAA 2121/9 Barcode 4098644)', p 5, TA, P2121/1/4).*

112 TA, TC10/1/17959, 'Chief Engineer to the Commissioner for Railway', 29 August 1958; 'Application for Expenditure Authority', 2 September 1959; TA, P1332/1/783, 'Plan 2023142 B-A-1 Locomotives, Hobart Offices - proposed office alterations, Goods Shed'.

113 'Plan 2023183 B-C-19, Locomotives, Hobart General - proposed new layout of Goods Shed offices' TA, P1332/1/824; 'Plan 2023185 B-C-21 Locomotives, Hobart Gen - Joinery Details for proposed new Goods Shed Offices' TA, P1332/1/826; 'Plan 203188 B-C-24, Locomotives, Hobart Gen - proposed ladies toilet for Goods Shed Offices', TA, P1332/1/829.

114 MPDC, 'The Goods Shed CMP', p 24.

In 1978, the Australian government took over Tasmania's public railways. Modernisation of the system was initiated by Australian National Railways resulting in the purchase of new locomotives and the rationalisation of services, having a drastic impact on railway heritage. Across the State, most railway station buildings, housing, and sheds were removed or sold. This same process occurred at the Hobart railyards during the 1980s, with the removal of most of the rail buildings, including the roundhouse.[115]

However, the Goods Shed was retained. Even though rail freight transport was increasing, the carrying of goods that required the Goods Shed had declined and the rail use of the building ceased. It was during the mid-1980s that the last major changes to the building took place, with the c.1984 conversion of the shed to a transit warehouse for truck use. Part of the exterior of the building was reclad in colourbond metal sheeting, and most of the loading bay openings were filled or replaced with roller shutters. It is likely that the single storey brick office addition (now the toilet block) on the eastern side of the building was constructed in this period. On the Evans Street frontage, new aluminium framed windows were installed (Figure 52).[116]

More major changes were made internally, most notably the removal of rail access to the building. The old rail lines were filled, and a new cement floor installed to allow for truck access. The majority of the loading docks on the former platforms were also filled, although some were retained and extended in length (Figure 53). At the northern end of the building, the concrete floor in the 1946-49 extension was removed, and a new concrete floor at ground level was installed in its place. Some of the columns from this end of the building were removed. It would also appear that it was during this phase of works that the size of the office facilities was increased, with the internal expansion of the offices to the north. The total cost of works was $249,000.[117]

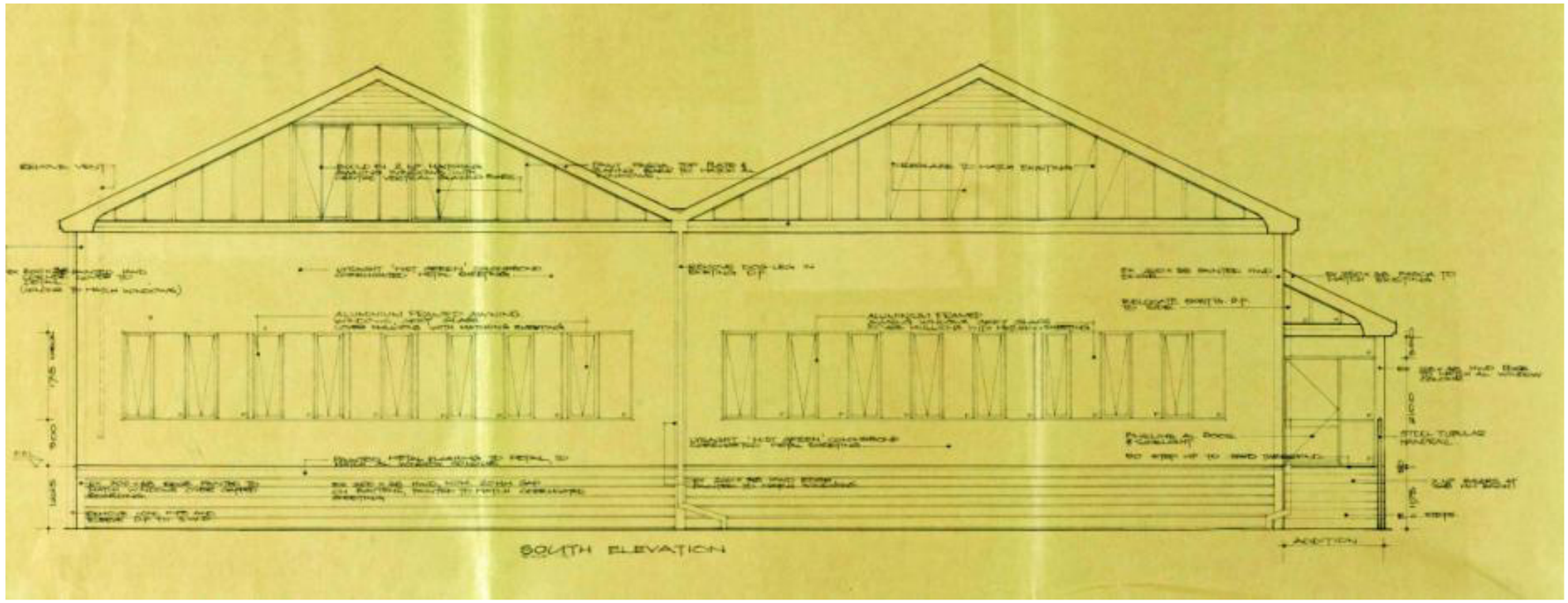


Figure 52: Detail from 1984 plans showing changes to Evans Street elevation ('Evans Street, Goods Shed Alterations (84085)', TA, AE417/8/475. Source: MPDC, 'The Goods Shed CMP', p 26).

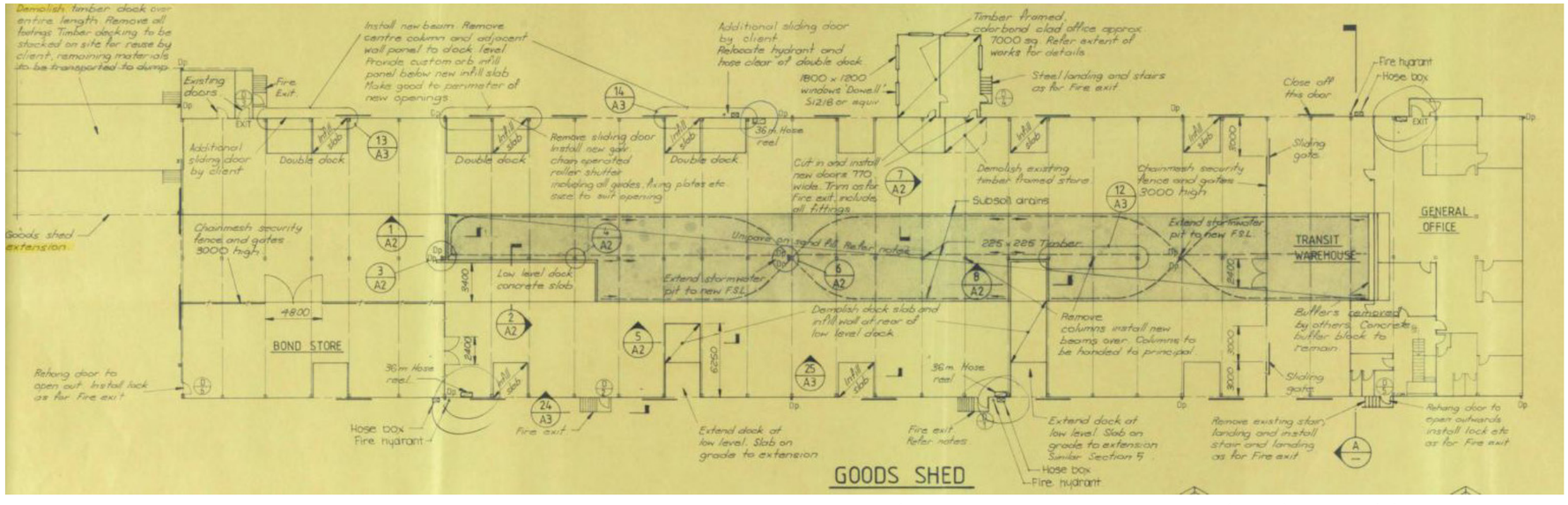


Figure 53: Detail from 1984 floor plan showing internal changes to the goods shed. North to left of figure('Evans Street, Goods Shed Alterations (84085)', TA, AE417/8/475. Source: MPDC, 'The Goods Shed CMP', p 27).

115 Clements, 'Railways', in Alexander, A, (ed.), *The Companion to Tasmanian History*; The Wapping History Group, 'Down Wapping', *Hobart's vanished Wapping and Old Wharf Districts*, Blubber Head Press: Hobart, 1988, p.218; *The Mercury*, Wednesday 23 November 1983, p.1.

116 MPDC, 'The Goods Shed CMP', p 25.

117 'Evans Street, Goods Shed Alterations (84085)', TA, AE417/8/475.

Constrained by both its size and location, the Macquarie Point railyards became increasingly inefficient for handling modern containerised freight trains. A new site was needed, and in 2009 works began on constructing a road and rail interchange and freight distribution hub for southern Tasmania at Brighton, north of Hobart.[118] The last train left the Macquarie Point site in June 2014.[119]

3.2.7 The Macquarie Point Development Corporation and the Goods Shed

The Macquarie Point Development Corporation was established by Parliament in 2013 and charged with the remediation and redevelopment of the old railyards site. In 2019 the Corporation relocated their offices to the old Goods Shed. The old office area was renovated, and new toilet facilities installed in the 1980s brick extension on the eastern side of the building. The distinctive timber columns were retained as part of these works, becoming a design feature in the new office fit out.

New uses quickly emerged for the remainder of the Goods Shed and its 2,305m2 of floor space. The venue is currently used for a range of popular events including concerts, art exhibitions, theatre performances, wine and gin launches and bridal expos. In 2021 the Corporation issued a Request for Proposals seeking venue management and commercial lessors.[120]

3.2.8 Recent history post 2021

In c.2023-2024, the Goods Shed roof was partially overclad with galvanized , corrugated roof sheeting with foil blanket insulation. A new fascia was installed to cover the gap created by the new roof, along with new galvanised gutters and rain goods. The existing roof and remnants of skylights were left in situ and can be seen from the interior.

Figure 54: The roof structural elements in 2022, showing the skylights, Howe trusses, bracing systems, and supporting central and peripheral timber posts on cement footings (Purcell, 2022)

Figure 55: The northern end interior, with skylights, lowered concrete floor, encased timber posts, concrete perimeter walls and cross wall nibs, and double bay width opening (Purcell, 2022).

Figure 56: The skylights are still visible from the interior after the roof over cladding, although they are covered by the new sheeting

118 'Largest Ever Transport Infrastructure Projects In Tasmania - Get Underway', Media Release, AA129/2009,
119 MPDC, 'The Goods Shed CMP', p 26.
120 'Leasing opportunity | mysite' (macquariepoint.com)

4.1 Assessment Framework

The philosophy of conservation is centred on significance. It helps to define what contribution various components of a place make to a wider understanding, and appreciation, of history, society, and culture. Significance encompasses not just the physical fabric, but also the setting, contents, use, history, associations, records, related places and objects, and the heritage context of a place. The relative significance can vary from element to element within each place. This section illustrates the Goods Shed's overall historic cultural heritage significance, and the relative historic cultural heritage significance of the buildings' fabric and spaces.

4.2 Assessment Against Criterion

In the Australian context, assessments of significance are based upon the model outlined in the *Burra Charter*. This model recommends that places be assessed against four main categories: historical, scientific (including archaeological), aesthetic, and social/ spiritual significance.

The *Historic Cultural Heritage Act 1995* (Tas) section 5 establishes the Tasmanian Heritage Council and sets out their powers. The HCHA 1995 section 15 establishes the Tasmanian Heritage Register (THR), and section 16 (2) lists the criteria used in Tasmania to assess cultural heritage significance. A place only needs to meet one criterion to be included on the THR, although it is not unusual for a place to meet more than one criterion.

Guidelines for using the criteria to assess significance can be found in the Heritage Tasmania publication:

- Heritage Tasmania, 'Assessing Historic Heritage Significance for application with the Historic Cultural Heritage Act 1995', Version 6, October 2021, Department of Natural Resources and Environment Tasmania (DNRE)

The place's level of historic cultural heritage significance will determine whether it is included on the local, state, national, or world, heritage list.

The THR datasheet[121] contains the following assessment against the HCHA 1995 section 16(2) criteria:

(a) the place is important to the course or pattern of Tasmania's history

The Hobart Railway Goods Shed is a notable example of the development of rail transport, and of the development of Sullivans Cove and Hobart as a centre for trade, including the export of fruit, from World War I onwards. The Goods Shed's use by the Tasmanian Government Railways was integral to the railway system's cartage of general goods up until the 1970s, which made a strong contribution to the development of the State. In the 1980s, the Goods Shed's conversion into a transit warehouse for road transport is illustrative of broader changes in Tasmania during the 20th century's later decades – particularly the transition of land transport away from railways to road-based networks, and the increasing dominance of shipping containers for freight. Recent use of the Goods Shed for various forms of entertainment reflects the Hobart waterfront's evolution from a working port to a precinct increasingly used for recreation.

(b) the place possesses uncommon or rare aspects of Tasmania's history

As a building associated with the State's former rail transport network , the Hobart Railway Goods Shed is rare in the Tasmanian context. Within its class of place it is an unusually extensive building. The Goods Shed illustrates a historical function which is no longer practised. It is one of very few comparable places across Tasmania that still demonstrates evidence of the operations of the Tasmanian Government Railways during the 20th century.

(c) the place has the potential to yield information that will contribute to an understanding of Tasmania's history

No data recorded.

(d) the place is important in demonstrating the principal characteristics of a class of place in Tasmania's history

No data recorded.

(e) the place is important in demonstrating a high degree of creative or technical achievement

No data recorded.

(f) the place has a strong or special association with a particular community or cultural group for social or spiritual reasons

No data recorded.

(g) the place has a special association with the life or works of a person, or group of persons, of importance in Tasmania's history

No data recorded.

(h) the place is important in exhibiting particular aesthetic characteristics.

No data recorded.[122]

4.3 Statement of Significance (Non-Statutory Summary)

The THR datasheet contains the following non-statutory summary Statement of Significance:

The Hobart Railway Goods Shed is a notable example in Tasmania of the development of rail transport from World War I onwards, and was integral to the railway system's cartage of general goods up until the 1970s.

The Goods Shed building's conversion in the 1980s to a transit warehouse for road transport is illustrative of broader changes in Tasmania during the later decades of the 20th century. The Hobart Railway Goods Shed is rare in the Tasmanian context, illustrating a historical function which is no longer practised, and it is an unusually extensive building within its class of place.[123]

4.4 Comparative Analysis

The following text was extracted unchanged from the 2021 CMP although reformatted to suit this CMP's layout:[124]

A comparative analysis is a useful tool to understand why the Goods Shed may have significance, and how important this building is, when compared with other similar places. In making comparisons, it is important to attempt to refer to a data set that will support 'like with like' evaluations.

No comprehensive study of the Tasmania's railway heritage has been undertaken. The rationalisation following the Commonwealth takeover of railway services resulted in the wide scale demolition or removal of most railway station buildings, housing, and sheds. As a result, there is relatively little which survives of this once extensive network of places. This loss of heritage sites is also reflected in the relatively few railway places which are represented on statutory heritage registers.

121 THC, THR Datasheet, 'Hobart Railway Goods Shed', pp 3-4.

122 THC, THR Datasheet, 'Hobart Railway Goods Shed', pp 3-4.

123 THC, THR Datasheet, 'Hobart Railway Goods Shed', p 3.

124 MPDC, 'The Goods Shed CMP', pp 43-47.

A number of railway sites are currently included in the Tasmanian Heritage Register. This includes:

- Station buildings at Hobart (THR 2187), St Marys (THR 613), Fingal (THR 5903), Tullochgorum (THR 5905), Burnie (THR 7386), Penguin (THR 10927), Macquarie Plains (THR 1202), Westerway (THR 1287), Scottsdale (THR 1404), Sorell (THR 5362), Oatlands (THR 8756), Strahan (THR 9919), Don (THR 1347), and Conara (THR 4980).
- Railway bridges and viaducts at Forth (THR 11930), Hayes (THR 1184), Macquarie Plains (THR 1201), Plenty (THR 1272), Deloraine (THR 4795), Perth (THR 5006), Longford (5145 THR), and Kimberley (THR 11243).
- Station master or staff housing at Highclere (THR 701), Sorell (THR 0928), Bellerive (THR 960), and Claremont (THR 7938).
- A railway carriage shed at Sorell (THR 5363).
- The railway tunnel at Cambridge (THR 1034), and the Ida Bay Railway in its entirety (THR 8215).

All the railway station sites included railyards of varying scales. However, the only railyards which are included on the Tasmanian Heritage Register are those at Inveresk (THR 4400) and St Marys (THR 10740). Of these, the Inveresk yards in Launceston is the only one which retains a substantial number of buildings, although the majority of these relate to its workshop functions, and not its railyards. The St Marys yards were an important regional railway centre, but built infrastructure no longer exists at the site. Numerous small and large private railway systems were also established in Tasmania during the nineteenth century, the most notable examples being the Emu Bay Railway Company, and the Mount Lyell Mining and Railway Company. Of these two operations, Mount Lyell at Queenstown retains a substantial complex of significant buildings related to the operations of the Abt Railway developed from the 1890s.

This includes the foundry, 'running sheds' (i.e., sheds for the storage, maintenance or repair of locomotives), wagon shed, oil store, paint store and machine shop.[125] The complex does not include any former goods sheds.

Inveresk is the only railyards sites which was comparable to Hobart in its scale. The Inveresk Railyards Workshops was completed in 1870, servicing Tasmania's first rail operation between Launceston and Deloraine. Being privately owned, financial difficulties led to the operation being taken over by the government in 1870.[126]

By the 1880s, Launceston was the State's most important railway centre, being the terminus for lines to Hobart, Deloraine, St Marys, and Scottsdale. By 1916, the 14 hectare site had evolved to become the centre for all heavy construction and repair work on Tasmania's railway system. This position was reinforced by the completion of a new workshops complex in 1923. During the Second World War, the site evolved to play an important role in the production of heavy artillery and mortar shells.

The site contains a large number of buildings, spaces, collections, and other features dating from 1871 to the mid-twentieth century. These buildings can be grouped into key functions including the carpenter's shop group (six buildings); the Paint Shop group (four buildings); the Smithy Group (two buildings); the main Workshop Group (two buildings); the Foundry (one building); the Fibreglass Shop Group (three buildings); the Sheet Panel and Wheel Shop Group (six buildings); the World War Two Industrial Annexes (four buildings); the Tramways Workshops Group (12 buildings); the Administration Group (12 buildings); the Goods Yard Group (two buildings); the Diesel Workshops Group (four buildings); the Roundhouse Group (ten buildings); the Amenities Buildings (11 buildings); and the Traverser. All buildings related to the railyards functions at Inveresk have been removed, save the substructure and mechanics of the railway turntable well.

The site was abandoned in 1994 and has been redeveloped for the Queen Victoria Museum and Art Gallery and the University of Tasmania. The heritage significance of Inveresk is recognised on local and State heritage registers, principally for its historical importance, rarity, research potential, representative characteristics, creative or technical achievements and social significance.[127]

Notably absent from Inveresk however are any goods sheds, or indeed other structures related to its railyards. The original 1882 goods shed was 216 feet long (i.e., approximately 65 m), and was substantially expanded in 1937 with the construction of a parallel shed 86 feet long (i.e., approximately 26 m).

Figure 57: Interior view of the Ocean Pier Goods Shed (Source: WJ Little, 'Ocean Pier Goods Shed', c.1914, TA, NS1752/1/13).

The works doubled the goods storage size, with two additional platforms and an extra track. Although not recorded, the number of tracks and platforms would appear to have been greater than Hobart's goods shed, originally constructed to handle 30 trucks and expanded in 1946-49 to hold 40 trucks. The last remaining section of Launceston's goods shed was demolished in the early 1990s.[128]

The only surviving structures that are comparable in size, age and function to Hobart's Goods Shed are two former wharf structures: Elizabeth Street Pier (highly modified) and Princes Wharf No. 1, both in Hobart. These two buildings date from the 1930s and were constructed from concrete, and whilst designed for storage are not related to railway uses.

125 Godden Mackay, 'Mount Lyell Mining Lease. Cultural Heritage Assessment Study. Volume 1 - Main Report', for Mineral Resources Tasmania and the Department of Environment and Land Management, May 1994

126 M Pearson, 'Launceston Railway Workshops Conservation Plan 1999', prepared for Queen Victoria Museum and Art Gallery, 12 May 1999, pp 27-28.

127 Pearson, 'Launceston Railway Workshops Conservation Plan', pp 4-9, 19.

128 *The Examiner*, Thursday 18 June 1936, p 8; Pearson, 'Launceston Railway Workshops Conservation Plan', p 8.

Other, smaller goods sheds are likely to exist in Tasmania, some possibly within original contexts, but most likely relocated to other places. There are no goods sheds currently identified on statutory heritage registers. The only relevant example that could be located is a small goods shed located at Melton Mowbray from the defunct Apsley Railway.[129] This shed has been nominated to the Heritage Register, but as yet, has not been considered for registration. A series of historic photographs of small goods sheds which once existed in Tasmania are reproduced below:

Figure 58: Fingal Goods Shed (Source: 'Photographs-referred to as Holden Tour of Tas - Mole Creek Line - Fingal Line (NAA P2121/9 Barcode 4098643), 1968, p 15, TA, P2121/1/1).

Figure 59: St Marys Goods Shed (Source: 'Photographs-referred to as Holden Tour of Tas - Mole Creek Line - Fingal Line (NAA P2121/9 Barcode 4098643), 1968, p 5, TA, P2121/1/1).

Figure 60: Devonport Goods Shed in 1968 (Source: 'Photographs-referred to as Holden Tour of Tas-North West Line (NAA 2121/9 Barcode 4098645)', 1968 p 31, TA, P2121/1/5).

Figure 61: Latrobe Goods Shed (Source: 'Photographs-referred to as Holden Tour of Tas-North West Line (NAA 2121/9 Barcode 4098645)', 1968 p 41, TA, P2121/1/5).

Figure 62: Ulverstone Goods Shed (Source: 'Photographs-referred to as Holden Tour of Tas-North East Line (NAA P2121/9 Barcode 4098646)', 1968, p 7, TA, P2121/1/5).

Figure 63: Lebrina Goods Shed (Source: 'Photographs-referred to as Holden Tour of Tas-North West Line (NAA 2121/9 Barcode 4098645)', 1968 p 41, TA, P2121/1/2).

129 THR 8767, 'Railway Shed', Highland Lakes Road, Melton Mowbray

Large and small goods sheds are also found elsewhere in Australia as part of railyards complexes. Although a comprehensive comparison of such buildings is beyond the scope of the current investigations, Hobart's Good Shed would appear to compare very well with similar places in Australia, with the exception of some of the very large and architecturally detailed masonry sheds constructed in Victoria from the 1860s.[130] Goods sheds in New South Wales of a similar date and scale as Hobart's would appear to be very uncommon.

4.4.1 The Comparison

Despite the limitations of finding comparable places, some credible conclusions can be made regarding the relative values of the Goods Shed.

- As a railyards site, Macquarie Point compares poorly with its Inveresk counterpart. Whilst the Hobart station was developed in the 1870s, the development of Macquarie Point did not commence until the early twentieth century, and this is not early within the context of Tasmania's railways.
- The Macquarie Point site was secondary in its role to the Inveresk site, which became the headquarters for rail operations in Tasmania. This historical association is well demonstrated by the large number of former railway workshop buildings which continue to exist at Inveresk. It is noted however that nearly all evidence of Inveresk's railyards have been removed, which is similar in this regard to Macquarie Point.
- By comparison, there are only three extant historic structures at Hobart's former railway site: the former Railway Station building (now the headquarters of the ABC), the Goods Shed and the Red Shed. The two sheds, and in particular the Goods Shed are the only surviving built structures which demonstrate early railway development at the Macquarie Point site.
- As an individual structure, the Goods Shed fares the more favourably. Historic railway buildings, and in particular goods sheds are now very rare in Tasmania.
- The 1915/49 Goods Shed is the only substantial surviving structure for the movement of goods by rail in the State that remains in situ, the Launceston shed having been demolished.
- In relation to other rail buildings in Australia, even without a comprehensive comparison, there are very few remaining goods sheds of the scale of the 1915 building remaining. There are excellent smaller examples of goods sheds, workshops, engine sheds, carriage works and sheds, signal boxes, industrial sites, roundhouses, turntables, coal loaders, and so on, but most goods sheds were in locations that have been redeveloped and the sheds have been light-weight and ephemeral. The exception being the very substantial and architecturally detailed masonry goods sheds developed in Victoria from the 1860s.
- Hobart's Goods Shed is one of the best remaining examples of a large goods shed in Australia.

4.5 Significance of Components

Individual components of a place may have a greater or lesser relative historic cultural heritage significance than other components. The following are previous gradings of significance for the Goods Shed.

4.5.1 THR gradings of significance

The THR datasheet includes a description of Features of High, Contributory, and Low-Level and No Historic Cultural Heritage Significance.[131]

Features Of High Historic Cultural Heritage Significance

The Goods Shed's roof is a pair of side-by-side gabled volumes, with ridges and a central valley-gutter parallel to the long sides. Open to view from much of the Shed's interior, these roofs are supported by timber trusses, comprising top and bottom chords and intermediate diagonal struts of timber with vertical tension-rods of metal. At the Shed's perimeter walls, and at the mid-line of the building beneath the valley gutter, the ends of the roof-trusses are supported by heavy, square timber posts.

The west, north and east elevations feature continuous 1.2m-high horizontal bands of fixed windows within white-painted timber framing. There are two remaining of the original openings formerly occupied by timber sliding goods doors – and above one of these openings, on the Shed's west elevation, is what may be an original externally-mounted head-track. In other locations, the timber wall-framing visible from the Shed's interior clearly demonstrates the former locations of now infilled goods doors.

At the Evans Street-facing end elevation of the Goods Shed, the two gables contain tall and narrow panes of textured glass panels within white-painted timber frames, with fine louvres of timber at the apexes. The wall bases at this end of the Shed, clad in painted horizontal timber planks with small ventilation gaps, are co-located with two structural bays in which the sub-floor structure appears to also be timber. These planks themselves are not significant fabric, but their similarity to the original cladding in this area is of value in alluding to the Goods Shed's initial timber -framed sub-floor structure.

On the northern side of the internal wall that separates the office area from the majority of the Shed's volume , buffer blocks of board-marked concrete protrude above the floor of interlocking pavers.

Features Of Contributory Historic Cultural Heritage Significance

The Hobart Railway Goods Shed contains features that are of contributory cultural heritage significance in their own right. Changes to these features may potentially impact the significant fabric of this place.

The Goods Shed contains evidence of additions and alterations made in the post World War II years up until the late 1970s. During these decades the Shed continued to be used and occupied by the Tasmanian Government Railways (TGR). Features added during those years – such as the internal concrete slab floors, and the 0.9 metre-high unpainted concrete surfaces at the bases of most of the Shed's exterior walls – remained in place until the Goods Shed left the TGR's custodianship. The transitions in flooring from concrete slabs to areas of non-significant interlocking pavers demarcate the edges of the Shed's former internal platforms, and assist in understanding how the building operated.

Other features of contributory historic cultural heritage significance at the Hobart Railway Goods Shed include:

- *the broken concrete slab-edges and stubs of former sub- floor walls that are visible at the perimeters of the Shed's north-most six structural bays; and*
- *any framing material within the mezzanine areas which demonstrates the initial construction of habitable space within the roof volumes above the Shed's south-end offices.*

130 See for example Castlemaine Railway Station; No. 2 Goods Shed, 708-710 Collins Street and 731-733 Bourke Street, Melbourne; Kyneton Railway Station Complex; Maryborough Railway Station; Taradale Railway Station Complex

131 THC, THR Datasheet, 'Hobart Railway Goods Shed', p 4.

Features Of Low-Level And No Historic Cultural Heritage Significance

The Hobart Railway Goods Shed contains features that are of low-level or no cultural heritage significance in their own right. Nevertheless, changes to these features may also potentially impact the significant fabric of this place.

All of the elements, features and finishes added during adaptive re-use works in the 1980s and 1990s are of low-level historic cultural heritage significance. Specific features of identified low-level historic cultural heritage significance include the:

- *wall cladding of painted corrugated steel sheeting;*
- *aluminium-framed windows of the Shed's office areas;*
- *ground-level concrete paving slabs within the Shed's north-most six structural bays; and*
- *flat-roofed amenities block, with external walls of painted brick, that adjoins the Goods Shed's east elevation.*

Historical aerial photographs indicate that the amenities block was constructed in the early 1990s.

Features at the Hobart Railway Goods Shed of no historic cultural heritage significance include elements, features and finishes added during adaptive re-use works in the 21st century, such as the:

- external access *ramps and stairs, and other additions and alterations associated with the Shed's 2019-onwards use as an events space and as offices for the Macquarie Point Development Corporation; and*
- *new, galvanised corrugated* steel sheeting installed across the top of the gable roofs.

From the site visit, and subsequent information from the MPDS, the corrugated sheeting used to infill spaces left by removal of the corrugated polycarbonate sheet skylights in c.2023-2024 is also of no historic cultural heritage significance.

4.5.2 2021 CMP Gradings of Significance

The CMP includes a table of relative levels of significance for Elements of the Goods Shed.[132] A four-tiered grading was applied, which was defined as:

Table 2: Grading of Significance Definitions

High Significance	Original or early fabric, spaces, views, layout etc. that are important in demonstrating the history and development of the place.
Medium Significance	These are elements or changes which contribute to the history and development of the place.
No significance, or neutral impact	These are recent or minor elements that neither contribute, nor detract from the significance of the place.
Intrusive elements that detract from the significance of the place:	Elements that impact adversely on the significance of the place.

132 MPDC, 'The Goods Shed CMP', pp 50-51.

Table 3: Grading of Significance of Elements

Element	Significance
Form of 1915 building with pattern of openings	*High*
1915 timber framing including: • *roof trusses* • *posts* • *wall framing*	*High*
1915 joinery including: • *windows* • *barge boards* • *louvres*	*High*
1946-49 concrete floors and supporting walls and structure	*High*
Remnant 1946-49 concrete elements in northern extension	*Low*
1946-49 addition to the north	*Moderate*
Surviving 1946-49 joinery seen in mezzanine level timber windows in particular	*Moderate*
Altered 1946-49 joinery	*Neutral*
1946-49 timber framing around the building	*Neutral - Low*
Current office fit out	*Neutral*
Amenities and fit out	*Neutral*
Brick toilet block	*Neutral*
Present roof cladding (noting it is more recent replacement cladding)	*Neutral*
Steel structure replacing removed posts	*Neutral*
Roller shutter doors and other loading area doors	*Neutral-Intrusive*
Pedestrian doors, awnings and stairs and ramps around the building	*Neutral-Intrusive*
Services generally	*Neutral - Intrusive*
Post-1946-49 concrete additions including: • *new slabs* • *new walls* • *infill slabs*	*Intrusive*
Infilled central former track area	*Intrusive*
Internal wire and corrugated iron walls	*Intrusive*
Present wall cladding (noting it is more recent replacement cladding)	*Intrusive*
Aluminium framed office windows c.1984	*Intrusive*

4.5.3 Gradings of Historic Cultural Heritage Significance

As part of this assessment, components of the place have been graded as being of exceptional, high, or little to neutral, historic cultural heritage significance or as intrusive.

This will assist to determine each components' capacity for change (Refer to Section 6.3.2) which indicates where changes are most acceptable.

4.5.3.1 Definitions

The definitions of the Historic Cultural Heritage Significance gradings are:

Exceptional	Fabric of exceptional significance makes the greatest direct contribution to the historic and aesthetic values of the place. It accounts for rare, or outstanding, original fabric, and unaltered original components. Fabric of exceptional significance should be retained and conserved in situ. A permit is required for most works or alterations. Any work, which affects the fabric or external appearance of these components, should be confined to preservation, conservation, restoration, and reconstruction as defined by The *Burra Charter*.
High	Includes components that make an important contribution to the item's significance, even if they may not be in good condition. This may include components from the original construction phase that have been altered, or components created as part of a generally sympathetic alteration to the building. In either case they make a direct contribution to the significance of the place. A permit is required for some works or alterations. Components identified as being of high significance should also be retained, restored, and conserved in situ. However, there is more flexibility for change. Minor interventions, including adaptation and alteration as defined by The *Burra Charter*, are permissible, if the level of significance of each element is retained, and significant fabric is not altered or removed. Changes should be reversible where possible.
Moderate	Includes components that make a moderate contribution to the item's significance, even if they have been altered or are not in good condition. This may include components from the original, or later, construction phases that have been more extensively altered, or relatively new components created as part of a generally sympathetic alteration to the building that are difficult to assess. In either case they make a contribution to the significance of the place. A permit is required for some works or alterations. Components identified as being of moderate significance should also be retained, restored, and conserved in situ wherever practicable. However, there is greater flexibility for change. Adaptation and alteration as defined by The *Burra Charter*, are permissible, if the level of significance of each element is retained. It is preferable for changes to be reversible where practicable.
Little / Neutral	Can include components which were originally of higher significance, but have been compromised by later, less significant modifications. Can include additions made to accommodate changing functional requirements where these components make little or no direct contribution to significance. Elements assessed as being of little or neutral significance are not considered essential to the major aspects of significance, often fulfilling a functional or operational role. Both retention and removal are typically acceptable options, depending on the element.
Intrusive	Intrusive fabric includes that which is damaging to the place or object's significance. Can include unsympathetic additions or replacement fabric which does not conform with the principles of like-for-like replacement, or is of a form or materiality which is incompatible with the predominant characteristics of the place.

4.5.3.2 Gradings of Significance

Table 4: Grading of Significance of elements

Element	Grading of Significance
Form of 1915 building with the pattern of openings	Exceptional
1915 timber framing including: • roof trusses • posts • wall framing	Exceptional
1915 joinery including: • windows • remnant door and window hardware • barge boards • remnant linings / boards • louvres	High
1946-49 timber framing to offices and generally around the building	High
Surviving 1946-49 joinery seen in mezzanine level timber windows in particular	High
Altered 1946-49 joinery	Moderate
1946-49 concrete floors and supporting walls and structure	Moderate
Post-1946-49 concrete additions including: • new slabs • new walls • infill slabs • internal access ramps	 Little / Neutral Little / Neutral Little / Neutral Intrusive
Present roof cladding (noting it is more recent replacement cladding)	Moderate
Present wall cladding (noting it is more recent replacement cladding)	Moderate
c.2023-2024 fascia, rain goods, and over-clad roof	Intrusive
Services mounted on or through the external slopes of the roof	Intrusive
Roller shutter doors and other loading area doors	Little / Neutral
Infilled central former track area	Little / Neutral
Services generally	Little / Neutral
Steel structure replacing removed posts	Little / Neutral
Aluminium framed office windows c.1984	Little / Neutral
Current office fit out	Little / Neutral
Brick toilet block (east side)	Little / Neutral
Internal wire and corrugated iron walls	Intrusive
Pedestrian doors, awnings and stairs and ramps external to the building	Little / Neutral
Externally mounted air conditioning units, lights, signage	Intrusive
Northern Extension (last six bays)	
1946-49 extension to the north	Little / Neutral
Remnant 1946-49 concrete elements in northern extension	Little / Neutral

5.1 Introduction

Conservation means all the processes of looking after a place so as to retain its cultural significance[133]

Conservation may, according to circumstance, include the processes of: retention or reintroduction of a use; retention of associations and meanings; maintenance, preservation, restoration, reconstruction, adaptation and interpretation; and will commonly include a combination of more than one of these. Conservation may also include retention of the contribution that related places and related objects make to the cultural significance of a place.[134]

Conservation "is an integral part of good management of places of cultural significance".[135] It is "based on a respect for the existing fabric, use, associations, and meanings"[136] of a place.

Conservation does not prevent change but enables it to occur sensitively, without reducing historic cultural heritage significance, to support the long-term future of a place. The foundation for conservation is the understanding, retention, and enhancement, of historic cultural heritage significance.

The purpose of conservation is to conserve a place of heritage value indefinitely. To achieve this, the place must have a viable and compatible use to ensure that it is cared for. Currently it is proposed that the Goods Shed be relocated as part of the Macquarie Point Multipurpose Stadium project, and be adaptively reused as part of the hospitality offering for the Stadium.

Relocation of the Goods Shed would likely require it to be carefully dismantled and reconstructed in its new location. These changes should be designed to retain the place's significance. The objective is to balance the protection of the historic fabric with the need to maintain a viable future for the place.

The Conservation Framework for the Goods Shed is an overarching guide for the conservation, maintenance, repair, and management of future change. The framework sets out a series of Conservation Policies, as well as related Management Actions for Change Management (Section 6) and Implementation (Section 7). The Policies convey a set of key principles to maintain the historic cultural heritage significance of the Goods Shed. The Management Actions are specific actions arising from the Policies. The Policies are intended to be enduring, whereas the Management Actions will need updating or replacing in future editions of the Conservation Management Plan.

5.2 Conservation Policies

The following Conservation policies are designed to aid in the long-term management, conservation, and enhancement, of the Goods Shed. The policies are supported by Management Actions which reflect current and future considerations for the place. They were developed through a holistic review and assessment of the site, a robust understanding of significance, careful consideration of the opportunities and constraints presented by the place, and the proposed relocation and adaptive reuse of the Goods Shed as part of the wider Macquarie Point Multipurpose Stadium proposal. They should be adopted and followed, both in the proposed relocation and adaptive reuse of the Goods Shed and the future day-to-day operations.

Policy 01 In the event that the Goods Shed cannot be maintained in its existing location, seek opportunities for its relocation, with retention and conservation of fabric of exceptional and high significance and accurate reconstruction.

Policy 02 Develop a proven and tested methodology for the dismantling and relocation of the Goods Shed to mitigate impacts and maintain, to the extent possible, the integrity of the significant structure.

Policy 03 Establish a compatible and economically viable use for the Goods Shed which affords a high level of public access.

Policy 04 Use the CMP and the change management process (Section 5.3) to guide change.

Policy 05 Secure adequate financial support for the ongoing conservation of the place, including one off or cyclical conservation and maintenance.

Policy 06 Establish a program for any urgent or essential (catchup) maintenance works and / or cyclical maintenance works.

Policy 07 Retain and enhance the cultural heritage significance and values of the Goods Shed through any program of change. Manage change sensitively and ensure the use of high-quality design and construction, and materials appropriate to its heritage context.

Policy 08 Prioritise the exposure of the timber structure and open plan configuration of the Goods Shed.

Policy 09 Reconstruct the original pattern of fenestration, in the reconstruction of the Goods Shed including cargo doors and skylights.

Policy 10 Plan change carefully to avoid potential adverse impacts arising from incremental change.

Policy 11 Document, record, and archive, any changes to the Goods Shed.

Policy 12 Establish policies and technical guides for signage and tenancy fitouts to ensure cohesive and consistent approaches which minimise visual clutter and avoid impact to significant fabric.

Policy 13 Enforce a cleaning program and methodology to ensure that tenancy cleaning contracts do not adversely impact significant fabric.

Policy 14 Ensure that all staff, tenants, consultants, and contractors have appropriate experience and are familiar with the Policies and Management Actions of this CMP. Ensure they understand the significance of the place. Provide guidance on how to best manage and maintain these values to ensure their retention.

Policy 15 Implement sustainable practices and reduce carbon emissions where it does not compromise heritage values.

Policy 16 Continue to explore ways to increase the public's understanding and appreciation of all values of the Goods Shed, including through an established program of Interpretation.

133 *Burra Charter,* Article 1.4.
134 *Burra Charter,* Article 14.
135 *Burra Charter,* Article 2.3.
136 *Burra Charter,* Article 3.1.

This section describes the process of managing change to the Goods Shed. Following this process will protect and conserve the significant values of the Goods Shed when planning changes.

6.1 Introducing Change

Change in the context of a place included in the Tasmania Heritage Register can mean conservation, development, relocation, subdivision, adaptation, or demolition.

Change may be required to ensure that a place:

- is appropriately maintained and does not fall into disrepair;
- can be used, either for its original purpose or, as is the case with the Goods Shed for a compatible alternative use;
- is compliant with building codes;
- has equitable access; and
- is more climate resilient and can adequately address the impacts of climate change.

Change must be managed to ensure that it does not reduce the historic cultural heritage significance of the Goods Shed overall, or of the component that is changed. Even following considerable change, as is the proposal for the Goods Shed, the long-term management of additional incremental changes is particularly important. Over time, many small changes that have little or no heritage impact, may cumulatively have an unforeseen, and detrimental heritage impact.

Article 3 of *The Burra Charter* has the following guidance for change:

> *3.1 Conservation is based on a respect for the existing fabric, use, associations, and meanings. It requires a cautious approach of changing as much as necessary but as little as possible.*
>
> *3.2 Changes to a place should not distort the physical or other evidence it provides, nor be based on conjecture.*[137]

6.2 Types of Change

Changes proposed should always balance the significance of the component(s) against the need for the proposed change and any extra benefits that the change may provide. Some examples of extra benefits (mitigation measures) from the change may include:

- improved condition;
- improved interpretation of the component;
- improved environmental sustainability;
- support for continued operations and use;
- meeting building code compliance, and workplace health and safety; or
- improved accessibility.

Change can be defined under three separate categories: Conservation, Repair, and Renewal; Functional Alterations and Upgrades; and Enhancement. Examples of such alterations are provided below, but it should be noted that these are not definitive lists.

6.2.1 Conservation, Repair and Renewal

These changes are linked to the general maintenance and upkeep of the building. They can include:

- preventative maintenance;
- planned or emergency repair; and
- periodic renewal of various elements.

Changes of this nature are generally acceptable in areas considered to have any level of capacity for change, as they are necessary to ensure the longevity of the built fabric.

6.2.2 Functional Alterations and Upgrades

These changes relate directly to practical improvements to the site. This could be, for example, to adapt spaces, increase public access or modernise services.

The changes could range from minor alterations through to removal of built fabric or subdivision of spaces (e.g. to facilitate new uses). These may cause some harm to significance, but this may be justified where the harm is outweighed by the public benefit and the long-term sustainability of the built fabric.

Examples of functional alterations and upgrades include:

- changing the function and use of spaces;
- upgrading of WCs;
- upgrading services, such as fire, mechanical and electrical services;
- installing solar panels, insulation and other passive and active environmental measures; and
- change to building thresholds to enhance accessibility.

6.2.3 Enhancement

These alterations change or improve the appearance of the place. These changes are generally considered to be non-essential. Examples of enhancements include:

- removal of intrusive features; and
- replacement of fixtures and fittings with those of a different style (e.g. lighting).

137 *Burra Charter*, Article 3 Cautious Approach.

6.2.4 Like-for-Like Definition

Like-for-like is the most appropriate approach for repairs to components of Exceptional or High historic cultural heritage significance.

Like-for-like repair is where a generally minor in scale repair is made to built fabric using the same materials, details, and techniques to maintain overall appearance, character, technical performance, and significance. This should be based on original drawings, specifications, historic photographs, and / or study of the remaining original material or detail.

Like-for-like should not be used to match a previous repair where it was done with an inappropriate material or detail, or in instances of hazardous materials.

Where materials are no longer available, or safe, for like-for-like repairs choose an appropriate material that matches the original material's colour, texture, and technical performance. This will reduce the visual impact, as new materials will develop the correct patina, wear, and weathering, and blend with the historic context. It will also reduce the risk of damage to adjacent heritage fabric.

New materials may have different, potentially incompatible, properties. Some examples of this are:

- replacement timbers of a different classification which may shrink, split or be more suspectable deterioration around the repair.
- using different metals that can lead to galvanic corrosion.

6.2.5 Guiding Principles for Change

Heritage Tasmania recognise that *'Whilst every heritage place has its own distinctive characteristics and no two proposals for works will be the same, there are a number of good-practice principles that will lead to sympathetic solutions in most situations'.*[138]

The following Guiding Principles have been outlined by Heritage Tasmania to support Works and Development.

Principle 1. Understand why the place is significant

Understand what makes a place significant before making any changes to the place. This can be done through historical research and examining the details of the place itself. Use this information to think about what components or spaces are the most significant, interesting and meaningful.

Principle 2. Changes to a place should be sympathetic to its significance

Any changes to a place should be sympathetic to its significance. Avoid changes that will compromise and erode the place's significance; that will obscure significant features; or that will confuse understanding of the nature and evolution of the place.

Principle 3. Heritage Places evolve

Heritage places evolve over time, and changes can be made where it does not impact on the place's significance, or where it is necessary. Change that provides for the ongoing relevance, use and upkeep of a place can help with its conservation. If changes which will comprise the heritage significance of a place can't be avoided, the changes should be carried out in a manner that is reversible.

Principle 4. Protect significant settings and views

For many heritage places, it is important to protect its visual setting and any relationships to other significant elements. Demolition, alterations, new structures, landscaping or other changes that remove, screen or impact on a place's significance should be avoided.

Principle 5. Provide for a place's upkeep

Maintaining a heritage place is essential to conserving its significance. In many cases maintaining and conserving a place can only occur by ensuring that it has a relevant use. This may require some degree of adaptation.[139]

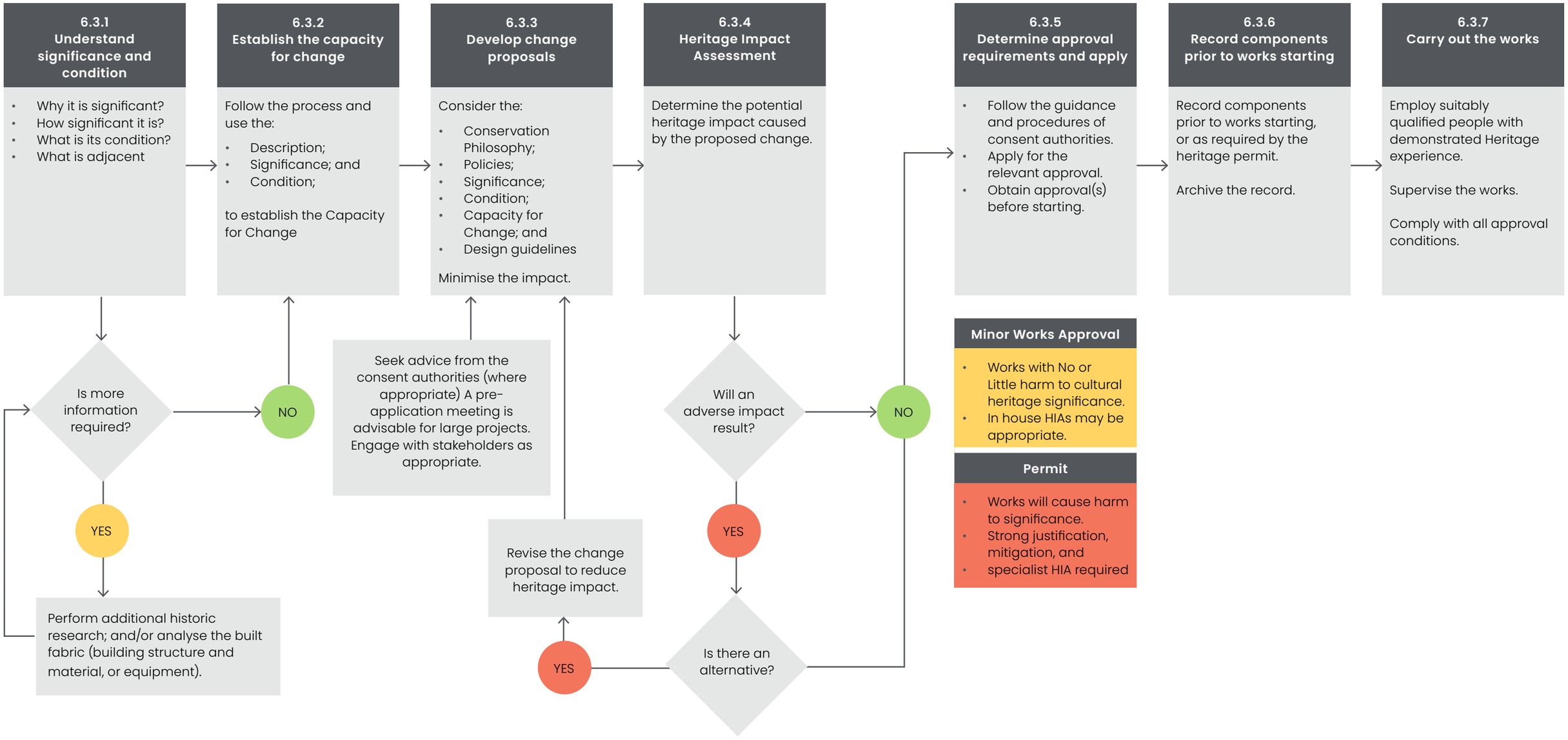
138 Heritage Tasmania, 'Guiding Principles' [website], last updated: 6/03/2017 10:16 AM.

139 HT, 'Guiding Principles' [website], last updated: 6/03/2017 10:16 AM.

6.3 Change Management Process Flow Diagram

The Change Management Process in the adjacent diagram is to guide the development of proposals when considering changes to the Goods Shed. Following this process should ensure that the change proposed will meet the need that prompted the proposal, while minimising the heritage impact to the component and to the overall significance and values of the Goods Shed.

The steps below are expanded on in the sections following the diagram.



6.3.1 Understand Significance and Condition

An understanding of historic cultural heritage significance should underpin every conservation decision and all change to a Heritage Place.

6.3.1.1 Understand the Historic Cultural Heritage Significance

The first step when change is proposed, is to determine the historic cultural heritage significance of the component(s) that will be affected by the change. Understand why it is significant; how significant it is; and what condition it is in.

It is also important to know if anything adjacent to, or near, the component(s) may be affected, even if they are not being changed. For example, modern services are likely to be of little / neutral historic cultural heritage significance, although their removal and replacement may have an impact on adjacent or nearby components of exceptional or high historic cultural heritage significance, such as the timber posts or trusses to which they are affixed. Proposed works may also have a visual impact to adjacent or nearby components of exceptional or high historic cultural heritage significance.

To understand the historic cultural heritage significance of the component:

- Consult the Grading of Significance Diagrams.
- Look for any significant adjacent, or nearby, components.

Additional historic research and/or analysis of the built fabric (building structure and materials) should be undertaken if more information or a more detailed understanding of the components' significance is required.

6.3.1.2 Understand the Condition

It is important to understand the condition and structural integrity of the component(s) that will be impacted by proposed changes. The Capacity for Change may be increased or decreased by the condition of a component. For example, a component of exceptional or high historic cultural heritage significance in excellent condition may have less Capacity for Change than a similar component in poor condition. However, the retention of historic cultural heritage significance should always be the first consideration when change is proposed.

Consult AECOM's 'Condition and Remaining Life Assessment Report', for the current condition of the place included at Appendix A, and 'Structural Compliance Assessment Report' included at Appendix B.

By understanding the historic cultural heritage significance and condition of the component(s), the Capacity for Change can be established.

6.3.2 Establish the Capacity for Change

The Capacity for Change is how much physical change can occur to the component or complement of the place with minimal or no harm to the historic cultural heritage significance of the component, or to the overall historic cultural heritage significance of the Goods Shed.

> *The amount of change to a place and its use should be guided by the cultural significance of the place and its appropriate interpretation.*

This will be the starting point for any detailed design work. Changes are more likely to be approved if based on a detailed understanding of the component's history and historic cultural heritage significance. This is important because the historic cultural heritage significance of a place can be reduced by a series of minor changes which have little effect individually but may have a much larger cumulative effect if their combined cultural heritage impacts are not considered.

An outline Capacity for Change of components of different levels of historic cultural heritage significance is in the adjacent Table. Use this table with the component's significance and condition to establish the component's Capacity for Change and align this with the proposed type and scale of change. Depending on the amount, and type, of proposed change, and the reasons why the change is proposed, the Capacity for Change may be different from the outline provided. Each proposal for change will be different, and the Capacity for Change will need to be assessed for each new proposal.

Historic Cultural Heritage Significance	Capacity For Change	Considerations
Exceptional	Minor Avoid change unless it enhances historic cultural heritage significance. Demolition is generally not supported.	• Components should be protected, retained, and conserved in their original location wherever possible. • Make changes to Intrusive, Little / Neutral, or Moderate, historic cultural heritage significance components instead of to Exceptional historic cultural heritage significance components wherever possible. • Reveal previously hidden Exceptional and High historic cultural heritage significance components where possible to enhance the interpretation of historic cultural heritage significance. • Conservation, repair, and renewal may be approved if carried out on a like-for-like basis. Replacement of hazardous materials, or a defective detail, are examples of exceptions to this principal (see Section 5.2.4). • Minor service changes or upgrades may be approved, if they are related to long-term, sustainable use, and cause little-to-no heritage impact They should not have a harmful, cumulative, or erosive effect on significance. • Changes should respect, and not obscure, the original design intent, or significant spatial qualities. • Sensitive change may be approved with appropriate justification, if it supports continued and future use and strengthens the visibility of Exceptional or High historic cultural heritage significance components.
High	Moderate More flexibility for change, especially if it enhances historic cultural heritage cultural heritage significance.	• Components should be protected, retained, and conserved, in their original location wherever possible. • Make changes to Intrusive, Little / Neutral, or Moderate, historic cultural heritage significance components instead of to High historic cultural heritage historic cultural heritage significance components wherever possible. • Reveal previously hidden High and Moderate historic cultural heritage significance components where possible to enhance the interpretation of their significance. • Conservation, repair, and renewal may be approved if carried out on a like-for-like basis. Replacement of hazardous materials, or a defective detail, are examples of exceptions to this principal (see Section 5.2.4). • Service changes and upgrades may be approved, if they are related to long-term, sustainable use and cause little-to-no heritage impact. They should not have a harmful, cumulative, or erosive effect on significance. • Changes should respect, and not obscure, the original design intent or significant spatial qualities. • Sensitive change may be permitted with appropriate justification, if it supports continued and future use and strengthens the visibility of Exceptional or High historic cultural heritage significance components.
Moderate		

Little / Neutral	High
	
	Greater capacity for change, especially if it enhances historic cultural heritage significance, supports compatible use, and/or lessens the intrusiveness of a component.
		• Components of Little or Neutral historic cultural heritage significance may be retained, substantially adapted, altered, or removed provided it is not harmful to significance, or the integrity of adjacent Exceptional, High, or Moderate historic cultural heritage significance components.
		• Make changes to components of Little or Neutral historic cultural heritage significance, instead of to Exceptional, High, or Moderate historic cultural heritage significance components wherever possible.
		• Change should not damage, remove, or hide, significant adjacent fabric.
		• Change should be reversible and should be reversed when practicable.
		• Examples of acceptable change include:
		  ○ Insertions of modern partitioning if there is a demonstrable need.
		  ○ New openings formed and existing openings in-filled if there is a demonstrable need.
		  ○ Removal of detracting or detrimental components.
		• Change generally does not need to be made on a like-for-like basis.

Intrusive		

6.3.3 Develop Change Proposals

It is understood that the Goods Shed will be relocated as part of the Macquarie Point Stadium Project. It is also understood that it may be used as part of the hospitality offering for the Stadium. This will require a large amount of change, potentially to room layouts, fittings, finishes, and for new environmental, and/or technological, requirements such as air conditioning, power, data, and communications cabling and equipment, and for compliance reasons.

Any changes should be designed to ensure the protection and enhancement of heritage values. Those designing the changes should find the right balance between meeting the functional, operational, and environmental, needs and maintaining the significance of built fabric.

MA01 Determine the Capacity for Change of all components prior to developing proposals for change.

MA02 Always try a range of different options to achieve the required outcome. Choose the option that will achieve the outcome, that causes the least harm to the Goods Shed's overall significance and to the significance of the component(s) that are being changed.

MA03 Refer to:

- The *Burra Charter*, and its practice notes.
- Heritage Tasmania, 'Works Guidelines' [website], last published on: 17/01/2017 2:45 PM.
- Heritage Tasmania, 'Guiding Principles' [website], last published on: 6/03/2017 10:16 AM

6.3.4 Heritage Impact Assessment

Assessing the potential impact of change on historic cultural heritage significance is essential to ensure that proposed change will not cause harm to the relative historic cultural heritage significance of an individual component and/or the whole place.

The heritage and planning sectors use the Heritage Impact Assessment (HIA) process to understand the impact that major physical change may have on a place's cultural significance or values. It is also possible to apply the methodology in a shorter and less formal way to minor proposed change. In some cases this process can be carried out by those proposing change, while in more complex cases specialist input should be sought. Each proposal for change should be considered on its own merits.

A Heritage Impact Statement should address three basic questions:

- *How will the proposed work impact on the 'historic cultural heritage significance' (i.e., heritage values) of a place?*
- *What measures (if any) are proposed to lessen any adverse impacts?*
- *Will the proposal result in any heritage conservation benefits that might offset any adverse impacts?*[140]

When proposing major change, it will also be important to consider the proposed setting of the Goods Shed, potential archaeological impacts, and to determine if, and how, the proposal will adversely impact the historic cultural heritage significance of the Goods Shed as a whole, and / or the component to be changed.

The critical issue to be assessed is the impact on the heritage place (or component), rather than the scale of change that is proposed. Small changes may have high heritage impacts and conversely, large changes may have low impacts, depending on how and where the change occurs.

If heritage impacts are identified, return to 1.3.3 Develop Proposals for Change, and find ways to avoid, or decrease, the identified impacts. It may be necessary to generate multiple options to find one that best aligns the proposal's objectives with the least impact on the place's cultural significance, or to modify the proposal to provide a better overall heritage conservation outcome for the place.

When it is determined that any heritage impacts have been minimised as far as possible, or that sufficient justification exists for the proposed change, and mitigating measures are appropriate, then determine the approval requirements and submit your application to Heritage Tasmania, or the City of Hobart as appropriate.

It is to be noted that as part of the Stadium Development, further work, or reports (such as Heritage Impact Assessments), will be produced in response to design proposals, and consultation with Heritage Tasmania will occur as required as part of the process.

6.3.5 Determine Approval Requirements and Apply

Part 35 of the *Historic Cultural Heritage Act 1995* requires an owner to obtain a Minor Works Approval, or Permit, before undertaking any works to their registered place or object (see Section 7.2.1). Significant penalties may apply if works are undertaken without approval.

The Tasmanian Heritage Council and Heritage Tasmania consider a variety of principles, guidelines, and legislation when deciding whether to grant or refuse a permit application. Heritage Tasmania must consider how an application may affect the cultural heritage significance of the registered place as set out at section 16(2) of the *Historic Cultural Heritage Act 1995*.

Heritage Tasmania outlines approval requirements on their webpage 'Getting Approval'. Heritage Tasmania's heritage advisors can be contacted for free advice on any works you are considering. For more information on managing works to places on the Heritage Register, read the 'Works Guidelines' before you lodge a development application.

Advice from a suitably qualified and experienced Heritage Consultant may also be helpful to guide the development to ensure the proposal will minimise heritage impact and improve the proposal's chance of receiving Heritage Tasmania's approval.

6.3.6 Record components prior to works starting

It is important to record components using best practice methods before works commence and after they are completed. Recording can include photographic archival recording, documents (including plans and as-built drawings), and records of decisions made and the reasons they were made.

Records should be archived so that it is possible to understand all the changes that have occurred to the component in the future and why the changes were made. This assists when determining the history of the component, its cultural heritage significance, the capacity for change, and why that change was made in that way. This can save time later as the reason why the change was made may still be relevant to the current situation, and it will save time and money and prevent the need to reinvestigate the change if the information is readily accessible.

> *Existing fabric, use, associations, and meanings should be adequately recorded before and after any changes are made to the place.*[141]

Historical plans, drawings, and photographs are a valuable record of previous changes and can help identify what original components remain in situ, and where the most change has been made.

140 Heritage Tasmania, 'Practice Note 1B, Preparation ff Heritage Impact Statements', Version 1: April 2023 (approved by Tasmanian Heritage Council on 19 April 2023).

141 *Burra Charter*, Article 27.

"If a record is worth making, it is worth securing its long-term survival and accessibility".[142] An easily accessible, well catalogued, archive of records should be created to keep all information in one place (digitally and/or physically), with appropriate backups, to prevent loss of information.

Recording should be done as part of regular building maintenance and linked to any Asset Management System. A well organised working archive of all records stored in suitable archiving facilities, with a copy in digital format, is considered best practice and is an invaluable resource for the future management and care of the Goods Shed.

MA04 Follow best practice guidelines when recording change.

MA05 Prior to change of any type, the existing significant fabric should be recorded, and the record filed in the archive.

MA06 Digitise all archival material when practicable.

MA07 Refer to the following publications for guidance on recording and preserving the record:

- HT Practice Note 3, 'Procedure for Recording a Heritage Place', November 2014.
- HV, 'Documenting maintenance and repair works', October 2000.
- Historic England, 'Understanding Historic Buildings: A Guide to Good Recording Practice', 2016, p 52.
- Historic England, 'Developing a Historic Building Information Model', 20 July 2017.

142 Historic England, 'Understanding Historic Buildings: A Guide to Good Recording Practice', May 2016, p 30.

6.3.7 Carry out the Works

Following the determination of any proposal, works should be executed in accordance with any conditions of approval and in accordance with best practice (Section 6.4)

MA08 Comply with all the General, or Site-specific Exemption conditions.

MA09 If HT approve your Certificate of exemption, or Permit, application, you must comply with all conditions listed on the approval.

MA10 Follow the conservation best practice guidelines included in this CMP while undertaking works.

MA11 Keep records of the works completed, works not done, and the reasons why.

6.4 Best Practice (Change Management)

6.4.1 Skills and experience

Conservation should make use of all the knowledge, skills and disciplines which can contribute to the study and care of the place.[143]

Competent direction and supervision should be maintained at all stages, and any changes should be implemented by people with appropriate knowledge and skills.[144]

Those responsible for the care and management of the Goods Shed should have awareness of, and access to, the CMP and feel confident in how to follow and implement its recommendations. They should also use, where necessary, the expertise of consultants, including specialist engineers, architects, and building contractors.

There is potential to produce maintenance manuals for the Goods Shed, with practical, detailed advice on maintenance, conservation, and repair. These manuals could support both in-house maintenance staff and external consultants and contractors. As methodologies of repair, maintenance, and cleaning, develop, the guide could be updated to reflect the current best practice.

MA12 All those responsible for the care and management of the Goods Shed, including contractors, should have an awareness of and access to the CMP and be confident in its implementation.

MA13 Engage suitably qualified specialist consultants and contractors with relevant heritage experience for complex works beyond the skills and expertise of staff and maintenance contractors.

143 *Burra Charter*, Article 4.1.
144 *Burra Charter*, Article 30.

MA14 Develop a heritage induction program for maintenance, and other contractors, so they understand the significance of fabric and components, and the obligations under the Historic Cultural Heritage Act 1995 and the *Burra Charter*. This could be a brief statement associated with a wider site induction. Consider including this induction as a condition in any contracts for ongoing or extended services for contractors prior to works commencing.

MA15 Where applicable, implement or identify training programs which would enhance the skills of staff in the day-to-day management of the place

6.4.2 Materials and techniques

Traditional techniques and materials are preferred for the conservation of significant fabric. In some circumstances modern techniques and materials which offer substantial conservation benefits may be appropriate.[145]

Best practice approaches to repair and restoration include the use of high-quality materials and techniques, and the use of a like-for-like approach wherever possible. This applies whether the changes are small or large.

Research and investigate the appropriateness of materials and techniques. The detailing of repairs is also important, such as best practice techniques for the splicing and scarfing of timber repairs. Repairs may be detrimental to historic cultural heritage significance if they do not blend in suitably both initially, and in the long term.

145 *Burra Charter*, Article 4.2.

While traditional materials and techniques are preferred for traditionally constructed buildings, modern materials and techniques may be more appropriate for modern buildings. However, such repairs may have adverse impacts if the long-term effects of repair materials and methods are unknown.

MA16 Have a clear understanding of best practice when specifying materials and techniques for conservation works.

MA17 Have a clear understanding of the material(s) present where the works are proposed.

MA18 Ensure best use of materials, and techniques by preparing specific repair and maintenance policies. These can be for specific materials (for timber and corrugated iron), or for techniques (such as splice and scarf timber repairs).

MA19 Refer to published guidance for a more detailed understanding of best practice conservation for a variety of materials and repair methods such as:

- Historic England, 'Practical Building Conservation Series' [website], updated 25 March 2021.
- Historic England, 'Technical Guidance' [website], 2023.
- Heritage NSW, 'Heritage maintenance guides' [website], updated 3 August 2023

6.4.3 Hazardous or Unobtainable Materials

Best practice guides such as Heritage Victoria's publication 'Adaptative Reuse of Industrial Heritage' recognises the complexities of managing hazardous materials in a heritage context and suggest development of '...creative approaches to remediating and containing contamination to ensure that sites are made safe for use without compromising heritage qualities and significance'.[146]

Buildings of this period are likely to retain evidence of lead paint, and investigation of historic schemes and preparation for painting should be managed in a manner which does not impact this historic record or present risk to personnel.

MA20 Existing hazardous materials or substances and their locations should be recorded and labelled, and this record kept up to date (refer to Section 1.3.6).

MA21 Seek to remediate all hazardous materials in the event of the proposed dismantling, relocation and reconstruction of the Goods Shed.

MA22 Appropriate personal protective equipment should always be worn when working with hazardous materials.

MA23 Take immediate steps to protect employees and visitors if hazardous materials are discovered on site.

Where like-for-like work is not possible because the materials are no longer available or are hazardous (such as lead-based paint, or asbestos), or it is not the most sensitive, or sustainable material, choose an appropriate material which matches the colour, texture, shape, dimensions, and technical performance of the original.

MA24 Consult suitably qualified and experienced specialists to determine if the materials are to be removed, remediated, or encapsulated as required by Local, State, and/or Commonwealth legislation.

MA25 Choose appropriate replacement materials which match the colour, texture, shape, dimensions, and technical performance of the original.

6.4.4 General Principles for Building and Site Services

While many of the Goods Shed services have exposed reticulation routes and are surface mounted some services may be encapsulated, under floors, or underground. Replacement or removal of existing, or installation of new, services can damage historic, significant, built fabric, and any extant archaeological deposits.

New services for the Goods Shed should be consolidated with careful consideration as to cable try routes and reticulation. The design and fixing details for any services routes should, where possible avoid penetrative fixings to the timber structure and ideally be strapped in a reversible manner. In instances where services are intended for 'pod' type insertions 'pods' and partitions should be used to affix services in preference to fabric of cultural heritage significance.

Record the location and routes of new and existing services, especially if they are concealed and maintain the record so it is up to date. A comprehensive record of service routes, (particularly for concealed services) is invaluable for planning maintenance, repairs, or alterations to the services and to prevent accidental damage to services by other works occurring on the site.

MA26 Keep intervention to the absolute minimum, make fixing methods reversible, and provide protection to adjacent existing significant fabric to avoid damage.

MA27 Design new services to minimise their visual, physical, environmental, and heritage impact.

MA28 Protect and conserve surrounding significant fabric during installation of services.

MA29 Research the contribution of redundant services to the building's significance. If they are significant, record them in situ, and if of exceptional or high significance a retain a representative sample in situ.

MA30 Consolidate intrusive services and equipment to a single lower significance area as and where practicable to minimise visual and physical impact.

MA31 Develop a standard cable tray system and fixing detail for the reticulation of all services

MA32 Keep a comprehensive record of service routes (particularly for concealed services) by preparing as-built or other documentation. This will benefit future maintenance planning and ensure services are protected during any changes.

MA33 Refer to Heritage Tasmania's website 'Works and Development 11.0 New Services' for guidance on what works are eligible for a Permit Exemption or require a Permit.

146 Heritage Victoria, 'Adaptive Reuse of Industrial Heritage: Opportunities and Challenges' [links to a pdf], p 18.

6.4.5 General Principles for Infrastructure

Appropriate infrastructure is fundamental in the support of site operations and is directly related to the visitation numbers, known as carrying capacity, which can be sustainably supported within the limitations of the site. Careful design, specification, and siting of infrastructure is critical to not only to visitor amenity but to the retention of the historic cultural heritage significance of the Goods Shed.

These management actions should be read in conjunction with those regarding Building and Site Services (Section 5.4.4).

MA34 The location and siting of any infrastructure should be carefully planned to avoid impact to the context and setting of the Goods Shed.

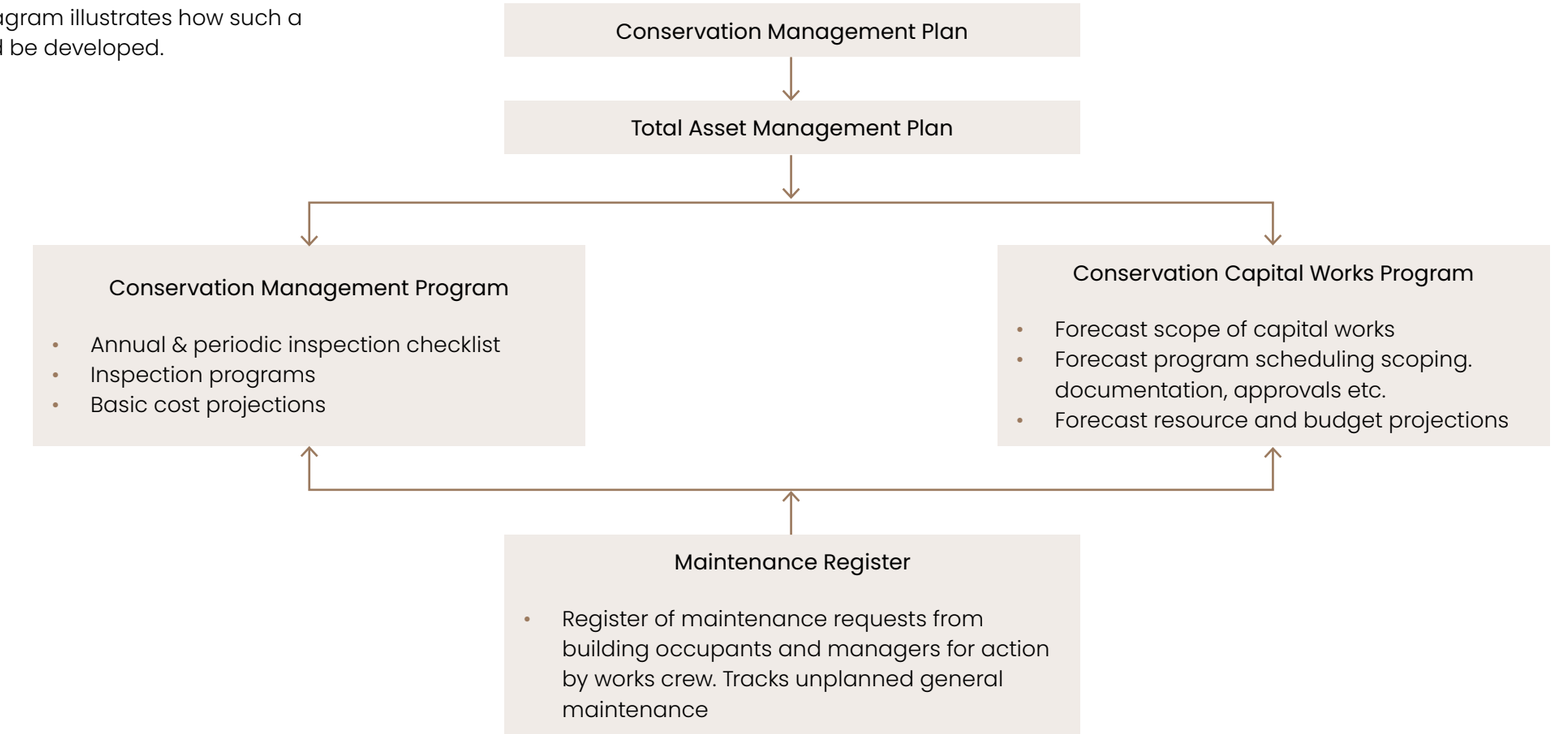
MA35 Consolidate service trenches and conduits wherever possible. Install new work underground where practicable, subject to archaeological assessment.

6.4.6 Total Asset Management

The purpose of integrating heritage within an asset management framework is to establish a general philosophical approach that, together with a clear understanding of significance, can guide decision making. It can also help identify the appropriate conservation and maintenance responses in the ongoing management of the place, whether for major change proposals or day-to-day maintenance.

The adjacent diagram illustrates how such a framework could be developed.

This CMP provides the backbone for a Heritage Asset Plan in that it sets out a conservation philosophy, a strategy to implement that philosophy; management actions and best practice guidelines to guide maintenance and care, and a guide to the implementation of the best practice guidelines.



7.1 Ownership and Management

The Crown in Right of Tasmania own the Goods Shed and wider Macquarie Point Site. The Macquarie Point Development Corporation was established by Parliament in 2013 and charged with the remediation and redevelopment of the old Hobart goodsyard, including the Goods Shed. They remain the responsible Agency for the strategic and operational management of the place.

7.1.1 Responsible Heritage Officer

A Responsible Heritage Officer would support the successful implementation of this CMP and the associated conservation and maintenance works. They would also guide heritage asset management to support the long-term conservation of the Goods Shed. Ideally this role would be within the Macquarie Point Development Corporation, or agency responsible for the long term management and administration of the future Macquarie Point Multipurpose Stadium, rather than being outsourced to a third (or external) party. This role need not be a full-time resource but may be within another compatible role.

The nominated Officer should have a detailed understanding of the significance of the place, the associated statutory framework, Conservation Policies, and Management Actions, of this CMP. They should provide guidance about the places management and supervise projects to ensure they are carried out in accordance with this CMP and the *Burra Charter*.

In conjunction with the owner, the Responsible Heritage Officer should ensure that appropriately qualified contractors with a demonstrated understanding and experience of heritage works are engaged for conservation and maintenance works to components of Exceptional and High historic cultural heritage significance.

7.2 Statutory Heritage Controls

7.2.1 Historic Cultural Heritage Act 1995

The Historic Cultural Heritage Act 1995 is the Tasmanian legislation for the protection and conservation for Tasmania's historic cultural heritage and for the identification, assessment and management of Tasmania's historic cultural heritage places. Under the Historic Cultural Heritage Act 1995 (s.3), a place is defined as including:

> *(a) a site, precinct, or parcel of land; and*
>
> *(b) any building or part of a building; and*
>
> *(c) any shipwreck; and*
>
> *(d) any item in or on, or historically or physically associated or connected with, a site, precinct or parcel of land where the primary importance of the item derives in part from its association with that site, precinct or parcel of land; and*
>
> *(e) any equipment, furniture, fittings, and articles in or on, or historically or physically associated or connected with, any building or item;* [147]

The Historic Cultural Heritage Act 1995 establishes the Tasmanian Heritage Register (THR) as an inventory of places of State-level historic cultural heritage significance. Inclusion of a place on the THR recognises the importance of the place to Tasmania and provides for the protection and conservation of Tasmania's historic cultural heritage. The term "historic cultural heritage significance" is defined in the Act as "significance in terms of the registration criteria". [148] The registration criteria are defined within s.16(2) as meeting one or more of the following:

> *(a) the place is important to the course or pattern of Tasmania's history;*
>
> *(b) the place possesses uncommon or rare aspects of Tasmania's history;*
>
> *(c) the place has the potential to yield information that will contribute to an understanding of Tasmania's history;*
>
> *(d) the place is important in demonstrating the principal characteristics of a class of place in Tasmania's history;*
>
> *(e) the place is important in demonstrating a high degree of creative or technical achievement;*
>
> *(f) the place has a strong or special association with a particular community or cultural group for social or spiritual reasons;*
>
> *(g) the place has a special association with the life or works of a person, or group of persons, of importance in Tasmania's history;*
>
> *(h) the place is important in exhibiting particular aesthetic characteristics.*

The *Historic Cultural Heritage Act 1995* provides the legal basis for protecting the historic cultural heritage significance of places included on the Tasmanian Heritage Register. [149]

Any works proposed to places included on the Tasmanian Heritage Register must be approved by the Heritage Council in the form of a Certificate of Exemption or a Permit (discretionary, major project, or combined) under section 35 of the *Historic Cultural Heritage Act 1995*.

7.2.1.1 Minor Works Approval

Under section 42(3) of the Historic Cultural Heritage Act 1995, the Heritage Council has the discretion to grant a Minor Works Approval. To be approved, a Minor Works Approval application must be consistent with the 'Works Guidelines for Historic Heritage Places'. To be eligible for approval ...

> *... works must have no impact or only negligible impact on the historic cultural heritage significance of the relevant registered place or heritage area and be capable of being carried out in accordance with the parameters for exemptions described in the Works Guidelines.* [150]

In all circumstances a Minor Works Approval application form can be lodged with Heritage Tasmania by email to enquiries@heritage.tas.gov.au, or online via Plan Build Tasmania. Note that you will still need to comply with any local planning scheme requirements and may need to lodge a development application with the local government authority.

MA36 Read the supporting guidance on Minor Works Approvals:

- Heritage Tasmania, 'Works Guidelines' [website], last published on: 17/01/2017 2:45 PM.
- Heritage Tasmania, 'Getting Approval' [website], last published on: 22/02/2019 1:51 PM.

MA37 Ask Heritage Tasmania for guidance if you cannot determine whether proposed works are eligible for a Minor Works Approval.

MA38 Get advice from a suitably qualified and experienced Heritage Consultant or Architect as required.

147 Historic Cultural Heritage Act 1995, pt 1 s3.
148 *Historic Cultural Heritage Act 1995*, 05/11/2021, part 1, section 3.
149 *Historic Cultural Heritage Act 1995*, 05/11/2021 to date, pt 4, sec 15((1A)(c)).
150 THC, 'Forms | Application for a Certificate of Exemption' [website], last updated: 13/12/2022 9:29 AM.

7.2.1.2 Permits

For all works that are not eligible for a Minor Works Approval, a development application (DA) must be lodged with the local government authority. The authority will forward the DA to Heritage Tasmania for assessment of any impacts on the Goods Shed's historic cultural heritage values.

Heritage Tasmania recommends you call one of their Heritage Advisors for advice on the proposal prior to lodging a DA. They provide a flowchart of the approval process on the 'Getting Approval' website. The 'Getting Approval' website also contains information on what to include with your DA. Ensuring that all information is provided and complete will help to reduce delays in approval. You may be required to submit a copy of this CMP with the DA, depending on what works are proposed.

It is recommended that the advice of a suitably qualified heritage consultant with relevant experience be sought in the early stages of planning change to provide input into the development of the proposal, and to review architectural drawings and documentation.

The local government authority will forward the application to Heritage Tasmania. If the Heritage Council does not require more information from you, they will advertise the application for community comment. Any comments received will be considered. The Heritage Council's decision will be forwarded within 35 days (or 49 days if extra time was requested) to the local government authority, who will incorporate the decision into your permit, which will be sent to you.

MA39 Read the supporting guidance on discretionary permits:

- Heritage Tasmania, 'Works Guidelines' [website], last published on: 17/01/2017 2:45 PM.
- Heritage Tasmania, 'Getting Approval' [website], last published on: 22/02/2019 1:51 PM.

MA40 Consult Heritage Tasmania for advice on the proposed works.

7.2.2 Aboriginal Heritage Act 1975

The Aboriginal Heritage Act 1975 (AHA) is the Tasmanian legislation for the protection of Aboriginal cultural heritage in Tasmania. Under the AHA it is an offense to destroy, damage, deface, conceal, or otherwise interfere with relics without a permit granted by the Minister. There is an obligation to report findings of relics as soon as practicable by advising Aboriginal Heritage Tasmania. [151]

The statutory Aboriginal Heritage Council was established under the Aboriginal Heritage Act 1975 (Tas) in August 2017. They advise the Tasmanian Government, land managers and owners on the protection and management of Aboriginal cultural heritage in Tasmania. [152]

The Aboriginal Heritage Register is a database of Aboriginal heritage places and objects which are of significance to the Aboriginal people of Tasmania.

MA41 Consult with relevant Aboriginal stakeholders, to develop an Aboriginal community consultation policy that:

- Identifies Aboriginal stakeholders who wish to be involved in consultation regarding Aboriginal heritage management at Macquarie Point.
- Outlines processes for Aboriginal community consultation, including the nature of projects that require consultation, methods and timeframes.

MA42 Undertake all Aboriginal heritage management measures in consultation with Aboriginal stakeholders.

MA43 When planning activities that involve ground disturbance consider the potential for Aboriginal archaeological impact. Reference should be made to the Draft Aboriginal Heritage Assessment Report (AHAR), Southern Archaeology, 30 January 2025, its findings and recommendations.

MA44 Contact Aboriginal Heritage Tasmania via an Aboriginal Heritage Desktop Review form for advice on Aboriginal heritage assessment requirements prior to any construction, or major soil disturbing works commencing.

MA45 Prior to undertaking any activities that may affect Aboriginal heritage, the current legislation, consent authority, policies, procedures and guidelines should be confirmed.

MA46 Download a copy of the Aboriginal Heritage Tasmania 'Unanticipated Discovery Plan' from the Aboriginal Heritage Tasmania's 'Assessment Process' website, before commencing any works and have it available during activities to ensure that the correct procedures are followed in case of an unanticipated discovery of Aboriginal heritage not covered by your permit terms.

MA47 Ensure all personnel are aware of the Unanticipated Finds Procedure and their obligations under the Aboriginal Heritage Act 1975.

MA48 Cease the activity immediately on finding previously undetected Aboriginal heritage sites, objects, or suspected features. Report them to the Aboriginal Heritage Tasmania as soon as possible and obtain their advice on how best to proceed.

MA49 An Aboriginal heritage induction should be provided to all staff and contractors undertaking any activities that may involve ground disturbance. This should be implemented even where a relevant Aboriginal heritage assessment has identified a no or low risk of harm.

151 Aboriginal Heritage Tasmania, 'Aboriginal Heritage Property Search' [website], last published on: 5/07/2023 3:12 PM.
152 Tasmanian Aboriginal Heritage Council, 'About the Council' [website], accessed 15/04/2024

7.2.3 Historical Archaeology

Historical archaeological heritage is most often found below ground ('subsurface') as artefacts, the remains of structures or features, environmental evidence, and associated soil deposits. It can also be found above ground within standing structures (within cavities and encapsulated spaces) or as ruins of historical structures or features. There is no defined end date for when objects or features are no longer defined as 'historical'. Being defined as 'historical' generally reflects activities or ways of doing things that occurred beyond living memory or are no longer practised.[153]

Management of historical archaeological heritage in Tasmania is guided by the Tasmanian Heritage Council's 'Practice Note 2: Managing Historical Archaeological Significance in the Works Application Process'. [154] All proposals that include any suggested archaeological work with a registered place require the approval of the Heritage Council.

MA50 Consider the potential for historical archaeological impact prior to planning any works that involve ground disturbance, underfloor works or works within cavities.

MA51 If possible, avoid works listed above.

MA52 Prior to planning or commencing works that might disturb historical archaeology, refer to the Historical Archaeological Assessment, Archaeological Sensitivity Report and Archaeological Method Statement, prepare by Aboriginal Heritage Investigations, 20 August 2024 to determine the archaeological potential for the site where the words are proposed.

153 GHD, 'Archaeological Desktop Study for Hobart Waterfront Campus – Historical Archaeology', unpublished report prepared for TMAG in February 2008, p 5.

154 Heritage Tasmania, 'Practice Note 2 – Managing Historical Archaeological Significance in the Works Application Process', Version 4, 19 November 2014.

MA53 If required, further clarify the archaeological potential as directed by the Heritage Council.

MA54 Create an Unanticipated Finds Procedure before commencing any works and have it available during works to ensure that the correct procedures are followed in case of disturbing unexpected discoveries.

MA55 Cease works immediately on finding unexpected non-Aboriginal archaeological features and/or deposits during works. Report them to the Tasmanian Heritage Council as soon as possible and obtain their advice on how best to proceed.

7.3 NCC Compliance

The National Construction Code (incorporating the Building Construction Code of Australia) is the technical code providing design and construction technical standards for safety, structural, fire, health, amenity, sustainability, and plumbing works. It is a performance-based code that sets minimum required levels ("Performance Requirements") for the "safety, health, amenity, accessibility and sustainability of certain buildings". [155]

Performance Requirements can be satisfied by a Deemed-to-Satisfy Solution, a Performance Solution, or a combination of both. [156] Performance Solutions provide an opportunity to meet the Performance Requirements in a non-standard way that may be better suited to a heritage place than a Deemed-to-Satisfy Solution.

155 Australian Building Codes Board, 'Understanding the NCC' [website], accessed 23/02/2025, © Commonwealth of Australia and the States and Territories 2022, published by the Australian Building Codes Board.

156 National Construction Code 2022, 'Part A2 Compliance with the NCC' [website], accessed 23/02/2025, © Commonwealth of Australia and the States and Territories 2022, published by the Australian Building Codes Board.

Given the proposal to relocate the Goods Shed, and its proposed proximity and integration within the wider Stadium envelope there will be a greater pressure for Code Compliance than may typically apply to a heritage listed place, for which retrospective compliance is not required. Full compliance is likely to be unachievable without detrimental impact to the place's significant fabric and spaces.

Under the Building Act 2016, sections 53-55, building surveyors can *"consent to partial compliance with the applicable provisions of the National Construction Code"*. However, the building surveyor must consider all the criteria in sections 53-55 and determine whether partial consent is appropriate. If partial consent is given, it does not apply to the proposed works which must still comply. As the Goods Shed is listed on the THR proposed works may be eligible for partial, rather than full, compliance.

MA56 Encourage Consultants to develop Performance Solutions which satisfy the Performance Requirements where compliance with the NCC Deemed-to-Satisfy solutions would result in adverse impact to historic cultural heritage significance.

MA57 Engage a building surveyor to advise if partial compliance with building regulations for any proposed works is appropriate.

7.4 DDA Compliance / Equitable Access

The original functional design and construction of the Goods Shed sees an internal floor finish for the majority of the interior, being much greater than the external ground level. The exception here being the presently infilled rail tracks. The building is currently accessed by a series of ramps and stairs which support more equitable access.

The *Disability (Access to Premises - Buildings) Standards 2010* (Cth), made under subsection 31(1) of the *Disability Discrimination Act 1992* (Cth), sets out performance requirements to ensure dignified and equitable access is achieved. Performance requirements are "the level of performance which a Performance Solution or Deemed-to-Satisfy Solution must meet".[157]

Any proposals for provision of equitable access at the Goods Shed must satisfy either a Performance Solution or a Deemed-to-Satisfy Provision of the Access Code for Buildings (Access Code), prepared by the Office of the Australian Building Codes Board. The Access Code is based on provisions of the National Construction Code (formerly the Building Code) of Australia. A copy of the Access Code for Buildings is included in the *Disability (Access to Premises - Buildings) Standards 2010* (Cth) at Schedule 1.

State based legislation such as the *Anti-Discrimination Act 1998* (Tas) also applies to provision of equitable access.

The listing of a place as a heritage site does not exempt it from compliance with the *Disability Discrimination Act 1992* (Cth). The proposed relocation of the Goods Shed should provide equal access, with advice taken from experts or organisations with relevant expertise on sympathetic means of altering heritage premises.[158]

157 *Disability (Access to Premises - Buildings) Standards 2010 (Cth)*, sch 1 pt A1.1.

158 Australian Human Rights Commission, 'Frequently asked questions: Access to premises' [website], last updated 2014.

In providing disabled access to heritage places, the aim is to meet the obligations of the various acts and regulations while providing the same opportunities for all, including people with disabilities to use, appreciate and enjoy heritage places.[159] The NCC Vol 1, Schedule 9 includes Tasmanian specific clauses, the Tas D4D5 clause includes relevant exemptions however these are unlikely to apply given the proposal for relocation.

MA58 Ensure that access solutions apply to the whole building and site and account for any considerations arising from compliance with relevant legislation.

MA59 Provide equitable access and facilities in a manner that minimises potential heritage impacts to fabric and spaces of Exceptional and High significance. Consider alternative solutions where adaptation or alteration will adversely impact on, and threaten, the heritage significance of the Goods Shed.

MA60 Explore Performance Solutions to equitable access where impacts are likely to arise.

MA61 Use inclusive design, universal design, or access for all, when upgrading a heritage place.

MA62 The following industry resources provide valuable information for the enhancement of access within a heritage context.

- Heritage Tasmania, 'Works and Development 10.0 Access to heritage places' [website], last published on: 21/02/2017 11:06 AM.
- Historic England, 'Easy Access to Historic Buildings', London, 2004.
- Eric Martin & Associates' website, 'Publications' has a range of publications on access for heritage places.

7.5 Maintaining Condition

It is important that the Goods Shed is maintained to best practice methodologies, practices, systems and philosophies to ensure its conservations and to present the place in its best possible condition, in its current and future form.

Regular condition surveys will ensure that the latest information about the buildings fabric is available, enabling any issues to be recognised early, monitored, and acted upon as soon as is necessary.

A full understanding of the condition of the building is important to understanding the long-term conservation works required on a cyclic and periodic basis. While the historic fabric of the place generally presents in sound condition, a comprehensive condition report has been undertaken. See AECOM's 2025 Reports: 'Condition and Remaining Life Assessment Report', and 'Structural Compliance Assessment Report', included at Appendix A and Appendix B respectively.

7.5.1 Preventative maintenance

The *Burra Charter* defines Maintenance as:

> *Maintenance means the continuous protective care of a place, and its setting.*
>
> *Maintenance is fundamental to conservation. Maintenance should be undertaken where fabric is of cultural significance, and its maintenance is necessary to retain that cultural significance*[160]

Heritage Tasmania derives its definition of Maintenance from the above statement as:

> *Maintenance means the continuous protective care of a place, and its setting. It is not the same as repair which involves restoration or reconstruction.*[161]

Planned, preventative maintenance will provide the care and upkeep necessary to ensure a long-term, viable and sustainable future for the Goods Shed as well as maintaining the significance of the built fabric and the principal characteristics. Furthermore, regular, high-quality maintenance will reduce the frequency of reactive repair that results from neglect, particularly in unused, underused, unseen, or difficult to access areas. Maintenance is best carried out as a series of planned operations on a cyclical programme.

A program of regular monitoring and cyclical maintenance is essential to sustainable conservation and economic outcomes. Regular monitoring can identify potential problems early so they can be addressed before they become a much larger problem. Likewise regular maintenance can prevent or minimise the risks, cost, and heritage impacts, which can occur if a small problem is not fixed and becomes a much larger problem. For example, a small amount of damage from a leak to the valley gutter left unrepaired can lead to much greater water damage to the structure, and interiors, over time.

> *There is a range of maintenance and repair which will be eligible for a minor works approval from the Tasmanian Heritage Council if the following general rules are followed:*
>
> *1. do 'as much as necessary but as little as possible';*
>
> *2. take care to retain as much original fabric as possible and to protect and conserve original and/or significant fabric and particularly details, such as vents, cappings, chimneys, mouldings, carving and glazing that give a place its character;*
>
> *3. repairs should match or be compatible with the existing fabric in type of material used, appearance and method of fixing.*[162]

Planning for regular inspections and maintenance allows them to be scheduled at convenient times when they will cause the least impact to daily operations. It also allows for resources, such as funding, materials, and people, to be organised in advance.

Adequate time, resources, and suitable people must be allocated for this to happen. Some tasks do not require special skills, and should be done weekly, such as checking for dead light bulbs or broken windows. Other tasks may require specialist skills and be done once or twice a year, for example periodic safety checks of electrical appliances and the electrical system by a licenced electrician.

Replacement of significant fabric must be a last resort only where most of an element/fabric has decayed beyond further maintenance.

MA63 Prepare, cost, and implement, a program for catch up and cyclic maintenance as part of an Asset Management approach. Ideally this program should be supported through an established Asset Maintenance System.

159 EJ Martin & Associates Architects, 'Access to Heritage Places Guidelines VIC', 2018, p 6.

160 *Burra Charter*, Article 16.

161 Heritage Tasmania, 'Definitions' [website], last published on: 14/05/2018 10:20 AM.

162 HT, 'Works and Development 1.0 Maintenance and repair of built elements' [website], last published on: 21/02/2017 11:05 AM.

MA64 Refer to the Heritage Tasmania's website 'Works Guidelines 1.0 Maintenance and repair of built elements' for guidance on what is eligible for a Minor Works Approval, or when a permit application is required.

7.5.2 Approaches to Repair

Repair is the work involved in returning damaged fabric or building elements to a serviceable condition, which may be the original condition or a condition that matches the surrounding viable fabric. Repair mostly involves the introduction of new, replacement or supplementary material and may in some cases involve a change in the nature or appearance of an element.[163]

Repair should be minimised by implementing a good preventative maintenance programme. However, there will be occasions, through accident, weather, or continual unpreventable deterioration, where repairs will be needed.

The purpose of repair is to remedy defects caused by decay or damage while maintaining the overall historic cultural heritage significance of a place. This is particularly relevant to places of historic cultural significance such as the Goods Shed.

The *Burra Charter* recognises two types of repairs: restoration and reconstruction.

Restoration means returning a place to a known earlier state by removing accretions or by reassembling existing elements without the introduction of new material.[164]

Reconstruction means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material.[165]

Examples of restoration include refixing loose gutters or returning a dislodged roof tile to its original location. Reconstruction differs from restoration as it may involve replacing decayed material that is beyond its usable life with new or recycled material.

Restoration is preferred as it has the least heritage impact, especially for components of Exceptional or High cultural heritage significance. Reconstruction is more complex, particularly where it involves large scale replacement of fabric. Both actions should only be undertaken where there is sufficient evidence, either documentary or physical, to ensure accuracy of the restored or reconstructed work.[166]

In all cases, repair should be undertaken with conservation as an objective, to ensure significance is maintained. This requires a sound understanding of the values of the place, the significance of the individual features of the place and how they will be impacted by repair works.

MA65 Do not repair a component unless the nature, and the cause of the defect, is understood and it is known that the technique and material will rectify the issue.

MA66 Use proven techniques that will minimise changes to aesthetics or the condition of fabric. Be precise to avoid damage. The area around the repair should be protected to prevent accidental damage during execution.

MA67 Restoration is the preferred method of repair for elements of Exceptional or High significance.

MA68 Reconstruction or replacement of fabric of Exceptional or High significance may be appropriate where it is beyond further repair, at the end of its serviceable life, or is a hazardous material or substance.

MA69 Use a like-for-like approach to repairs of Exceptional and High cultural heritage significance. A like for like approach is not needed for repairs to fabric of Little or No cultural heritage significance, but the repair should not have a heritage impact on any adjacent, more significant, fabric.

MA70 Carefully reverse previous inappropriate repairs (not like for like, or detrimental to cultural heritage significance) and use more appropriate repair methods and materials.

MA71 Engage conservation professionals to specify, inspect, and endorse, repair works to historic fabric. Where necessary, obtain advice from a suitably qualified specialist with relevant, proven, heritage experience of the material or techniques, especially for complex repairs.

MA72 Repairs should be as minimal, and invisible, as possible. They should also be reversable, meaning that they can be removed without causing further damage to the historic fabric.

MA73 Monitor repairs to endure they are effective and compatible. If needed, obtain advice from a suitably qualified specialist with relevant, proven heritage experience, especially for complex repairs.

MA74 Refer to the following Heritage Tasmania websites for guidance:

- 'Works and Development 1.0 Maintenance and repair of built elements'.
- '3.0 Works and Development Restoration and reconstruction'.

7.5.3 Periodic Renewal

[Periodic renewal] may involve the temporary loss of certain heritage values, such as the aesthetic value of the patina of age on an old roof covering, or the value of a dying tree as a habitat for invertebrates; but these values are likely to return within the next cycle, provided the replacement is physically and visually compatible (normally 'like for like', to the extent that this is sustainable). By contrast, the consequence of not undertaking periodic renewal is normally more extensive loss of both fabric and heritage values.

The justification for periodic renewal will normally be that the fabric concerned is becoming incapable of fulfilling its intended functions through more limited intervention; and additionally, in the case of landscapes, that succession planting cannot achieve the objective in a less drastic way. Harm to values that will normally be recovered during the next cycle can, in most cases, be discounted, but potential permanent harm cannot be ignored in making the decision.[167]

Periodic renewal is more complex than either maintenance or repair. It involves a larger scale replacement of components. For example, the replacement of the whole, or a large section of, roof sheeting or wall cladding. Periodic renewal often has a greater visual, and heritage, impact than repair. Ideally the replacement material is one that is physically, technically, and visually compatible.[168]

163 THC, 'Works Guidelines for Historic Heritage Places', November 2015, p 3.
164 *Burra Charter,* Article 1.7.
165 Note: New material may include recycled material salvaged from other places. This should not be to the detriment of any place of cultural significance. *Burra Charter,* Article 1.8.

166 *Burra Charter,* Articles 19 and 20.

167 Historic England, 'Conservation Principles, Policies and Guidance for the sustainable management of the historic environment', 2008, p 52.
168 Historic England, 'Conservation and Maintenance Work for Listed Buildings and Other Heritage Assets' [website], accessed 6/11/2023.

MA75 Periodic renewal should only be undertaken where fabric is beyond further repair and maintenance.

MA76 Replacement materials used for periodic renewal should be selected on a like-for-like basis. This extends to the timber species and overall member dimensions for any isolated repair, splicing, scarfing or replacement of structural timbers.

MA77 Significant fabric and components should remain in situ, where any significant fabric is removed it should be retained on site for future reinstatement.

MA78 Periodic renewal of roof sheeting and wall cladding should balance the selection of readily available and cost-effective materials with consideration of traditional materials. While historically the cladding would have been corrugated galvanised iron the roof sheeting is thought to have been replaced in 1949, c.1984 and 2019 and again modified in 2023. Wall cladding has also been subject to large scale replacement. Future replacement works should seek to maintain a corrugated appearance, with avoidance of intrusive modern elements such as hex head screws.

7.6 Dismantling, Storage and Relocation

Given the proposal to dismantle, relocate and reconstruct the Goods Shed project planning will need to be carefully developed to ensure that the integrity of the elements nominated for relocation is retained to the greatest extent possible. This should be done through faithful reconstruction, conservation and maintenance.

MA79 The dismantling of the Goods Shed should be proceeded by the preparation of an archival record, including but not limited to:

- Measured plans, sections and typical details taken from a 3D scan or other means
- Photographs sufficient to record the existing context and setting, typical details and general condition
- An inventory of features and fabric

MA80 The dismantling of the Goods Shed should be informed by a tested methodology and inventory procedure. This should seek to identify, label and record all significant items nominated for retention and reuse in a manner which ensures their tracking and accurate reconstruction. Temporary propping, support and protections measures should also be defined.

MA81 A disposal strategy should define the principles for the identification, removal and disposal of non-significant elements, and those of a condition beyond repair and conservation. Those elements of significance which are not proposed for relocation and reconstruction should be retained as a resource for future conservation and repair works.

MA82 The condition of the structure should be clearly understood prior to dismantling, as set out in AECOM's 2025 'Condition and Remaining Life Assessment Report' included in Appendix A and 'Structural Compliance Assessment Report', included at Appendix B.

MA83 Develop with a suite of best practice details and specifications developed for the repair and conservation of those elements of poor condition nominated for retention and reuse. This should include, but not be limited to, splicing and scarfing of timbers, corrosion treatment of all exposed and embedded metals, conservation to significant signage and markings.

MA84 Where possible the long-term storage of building fabric should be avoided so as to mitigate deterioration of fabric condition.

7.7 Compatible Use and Development

7.7.1 Compatible Use

The *Burra Charter* identifies retaining or reintroducing a significant use as an appropriate and preferred form of conservation.[169] The Stadium proposal presents considerable impact to the Goods Shed, and the proposal to relocate and reconstruct the structure comes with the need to establish a compatible and viable future use for the avoidance of total loss.

The Goods Shed is a large and robust structure with a flexible open plan configuration. It could support a wide range of future uses. Compatible use is defined by the *Burra Charter* as

> *...a use which respects the cultural significance of a place. Such a use involves no, or minimal, impact on cultural significance.*[170]

MA85 Establish a viable future for the Goods Shed to ensure the continuity of uses compatible with its historic cultural heritage significance.

169 *Burra Charter* (2013). Article 23, p.7
170 *Burra Charter* (2013). Article 1.11

MA86 Priority is to be given to uses which afford extensive public access. A single use and/or occupancy will likely support the greatest possible extent of open plan and volume consistent with the original presentation and form.

MA87 Uses which require an intensification of infrastructure, partitioning or other works which would detract from the appreciation of the form, open plan arrangement and expressed structure should be avoided.

7.7.2 Adaptive Re-Use

The establishment of compatible uses for the Goods Shed will require the implementation of a program of adaptive re-use. Any redevelopment of a heritage place needs to demonstrate that the change of use, and associated work, provides long-term sustainability for the heritage place. It should not be a one-off project that makes the place vulnerable to uncertainty and ongoing change.[171]

Proposals for the reuse of the Goods Shed should be informed by the Capacity for Change (Section 6.3.2) of individual features and follow the Change Management Process. Closely aligning proposed new uses with within this guidance will minimise the amount of change required (for example a use which enables the continued expression of the timber structure).

MA88 Develop proposal for change with reference to the Capacity for Change (Section 6.3.2), together with the policies and management actions of this CMP.

MA89 The partitioning, division and fit out of the space is to retain the open expression of the structure its pattern of fenestration, and its open plan nature.

171 NSW Heritage Office and RAIA, 'New Uses for Heritage Places', 2008, p 11.

7.8 Sustainability and Climate Change

The roots of heritage conservation - the responsible stewardship of our inherited world - are inextricably linked with sustainability and climate adaptation. The continued use of existing buildings, coupled with measures to improve energy efficiency, is a global priority. Replacing an existing building with a new one requires a considerable investment of 'embodied' carbon in materials, transport, and construction. Therefore, prolonging the life of our existing buildings and safeguarding their future, is an inherently sustainable approach.

The relocation and reconstruction of the Goods Shed, together with the extent of replaced roof and wall cladding affords opportunities to improve the performance and climate resilience of the building. It is none the less important to assess the performance of the Goods Shed with a degree of flexibility to account for its significance. Any assessment of environmental impact and embodied energy should be secondary to the historical and cultural significance.

7.8.1 Whole of building approach

"A whole of building approach uses an understanding of a building in its context, to find balanced solutions that save energy, sustain heritage significance, and maintain a comfortable and healthy indoor environment."[172] It considers the building as a system of interconnected materials, functions, users, and services, with interventions designed to work together to deliver the maximum benefits, as effectively as possible.

The relocation and reconstruction of the Goods Shed presents a unique opportunity to implement a whole of building approach. This will enable consideration of a full suite of strategies the building while considering potential risks, and ensuring one measure doesn't adversely affect the outcomes and performance of another measure.

A whole of building approach follows a responsible retrofit hierarchy. This is a process that begins by eliminating energy wastage and reducing energy usage. These measures are often low cost, easy to install, and have limited heritage impact. Some examples include installing energy efficient lighting; optimising the building management settings for lights, heating and cooling; education of occupants about behavioural changes to reduce energy demand, such as switching off equipment, or wearing layers to cope with temperature fluctuations.

Improving the building fabric by means of insulation, airtightness measures, and minimising thermal bridging is likely to reduce heat gain / loss, heating / cooling demand, and reduce the required capacity of the heating system. These measures need to consider the movement of moisture and air, the permeability of the existing and proposed materials, and their impact on heritage significance.

Active systems (mechanical and electrical solutions that are zero carbon and renewable) are a vital part of achieving net zero carbon emissions. However, jumping to these measures without first reducing energy demand as much as possible, could mean the new energy source will need to be larger and work harder, ultimately costing more to install and run.

The adjacent diagram shows the hierarchy of a responsible retrofit. It is a planning tool to use in the early stages of a project to guide a whole building approach.

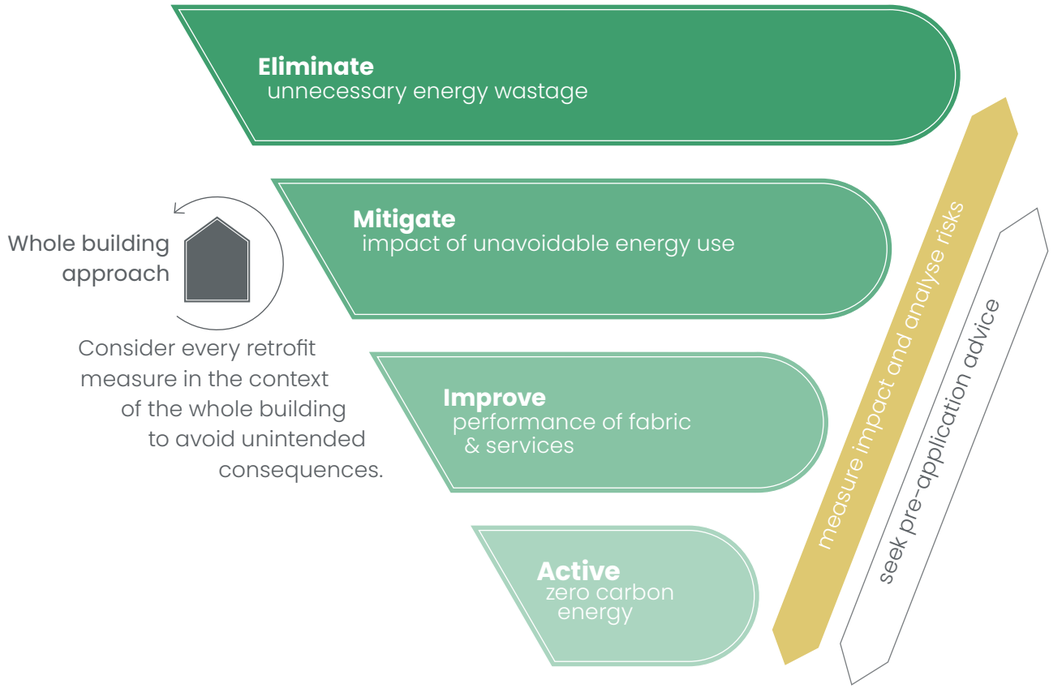


Figure 64: Purcell whole building approach (Source: Purcell, 'Heritage Building Retrofit Toolkit', 2023, p 15).

172 Historic England, 'Energy Efficiency and Historic Buildings How to Improve Energy Efficiency', June 2018, p 9

Heritage buildings require a different approach to retrofit than non-heritage buildings. While carbon reduction and climate resilience measures present significant opportunities to ensure the continued enjoyment and relevance of these buildings, it is important to ensure these values are sustained for future generations.

Historical and traditionally constructed buildings behave in a very different way to most modern buildings. The interrelationship between heat and moisture in traditional buildings is complex. In a well-maintained, adequately heated, and ventilated, building, the daily, and seasonal, cycles of wet, dry, hot, and cold, balance out naturally. However, alterations to the building fabric that prevent movement of air and moisture (for example the use of impermeable materials, and excessively sealing of the building) can lead to problems of moisture accumulation, overheating, fabric damage, and poor indoor environmental conditions.

Thermal comfort is influenced by temperature, humidity, airflow, clothing, gender, and activity level, and can vary widely between individuals. Airconditioning can form up to 50% of the energy usage in many buildings. Inappropriate air conditioning temperatures and humidity can cause condensation on interior surfaces, resulting in growth of mould or other disease-causing organisms, failure of paintwork, timber rot, and structural issues.

MA90 During design development understand the consequence of every retrofit measure.

MA91 Explore options to reduce energy and water consumption when upgrading existing infrastructure.

MA92 Understand the building's existing performance as an integrated environmental system before proposing new efficiency measures to avoid unintended consequences, including but not limited to a stable environment for structural timbers.

MA93 Embodied carbon emissions can be minimised through reusing existing materials as much as possible, specifying durable, long lasting, low embodied carbon materials, and avoiding over specification of services.

MA94 All new work should achieve high environmental sustainability standards.

MA95 Control the temperature and humidity of air conditioning to provide user comfort and avoid undue energy consumption and condensation.

MA96 Incorporate intelligent controls and sensors to help reduce energy use. Incorporate or upgrade Building Management Systems to efficiently manage the different patterns of occupation.

MA97 Consider the use of each space and how the heating / cooling and energy system operates. Isolate unused spaces and avoid heating or cooling unused areas.

MA98 Refer to the following websites:

- 'Renewables, Climate and Future Industries Tasmania' website for fact sheets and information on reducing carbon footprint and preparing for climate change.
- Historic England series 'Energy Efficiency and Historic Buildings', which covers topics such as insulation, solar electric (photovoltaics) and secondary glazing.

7.8.2 Renewable Energy

Solar panels are a well-known and common way of producing renewable energy. It is understood that consideration is being given to their installation on the roof of the relocated Goods Shed. While this is supported, in principle, the final design, placement and detailing should not detract from the historic cultural heritage values of the Goods Shed.

MA99 Locate solar devices to avoid visual impacts resulting from their location, scale, form, colour and reflectivity. Ideally they should be maintained within the valley of the roof so as not to intrude on the principle views of the place or key public views.

MA100 Avoid systems of support and installation which are affixed to the structural timbers of the Goods Shed. While the timber structure is likely to accommodate considerable loads, ensure that the weight of the total system can be supported by the structure.

MA101 Refer to the following best practice guidance:

- 'Solar Panel Guidelines' Heritage Victoria, 10 October 2022

7.9 Signage and Wayfinding

The effective control of commercial and wayfinding signage is essential to ensure that operational need and impact to the heritage values of the site are balanced, and to avoid irreversible damage to buildings from signage installation.

A signage style guide will support consistency in the location, style, and number, of signs and assist in managing potential for visual clutter and inadvertent impacts to significant fabric.

Way finding is a key consideration for signage needs at the Goods Shed. Way finding signage is important to enhance the usability and navigation of the building.

MA102 Ensure signage has no adverse impact on significant heritage fabric and the overall character of the place.

MA103 Commission and implement a new a signage policy and technical guide that includes all aspects of signage, including location, positioning, fixing, design guidelines, accessibility, and illumination. The objective is to ensure consistency of signage through the Goods Shed, to reduce visual clutter and provide wayfinding. Guidance and controls should extend to both permanent signage (commercial, wayfinding and compliance) and temporary signage in support of events (banners, A-frames etc).

MA104 Detail fixings for signage in a way which does not impact fabric of Exceptional or High significance. Seek opportunities to clamp fixings and avoid penetrations to the timber structure.

MA105 Avoid the incremental visual and physical impact of ad-hoc signage by ensuring that tenancy agreements enforce compliance with the signage policy and technical guide.

MA106 Avoid dominant corporate signage and branding which would overwhelm the interpretation and appreciation of the Goods Shed and be unsympathetic to the place.

MA107 Refer to Heritage Tasmania's website 'Works and Development 14.0 Guideline for Signage' for guidance on what works are eligible for a Permit Exemption or require a Permit.

7.10 Outdoor Dining, Lighting and Furniture

As with signage the control of outdoor seating and furniture is essential to balance visitor amenity with the heritage values of the site, to avoid visual clutter and retain the predominance and views to the buildings elevations.

An outdoor dining and furniture policy will support the management and operations of designated seating areas, and furniture style, and types.

MA108 Nominated designated seating areas for lease and license operations that retain view and prominence of the significant facades. Include these designated areas and operational controls within lease agreements.

MA109 Develop policy which prevents marquees, all weather enclosures and excessive planters or permanent structures beyond whole of building design solutions.

MA110 Develop policy which prohibits corporate signage and branding for hospitality and product suppliers on umbrellas, seating, partitions and the like.

MA111 Preference should be given to a single, or select few styles of outdoor furniture to ensure a cohesive visual presentation.

7.11 Interpretation

Heritage interpretation means all the ways of communicating the significance of a place and is an essential part of the conservation process. Heritage interpretation by culturally appropriate means can enhance the understanding and enjoyment of the place for present and future generations. While buildings and their settings convey a certain amount of information in their fabric and spatial relationships, other information, particularly relating to their history and associations, may require communication through a variety of culturally appropriate means that would enhance visitor understanding and enjoyment.

Well-planned and executed interpretation adds significantly to the community's understanding and appreciation of heritage places and is an important part of the conservation process. Interpretation also offers opportunities for the re-imaging of the place. The process for identifying and designing culturally appropriate heritage interpretation is two-fold:

- A Heritage Interpretation Strategy identifies the significance of the place, establishes relevant themes and stories, identifies existing and potential audiences, and recommends suitable interpretive media, devices, and locations.
- A Heritage Interpretation Plan provides for the implementation of the Strategy through detailed design and construction of recommended media and devices in the locations recommended in the Strategy.

The interpretation of historic properties should use the wider context and setting of the place to provide insights into the lives of the people associated with the place and as the springboard to explore ideas relating to their time and place. There is the potential to enhance appreciation of lesser-known aspects of the site's significance through carefully planned and well-designed interpretation.

Interpretation can include conservation works, guided tours and lectures, printed materials, digital access (e. g. downloadable apps, brochures, book, virtual tours), other media, and public programs and special events. Any interpretation should form a backdrop to, and not hinder the operation of the place, or the occupant, user, and visitor experience.

MA112 Commission and implement a Heritage Interpretation Strategy and Heritage Interpretation Plan. These should ensure the interpretation of the heritage significance of the Goods Shed in culturally appropriate ways.

MA113 Ensure engagement with the Aboriginal community, designers and advisors to include acknowledgement of the Aboriginal people's connection to Country in any Heritage Interpretation Strategy or Plan.

MA114 Design interpretation so that it enhances the understanding of the Goods Shed's significance and make this understanding accessible to the widest possible audience.

MA115 Ensure techniques to deliver interpretation are appropriate to the wider setting of Macquarie Point and do not intrude on, or detract from, the significance of adjacent places.

MA116 Detail fixings for any interpretative display so they do not impact fabric of Exceptional or High significance.

MA117 Review and regularly update interpretation material, and the methods of delivery, as new research becomes available, and to meet audience expectations.

MA118 Refer to Heritage Tasmania's website 'Works and Development 4.0 Interpretation' for guidance on what works are eligible for a Permit Exemption or require a Permit.

8.0 SOURCES

Aboriginal Heritage Tasmania, 'Aboriginal Heritage Property Search' [website], last published on: 5/07/2023 3:12 PM.

Aboriginal Heritage Tasmania, 'Assessment Process' [website], Last published on: 20/11/2024 12:28 PM.

Austral Tasmania, 'Macquarie Point Development Project Historical Summary', for the Department of Economic Development, Tourism and the Arts, 15 January 2013, pp 4-5.

Australian Building Codes Board, 'Understanding the NCC' [website], accessed 23/02/2025, ©Commonwealth of Australia and the States and Territories 2022, published by the Australian Building Codes Board.

Australian Human Rights Commission, 'Frequently asked questions: Access to premises' [website], last updated 2014.

Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW), 'Register of the National Estate – archive' [website], last updated: 03 October 2021.

Austral Tasmania Pty Ltd, 'Macquarie Point Roundhouse Area Remediation Works: Archaeological Sensitivity Report', AT0290, for Macquarie Point Development Corporation, 13 May 2020.

Bolt, F., 'James Meehan's survey of Hobart Town in 1811', Papers and Proceedings of the Royal Society of Tasmania, 1981, Vol 115, doi: https://doi.org/10.26749/rstpp.115.5.

Cultural Heritage Management Australia, 'Desktop Aboriginal Heritage Assessment Report', for Purcell, 18 May 2024.

Department of Natural Resources and Environment Tasmania, 'Assessing Historic Heritage Significance for application with the Historic Cultural Heritage Act 1995', Version 6, October 2021.

EJ Martin & Associates Architects, 'Access to Heritage Places Guidelines VIC', 2018, p 6.

Eric Martin & Associates' website, 'Publications' has a range of publications on access for heritage places.

GHD, 'Archaeological Desktop Study for Hobart Waterfront Campus – Historical Archaeology', unpublished report prepared for TMAG in February 2008.

Heritage Tasmania, 'Definitions' [website], last published on: 14/05/2018 10:20 AM.

Heritage Tasmania, 'Guiding Principles' [website], last updated: 6/03/2017 10:16 AM.

Heritage Tasmania, 'Practice Note 1B, Preparation of Heritage Impact Statements', Version 1: April 2023 (approved by Tasmanian Heritage Council on 19 April 2023).

Heritage Tasmania, 'Practice Note 2 – Managing Historical Archaeological Significance in the Works Application Process', Version 4, 19 November 2014.

Heritage Tasmania, 'Practice Note 3, Procedure for Recording a Heritage Place', November 2014.

Heritage Tasmania, 'Works and Development 1.0 Maintenance and repair of built elements' [website], last published on: 21/02/2017 11:05 AM.

Heritage Tasmania, 'Works Guidelines for Historic Heritage Places', November 2015.

Heritage NSW, 'Heritage maintenance guides' [website], updated 3 August 2023.

Heritage Victoria, 'Adaptive Reuse of Industrial Heritage: Opportunities and Challenges' [links to a pdf].

Heritage Victoria, 'Documenting maintenance and repair works', October 2000.

Historic England, 'Conservation Principles, Policies and Guidance for the sustainable management of the historic environment', 2008, p 52.

Historic England, 'Conservation and Maintenance Work for Listed Buildings and Other Heritage Assets' [website], accessed 6/11/2023.

Historic England, 'Developing a Historic Building Information Model', 20 July 2017.

Historic England, 'Easy Access to Historic Buildings', London, 2004.

Historic England, 'Energy Efficiency and Historic Buildings How to Improve Energy Efficiency', June 2018

Historic England, 'Practical Building Conservation Series' [website], updated 25 March 2021.

Historic England, 'Technical Guidance' [website], 2023.

Historic England, 'Understanding Historic Buildings: A Guide to Good Recording Practice', May 2016.

Kerr, JS., & National Trust of Australia (New South Wales), Conservation plan : a guide to the preparation of conservation plans for places of European cultural significance, Sydney : National Trust of Australia (NSW), 2000.

'Macquarie Point Multipurpose Stadium Project of State Significance Stadium Design Description', August 2024.

Macquarie Point Development Corporation, 'The Goods Shed Conservation Management Plan', Version 2, June 2021.

National Construction Code 2022, 'Part A2 Compliance with the NCC' [website], accessed 23/02/2025, © Commonwealth of Australia and the States and Territories 2022, published by the Australian Building Codes Board.

NSW Heritage Office and RAIA, 'New Uses for Heritage Places', 2008.

Purcell, 'Macquarie Point Goods Shed 41 Evans Street, nipaluna / Hobart Heritage Impact Assessment' (HIA), 4 August 2022.

Tasmanian Aboriginal Heritage Council, 'About the Council' [website], accessed 15/04/2024

Tasmanian Government Gazette, Vol. CCCXLII, No. 22383, Wednesday 24 April 2024.

Tasmanian Heritage Council, 'Forms | Application for a Certificate of Exemption' [website], last updated: 13/12/2022 9:29 AM.

Tasmanian Heritage Council, Tasmanian Heritage Registry Datasheet, 'Hobart Railway Goods Shed', THR ID Number 10995, report date: Thursday, November 07, 2024.

Tasmanian Heritage Council, 'Works Guidelines for Historic Heritage Places', November 2015, p 3.

Tasmanian National Trust, 'Tasmanian National Trust Register Historic Buildings listed by the Tasmanian National Trust' [website], 27/06/2016.

TasWater, 'Engagement plan to ensure no surprises for Hobartians' [online], 20 Sep 2024, accessed 29/11/2024

University of Tasmania, 'Tasmanian Aboriginal oral traditions among the oldest recorded narratives in the world' [website], 14 Aug 2023.

Prepared for
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ABN: 72 426 372 646

AECOM

Condition and Remaining Life Assessment Report

Hobart Railway Goods Shed

30-Apr-2025
Macquarie Point Multi-Purpose Stadium
Doc No. MPMS-AEC-RP-DU-03-11-01-E

Revision B – 30-Apr-2025
Prepared for – Cox Architecture – ABN: 72 426 372 646

Condition and Remaining Life Assessment Report

Hobart Railway Goods Shed

Client: Cox Architecture
ABN: 72 426 372 646

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AECOM
Macquarie Point Multi-Purpose Stadium
Condition and Remaining Life Assessment Report

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Executive Summary

AECOM Australia Pty Ltd was engaged by Cox Architecture to carry out a condition, remaining life and structural compliance assessment for the heritage-listed Hobart Railway Goods Shed (or the Goods Shed) as part of the 'Phase B: Schematic Design – Gap Analysis'.

The objectives of the assessment are to:

- Determine the current condition and estimated remaining life of the building.
- Identify the areas of structural non-compliance.

A visual inspection was conducted across timber and steel structural elements comprising the Goods Shed. Condition ratings were assigned to inspected elements and defects using a generalised condition grading adapted from the International Infrastructure Management Manual (IIMM) 5th (2015) edition as follows: CR1 (As New), CR2 (Good), CR3 (Average), CR4 (Poor), CR5 (Very Poor), CR6 (Obscured / Not Inspected).

The main findings from the condition assessment are summarised in Figure A.

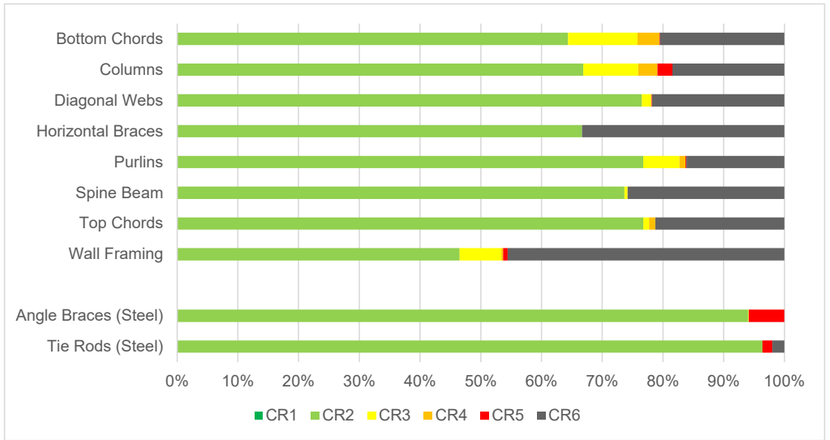


Figure A Condition rating breakdown across Goods Shed structural elements

Key defects have been identified as rot, splitting, section loss, mechanical impact damage, misalignment (e.g., displacement, twisting) and corrosion. Of the inspected structural elements, 83% were assigned a maximum condition rating of CR2 (Good) or CR3 (Average), indicating overall the structural members were in good-average condition but had localised deterioration or notable defects requiring an additional rating of C4 and/or C5.

Defects affecting overall durability and/or structural integrity of an element require some form of intervention i.e. repair (splice, strengthening, recoating) or replacement. Once interventions are undertaken for durability or structurally compromised elements, the service life of the Goods Shed elements will return to the required design life ~50 years.

1.0 Introduction

AECOM Australia Pty Ltd (AECOM) was engaged by Cox Architecture to carry out a condition, remaining life and structural compliance assessment for the heritage-listed Hobart Railway Goods Shed (or the Goods Shed) as part of the 'Phase B: Schematic Design – Gap Analysis'.

The objectives of the assessment are to:

- Determine the current condition and estimated remaining life of the building.
- Identify the areas of structural non-compliance.

This report focuses on the condition and remaining life assessment of the key structural elements of the Goods Shed. AECOM Report No. MPMS-AEC-RP-ST-03-11-01-E has been prepared by AECOM's structural engineers, which includes the structural assessment of the Goods Shed for gravity loads (self-weight) and lateral loads (i.e. wind and earthquake loads).

1.1 Scope of Work

To achieve the assessment objectives, the following scope of work was undertaken:

1. Desktop review of all available drawings.
2. Visual condition assessment of external and internal structural elements.
3. Site measurement of timber structural elements accessible from ground level (see AECOM Report No. MPMS-AEC-RP-ST-03-11-01-E).
4. Provide a brief for the selective sampling of timber structural elements for species identification and characterisation by others.

   Note: This revision of the report does not include the results of any materials sampling and testing.

1.2 Assumptions

The following assumptions have been considered for the above scope of work:

1. Minimum design life extension is 50 years.
2. Unless specified, structural elements have not been replaced since construction (i.e., truss rows 1 to 25 constructed in 1914-1915, truss rows 26 to 32 constructed in 1946-1949).
3. All structural timber elements comprise Huon pine, Oregon (known in Australia as Douglas Fir) or an unknown hardwood species, as per Section 2.1.
4. The structural elements included in the assessment are summarised in Table 1.

Table 1 Goods Shed – Inspected Elements

Element Type	Material
• Bottom chords • Column • Truss diagonals • Horizontal braces • Purlins • Spine beam • Top chords • Wall framing	Timber
• Buffer block	Timber/concrete
• Angle bracing • Tie rods	Steel

1.3 Exclusions

The following items were not in scope:

1. Inspection of non-structural elements, except for the original buffer blocks.
2. Inspection of non-original structural elements including retrofit wall framing and new structures (e.g., toilet block, office fit-out).
3. Structural grading of timber elements and timber type identification.

1.4 Reviewed Documents

The reference documents and drawings listed in Table 2 were reviewed for the Hobart Goods Shed condition and remaining life assessment.

Table 2 Provided Drawings - The Goods Shed

Document ID	Document Name	Date
3090984 (B672870)[1]	Plan Drawing of Goods Shed at Hobart Town (*Tasmanian MainLine Railway Company*)	1870
3060944 (B672472)[1]	Goods Shed – Hobart – Plan, Elevations, Sections and Details (*Tasmanian Government Railways*)	1914
7807567 (B672460)[1]	Main Line – Hobart Station Goods Yard – Nomenclature of Tracks (*Tasmanian Government Railways*)	1956-1962
B-a-1 (P1332/1/783)	Hobart Good's Shed – Proposed Office Alterations (*Transport Commission Railway Branch*)	1958
B-c-21 (P1332/1/826[1])	Hobart Goods Shed – Joinery Details for Proposed New Goods Shed Offices (*Transport Commission TAS Railway Branch*)	1964
B-c-19 (P1332/1/824[1])	Hobart Goods Shed – Proposed New Layout of Goods Shed Offices (*Transport Commission TAS Railway Branch*)	1964
B-c-24 (P1332/1/829[1])	Hobart Goods Shed – Proposed Ladies Toilet for Goods Shed Offices (*Transport Commission TAS Railway Branch*)	1969
129083/A1 (AE417-8-475[1])	Goods Shed – Extent of Work (*JMG Consulting Engineers*)	1983
129083/C2 (AE417-8-475[1])	Goods Shed Office Upgrading – Elevations (*JMG Consulting Engineers*)	1984
DOC/21/3342	Conservation Management Plan – Goods Shed (*Macquarie Point Development Corporation*)	2021
THR ID 10995	Tasmanian Heritage Register Datasheet – Hobart Railway Goods Shed	2024

Notes:

1. Tasmania Archives item number.

1.5 Other Assessments Undertaken

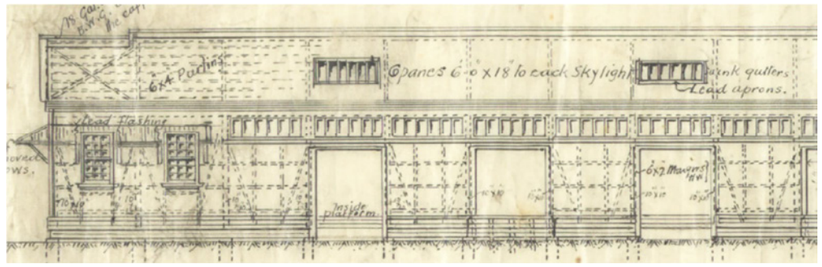
This report should be read in conjunction with:

- Structural Compliance Assessment Report - Hobart Railway Goods Shed (AECOM Report No. MPMS-AEC-RP-ST-03-11-01-E)
- Macquarie Point Multi-Purpose Stadium Fire Engineering Report
- Notice of Advice – Preliminary Environmental Exposure Category Advice (AECOM Ref. NOA-DU-01)

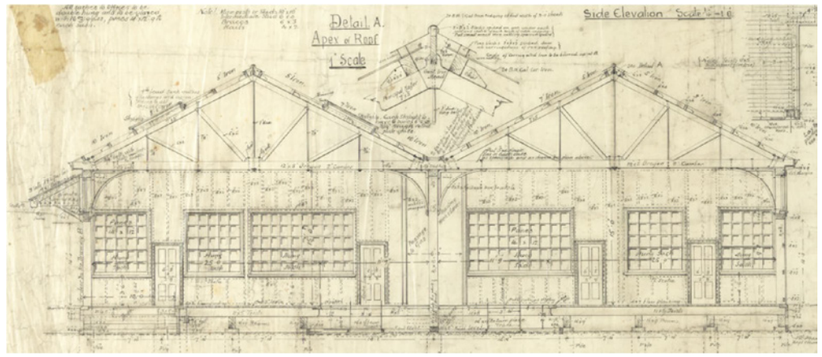
2.0 Background

The Hobart Railway Goods Shed was constructed circa 1914 to 1915 (currently ~110 years old). The building was modified between 1946 and 1949 with the addition of six new structural bays added to the northern end of the building. Further works were completed in the 1980s, 1990s and 2010s, including the conversion to a transit warehouse for truck use, the installation of a brick extension with toilet facilities on the east side, and multiple office renovations.

The Goods Shed is a predominantly timber structure, consisting of a dual gable timber roof comprised of repeated trusses running in the transverse direction, in addition to timber columns, spine beam, purlins, bracing and struts. The perimeter walls consist of alternating braced and unbraced bays, indicative of the former locations of doors as shown in Figure 1-a. The structure also incorporates rolled steel angle bracing in the transverse direction and tie rods in the trusses (refer to Figure 1-b). The shed walls and roof are clad with painted corrugated steel sheeting with galvanized steel capping.



(a)



(b)

Figure 1 Goods Shed – Side Elevation (a), Section View (b) (Ref: Tasmania Archive ID 3060944 (B672472))

2.1 Timber

Based on historical drawing *National Archives of Australia Item ID 3060944*, it is understood that the Goods Shed structural timber elements comprise of Huon pine, Oregon (i.e., Douglas fir) and an unknown hardwood species. While details of the timber species for the additional six bays were unavailable, it is probable the same timber species as the original structure was used.

Huon pine (Lagarostrobos franklinii) and Oregon (Pseudotsuga menziesii) are species of conifer softwoods. In accordance with AS 5604:2022, the natural durability of the species in above-ground external conditions yields the following average probable life expectancy:

- Huon pine: 7 to 15 years (Classification 3)
- Oregon: 0 to 7 years (Classification 4)

Note that the above-ground external conditions described in AS 5604 assume outdoor conditions subject to periodic, moderate wetting. Timber elements in the Goods Shed have been protected from inclement weather and wetting by the shed's roof and wall cladding for the most part though prior to change of use to a transit storage warehouse in 1984, timber elements near the wall and north end openings may have experienced intermittent localised wetting. Prior to installation of the roller doors, the relative humidity in the internal shed would be expected to have been similar to that externally however once the roller doors were installed, the internal shed relative humidity is likely to have become more consistent, increasing the probable life expectancy.

Above ground timber fully protected from weather and termites for all natural durability classes (Class 1 to Class 4) has a probable heartwood life expectancy of 50+ years[1].

2.2 Element Nomenclature

The structural element identification and nomenclature in this report listed in Table 3 and illustrated in Figures 2 to 4 is consistent with Section 2.2 of the Hobart Goods Shed Structural Assessment (AECOM Report No. MPMS-AEC-RP-ST-03-11-01-E) .

Table 3 Structural element nomenclature

Tag	Description	Cross Section (mm x mm)	Timber Species
RP1	Roof purlins	100x150	Unknown
RR1	Top Rafter	180x125	Douglas Fir
RB1	Bottom chord (braced bay)	300x120	Douglas Fir
RB2	Bottom chord (typical bay)	300x120	Douglas Fir
TD1	Truss diagonal	120x120	Douglas Fir
TD2	Truss diagonal	115x95	Douglas Fir
HB1	Horizontal bracing	130x100 (on flat)	Douglas Fir
SC1	Central column	230x230	Douglas Fir
SC2	Wall column	230x230	Douglas Fir
STB1	Stub over wall column	230x230	Douglas Fir
WB1	Wall bracing	130x70	Douglas Fir
FM1	Wall mullion	130x90	Douglas Fir
ST1	Wall strut at window height	190x250 (on flat)	Douglas Fir
ST2	Wall strut at eve height	230x210	Douglas Fir
ST3	Main strut along centre of building	230x210	Douglas Fir
RA1	Rolled steel angle brace	90x10 EA	N/A
TR1	Truss tie rod (25 mm dia)	N/A	N/A
TR2	Truss tie rod (21 mm dia)	N/A	N/A
TR3	Truss tie rod (18 mm dia)	N/A	N/A

[1] *Design Guide 5 - Timber Service Life Design for Durability*, Wood Solutions, Forest and Wood Products Australia, p16, 2012.

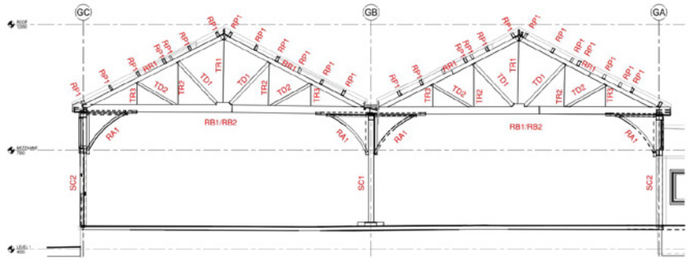


Figure 2 Typical cross section structural members.

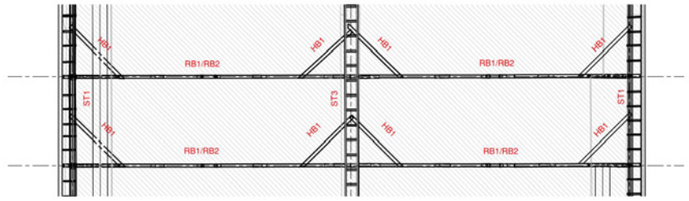


Figure 3 Typical plan at eve level structural members.

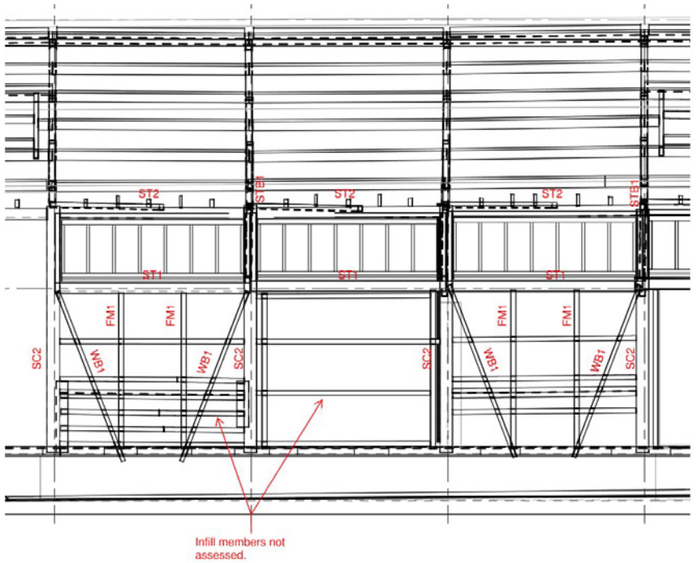


Figure 4 Typical wall elevation structural members.

3.0 Methodology

3.1 Condition Assessment

The Goods Shed was inspected by AECOM's materials engineers (Kerryn Wilson, Ava Thornley) and structural engineers (Zac Hankin, Robert Ranzolin, Khang Nguyen) between 28th to 30th January 2025.

The visual condition of visible Good's Shed structural elements including external wall cladding and windows was conducted from ground level and within accessible areas in the mezzanine roof space above the ground floor office. All inspection works were performed on foot without ladders or elevated work platforms.

The following information was collected during the inspection:

- Condition ratings for each structural element (in accordance with Table 4).
- Type and location of any existing defects.
- Photo records of structural element current condition.

3.1.1 Condition Ratings

For building assets, the International Infrastructure Management Manual (IIMM) (2015) suggests the use of generalised condition grading. Element condition ratings were assigned in accordance with the general condition rating matrix presented in Table 4, adapted from the International Infrastructure Management Manual 5th (2015) Edition (IIMM) guidelines.

The condition of inspected elements is allocated as a percentage of relevant condition ratings, typically based on the visual estimate of condition over the length or area of the element. Furthermore, defects were assigned individual condition rating scores based on their visual condition and/or structural integrity.

Table 4 General framework for scoring condition of Goods Shed structural elements (adapted from IIMM)

Rating	Condition	Description
CR1	As New	Condition and performance near the top of the expected range of operation.
CR2	Good	Condition and performance have experienced minor deterioration and there are limited visible defects.
CR3	Average	Condition and performance may have minor impact in integrity. Localised area/s of moderate deterioration may be present.
CR4	Poor	Condition and performance may have moderate impact on integrity. Localised areas with advanced deterioration may be present.
CR5	Failed / Unserviceable	Condition and performance may have major impact on integrity and may constitute failure of the element. Further deterioration will compromise the safety of the structure.
CR6	Not Assessed[1]	Condition and performance have not been assessed and/or condition rated.

Notes:

1. Condition rating CR6 was assigned to elements that could not be inspected/accessed, typically due to being obstructed by building features or when elements were situated in inaccessible areas (e.g., bond store, office fit-out, infill areas).

3.1.2 Moisture Content

As moisture affects the dimensional stability and mechanical properties of timber resulting in swelling, shrinking, losing strength if too high, or becoming brittle and cracking if too dry, monitoring moisture content helps identify moisture issues in the timber, and inform repairs to extend the service life of the structure.

Moisture content testing was performed on a range of readily accessible elements in representative areas such as columns, truss bottom chord, truss incline diagonals, central box gutter and south end

window framing using a Crommelin Moisture meter, with results interpreted in accordance with the manufacturer's instructions (refer to Table 5).

Table 5 Moisture content guide (adapted from Crommelin moisture meter manufacturer's instructions)

Moisture content (%)	Relative moisture content – timber
< 5.9	Very Low
5.9 to 9.9	Low
10.0 to 19.9	Medium
≥ 20	High

3.2 Remaining Service Life

The condition of an asset can be used to predict the asset's remaining service life, how long the asset can perform its function.

The condition data was collected at element level, asset – sub-area (external/internal) – structure – element. The condition data is presented in Appendix A. To assess the remaining life, the condition ratings were averaged for each element of the asset.

3.2.1 Design Life

The design life is the expected life of an asset at its design. The design life of the building elements summarised in Table 6 is based on a combination of design life guidelines from the Building Code of Australia (BCA), the National Construction Code (NCC) and industry experience with heritage rail goods shed buildings. Further design life data is presented in Appendix A.

Table 6 Asset element design life

Building Elements	Design Life	Estimated Current Age
External wall cladding	20	41 y (replaced 1984)
External roof sheet	25	5 y (replaced ~2019)
External windowpanes	30	41 y (replaced 1984)
Internal top chord (truss)	100	111 y (constructed 1914-1915) 76 y (extension 1949)
Internal bottom chord (truss)	100	
Internal diagonal web (truss)	100	
Internal horizontal braces	100	
Internal truss – top chord	100	
Internal column	100	
Internal spine beam	100	
Internal purlins	50	
Internal tie rods (truss)	100	
Internal angle braces	100	*Multiple members have been replaced over service life
Internal wall framing*	50	

3.2.2 Degradation Profile

A degradation profile is a representation of how an asset may deteriorate over time. The degradation profile used, illustrated in Figure 5, is based on an interpretation of the Institute of Public Works Engineering Australasia (IPWEA) Practice Note 3 and 5 for building and infrastructure assets and

supplemented by industry experience. This information is used to determine the condition-based age of the asset and inform where interventions may be necessary to bring the Goods Shed back to its expected age.

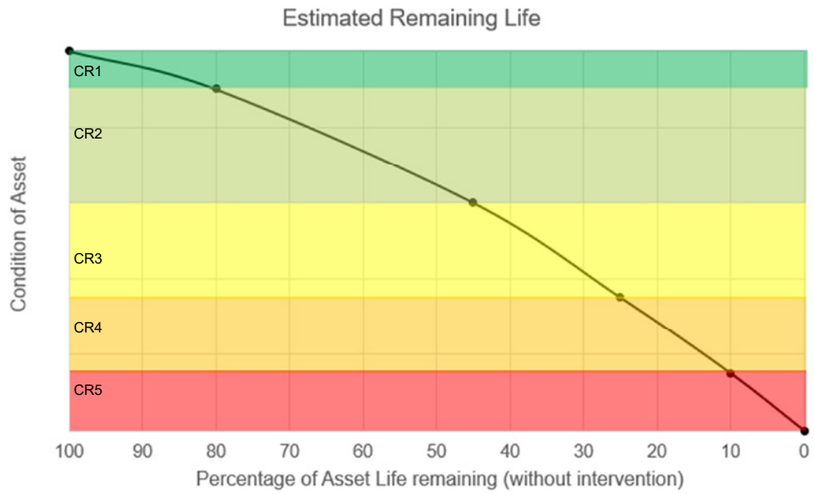


Figure 5 Remaining Life Deterioration Curve (adapted from IPWEA Practice Note 5)

The typical actions associated with the remaining design life of an asset is noted in Table 7.

Table 7 Degradation profile

Rating	Condition	Action	Expected Remaining Service Life (% of original design life)
CR1	As New	No repairs required. Inspect at next scheduled inspection.	80-100
CR2	Good	Inspect at next scheduled inspection Continue planned and preventative maintenance. No repairs required.	45-80
CR3	Average	Further testing is justified and mostly reactive maintenance and some minor upgrades. Priority of repairs is low.	25-45
CR4	Poor	Maintenance, upgrade or rehabilitation works are required within 5 years or as dictated by expected remaining life. Structural assessment is recommended.	10-25
CR5	Failed / Unserviceable	Rehabilitation or renewal required immediately. Structural assessment is recommended.	0-10
CR6	Not Assessed[1]		N/A

3.2.3 Remaining Service Life

The condition data collected on site was used to assess the asset's estimated average and lower remaining life. The average and lower limits are calculated by multiplying the condition rating detailed in Table 7 by the percentage of design life for each element type outlined in Table 6.

The condition ratings collated and interpreted are outlined in Appendix B. The output shows the effect of a localised defect on a particular element section.

4.0 Condition Assessment

4.1 Overview

The Good's Shed structural element condition ratings are summarised in Figure 6 and a breakdown of each individual element condition rating is presented in Appendix A.

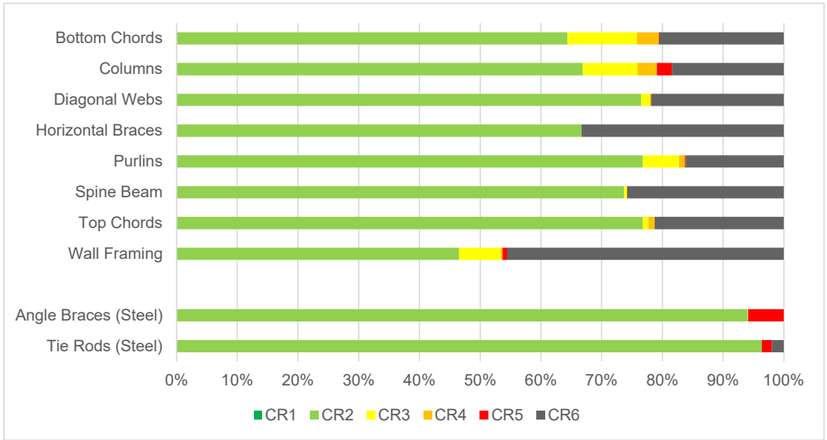


Figure 6 Condition rating breakdown across Goods Shed structural elements

Of the inspected structural elements, 83% were assigned a maximum condition rating of CR2 (Good) or CR3 (Average), indicating that overall the structural members were in good-average condition.

Where elements comprised a % CR4 and/or CR5 rating the timber or steel members had visible deterioration more than general wear and tear, or a notable defect which compromised the integrity of the member. Of the 228 no. total defects identified across the structural elements, approximately 29% and 15% were rated CR4 (Poor) or CR5 (Very Poor) respectively.

The following sections provide a summary of the condition assessment findings by element type.

4.1.1 Moisture Content

Moisture measurements were taken in 74 representative locations across internal Good's Shed timber elements, in addition to timber box gutter and window framing elements.

Overall, the moisture content of the timber was determined as 'Low' despite evidence of widespread water-staining on box gutter and truss elements, with an average moisture content of 7.4% and measurements varying between 5.2% and 12.8% across the tested elements. Staining was confirmed to be superficial, with no evidence of rot or softening of the surface when inspected in close proximity (<1 m).

Table 8 summarises the moisture content measurements by element type.

Table 8 Summary of moisture content results

Location	Element	Average moisture content (%)	No. measurements
Shed – Internal	Column (central)	7.1	20
Shed – Internal	Column (walls)	7.3	8
Shed – Internal	Vertical framing (walls)	7.4	14
Shed – Internal	Horizontal framing (walls)	7.4	6
Shed – Internal	Diagonal bracing (walls)	7.3	4
Office Roof Space – Internal	Bottom chord	7.2	1
Office Roof Space – Internal	Box gutter[1]	8.1	14
Office Roof Space – Internal	Windowpanes	8.3	7

Notes:

1. Non-structural timber elements.

4.2 Bottom Chords

The truss bottom chords were typically in a good condition, with 79% of inspected elements assigned a maximum condition rating of CR2 or CR3.

Water staining and discolouration were observed on most bottom chords, with evidence of moisture tracking along diagonal webs. Further, evidence of an aged, red/pink coating system was noted on some chords. All CR4 (9 total) and CR5 (1 total) defects involved splitting extending along the majority of the chord length. Table 9 summarises the CR5 (Very Poor) defects observed across the bottom chords.

Table 9 Summary of CR5 defects – bottom chords

Grid ID		Defect type	Comments	Photo
G24	GB-GC	Splitting	Splitting on both sides and underside of bottom chord, extending most of length.	

4.3 Columns

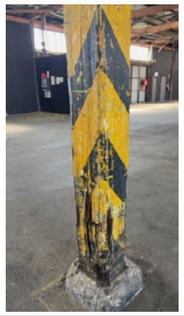
Wall and central columns were inspected as part of the assessment. Generally, columns were in good condition with 76% of inspected columns assigned a condition rating of CR2 or CR3. However, columns had the most CR4 (10 total) and CR5 (11 total) defects of any structural element, with defects typically affecting the centrally located columns.

Typical CR4 and CR5 defects include splitting with section loss, mechanical impact damage, column misalignment (e.g., displacement, twisting) and concave column faces, often accompanied by a hollow sound when tapped indicative of degradation of heartwood in the base of the column. The central columns in rows G12, G13, G28, G30 and G31 were located in a grout/concrete filled steel drum. While the encased sections could not be inspected, it is anticipated the encased timber will be in very poor condition with rot and possible section loss due to the rising moisture from the foundations.

The CR5 (Very Poor) defects noted on the columns are summarised in Table 10.

Table 10 Summary of CR5 defects - columns

Grid ID		Defect type	Comments	Photo
G5	GB	Splitting	Splitting on all sides, likely extends into column.	
G9	GB	Section Loss	Section loss up to 50% depth, affecting approximately half of column height. Column believed to have been replaced since construction.	
G10	GB	Section Loss	Splitting and section loss approximately 15% at north-east corner.	
G15	GB	Splitting	Splitting on all sides, likely extends into column.	

Grid ID		Defect type	Comments	Photo
G18	GB	Displacement	Out of alignment, twisted and displaced southward.	
G21	GB	Deformation	Concave on all sides, indicating degradation of heartwood affecting approximately 50% of column height from base.	
G21	GB	Section Loss	Splitting and section loss near bottom of column.	*Refer to G20-GB (Deformation)*
G26	GB	Section Loss	Up to 100% section loss at bottom of column due to rot, no base remaining to provide structural support.	
G30	GB	Displacement	Out of alignment, leaning northward.	

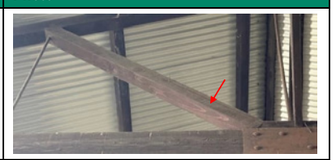
Grid ID		Defect type	Comments	Photo
G30	GB	Splitting	Splitting affecting 25% of column height, approximately 30% loss of section. Strapping present in above grout/concrete in lower column section.	
G31	GB	Displacement	Out of alignment, twisted and leaning northward.	*Refer to G30-GB (Misalignment)*
G31	GB	Section Loss	Rot and splitting with section loss at top of column, splitting and degradation of heartwood for most of length above grout/concrete. Strapping present on lower half of column. **Safety concern** – column to be reviewed by competent structural engineer, consider propping to provide vertical structural support in the short-term.	

4.4 Diagonal Webs

The diagonal webs were typically in a good condition, with 98% of inspected members assigned a condition rating of CR2 or CR3.

A total of six defects were identified across the inspected webs, including one CR4 and one CR5 defect. The majority of defects comprised of splitting, typically near the ends of affected members The CR5 (Very Poor) defect observed on the diagonal web is summarised in Table 11.

Table 11 Summary of CR5 defects – diagonal webs

Grid ID		Defect type	Comments	Photo
G27	GB-GC	Splitting	Splitting affecting approximately 50% of the section on the northern side. Splitting extends full length of web.	

4.5 Horizontal Braces

Of the ninety-two (92) horizontal braces that were inspected across the Goods Shed, 91% had a condition rating of CR2 or CR3.

A maximum allocation of 30% CR4 and/or CR5 was assigned to defective horizontal brace members. Insect damage with associated section loss was identified on four braces, and assigned a CR4 rating. The CR5 (Very Poor) defects observed on the horizontal braces are summarised in Table 12.

Table 12 Summary of CR5 defects – horizontal braces

Grid ID		Defect type	Comments	Photo
G15	GA-GB	Splitting	Splitting through majority of section, unclear if load could be supported.	
G31	GB-GC	Insect Damage	Insect damage with section loss on brace near bottom chord connection.	

4.6 Purlins

The roof purlins were typically in good condition, with 77% of inspected purlins assigned a condition rating of CR2 or CR3.

Widespread water staining and discolouration of purlins as a result of white staining was observed. Typical CR4 (Poor) defects identified on the purlins included splitting and insect damage with section loss (maximum 20%) in addition to localised water damage and rot. The CR5 rating was assigned in two locations where purlins were broken or cut. The CR5 (Very Poor) defects on the purlins are summarised in Table 13.

Table 13 Summary of CR5 defects – purlins

Grid ID		Defect type	Comments	Photo
G20	GB-GC	Missing Section	1 purlin broken midspan, supported by new spliced member.	
G24	GB-GC	Missing Section	1 purlin cut/missing	

4.7 Spine Beam

Twenty-three (23) of thirty-one (31) sections of spine beam along the length of the Good's Shed were inspected, with 74% of the elements assigned a condition rating of CR2 and CR3. A maximum condition rating of CR4 was noted in five locations, representing less than 1% of the total inspected area. No CR5 defects were present.

Widespread water staining was observed along the spine beam, likely to have tracked to lower members from leakage through the roof sheet. Typical CR3 and CR4 defects include splitting with section loss in some locations, in addition to non-structural, internal defects.

4.8 Top Chords

The truss top chords were typically in a good condition, with 97% of inspected elements assigned a condition rating of CR2 or CR3. Note 21% of the top chords were unable to be inspected (i.e., assigned 100% CR6 rating).

Widespread water staining was observed across most of the top chords, water staining is proposed to have tracked to lower members from leakage through the roof sheet. A total of two CR4 defects were identified, with no CR5 defects. Both CR4 defects comprised of splitting with no section loss.

4.9 Wall Framing

Wall framing elements were evaluated by bay, and included all vertical, horizontal and diagonal members, except for columns (refer to Section 4.3). A singular condition rating was assigned per bay.

Overall, inspected wall framing elements were in a good to average condition, with 76% assigned a maximum condition rating of CR2 or CR3, and 16% CR5. Typical defects observed on the wall framing include splitting, section loss, insect damage and missing sections. Note 46% of the wall framing was not able to be inspected (i.e., assigned 100% CR6 rating) due to the following:

- Removed sections from Goods Shed works since 1914-1915.
- Obscured by new structures including panelling.
- Obscured by office fit out structures (may have been previously removed).
- Bays with majority or all non-original wall framing.

The CR5 (Very Poor) wall framing defects are summarised in Table 14.

Table 14 Summary of CR5 defects – wall framing

Grid ID		Defect type	Comments	Photo
G17	GA	Missing Section	Broken horizontal member. Supported by new member.	
G19	GC	Missing Section	Missing section/cut in diagonal member.	
G21	GC	Missing Section	Missing section/cut in diagonal member.	
G29	GC	Splitting	Splitting on horizontal member.	
G30	GC	Insect Damage	Insect damage and splitting on horizontal member. Non-original member.	

Grid ID		Defect type	Comments	Photo
G32	GB-GC	Insect Damage	Insect damage on vertical member.	

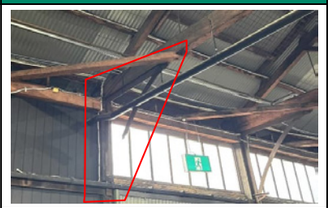
4.10 Angle Braces (Steel)

In total, eighty-five (85) steel angle braces were inspected across the Goods Shed. The braces were typically found to be in good condition, with 94% assigned a condition rating of CR2. In some locations, surface corrosion, water staining and evidence of an aged, red (potentially red lead) coating were apparent.

Five instances of cut braces with missing sections were observed along the eastern wall, within the vicinity of new structures including the toilet block. These defects have been assigned a CR5 rating as the elements no longer provide structural support.

The CR5 (Very Poor) defects observed across the angle braces are summarised in Table 13.

Table 15 Summary of CR5 defects – angle braces

Grid ID		Defect type	Comments	Photo
G9	GA	Missing Section	Half of angle brace missing, previously cut.	
G12	GA	Missing Section	Half of angle brace missing, previously cut.	*Refer to G8-GA (Missing Section) for typical appearance.*
G13	GA	Missing Section	Half of angle brace missing, previously cut.	*Refer to G8-GA (Missing Section) for typical appearance.*
G16	GA	Missing Section	Half of angle brace missing, previously cut.	*Refer to G8-GA (Missing Section) for typical appearance.*
G17	GA	Missing Section	Half of angle brace missing, previously cut.	*Refer to G8-GA (Missing Section) for typical appearance.*

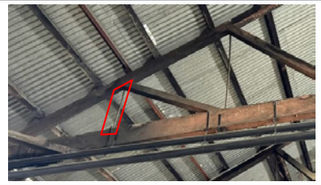
4.11 Tie Rods (Steel)

Tie rods were evaluated by truss (GA-GB and GB-GC), including four outer rods and one central rod.

The truss tie rods were generally in a good condition, with 88% of rods assigned a maximum condition rating of CR2.

Five misaligned tie rods were identified, typically outer rod locations (4 no.) rather than the central rods (1 no.). Misaligned rods were assigned a CR5 condition rating based on their compromised structural integrity. The CR5 (Very Poor) defects observed across the tie rods are summarised in Table 14.

Table 16 Summary of CR5 defects – tie rods

Grid ID		Defect type	Comments	Photo
G18	GA-GB	Misalignment	Bend in outer vertical strut, west side.	
G18	GB-GC	Misalignment	Bend in outer vertical strut, east side.	*Refer to G18-GA-GB (Misalignment) for typical appearance.*
G19	GA-GB	Misalignment	Bend in outer vertical strut, west side.	*Refer to G18-GA-GB (Misalignment) for typical appearance.*
G28	GA-GB	Misalignment	Bend in outer vertical strut, east side.	*Refer to G18-GA-GB (Misalignment) for typical appearance.*
G30	GB-GC	Misalignment	Bend in central vertical strut.	*Refer to G18-GA-GB (Misalignment) for typical appearance.*

5.0 Remaining Service Life

The average percentage remaining service life for condition-based age Goods Shed elements is shown on the degradation curves in Figure 7. Results for all members are included in Appendix C. As most of the elements had an overwhelming majority of the element length / surface area in condition CR2 (45-80% remaining service life), the average CR for each element was significantly greater than the contribution from deterioration or defects represented by conditions C3 to C5 which for the most part do not show on the degradation curve. Defects affecting overall durability and/or structural integrity of an element indicating some form of intervention i.e. repair (splice, strengthening, recoating) or replacement is required are summarised in Appendix A and B. Once interventions are undertaken for durability or structurally compromised elements, the Goods Shed asset can return to the required design life ~50 years.

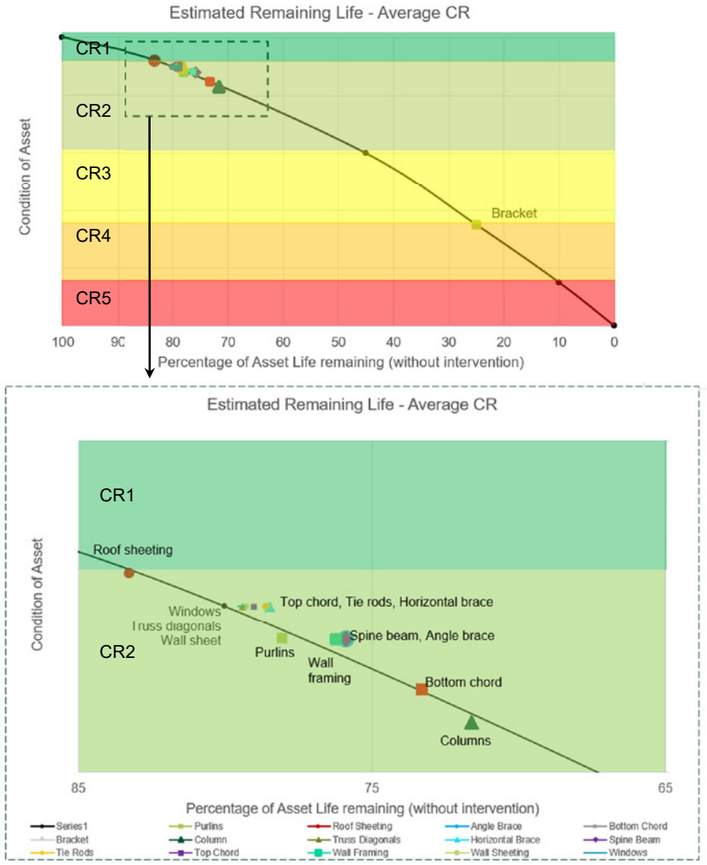


Figure 7 **Remaining service life of Good Shed elements without intervention based on the current overall average condition rating as a percentage of expected design life.**

Table 17 **Remaining service with no intervention life for Good Shed elements based on condition-based age and typical design life**

Building Elements	Material	Typical Design Life (years)	Remaining Service Life with no intervention based on avg CR (years)	Remaining Service Life with no intervention based on max. CR (years)
External wall sheet	Metal sheet	20	15.9	5.0
External roof sheet	Metal sheet	25	20.8	6.3
External windowpanes	Glass	30	23.8	3.0
Internal top chord (truss)	Timber	100	79.0	25.0
Internal bottom chord (truss)	Timber	100	73.3	10.0
Internal diagonal (truss)	Timber	100	79.4	10.0
Internal horizontal braces	Timber	100	78.5	10.0
Internal column	Timber	100	71.6	10.0
Internal spine beam	Timber	100	75.9	25.0
Internal purlins	Timber	50	39.0	5.0
Internal tie rods (truss)	Steel	100	78.6	10.0
Internal angle braces	Steel	100	75.9	10.0
Internal wall framing*	Timber	50	38.1	3.0

6.0 Conclusions

6.1.1 Timber Elements

Overall, the timber structural elements comprising the Goods Shed are in good to average condition with localised defects only. Widespread water staining and accumulation of dirt have worsened the visual condition of the timber.

Based on the results of the visual inspection, it is expected that elements assigned a condition rating of CR2 or CR3 will meet the minimum design life extension of 50 years provided that the similar exposure conditions to the current conditions are maintained (refer to NOA-DU-01 (Preliminary Environmental Exposure Category Advice)). This includes factors including, but not limited to:

- Relative humidity.
- Microenvironments, including exposure to atmospheric contaminants (including salts and pollution), rain/moisture ingress.

Where the current conditions cannot be maintained, then a suitable surface treatment may be required to extend the life of the timber elements.

Based on the results of the visual inspection, elements with a maximum condition rating of CR4 and CR5 should be reviewed on a case-by-case basis. In most locations, CR5 defects have reduced the structural capacity of the elements, requiring repair or replacement in locations with missing sections, significant section loss and deformation.

6.1.2 Steel Elements

Overall, the steel structural elements comprising the Goods Shed are in a good condition, with defects limited to missing sections or deformation.

Similarly to the timber elements, it is expected that the inspected steel elements will meet the minimum design life extension of 50 years provided that the similar exposure conditions to the current conditions are maintained. Notably for steel elements, exposure to the external environment without a protective coating increases the risk and rate of mild steel corrosion (in accordance with AS 4312) – refer to NOA-DU-01 (Preliminary Environmental Exposure Category Advice). If loss of section cannot be tolerated, steel elements should be coated.

6.2 Next Steps

6.2.1 Timber Materials Sampling and Testing

Materials sampling and testing should be performed on representative timber structural elements for species identification and characterisation. A minimum sample size of approximately 20-30 mm by 5-10 mm (Ref: *Wood Solutions*) is required for testing. Samples may be broken off from damaged elements or extracted using a timber auger / core drill bit.

Materials testing for structural properties are detailed in Section 4.0 of the Structural Compliance Assessment Report – Hobart Railway Goods Shed (AECOM Report No. MPMS-AEC-RP-ST-03-11-01-E).

Appendix A

Element Condition Ratings

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G01	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G01	GB-GC	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G01	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G01	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G01	GB-GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G01	GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G01	GA-GB	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured
G01	GB-GC	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured
G01	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G01	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G01	GA-GB	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G01	GB-GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G01	GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G01	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G01	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G02	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G02	GB-GC	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G02	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G02	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G02	GB-GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G02	GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G02	GA-GB	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured
G02	GB-GC	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured
G02	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G02	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G02	GA-GB	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G02	GB-GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G02	GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G02	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G02	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G03	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G03	GB-GC	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G03	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G03	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G03	GB-GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G03	GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G03	GA-GB	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured
G03	GB-GC	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured
G03	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G03	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G03	GA-GB	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G03	GB-GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G03	GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G03	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G03	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G04	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G04	GB-GC	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured
G04	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured
G04	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured
G04	GB-GC	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured
G04	GC	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured
G04	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G04	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G04	GB-GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G04	GC	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured
G04	GC	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G05	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G05	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G05	GB-GC	Roof Truss	Top Chord	Timber	0	70	0	0	0	30	Partly obscured
G05	GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G05	GA	Walls	Wall Framing	Timber	0	95	5	0	0	0	
G05	GC	Walls	Wall Framing	Timber	0	60	40	0	0	0	
G06	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G06	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G06	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G06	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G06	GA-GB	Roof Truss	Bottom Chord	Timber	0	98	2	0	0	0	
G06	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G06	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G06	GC	Roof Truss	Column	Timber	0	95	5	0	0	0	
G06	GB	Roof Truss	Column	Timber	0	60	30	10	0	0	
G06	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G06	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G06	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G06	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G06	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G06	GB-GC	Roof Truss	Horizontal Brace	Timber	0	85	15	0	0	0	
G06	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G06	GA-GB	Roof	Purlins	Timber	0	90	10	0	0	0	
G06	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G06	GB	Roof Truss	Spine Beam	Timber	0	70	30	0	0	0	
G06	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G06	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G06	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G06	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G06	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G06	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G06	GA	Walls	Wall Framing	Timber	0	95	5	0	0	0	
G06	GC	Walls	Wall Framing	Timber	0	70	30	0	0	0	
G07	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G07	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G07	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G07	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G07	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	70	30	0	0	
G07	GB-GC	Roof Truss	Bottom Chord	Timber	0	99	1	0	0	0	
G07	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G07	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G07	GB	Roof Truss	Column	Timber	0	50	50	0	0	0	
G07	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G07	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G07	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G07	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G07	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G07	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G07	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G07	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G07	GA-GB	Roof	Purlins	Timber	0	80	15	5	0	0	
G07	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G07	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G07	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G07	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G07	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	

Element Condition Rating
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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G07	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G07	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G07	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G07	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G07	GA	Walls	Wall Framing	Timber	0	90	10	0	0	0	
G07	GC	Walls	Wall Framing	Timber	0	90	5	5	0	0	
G08	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G08	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G08	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G08	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G08	GA-GB	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	
G08	GA-GB	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	
G08	GB-GC	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	
G08	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G08	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G08	GB	Roof Truss	Column	Timber	0	0	60	40	0	0	
G08	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G08	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G08	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G08	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G08	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G08	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G08	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G08	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G08	GA-GB	Roof	Purlins	Timber	0	95	5	0	0	0	
G08	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G08	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G08	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G08	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G08	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G08	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G08	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G08	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G08	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G08	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G09	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	100	0	
G09	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G09	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G09	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G09	GA-GB	Roof Truss	Bottom Chord	Timber	0	99	1	0	0	0	
G09	GB-GC	Roof Truss	Bottom Chord	Timber	0	0	70	30	0	0	
G09	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G09	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G09	GB	Roof Truss	Column	Timber	0	0	40	10	50	0	
G09	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G09	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G09	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G09	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G09	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G09	GB-GC	Roof Truss	Horizontal Brace	Timber	0	90	10	0	0	0	
G09	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G09	GB-GC	Roof	Purlins	Timber	0	85	15	0	0	0	
G09	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G09	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G09	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G09	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G09	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G09	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G09	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G09	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G09	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G09	GC	Walls	Wall Framing	Timber	0	85	15	0	0	0	
G10	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G10	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G10	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G10	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G10	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	70	30	0	0	
G10	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G10	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G10	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G10	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G10	GB	Roof Truss	Column	Timber	0	35	40	20	5	0	
G10	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G10	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G10	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G10	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G10	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G10	GB-GC	Roof Truss	Horizontal Brace	Timber	0	0	70	30	0	0	
G10	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G10	GA-GB	Roof	Purlins	Timber	0	90	10	0	0	0	
G10	GB-GC	Roof	Purlins	Timber	0	90	10	0	0	0	
G10	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G10	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G10	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G10	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G10	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G10	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G10	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G10	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G10	GC	Walls	Wall Framing	Timber	0	80	20	0	0	0	
G11	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G11	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G11	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	80	20	0	0	
G11	GB-GC	Roof Truss	Bottom Chord	Timber	0	20	65	15	0	0	
G11	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No column or angle braces
G11	GB-GC	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No column or angle braces
G11	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G11	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G11	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	No column
G11	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G11	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G11	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G11	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G11	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G11	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G11	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G11	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	
G11	GB-GC	Roof	Purlins	Timber	0	65	30	5	0	0	
G11	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G11	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G11	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G11	GA	Roof Truss	Top Chord	Timber	0	85	15	0	0	0	
G11	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G11	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G11	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G11	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G11	GC	Walls	Wall Framing	Timber	0	70	30	0	0	0	
G12	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	
G12	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G12	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G12	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G12	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G12	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured
G12	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G12	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G12	GB	Roof Truss	Column	Timber	0	35	35	0	0	30	Partly obscured
G12	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G12	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G12	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G12	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G12	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G12	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G12	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G12	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	
G12	GB-GC	Roof	Purlins	Timber	0	85	15	0	0	0	
G12	GB	Roof Truss	Spine Beam	Timber	0	99	1	0	0	0	
G12	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G12	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G12	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G12	GA-GB	Roof Truss	Top Chord	Timber	0	90	10	0	0	0	
G12	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G12	GC	Roof Truss	Top Chord	Timber	0	85	15	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G12	GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured
G12	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G12	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G13	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	
G13	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G13	GB-GC	Roof Truss	Angle Brace	Steel	0	95	5	0	0	0	
G13	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G13	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G13	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G13	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G13	GC	Roof Truss	Column	Timber	0	85	15	0	0	0	
G13	GB	Roof Truss	Column	Timber	0	40	20	10	0	30	Partly obscured
G13	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G13	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G13	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G13	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G13	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G13	GB-GC	Roof Truss	Horizontal Brace	Timber	0	90	10	0	0	0	
G13	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G13	GA-GB	Roof	Purlins	Timber	0	95	5	0	0	0	
G13	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G13	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G13	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G13	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G13	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G13	GA-GB	Roof Truss	Top Chord	Timber	0	90	10	0	0	0	
G13	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G13	GC	Roof Truss	Top Chord	Timber	0	0	50	50	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G13	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G13	GC	Walls	Wall Framing	Timber	0	70	30	0	0	0	
G14	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G14	GA-GB	Roof Truss	Bottom Chord	Timber	0	20	55	25	0	0	
G14	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G14	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G14	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G14	GB-GC	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G14	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G14	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G14	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	No column
G14	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G14	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G14	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G14	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G14	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G14	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G14	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G14	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	
G14	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G14	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G14	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G14	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G14	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G14	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G14	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G14	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G14	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured

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Client Name: Cox Architecture
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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G14	GC	Walls	Wall Framing	Timber	0	80	20	0	0	0	
G15	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G15	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G15	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G15	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G15	GB-GC	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	
G15	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G15	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G15	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G15	GB	Roof Truss	Column	Timber	0	40	30	30	0	0	
G15	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G15	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G15	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G15	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G15	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G15	GB-GC	Roof Truss	Horizontal Brace	Timber	0	80	20	0	0	0	
G15	GA-GB	Roof Truss	Horizontal Brace	Timber	0	95	0	0	5	0	
G15	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	
G15	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G15	GB	Roof Truss	Spine Beam	Timber	0	40	45	15	0	0	
G15	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G15	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G15	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G15	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G15	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G15	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G15	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G15	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured

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Client Name: Cox Architecture
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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G16	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	
G16	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G16	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G16	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G16	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	
G16	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G16	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G16	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G16	GB	Roof Truss	Column	Timber	0	65	15	20	0	0	
G16	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G16	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G16	GB-GC	Roof Truss	Diagonal Webs	Timber	0	85	15	0	0	0	
G16	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G16	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G16	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G16	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G16	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G16	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	
G16	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G16	GB	Roof Truss	Spine Beam	Timber	0	85	0	15	0	0	
G16	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G16	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G16	GA	Roof Truss	Top Chord	Timber	0	99	0	1	0	0	
G16	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G16	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G16	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G16	GA	Walls	Wall Framing	Timber	0	85	10	5	0	0	
G16	GC	Walls	Wall Framing	Timber	0	85	15	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G17	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	
G17	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G17	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G17	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G17	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G17	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G17	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G17	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G17	GB	Roof Truss	Column	Timber	0	95	0	5	0	0	
G17	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G17	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G17	GB-GC	Roof Truss	Diagonal Webs	Timber	0	85	15	0	0	0	
G17	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G17	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G17	GB-GC	Roof Truss	Horizontal Brace	Timber	0	60	40	0	0	0	
G17	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G17	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G17	GA-GB	Roof	Purlins	Timber	0	90	10	0	0	0	
G17	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G17	GB	Roof Truss	Spine Beam	Timber	0	60	40	0	0	0	
G17	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G17	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G17	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G17	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G17	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G17	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G17	GA	Walls	Wall Framing	Timber	0	80	15	0	5	0	
G17	GC	Walls	Wall Framing	Timber	0	85	15	0	0	0	

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Client Name: Cox Architecture
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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G18	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G18	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G18	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G18	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G18	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G18	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G18	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G18	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G18	GB	Roof Truss	Column	Timber	0	0	65	25	10	0	
G18	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G18	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G18	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G18	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G18	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G18	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G18	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G18	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G18	GA-GB	Roof	Purlins	Timber	0	90	5	5	0	0	
G18	GB-GC	Roof	Purlins	Timber	0	85	15	0	0	0	
G18	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G18	GA-GB	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	
G18	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G18	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G18	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G18	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G18	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G18	GA	Walls	Wall Framing	Timber	0	90	10	0	0	0	
G18	GC	Walls	Wall Framing	Timber	0	85	15	0	0	0	

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Client Name: Cox Architecture
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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G19	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G19	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G19	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G19	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	
G19	GB-GC	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	
G19	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G19	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G19	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G19	GB	Roof Truss	Column	Timber	0	80	15	5	0	0	
G19	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G19	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G19	GB-GC	Roof Truss	Diagonal Webs	Timber	0	90	10	0	0	0	
G19	GC	Roof Truss	Diagonal Webs	Timber	0	90	10	0	0	0	
G19	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G19	GB-GC	Roof Truss	Horizontal Brace	Timber	0	50	50	0	0	0	
G19	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G19	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G19	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G19	GB-GC	Roof	Purlins	Timber	0	90	10	0	0	0	
G19	GB	Roof Truss	Spine Beam	Timber	0	15	80	5	0	0	
G19	GA-GB	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	
G19	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G19	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G19	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G19	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G19	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G19	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G19	GC	Walls	Wall Framing	Timber	0	85	13	0	2	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G20	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G20	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G20	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G20	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	
G20	GB-GC	Roof Truss	Bottom Chord	Timber	0	80	20	0	0	0	
G20	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G20	GA	Roof Truss	Column	Timber	0	90	10	0	0	0	
G20	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G20	GB	Roof Truss	Column	Timber	0	0	45	30	25	0	
G20	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G20	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G20	GB-GC	Roof Truss	Diagonal Webs	Timber	0	80	20	0	0	0	
G20	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G20	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G20	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G20	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G20	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G20	GB-GC	Roof	Purlins	Timber	0	90	5	0	5	0	
G20	GB	Roof Truss	Spine Beam	Timber	0	95	5	0	0	0	
G20	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G20	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G20	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G20	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G20	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G20	GC	Roof Truss	Top Chord	Timber	0	80	20	0	0	0	
G20	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G20	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G21	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G21	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G21	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G21	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	
G21	GB-GC	Roof Truss	Bottom Chord	Timber	0	95	5	0	0	0	
G21	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G21	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G21	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G21	GB	Roof Truss	Column	Timber	0	25	40	10	0	0	
G21	GA	Roof Truss	Diagonal Webs	Timber	0	90	10	0	0	0	
G21	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G21	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G21	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G21	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G21	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G21	GA-GB	Roof Truss	Horizontal Brace	Timber	0	90	0	10	0	0	
G21	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G21	GA-GB	Roof	Purlins	Timber	0	95	0	5	0	0	
G21	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G21	GB	Roof Truss	Spine Beam	Timber	0	90	0	10	0	0	
G21	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G21	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G21	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G21	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G21	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G21	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G21	GA	Walls	Wall Framing	Timber	0	95	5	0	0	0	
G21	GC	Walls	Wall Framing	Timber	0	85	10	0	5	0	
G22	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G22	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G22	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G22	GA-GB	Roof Truss	Bottom Chord	Timber	0	98	2	0	0	0	
G22	GB-GC	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	
G22	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G22	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G22	GB	Roof Truss	Column	Timber	0	50	50	0	0	0	
G22	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G22	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G22	GB-GC	Roof Truss	Diagonal Webs	Timber	0	95	5	0	0	0	
G22	GC	Roof Truss	Diagonal Webs	Timber	0	85	10	0	0	0	
G22	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G22	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G22	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G22	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G22	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G22	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G22	GB	Roof Truss	Spine Beam	Timber	0	70	30	0	0	0	
G22	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G22	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G22	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G22	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G22	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G22	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G22	GA	Walls	Wall Framing	Timber	0	100	0	0	0	0	
G22	GC	Walls	Wall Framing	Timber	0	95	5	0	0	0	
G23	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G23	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G23	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G23	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G23	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured (bond shed)
G23	GA	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G23	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G23	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G23	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G23	GB-GC	Roof Truss	Horizontal Brace	Timber	0	75	20	5	0	0	
G23	GA-GB	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured
G23	GA	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured
G23	GA-GB	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G23	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G23	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G23	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G23	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G23	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G23	GA	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G23	GA-GB	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G23	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G23	GC	Walls	Wall Framing	Timber	0	85	15	0	0	0	
G24	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G24	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G24	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GB-GC	Roof Truss	Bottom Chord	Timber	0	30	40	25	5	0	
G24	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured (bond shed)
G24	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured (bond shed)
G24	GA	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G24	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G24	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G24	GC	Roof Truss	Horizontal Brace	Timber	0	80	10	10	0	0	
G24	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G24	GA-GB	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured
G24	GA	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured
G24	GA-GB	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GB-GC	Roof	Purlins	Timber	0	75	10	10	5	0	
G24	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G24	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G24	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GA-GB	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G24	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G24	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G24	GA	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G24	GA-GB	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G24	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G24	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G25	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G25	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G25	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GB-GC	Roof Truss	Bottom Chord	Timber	0	95	5	0	0	0	
G25	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured (bond shed)
G25	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured (bond shed)
G25	GA	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G25	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G25	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G25	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G25	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G25	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G25	GA-GB	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured
G25	GA	Roof Truss	Horizontal Brace	Timber	0	0	0	0	0	100	Obscured
G25	GA-GB	Roof	Purlins	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G25	GB	Roof Truss	Spine Beam	Timber	0	0	0	0	0	100	Obscured
G25	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G25	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GA-GB	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G25	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G25	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G25	GA	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G25	GA-GB	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G25	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G25	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G26	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GB-GC	Roof Truss	Bottom Chord	Timber	0	50	0	0	0	50	Partly obscured
G26	GA-GB	Roof Truss	Bracket	Steel	0	0	0	0	0	100	Obscured (bond shed)
G26	GB-GC	Roof Truss	Bracket	Steel	0		0	0	0	100	No angle brace
G26	GC	Roof Truss	Bracket	Steel	0		0	0	0	100	No angle brace
G26	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G26	GA	Roof Truss	Column	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GC	Roof Truss	Column	Timber	0	50	0	0	0	50	Partly obscured
G26	GB	Roof Truss	Column	Timber	0	0	70	10	20	0	
G26	GA	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GA-GB	Roof Truss	Diagonal Webs	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GB-GC	Roof Truss	Diagonal Webs	Timber	0	50	0	0	0	50	Partly obscured
G26	GC	Roof Truss	Diagonal Webs	Timber	0	50	0	0	0	50	Partly obscured
G26	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G26	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G26	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G26	GB-GC	Roof Truss	Tie Rods	Steel	0	50	0	0	0	50	Partly obscured
G26	GC	Roof Truss	Tie Rods	Steel	0	50	0	0	0	50	Partly obscured
G26	GA	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GA-GB	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GB-GC	Roof Truss	Top Chord	Timber	0	0	0	0	0	100	Obscured (bond shed)
G26	GC	Roof Truss	Top Chord	Timber	0	50	0	0	0	50	Partly obscured
G26	GA	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G26	GA-GB	Roof Truss	Vertical Struts	Steel	0	0	0	0	0	100	Obscured (bond shed)
G26	GA	Walls	Wall Framing	Timber	0	95	5	0	0	0	
G26	GC	Walls	Wall Framing	Timber	0	90	10	0	0	0	
G27	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G27	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G27	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G27	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G27	GA-GB	Roof Truss	Bottom Chord	Timber	0	98	2	0	0	0	
G27	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G27	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G27	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Client Name: Cox Architecture
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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G27	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	No column
G27	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G27	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G27	GB-GC	Roof Truss	Diagonal Webs	Timber	0	90	0	0	10	0	
G27	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G27	GC	Roof Truss	Horizontal Brace	Timber	0	85	15	0	0	0	
G27	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G27	GA-GB	Roof Truss	Horizontal Brace	Timber	0	85	15	0	0	0	
G27	GA	Roof Truss	Horizontal Brace	Timber	0	90	0	10	0	0	
G27	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G27	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	
G27	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G27	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G27	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G27	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G27	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G27	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G27	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G27	GA	Walls	Wall Framing	Timber	0	95	5	0	0	0	
G27	GC	Walls	Wall Framing	Timber	0	85	15	0	0	0	
G28	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G28	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G28	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G28	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G28	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G28	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G28	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G28	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G28	GB	Roof Truss	Column	Timber	0	50	25	0	0	25	Partly obscured
G28	GA	Roof Truss	Diagonal Webs	Timber	0	0	85	15	0	0	
G28	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G28	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G28	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G28	GC	Roof Truss	Horizontal Brace	Timber	0	95	5	0	0	0	
G28	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G28	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G28	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G28	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G28	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G28	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G28	GA-GB	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	
G28	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G28	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G28	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G28	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G28	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G28	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G28	GC	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G29	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G29	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G29	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G29	GA-GB	Roof Truss	Bottom Chord	Timber	0	30	60	10	0	0	
G29	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G29	GA	Roof Truss	Bracket	Steel	0	0	0	0	0	100	No angle brace
G29	GA	Roof Truss	Column	Timber	0	0	0	0	0	100	No column
G29	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G29	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	No column
G29	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G29	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G29	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G29	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G29	GC	Roof Truss	Horizontal Brace	Timber	0	95	5	0	0	0	
G29	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G29	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G29	GA	Roof Truss	Horizontal Brace	Timber	0	95	0	5	0	0	
G29	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G29	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G29	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G29	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G29	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G29	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G29	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G29	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G29	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G29	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G29	GC	Walls	Wall Framing	Timber	0	75	0	0	25	0	
G30	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G30	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G30	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G30	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G30	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G30	GB-GC	Roof Truss	Bottom Chord	Timber	0	70	20	10	0	0	
G30	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G30	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G30	GB	Roof Truss	Column	Timber	0	15	30	0	15	25	Partly obscured
G30	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G30	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G30	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G30	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G30	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G30	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G30	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G30	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G30	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G30	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G30	GB	Roof Truss	Spine Beam	Timber	0	80	15	5	0	0	
G30	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G30	GB-GC	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	
G30	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G30	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G30	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G30	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G30	GA	Walls	Wall Framing	Timber	0	80	20	0	0	0	
G30	GC	Walls	Wall Framing	Timber	0	83	15	0	2	0	
G31	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G31	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G31	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G31	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	
G31	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	
G31	GB-GC	Roof Truss	Bottom Chord	Timber	0	50	25	25	0	0	
G31	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	
G31	GB	Roof Truss	Column	Timber	0	0	0	0	75	25	Partly obscured

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Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G31	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	
G31	GB	Roof Truss	Column	Timber	0	0	0	0	0	100	No column
G31	GA	Roof Truss	Diagonal Webs	Timber	0	95	5	0	0	0	
G31	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G31	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G31	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	
G31	GC	Roof Truss	Horizontal Brace	Timber	0	70	0	15	15	0	
G31	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G31	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G31	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G31	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	
G31	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	
G31	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	
G31	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G31	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	
G31	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G31	GA-GB	Roof Truss	Top Chord	Timber	0	25	0	75	0	0	
G31	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G31	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	
G31	GA	Walls	Wall Framing	Timber	0	100	0	0	0	0	
G31	GC	Walls	Wall Framing	Timber	0	90	10	0	0	0	
G32	GC	Roof Truss	Horizontal Brace	Timber	0	75	25	0	0	0	
G32	GB-GC	Roof Truss	Horizontal Brace	Timber	0	80	20	0	0	0	
G32	GA-GB	Roof Truss	Horizontal Brace	Timber	0	80	20	0	0	0	
G32	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	
G32	GA	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured
G32	GA-GB	Walls	Wall Framing	Timber	0	80	10	0	10	0	
G32	GB	Walls	Wall Framing	Timber	0	0	0	0	0	100	Obscured

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix A - Element Condition Ratings

Location					Condition Rating (%)						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Comment
G32	GB	Walls	Wall Framing	Timber	0	80	20	0	0	0	
G32	GB-GC	Walls	Wall Framing	Timber	0	80	10	10	0	0	
G32	GC	Walls	Wall Framing	Timber	0	95	5	0	0	0	

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Client Name: Cox Architecture
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Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G04	GA-GB	Roof Truss	Purlin	Water Damage	4	Water damage, peeling timber bottom purlin
G04	GA	Wall	Wall Framing	Splitting	3	Splitting on horizontal member, north end
G05	GA	Wall	Wall Framing	Splitting	3	Splitting on vertical member, south side
G05	GA	Wall	Column	Section Loss	3	Fraying with section loss, column south side
G05	GB	Roof	Column	Splitting	5	Splitting on all sides, appears to extend into column max 50%
G05	GB	Roof	Column	Deformation	4	Concave on all faces, especially on bottom third where hollow sounding
G06	GA-GB	Roof Truss	Bottom Chord	Splitting	3	Splitting, western half
G06	GB	Roof Truss	Spine Beam	Splitting	3	Splitting on western side
G06	GB	Roof	Column	Splitting	3	General splitting/wear, loss of moisture
G06	GB	Roof	Column	Deformation	4	Concave on all faces, especially on bottom third where hollow sounding
G06	GB	Roof	Column	Hollow	4	Hollow sounding when tapped, bottom third
G07	GA-GB	Roof Truss	Bottom Chord	Previous Fixing	3	Hole from previous fixing, western half
G07	GA-GB	Roof Truss	Purlin	Rotting	4	Rotting midspan bottom purlin
G07	GB	Roof	Column	Splitting	3	Splitting, impact scrapes, loss of moisture
G07	GB-GC	Roof Truss	Bottom Chord	Splitting	4	Spliting on both sides, extending most of bottom chord
G07	GA	Wall	Wall Framing	Splitting	3	Splitting on vertical member, south side
G07	GA	Wall	Wall Framing	Section Loss	3	Section loss on diagonal member, outer face
G08	GB-GC	Roof Truss	Bottom Chord	Splitting	3	Splitting south side only, eastern half
G08	GA-GB	Roof Truss	Bottom Chord	Internal Defect	3	Internal defect/deterioration
G08	GB	Roof	Column	Splitting	3	Split corner, impact damage
G08	GB	Roof	Column	Splitting	4	Splitting, corner coming off/section loss
G08	GC	Wall	Column	Section Loss	4	Section loss at bottom of column
G09	GB-GC	Roof Truss	Column	Splitting	3	Small splits in three locations across chord
G09	GA-GB	Roof Truss	Column	Missing Section	5	Half of angle brace missing, previously cut
G09	GB	Roof	Column	Section Loss	5	Section loss up to 50% depth, affects approx half of column
G09	GA-GB	Roof Truss	Bottom Chord	Splitting	4	Spliting on both sides, extending most of bottom chord
G09	GC	Wall	Column	Section Loss	4	Section loss at bottom of column
G10	GB-GC	Roof Truss	Purlin	Section Loss	3	Localised section loss on AB side

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G10	GB	Roof	Column	Section Loss	5	Splitting and section loss approximtaley 15% on north-east corner
G10	GB	Roof	Column	Hollow	4	Hollow sounding midheight
G10	GC	Wall	Wall Framing	Splitting	3	Splitting and weathering on horizontal members
G11	GB-GC	Roof Truss	Bottom Chord	Splitting	4	Spliting on both sides, extending most of bottom chord
G11	GA	Roof Truss	Angle Brace	Missing Section	5	Half of angle brace missing, previously cut
G11	GA-GB	Roof Truss	Bottom Chord	Splitting	4	Splitting north side only, both ends of bottom chord
G11	GB-GC	Roof Truss	Purlin	Splitting	4	Splitting and possible insect damage on north end of purlin third from bottom
G11	GA-GB	Roof Truss	Purlin	Splitting	4	Splitting and possible insect damage midspan on purlin third from bottom
G11	GC	Wall	Wall Framing	Splitting	3	Splitting on vertical member, south side
G11	GC	Wall	Column	Splitting	3	Vertical splitting on column south end
G12	GA	Roof Truss	Angle Brace	Missing Section	5	Half of angle brace missing, previously cut
G12	GB-GC	Roof Truss	Purlin	Splitting	3	Splitting on purlins second and fourth from bottom
G12	GB-GC	Roof Truss	Bottom Chord	Splitting	3	Splitting north side only, western half
G12	GB-GC	Roof Truss	Purlin	Water Damage	3	Water damage, purlin fifth from bottom
G12	GB	Roof Truss	Spine Beam	Splitting	3	Spliting on western side
G12	GA-GB	Roof Truss	Purlin	Insect Damage	4	Insect damage, purlins third and fourth from bottom
G12	GB	Roof	Column	Section Loss	6	Assumed deterioration and section loss where obscured by barrels/footing
G13	GA-GB	Roof Truss	Bottom Chord	Water Damage	3	Possible water damage south side only, eastern half
G13	GB-GC	Roof Truss	Bottom Chord	Splitting	4	Spliting on both sides and underside, extending most of bottom chord
G13	GA	Roof Truss	Angle Brace	Missing Section	5	Half of angle brace missing, previously cut
G13	GA-GB	Roof Truss	Purlin	Water Damage	3	Water damage purlin second from bottom
G13	GB	Roof	Column	Section Loss	6	Assumed deterioration and section loss where obscured by barrels/footing
G13	GC	Wall	Wall Framing	Splitting	3	Splitting/fraying some section loss on horizontal members
G14	GA-GB	Roof Truss	Bottom Chord	Splitting	4	Spliting north side only , extending most of bottom chord
G14	GA-GB	Roof Truss	Purlin	Insect Damage	4	Insect damage or rot extending most of bottom purlin, section loss 10-20%
G14	GC	Wall	Wall Framing	Section Loss	3	Section loss on horizontal member, north end
G15	GB-GC	Roof Truss	Bottom Chord	Splitting	3	Splitting south side only, central
G15	GB	Roof	Column	Splitting	5	Mechanicl damage, splitting on all sides. Splitting likely extends into column

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Client Name: Cox Architecture
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Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G15	GA-GB	Roof Truss	Horizontal Brace	Splitting	5	Splitting through most of section, would fail if loaded. Central brace
G15	GB	Roof Truss	Spine Beam	Section Loss	4	Section loss on western side
G15	GA-GB	Roof Truss	Purlin	Splitting	3	Splitting or water damage, bottom purlin
G15	GB	Roof	Column	Hollow	4	Hollow sounding near bottom
G15	GA-GB	Roof Truss	Purlin	Insect Damage	4	Insect damage or rot extending most of bottom purlin from previous bay, section loss 10-20%
G15	GB	Roof	Column	Splitting	3	Splitting and mechanical damage
G16	GB-GC	Roof Truss	Diagonal Webs	Internal Defect	3	Deterioration on south side only, near connection to bottom chord
G16	GA-GB	Roof Truss	Angle Brace	Missing Section	5	Half of angle brace missing, previously cut
G16	GA-GB	Roof Truss	Top Chord	Splitting	4	Splitting on top chord, eastern side
G16	GA-GB	Roof Truss	Bottom Chord	Splitting	4	Splitting, eastern half
G16	GB	Roof Truss	Spine Beam	Splitting	4	Splitting on eastern side, from splice connection
G16	GB	Roof	Column	Section Loss	4	Some section loss, mechanical damage
G16	GA-GB	Roof Truss	Purlin	Splitting	4	Splitting with section loss, second and fifth from bottom purlins
G16	GA-GB	Roof Truss	Purlin	Rotting	4	Possible rot, bottom and fourth from bottom purlins
G16	GA	Wall	Wall Framing	Section Loss	4	Rotting with section loss approx 20%, vertical member adjacent to column G16
G16	GC	Wall	Wall Framing	Misalignment	3	Loose connections between framing
G17	GB-GC	Roof Truss	Diagonal Webs	Splitting	3	Splitting on south side, splitting on north side near connection to bottom chord
G17	GA-GB	Roof Truss	Angle Brace	Missing Section	5	Half of angle brace missing, previously cut
G17	GA-GB	Roof Truss	Purlin	Splitting	3	Splitting and possible rot midspan, fourth from bottom purlin
G17	GB	Roof Truss	Spine Beam	Internal Defect	3	Deterioration on western side
G17	GB-GC	Roof Truss	Horizontal Brace	Splitting	3	Splitting on eastern side, central brace
G17	GB	Roof	Column	Hollow	4	Hollow sounding from base to mid-height
G17	GA	Wall	Wall Framing	Splitting	3	Splitting on horizontal member, north end
G17	GA	Wall	Wall Framing	Missing Section	5	Broken horizontal member
G17	GC	Wall	Wall Framing	Splitting	3	Splitting on vertical member - painted bay
G18	GB	Roof	Column	Misalignment	5	Out of alignment, twisted and leaning southward
G18	GA-GB	Roof Truss	Tie Rod	Misalignment	5	Bend in western outer tie rod
G18	GB-GC	Roof Truss	Tie Rod	Misalignment	5	Bend in eastern outer tie rod

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Client Name: Cox Architecture
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Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G18	GB-GC	Roof Truss	Purlin	Water Damage	3	Water damage with possible warping bottom and second from bottom purlins south end
G18	GB	Roof	Column	Deformation	4	Concave on south face, not drummy
G18	GA-GB	Roof Truss	Purlin	Section Loss	4	Section loss, possible insect damage south end, fourth from bottom purlin
G18	GB	Roof	Column	Splitting	3	Splitting on south face
G18	GA	Wall	Wall Framing	Insect Damage	3	Insect exit holes on horizontal member, north end
G18	GA	Wall	Column	Section Loss	3	Section loss on column, south end
G18	GC	Wall	Wall Framing	Section Loss	3	Splitting/fraying on horizontal member
G19	GA-GB	Roof Truss	Bottom Chord	Splitting	3	Splitting on north side only, central
G19	GA-GB	Roof Truss	Tie Rod	Misalignment	5	Bend in western outer tie rod
G19	GB-GC	Roof Truss	Purlin	Splitting	3	Splitting with possible section loss and rotting midspan bottom purlin
G19	GB-GC	Roof Truss	Horizontal Brace	Internal Defect	3	Deterioration on western side, central brace
G19	GB	Roof Truss	Spine Beam	Splitting	4	Splitting on western side
G19	GB	Roof	Column	Splitting	4	Splitting with loss of material, coating failure
G19	GB	Roof	Column	Insect Damage	3	Insect exit holes
G19	GC	Wall	Wall Framing	Missing Section	5	Missing section/cut in diagonal member
G20	GA-GB	Roof Truss	Bottom Chord	Splitting	3	Splitting on south side only, eastern half
G20	GB	Roof Truss	Spine Beam	Section Loss	3	Section loss near splice connection, western side
G20	GB	Roof	Column	Splitting	4	Splitting and mechanical damage
G20	GB-GC	Roof Truss	Purlin	Missing Section	5	Broken midspan supported by new member, bottom purlin
G21	GA-GB	Roof Truss	Bottom Chord	Splitting	3	Splitting south side only, western half
G21	GA-GB	Roof Truss	Diagonal Webs	Splitting	3	Splitting north side only, bottom half. Inner web on eastern side
G21	GB-GC	Roof Truss	Bottom Chord	Splitting	3	Splitting south side only, western half
G21	GB	Roof	Column	Deformation	5	Concave on all sides
G21	GB	Roof	Column	Section Loss	5	Section loss near bottom
G21	GB	Roof Truss	Spine Beam	Section Loss	4	Section loss on both sides, possible insect damage
G21	GA-GB	Roof Truss	Horizontal Brace	Section Loss	4	Section loss with possible insect damage, central brace
G21	GA-GB	Roof Truss	Purlin	Splitting	4	Splitting with section loss approx 20%, fifth from bottom purlin
G21	GA	Wall	Wall Framing	Splitting	3	Splitting on vertical member, south side

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Client Name: Cox Architecture
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Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G21	GC	Wall	Wall Framing	Missing Section	5	Missing section/cut in diagonal member
G21	GC	Wall	Wall Framing	Misalignment	3	Loose connections between framing
G22	GA-GB	Roof Truss	Bottom Chord	Internal Defect	3	Internal defect south side only, western half
G22	GB-GC	Roof Truss	Bottom Chord	Splitting	3	Splitting south side only, western half
G22	GB	Roof Truss	Spine Beam	Section Loss	3	Section loss on western side
G22	GB-GC	Roof Truss	Diagonal Webs	Splitting	4	Splitting approx 30% section, bottom half. Inner web on western side.
G22	GB	Roof	Column	Mechanical Damage	3	Mechanical damage
G22	GC	Wall	Wall Framing	Splitting	3	Splitting on horizontal member, north end
G23	GB-GC	Roof Truss	Horizontal Brace	Section Loss	4	Section loss at internal defect (knot), central brace
G23	GC	Wall	Wall Framing	Splitting	3	Widespread splitting on horziontal, vertical and diagonal members
G24	GB-GC	Roof Truss	Bottom Chord	Splitting	5	Splitting on both sides and underside, extending most of bottom chord
G24	GB-GC	Roof Truss	Purlin	Section Loss	4	Splitting and section loss south and north ends on bottom, second and fifth purlins
G24	GB-GC	Roof Truss	Horizontal Brace	Insect Damage	4	Insect damage at bottom chord connection, outer brace
G24	GB-GC	Roof Truss	Purlin	Missing Section	5	Member cut/missing, fourth purlin from bottom
G25	GB-GC	Roof Truss	Purlin	Splitting	3	Splitting north end, third purlin from bottom
G26	GB	Roof	Column	Section Loss	5	Section loss at bottom of column, not supported - column needs replacement
G26	GB	Roof	Column	Splitting	3	Splitting, areas cut near top
G27	GA-GB	Roof Truss	Bottom Chord	Internal Defect	3	Knot/internal defect on eastern half
G27	GB-GC	Roof Truss	Purlin	Splitting	3	Splitting and possible water damage midspan, third purlin from bottom
G27	GB-GC	Roof Truss	Horizontal Brace	Splitting	3	Splitting at bottom chord connection, outer brace
G27	GB-GC	Roof Truss	Diagonal Webs	Splitting	5	Splitting approx 50% section on north side, extending full length of web. Inner web on eastern side
G27	GA-GB	Roof Truss	Horizontal Brace	Insect Damage	4	Insect damage and section loss near bottom chord connection, outer brace
G27	GC	Wall	Wall Framing	Splitting	3	Splitting with evidence of putty repair horziontal member, north end
G28	GB-GC	Roof Truss	Horizontal Brace	Splitting	3	Splitting at bottom chord connection, outer brace
G28	GA-GB	Roof Truss	Tie Rod	Misalignment	5	Bend in eastern outer tie rod
G28	GB	Roof	Column	Misalignment	3	Possibly twisted/misaligned
G28	GB	Roof	Column	Section Loss	6	Assumed deterioration and section loss where obscured by barrels/footing

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Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G29	GB-GC	Roof Truss	Horizontal Brace	Splitting	3	Splitting at bottom chord connection, outer brace
G29	GA-GB	Roof Truss	Bottom Chord	Splitting	4	Splitting on both sides and underside, extending most of bottom chord
G29	GA-GB	Roof Truss	Horizontal Brace	Insect Damage	4	Insect damage and section loss near bottom chord connection, outer brace
G29	GC	Wall	Wall Framing	Splitting	5	Splitting on horizontal member, south end
G30	GB	Roof Truss	Spine Beam	Internal Defect	3	Deterioration along bottom of spine beam
G30	GB	Roof	Column	Misalignment	5	Misaligned leaning north
G30	GB	Roof	Column	Splitting	5	Splitting affecting 25% of height, 30% section - held by strap near base
G30	GB-GC	Roof Truss	Tie Rod	Misalignment	5	Bend in central tie rod
G30	GB-GC	Roof Truss	Bottom Chord	Splitting	4	Splitting on north side only, western half
G30	GB	Roof Truss	Spine Beam	Splitting	4	Splitting on western side
G30	GB	Roof	Column	Misalignment	3	Misaligned leaning north
G30	GB	Roof	Column	Section Loss	6	Assumed deterioration and section loss where obscured by barrels/footing
G30	GA	Wall	Wall Framing	Splitting	3	Splitting on vertical members and horizontal member
G30	GC	Wall	Wall Framing	Splitting	3	Widespread splitting on vertical and horziontal members, gaps on diagonal members at wall
G30	GC	Wall	Wall Framing	Insect Damage	5	Insect damage and splitting on horizontal member
G31	GA-GB	Roof Truss	Diagonal Webs	Splitting	3	Splitting on top of web bottom half, inner eastern
G31	GB	Roof	Column	Misalignment	5	Misaligned leaning north
G31	GB	Roof	Column	Section Loss	5	Splitting with section loss near top. Splitting and concave full height - held by straps near base
G31	GB-GC	Roof Truss	Horizontal Brace	Insect Damage	5	Insect damage and section loss near bottom chord connection, outer brace
G31	GB	Roof	Column	Section Loss	6	Assumed deterioration and section loss where obscured by barrels/footing
G31	GA-GB	Roof Truss	Top Chord	Splitting	4	Splitting approx 30% section on north side only, western side
G31	GB-GC	Roof Truss	Bottom Chord	Splitting	4	Splitting on north side only, extending most of bottom chord
G31	GC	Wall	Wall Framing	Splitting	3	Splitting on diagonal member, underside
G32	GB-GC	Wall	Wall Framing	Splitting	3	Splitting on vertical framing members
G32	GA-GB	Roof Truss	Horizontal Brace	Splitting	3	Splitting near spine beam connection, central brace
G32	GB-GC	Wall	Wall Framing	Insect Damage	5	Insect damage on vertical framing member
G32	GA-GB	Wall	Wall Framing	Splitting	4	Splitting on diagonal and horizontal framing members

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Client Name: Cox Architecture
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Appendix B - Defect Condition Ratings

Location				Defect		
Grid ID	Grid ID2	Asset	Element	Type	Condition Rating	Comment
G32	GA-GB	Wall	Wall Framing	Section Loss	4	Section loss on 2x vertical framing members below truss structure

Appendix C

Remaining Service Life

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	100		Original	5.0	5	100	10	10
G09	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	100		Original	5.0	5	100	10	10
G12	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	100		Original	5.0	5	100	10	10
G13	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GB-GC	Roof Truss	Angle Brace	Steel	0	95	5	0	0	0	100		Original	2.1	3	100	80	45
G13	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	100		Original	5.0	5	100	10	10
G16	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GA	Roof Truss	Angle Brace	Steel	0	0	0	0	100	0	100		Original	5.0	5	100	10	10
G17	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G18	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G27	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA-GB	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GB-GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GC	Roof Truss	Angle Brace	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA-GB	Roof Truss	Bottom Chord	Timber	0	98	2	0	0	0	100		Original	2.0	3	100	80	45
G06	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	70	30	0	0	100		Original	3.3	4	100	41	25
G07	GB-GC	Roof Truss	Bottom Chord	Timber	0	99	1	0	0	0	100		Original	2.0	3	100	80	45
G08	GA-GB	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G08	GB-GC	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G09	GA-GB	Roof Truss	Bottom Chord	Timber	0	99	1	0	0	0	100		Original	2.0	3	100	80	45
G09	GB-GC	Roof Truss	Bottom Chord	Timber	0	0	70	30	0	0	100		Original	3.3	4	100	41	25
G10	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	70	30	0	0	100		Original	3.3	4	100	41	25
G10	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GA-GB	Roof Truss	Bottom Chord	Timber	0	0	80	20	0	0	100		Original	3.2	4	100	43	25
G11	GB-GC	Roof Truss	Bottom Chord	Timber	0	20	65	15	0	0	100		Original	3.0	4	100	48.5	25
G12	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GA-GB	Roof Truss	Bottom Chord	Timber	0	20	55	25	0	0	100		Original	3.1	4	100	45	25
G14	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G15	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Bottom Chord	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G16	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G16	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G19	GB-GC	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G18	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G20	GB-GC	Roof Truss	Bottom Chord	Timber	0	80	20	0	0	0	100		Original	2.2	3	100	76.5	45
G21	GA-GB	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G21	GB-GC	Roof Truss	Bottom Chord	Timber	0	95	5	0	0	0	100		Original	2.1	3	100	80	45
G22	GA-GB	Roof Truss	Bottom Chord	Timber	0	98	2	0	0	0	100		Original	2.0	3	100	80	45
G22	GB-GC	Roof Truss	Bottom Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G23	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GB-GC	Roof Truss	Bottom Chord	Timber	0	30	40	25	5	0	100		Original	3.1	5	100	45	10
G25	GB-GC	Roof Truss	Bottom Chord	Timber	0	95	5	0	0	0	100		Original	2.1	3	100	80	45
G26	GB-GC	Roof Truss	Bottom Chord	Timber	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G27	GA-GB	Roof Truss	Bottom Chord	Timber	0	98	2	0	0	0	100		Extension	2.0	3	100	80	45
G27	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA-GB	Roof Truss	Bottom Chord	Timber	0	30	60	10	0	0	100		Extension	2.8	4	100	55.5	25
G29	GB-GC	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB-GC	Roof Truss	Bottom Chord	Timber	0	70	20	10	0	0	100		Extension	2.4	4	100	69.5	25
G31	GA-GB	Roof Truss	Bottom Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GB-GC	Roof Truss	Bottom Chord	Timber	0	50	25	25	0	0	100		Extension	2.8	4	100	55.5	25

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GB	Roof Truss	Column	Timber	0	30	40	30	0	0	100		Original	3.0	4	100	45	25
G06	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GC	Roof Truss	Column	Timber	0	95	5	0	0	0	100		Original	2.1	3	100	80	45
G06	GB	Roof Truss	Column	Timber	0	60	30	10	0	0	100		Original	2.5	4	100	66	25
G07	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GB	Roof Truss	Column	Timber	0	50	50	0	0	0	100		Original	2.5	3	100	66	45
G08	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB	Roof Truss	Column	Timber	0	0	60	40	0	0	100		Original	3.4	4	100	39	25
G09	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB	Roof Truss	Column	Timber	0	0	40	10	50	0	100		Original	4.1	5	100	25	10
G10	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB	Roof Truss	Column	Timber	0	35	40	20	5	0	100		Original	3.0	5	100	48.5	10
G11	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GB	Roof Truss	Column	Timber	0	35	35	0	0	30	100	Partly obscured	Original	2.5	3	100	66	45
G13	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GC	Roof Truss	Column	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G13	GB	Roof Truss	Column	Timber	0	40	20	10	0	30	100	Partly obscured	Original	2.6	4	100	62.5	25
G14	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB	Roof Truss	Column	Timber	0	40	30	30	0	0	100		Original	2.9	4	100	52	25
G16	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GB	Roof Truss	Column	Timber	0	65	15	20	0	0	100		Original	2.6	4	100	62.5	25
G17	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB	Roof Truss	Column	Timber	0	95	0	5	0	0	100		Original	2.1	4	100	80	25
G19	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GB	Roof Truss	Column	Timber	0	80	15	0	0	0	95		Original	2.2	3	100	76.5	45
G18	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GB	Roof Truss	Column	Timber	0	0	65	25	10	0	100		Original	3.5	5	100	37	10
G20	GA	Roof Truss	Column	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G20	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GB	Roof Truss	Column	Timber	0	0	45	30	25	0	100		Original	3.8	5	100	31	10
G21	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GB	Roof Truss	Column	Timber	0	25	65	10	0	0	100		Original	2.9	4	100	52	25
G22	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GB	Roof Truss	Column	Timber	0	50	50	0	0	0	100		Original	2.5	3	100	66	45

Remaining Life Table
Revision 0 30 April 2025

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G23	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G26	GC	Roof Truss	Column	Timber	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G26	GB	Roof Truss	Column	Timber	0	0	70	10	20	0	100		Extension	3.5	5	100	37	10
G27	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GB	Roof Truss	Column	Timber	0	50	25	0	0	25	100	Partly obscured	Extension	2.3	3	100	69.5	45
G29	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB	Roof Truss	Column	Timber	0	15	30	0	15	40	100	Partly obscured	Extension	3.3	5	100	41	10
G31	GA	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GB	Roof Truss	Column	Timber	0	0	0	0	75	25	100	Partly obscured	Extension	5.0	5	100	10	10
G31	GC	Roof Truss	Column	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G04	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GB-GC	Roof Truss	Horizontal Brace	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G06	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB-GC	Roof Truss	Horizontal Brace	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G10	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB-GC	Roof Truss	Horizontal Brace	Timber	0	0	70	30	0	0	100		Original	3.3	4	100	41	25
G10	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GB-GC	Roof Truss	Horizontal Brace	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G13	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Horizontal Brace	Timber	0	80	20	0	0	0	100		Original	2.2	3	100	76.5	45
G15	GA-GB	Roof Truss	Horizontal Brace	Timber	0	95	0	0	5	0	100		Original	2.2	5	100	76.5	10
G16	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB-GC	Roof Truss	Horizontal Brace	Timber	0	60	40	0	0	0	100		Original	2.4	3	100	69.5	45
G17	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GB-GC	Roof Truss	Horizontal Brace	Timber	0	50	50	0	0	0	100		Original	2.5	3	100	66	45
G19	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G20	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GA-GB	Roof Truss	Horizontal Brace	Timber	0	90	0	10	0	0	100		Original	2.2	4	100	76.5	25
G21	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GB-GC	Roof Truss	Horizontal Brace	Timber	0	75	20	5	0	0	100		Original	2.3	4	100	73	25
G24	GC	Roof Truss	Horizontal Brace	Timber	0	80	10	10	0	0	100		Original	2.3	4	100	73	25
G24	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G27	GC	Roof Truss	Horizontal Brace	Timber	0	85	15	0	0	0	100		Extension	2.2	3	100	76.5	45
G27	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GA-GB	Roof Truss	Horizontal Brace	Timber	0	85	15	0	0	0	100		Extension	2.2	3	100	76.5	45
G27	GA	Roof Truss	Horizontal Brace	Timber	0	90	0	10	0	0	100		Extension	2.2	4	100	76.5	25
G28	GC	Roof Truss	Horizontal Brace	Timber	0	95	5	0	0	0	100		Extension	2.1	3	100	80	45
G28	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GC	Roof Truss	Horizontal Brace	Timber	0	95	5	0	0	0	100		Extension	2.1	3	100	80	45
G29	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA	Roof Truss	Horizontal Brace	Timber	0	95	0	5	0	0	100		Extension	2.1	4	100	80	25
G30	GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GC	Roof Truss	Horizontal Brace	Timber	0	70	0	15	15	0	100		Extension	2.8	5	100	55.5	10
G31	GB-GC	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA-GB	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G32	GC	Roof Truss	Horizontal Brace	Timber	0	75	25	0	0	0	100		Extension	2.3	3	100	73	45
G32	GB-GC	Roof Truss	Horizontal Brace	Timber	0	80	20	0	0	0	100		Extension	2.2	3	100	76.5	45
G32	GA-GB	Roof Truss	Horizontal Brace	Timber	0	80	20	0	0	0	100		Extension	2.2	3	100	76.5	45
G32	GA	Roof Truss	Horizontal Brace	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)								Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment						
G04	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GB	Roof Truss	Spine Beam	Timber	0	70	30	0	0	0	100		Original	2.3	3	100	73	45
G07	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GB	Roof Truss	Spine Beam	Timber	0	99	1	0	0	0	100		Original	2.0	3	100	80	45
G15	GB	Roof Truss	Spine Beam	Timber	0	40	45	15	0	0	100		Original	2.8	4	100	55.5	25
G16	GB	Roof Truss	Spine Beam	Timber	0	85	0	15	0	0	100		Original	2.3	4	100	73	25
G18	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0		100		Original	2.0	2	100	80	80
G17	GB	Roof Truss	Spine Beam	Timber	0	60	40	0	0	0	100		Original	2.4	3	100	69.5	45
G19	GB	Roof Truss	Spine Beam	Timber	0	15	80	5	0	0	100		Original	2.9	4	100	52	25
G20	GB	Roof Truss	Spine Beam	Timber	0	95	5	0	0	0	100		Original	2.1	3	100	80	45
G21	GB	Roof Truss	Spine Beam	Timber	0	90	0	10	0	0	100		Original	2.2	4	100	76.5	25
G22	GB	Roof Truss	Spine Beam	Timber	0	70	30	0	0	0	100		Original	2.3	3	100	73	45
G26	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB	Roof Truss	Spine Beam	Timber	0	80	15	5	0	0	100		Extension	2.3	4	100	73	25
G31	GB	Roof Truss	Spine Beam	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

Remaining Life Table
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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA-GB	Roof Truss	Tie Rods	Steel	0	80	0	0	20		100		Original	2.6	5	100	62.5	10
G18	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0		100		Original	2.0	2	100	80	80
G17	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GA-GB	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	100		Original	2.6	5	100	62.5	10
G19	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G26	GB-GC	Roof Truss	Tie Rods	Steel	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G26	GC	Roof Truss	Tie Rods	Steel	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G27	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA-GB	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	100		Extension	2.6	5	100	62.5	10
G28	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB-GC	Roof Truss	Tie Rods	Steel	0	80	0	0	20	0	100		Extension	2.6	5	100	62.5	10
G31	GA-GB	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GB-GC	Roof Truss	Tie Rods	Steel	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

Remaining Life Table
Revision 0 30 April 2025

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GB-GC	Roof Truss	Top Chord	Timber	0	70	0	0	0	30	100	Partly obscured	Original	2.0	2	100	80	80
G06	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GA	Roof Truss	Top Chord	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G11	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA-GB	Roof Truss	Top Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G12	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GC	Roof Truss	Top Chord	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G13	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GA-GB	Roof Truss	Top Chord	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G13	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GC	Roof Truss	Top Chord	Timber	0	0	50	50	0	0	100		Original	3.5	4	100	37	25
G14	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA	Roof Truss	Top Chord	Timber	0	99	0	1	0	0	100		Original	2.0	4	100	80	25
G16	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0		100		Original	2.0	2	100	80	80
G17	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G19	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GC	Roof Truss	Top Chord	Timber	0	80	20	0	0	0	100		Original	2.2	3	100	76.5	45
G21	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G26	GC	Roof Truss	Top Chord	Timber	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G27	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA-GB	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA-GB	Roof Truss	Top Chord	Timber	0	25	0	75	0	0	100		Extension	3.5	4	100	37	25
G31	GB-GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GC	Roof Truss	Top Chord	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G19	GA	Roof Truss	Bracket	Steel	0	0	0	100	0	0	100	No angle brace	Original	4.0	4	100	25	25

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)						Total	Comment						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6			Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G05	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G06	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G07	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G08	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G09	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G10	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G11	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G12	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G13	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G14	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G15	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G16	GB-GC	Roof Truss	Diagonal Webs	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G16	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G17	GB-GC	Roof Truss	Diagonal Webs	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G17	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)						Total	Comment						
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6			Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G19	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G19	GB-GC	Roof Truss	Diagonal Webs	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G19	GC	Roof Truss	Diagonal Webs	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G18	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G18	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G20	GB-GC	Roof Truss	Diagonal Webs	Timber	0	80	20	0	0	0	100		Original	2.2	3	100	76.5	45
G20	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GA	Roof Truss	Diagonal Webs	Timber	0	90	10	0	0	0	100		Original	2.1	3	100	80	45
G21	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G21	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G22	GB-GC	Roof Truss	Diagonal Webs	Timber	0	95	5	0	0	0	100		Original	2.1	3	100	80	45
G22	GC	Roof Truss	Diagonal Webs	Timber	0	85	15	0	0	0	100		Original	2.2	3	100	76.5	45
G23	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G23	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G24	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G25	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Original	2.0	2	100	80	80
G26	GB-GC	Roof Truss	Diagonal Webs	Timber	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G26	GC	Roof Truss	Diagonal Webs	Timber	0	50	0	0	0	50	100	Partly obscured	Extension	2.0	2	100	80	80
G27	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G27	GB-GC	Roof Truss	Diagonal Webs	Timber	0	90	0	0	10	0	100		Extension	2.3	5	100	73	10
G27	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GA	Roof Truss	Diagonal Webs	Timber	0	0	85	15	0	0	100		Extension	3.2	4	100	43	25
G28	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G28	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G29	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G30	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GA	Roof Truss	Diagonal Webs	Timber	0	95	5	0	0	0	100		Extension	2.1	3	100	80	45
G31	GA-GB	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GB-GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80
G31	GC	Roof Truss	Diagonal Webs	Timber	0	100	0	0	0	0	100		Extension	2.0	2	100	80	80

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G04	GA-GB	Roof	Purlins	Timber	0	0	95	5	0	0	100		Original	3.1	4	50	22.5	12.5
G05	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G05	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G06	GA-GB	Roof	Purlins	Timber	0	90	10	0	0	0	100		Original	2.1	3	50	40	22.5
G06	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G07	GA-GB	Roof	Purlins	Timber	0	80	15	5	0	0	100		Original	2.3	4	50	36.5	12.5
G07	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G08	GA-GB	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G08	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G09	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G09	GB-GC	Roof	Purlins	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G10	GA-GB	Roof	Purlins	Timber	0	90	10	0	0	0	100		Original	2.1	3	50	40	22.5
G10	GB-GC	Roof	Purlins	Timber	0	90	10	0	0	0	100		Original	2.1	3	50	40	22.5
G11	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	100		Original	2.2	4	50	38.25	12.5
G11	GB-GC	Roof	Purlins	Timber	0	65	30	5	0	0	100		Original	2.4	4	50	34.75	12.5
G12	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	100		Original	2.2	4	50	38.25	12.5
G12	GB-GC	Roof	Purlins	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G13	GA-GB	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G13	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G14	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	100		Original	2.2	4	50	38.25	12.5
G14	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G15	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	100		Original	2.2	4	50	38.25	12.5
G15	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G16	GA-GB	Roof	Purlins	Timber	0	85	10	5	0	0	100		Original	2.2	4	50	38.25	12.5
G16	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G19	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G19	GB-GC	Roof	Purlins	Timber	0	90	10	0	0	0	100		Original	2.1	3	50	40	22.5
G17	GA-GB	Roof	Purlins	Timber	0	90	10	0	0	0	100		Original	2.1	3	50	40	22.5
G17	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G18	GA-GB	Roof	Purlins	Timber	0	90	5	5	0	0	100		Original	2.2	4	50	38.25	12.5
G18	GB-GC	Roof	Purlins	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G20	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G20	GB-GC	Roof	Purlins	Timber	0	90	5	0	5	0	100		Original	2.2	5	50	38.25	5
G21	GA-GB	Roof	Purlins	Timber	0	95	0	5	0	0	100		Original	2.1	4	50	40	12.5
G21	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G22	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G22	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G23	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G24	GB-GC	Roof	Purlins	Timber	0	75	10	10	5	0	100		Original	2.5	5	50	33	5
G25	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G26	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G26	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G27	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G27	GB-GC	Roof	Purlins	Timber	0	95	5	0	0	0	100		Extension	2.1	3	50	40	22.5
G28	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G28	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G29	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G29	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G30	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G30	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G31	GA-GB	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G31	GB-GC	Roof	Purlins	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G05	GA-GB	Roof	Roof Sheeting	Steel	25	20	15	0	0	40	100	Partly obscured	Original	1.8	3	25	21	11.25
G05	GB-GC	Roof	Roof Sheeting	Steel	0	75	25	0	0	0	100		Original	2.3	3	25	18.25	11.25
G06	GA-GB	Roof	Roof Sheeting	Steel	50	30	20	0	0	0	100		Original	1.7	3	25	22	11.25
G06	GB-GC	Roof	Roof Sheeting	Steel	0	50	50	0	0	0	100		Original	2.5	3	25	16.5	11.25
G07	GA-GB	Roof	Roof Sheeting	Steel	50	25	25	0	0	0	100		Original	1.8	3	25	21.5	11.25
G07	GB-GC	Roof	Roof Sheeting	Steel	0	95	5	0	0	0	100		Original	2.1	3	25	20	11.25
G08	GA-GB	Roof	Roof Sheeting	Steel	50	35	15	0	0	0	100		Original	1.7	3	25	22	11.25
G08	GB-GC	Roof	Roof Sheeting	Steel	0	75	25	0	0	0	100		Original	2.3	3	25	18.25	11.25
G09	GA-GB	Roof	Roof Sheeting	Steel	50	35	15	0	0	0	100		Original	1.7	3	25	22	11.25
G09	GB-GC	Roof	Roof Sheeting	Steel	0	80	20	0	0	0	100		Original	2.2	3	25	19.125	11.25
G10	GA-GB	Roof	Roof Sheeting	Steel	50	45	5	0	0	0	100		Original	1.6	3	25	22.5	11.25
G10	GB-GC	Roof	Roof Sheeting	Steel	0	75	25	0	0	0	100		Original	2.3	3	25	18.25	11.25
G11	GA-GB	Roof	Roof Sheeting	Steel	50	40	10	0	0	0	100		Original	1.6	3	25	22.5	11.25
G11	GB-GC	Roof	Roof Sheeting	Steel	0	75	25	0	0	0	100		Original	2.3	3	25	18.25	11.25
G12	GA-GB	Roof	Roof Sheeting	Steel	0	50	45	5	0	0	100		Original	2.6	4	25	15.625	6.25
G12	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	25	20	11.25
G13	GA-GB	Roof	Roof Sheeting	Steel	50	49	1	0	0	0	100		Original	1.5	3	25	22.5	11.25
G13	GB-GC	Roof	Roof Sheeting	Steel	0	95	5	0	0	0	100		Original	2.1	3	25	20	11.25
G14	GA-GB	Roof	Roof Sheeting	Steel	50	50	0	0	0	0	100		Original	1.5	2	25	23	20
G14	GB-GC	Roof	Roof Sheeting	Steel	0	95	5	0	0	0	100		Original	2.1	3	25	20	11.25
G15	GA-GB	Roof	Roof Sheeting	Steel	50	35	15	0	0	0	100		Original	1.7	3	25	22	11.25
G15	GB-GC	Roof	Roof Sheeting	Steel	0	75	25	0	0	0	100		Original	2.3	3	25	18.25	11.25
G16	GA-GB	Roof	Roof Sheeting	Steel	50	30	20	0	0	0	100		Original	1.7	3	25	22	11.25
G16	GB-GC	Roof	Roof Sheeting	Steel	0	85	15	0	0	0	100		Original	2.2	3	25	19.125	11.25
G19	GA-GB	Roof	Roof Sheeting	Steel	50	40	10	0	0	0	100		Original	1.6	3	25	22.5	11.25
G17	GA-GB	Roof	Roof Sheeting	Steel	50	40	10	0	0	0	100		Original	1.6	3	25	22.5	11.25
G17	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	25	20	11.25
G18	GA-GB	Roof	Roof Sheeting	Steel	50	30	5	15	0	0	100		Original	1.9	4	25	21	6.25
G18	GB-GC	Roof	Roof Sheeting	Steel	0	80	10	10	0	0	100		Original	2.3	4	25	18.25	6.25
G19	GB-GC	Roof	Roof Sheeting	Steel	0	75	10	15	0	0	100		Original	2.4	4	25	17.375	6.25
G20	GA-GB	Roof	Roof Sheeting	Steel	50	35	15	0	0	0	100		Original	1.7	3	25	22	11.25
G20	GB-GC	Roof	Roof Sheeting	Steel	0	85	10	0	0	0	95		Original	2.1	3	25	19.125	11.25
G21	GA-GB	Roof	Roof Sheeting	Steel	50	30	20	0	0	0	100		Original	1.7	3	25	22	11.25
G21	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	25	20	11.25
G22	GA-GB	Roof	Roof Sheeting	Steel	50	35	15	0	0	0	100		Original	1.7	3	25	22	11.25
G22	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	25	20	11.25
G23	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	25	20	11.25
G24	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	25	20	11.25
G25	GB-GC	Roof	Roof Sheeting	Steel	0	95	5	0	0	0	100		Original	2.1	3	25	20	11.25
G26	GA-GB	Roof	Roof Sheeting	Steel	100	0	0	0	0	0	100		Extension	1.0	1	25	25	25
G26	GB-GC	Roof	Roof Sheeting	Steel	0	98	2	0	0	0	100		Extension	2.0	3	25	20	11.25
G27	GA-GB	Roof	Roof Sheeting	Steel	100	0	0	0	0	0	100		Extension	1.0	1	25	25	25
G27	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Extension	2.1	3	25	20	11.25
G28	GA-GB	Roof	Roof Sheeting	Steel	100	0	0	0	0	0	100		Extension	1.0	1	25	25	25
G28	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Extension	2.1	3	25	20	11.25
G29	GA-GB	Roof	Roof Sheeting	Steel	100	0	0	0	0	0	100		Extension	1.0	1	25	25	25
G29	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Extension	2.1	3	25	20	11.25
G30	GA-GB	Roof	Roof Sheeting	Steel	100	0	0	0	0	0	100		Extension	1.0	1	25	25	25
G30	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Extension	2.1	3	25	20	11.25
G31	GA-GB	Roof	Roof Sheeting	Steel	100	0	0	0	0	0	100		Extension	1.0	1	25	25	25
G31	GB-GC	Roof	Roof Sheeting	Steel	0	90	10	0	0	0	100		Extension	2.1	3	25	20	11.25

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life

AECOM

Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G04	GA	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G05	GA	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G05	GC	Wall	Wall Framing	Timber	0	60	40	0	0	0	100		Original	2.4	3	50	34.75	22.5
G06	GA	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G06	GC	Wall	Wall Framing	Timber	0	70	30	0	0	0	100		Original	2.3	3	50	36.5	22.5
G07	GA	Wall	Wall Framing	Timber	0	90	10	0	0	0	100		Original	2.1	3	50	40	22.5
G07	GC	Wall	Wall Framing	Timber	0	90	5	5	0	0	100		Original	2.2	4	50	38.25	12.5
G09	GC	Wall	Wall Framing	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G10	GC	Wall	Wall Framing	Timber	0	80	20	0	0	0	100		Original	2.2	3	50	38.25	22.5
G11	GC	Wall	Wall Framing	Timber	0	70	30	0	0	0	100		Original	2.3	3	50	36.5	22.5
G13	GC	Wall	Wall Framing	Timber	0	70	30	0	0	0	100		Original	2.3	3	50	36.5	22.5
G14	GC	Wall	Wall Framing	Timber	0	80	20	0	0	0	100		Original	2.2	3	50	38.25	22.5
G16	GA	Wall	Wall Framing	Timber	0	85	10	5	0	0	100		Original	2.2	4	50	38.25	12.5
G16	GC	Wall	Wall Framing	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G18	GA	Wall	Wall Framing	Timber	0	90	10	0	0		100		Original	2.1	3	50	40	22.5
G18	GC	Wall	Wall Framing	Timber	0	85	15	0	0		100		Original	2.2	3	50	38.25	22.5
G17	GA	Wall	Wall Framing	Timber	0	80	15	0	5	0	100		Original	2.3	5	50	36.5	5
G17	GC	Wall	Wall Framing	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G19	GC	Wall	Wall Framing	Timber	0	85	13	0	2	0	100		Original	2.2	5	50	38.25	5
G21	GA	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G21	GC	Wall	Wall Framing	Timber	0	85	10	0	5	0	100		Original	2.3	5	50	36.5	5
G22	GA	Wall	Wall Framing	Timber	0	100	0	0	0	0	100		Original	2.0	2	50	40	40
G22	GC	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Original	2.1	3	50	40	22.5
G23	GC	Wall	Wall Framing	Timber	0	85	15	0	0	0	100		Original	2.2	3	50	38.25	22.5
G26	GA	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Extension	2.1	3	50	40	22.5
G26	GC	Wall	Wall Framing	Timber	0	90	10	0	0	0	100		Extension	2.1	3	50	40	22.5
G27	GA	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Extension	2.1	3	50	40	22.5
G27	GC	Wall	Wall Framing	Timber	0	85	15	0	0	0	100		Extension	2.2	3	50	38.25	22.5
G29	GC	Wall	Wall Framing	Timber	0	75	0	0	25	0	100		Extension	2.8	5	50	27.75	5
G30	GA	Wall	Wall Framing	Timber	0	80	20	0	0	0	100		Extension	2.2	3	50	38.25	22.5
G30	GC	Wall	Wall Framing	Timber	0	83	15	0	2	0	100		Extension	2.2	5	50	36.5	5
G31	GA	Wall	Wall Framing	Timber	0	100	0	0	0	0	100		Extension	2.0	2	50	40	40
G31	GC	Wall	Wall Framing	Timber	0	90	10	0	0	0	100		Extension	2.1	3	50	40	22.5
G32	GA-GB	Wall	Wall Framing	Timber	0	80	10	0	10	0	100		Extension	2.4	5	50	34.75	5
G32	GB	Wall	Wall Framing	Timber	0	80	20	0	0	0	100		Extension	2.2	3	50	38.25	22.5
G32	GB-GC	Wall	Wall Framing	Timber	0	80	10	10	0	0	100		Extension	2.3	4	50	36.5	12.5
G32	GC	Wall	Wall Framing	Timber	0	95	5	0	0	0	100		Extension	2.1	3	50	40	22.5

Remaining Life Table
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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G01	GA (S)	Wall	Wall Sheeting	Steel	0	48	2	0	0	50	100	Obscured	Original	2.0	3	20	16	9
G01	GA (E)	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	Obscured	Original	2.0	2	20	16	16
G01	GA-GB	Wall	Wall Sheeting	Steel	0	48	2	0	0	50	100	Obscured	Original	2.0	3	20	16	9
G01	GB	Wall	Wall Sheeting	Steel	0	48	2	0	0	50	100	Obscured	Original	2.0	3	20	16	9
G01	GB-GC	Wall	Wall Sheeting	Steel	0	48	2	0	0	50	100	Obscured	Original	2.0	3	20	16	9
G01	GC (S)	Wall	Wall Sheeting	Steel	0	45	5	0	0	50	100	Obscured	Original	2.1	3	20	16	9
G01	GC (W)	Wall	Wall Sheeting	Steel	0	45	5	0	0	50	100	Obscured	Original	2.1	3	20	16	9
G02	GA	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	Internal obscured/not accessible	Original	2.0	2	20	16	16
G02	GC	Wall	Wall Sheeting	Steel	0	45	5	0	0	50	100	Internal obscured/not accessible	Original	2.1	3	20	16	9
G03	GA	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	Internal obscured/not accessible	Original	2.0	2	20	16	16
G03	GC	Wall	Wall Sheeting	Steel	0	45	5	0	0	50	100	Internal obscured/not accessible	Original	2.1	3	20	16	9
G04	GA	Wall	Wall Sheeting	Steel	0	75	0	0	0	25	100	Half of internal obscured/not accessible	Original	2.0	2	20	16	16
G04	GC	Wall	Wall Sheeting	Steel	0	45	5	0	0	50	100	Internal obscured/not accessible	Original	2.1	3	20	16	9
G05	GA	Wall	Wall Sheeting	Steel	0	100	0	0	0	0	100		Original	2.0	2	20	16	16
G05	GC	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	External obscured/not accessible	Original	2.0	2	20	16	16
G06	GA	Wall	Wall Sheeting	Steel	0	75	0	0	0	25	100	Half of internal obscured/not accessible	Original	2.0	2	20	16	16
G06	GC	Wall	Wall Sheeting	Steel	0	25		0	0	75	100	Half of internal obscured/not accessible, External obscured/not accessible	Original	2.0	2	20	16	16
G07	GA	Wall	Wall Sheeting	Steel	0	100	0	0	0	0	100		Original	2.0	2	20	16	16
G07	GC	Wall	Wall Sheeting	Steel	0	49	0	1	0	50	100	External obscured/not accessible	Original	2.0	4	20	16	5
G08	GA	Wall	Wall Sheeting	Steel	50	45	5	0	0	0	100	Roller door	Original	1.6	3	20	18	9
G08	GC	Wall	Wall Sheeting	Steel	95	5	0	0	0	0	100	Roller door	Original	1.1	2	20	20	16
G09	GA	Wall	Wall Sheeting	Steel	0	25	0	0	0	75	100	Internal obscured/not accessible, half obscured/not accessible external	Original	2.0	2	20	16	16
G09	GC	Wall	Wall Sheeting	Steel	0	73	2	0	0	25	100	Half of internal obscured/not accessible	Original	2.0	3	20	16	9
G10	GC	Wall	Wall Sheeting	Steel	0	90	10	0	0	0	100		Original	2.1	3	20	16	9
G11	GC	Wall	Wall Sheeting	Steel	0	90	9	1	0	0	100		Original	2.1	4	20	15.3	5
G13	GC	Wall	Wall Sheeting	Steel	0	98	2	0	0	0	100		Original	2.0	3	20	16	9
G14	GC	Wall	Wall Sheeting	Steel	0	65	5	0	0	30	100	Door insert	Original	2.1	3	20	16	9
G15	GC	Wall	Wall Sheeting	Steel	0	48	2	0	0	50	100	Internal obscured/not accessible	Original	2.0	3	20	16	9
G16	GA	Wall	Wall Sheeting	Steel	0	75	0	0	0	25	100	Approx half external obscured/not accessible	Original	2.0	2	20	16	16
G16	GC	Wall	Wall Sheeting	Steel	0	85	15	0	0	0	100		Original	2.2	3	20	15.3	9
G18	GA	Wall	Wall Sheeting	Steel	0	99	1	0	0	0	100		Original	2.0	3	20	16	9
G18	GC	Wall	Wall Sheeting	Steel	0	80	5	15	0	0	100	Approx one third internal obscured/not accessible	Original	2.4	4	20	13.9	5
G17	GA	Wall	Wall Sheeting	Steel	0	75	0	0	0	25	100	Approx half external obscured/not accessible	Original	2.0	2	20	16	16
G17	GC	Wall	Wall Sheeting	Steel	0	75	20	5	0	0	100		Original	2.3	4	20	14.6	5
G19	GC	Wall	Wall Sheeting	Steel	0	70	13	2	0	15	100	Approx one third internal obscured/not accessible	Original	2.2	4	20	15.3	5
G21	GA	Wall	Wall Sheeting	Steel	0	95	4	1	0	0	100		Original	2.1	4	20	16	5
G21	GC	Wall	Wall Sheeting	Steel	0	40	9	1	0	50	100	External not accessible	Original	2.2	4	20	14.6	5
G22	GA	Wall	Wall Sheeting	Steel	0	73	2	0	0	25	100	Approx half internal obscured/not accessible.	Original	2.0	3	20	16	9
G22	GC	Wall	Wall Sheeting	Steel	0	30	4	1	0	65	100	Approx one third internal obscured/not accessible. External not accessible	Original	2.2	4	20	15.3	5

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)													
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G23	GA	Wall	Wall Sheeting	Steel	0	48	2	0	0	50	100	Internal obscured/not accessible	Original	2.0	3	20	16	9
G23	GC	Wall	Wall Sheeting	Steel	0	40	5	5	0	50	100	External not accessible	Original	2.3	4	20	14.6	5
G24	GA	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	Internal obscured/not accessible	Original	2.0	2	20	16	16
G24	GC	Wall	Wall Sheeting	Steel	0	20	0	0	0	80	100	Door insert. External not accessible.	Original	2.0	2	20	16	16
G25	GA	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	Internal obscured/not accessible	Original	2.0	2	20	16	16
G25	GC	Wall	Wall Sheeting	Steel	0	25	25	0	0	50	100	Different sheeting material. External not accessible.	Original	2.5	3	20	13.2	9
G26	GA	Wall	Wall Sheeting	Steel	0	95	5	0	0	0	100		Extension	2.1	3	20	16	9
G26	GC	Wall	Wall Sheeting	Steel	0	45	5	0	0	50	100	External not accessible.	Extension	2.1	3	20	16	9
G27	GA	Wall	Wall Sheeting	Steel	0	90	10	0	0	0	100		Extension	2.1	3	20	16	9
G27	GC	Wall	Wall Sheeting	Steel	0	43	5	2	0	50	100	External not accessible	Extension	2.2	4	20	15.3	5
G28	GA	Wall	Wall Sheeting	Steel	0	90	5	5	0	0	100		Extension	2.2	4	20	15.3	5
G28	GC	Wall	Wall Sheeting	Steel	0	25	25	0	0	50	100	Roller door, different sheeting material. External not accessible.	Extension	2.5	3	20	13.2	9
G29	GA	Wall	Wall Sheeting	Steel	0	83	15	2	0	0	100		Extension	2.2	4	20	15.3	5
G29	GC	Wall	Wall Sheeting	Steel	0	45	5			50	100	External not accessible.	Extension	2.1	3	20	16	9
G30	GA	Wall	Wall Sheeting	Steel	0	83	2	0	0	15	100	Approx one third internal obscured/not accessible	Extension	2.0	3	20	16	9
G30	GC	Wall	Wall Sheeting	Steel	0	43	5	2	0	50	100	External not accessible	Extension	2.2	4	20	15.3	5
G31	GA	Wall	Wall Sheeting	Steel	0	63	2	0	0	35	100	Approx two thirds internal obscured/not accessible	Extension	2.0	3	20	16	9
G31	GC	Wall	Wall Sheeting	Steel	0	50	0	0	0	50	100	External not accessible.	Extension	2.0	2	20	16	16
G32	GA	Wall	Wall Sheeting	Steel	0	88	10	2	0	0	100		Extension	2.1	4	20	15.3	5
G32	GA-GB	Wall	Wall Sheeting	Steel	0	98	2	0	0	0	100		Extension	2.0	3	20	16	9
G32	GB	Wall	Wall Sheeting	Steel	98	2	0	0	0	0	100	Roller door	Extension	1.0	2	20	20	16
G32	GB-GC	Wall	Wall Sheeting	Steel	0	95	5	0	0	0	100	Approx one third internal obscured/not accessible	Extension	2.1	3	20	16	9
G32	GC	Wall	Wall Sheeting	Steel	0	90	9	1	0	0	100		Extension	2.1	4	20	15.3	5

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Client Name: Cox Architecture
Project Name: Hobart Goods Shed

Appendix C - Remaining Service Life

Location					Condition Rating (%)												
Grid ID	Grid ID2	Asset	Element	Material	CR1	CR2	CR3	CR4	CR5	CR6	Total	Comment	Section	Average CR	Maximum CR	Design Life	Remaining Life (Years) - Average CR - using design life	Remaining Life (Years) - Maximum CR - using design life
G03	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G03	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G04	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G04	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	7 original, 0 replacement	Original	2.0	2	30	24	24
G05	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G05	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G06	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G06	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G07	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	7 original, 0 replacement	Original	2.0	2	30	24	24
G07	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G08	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G08	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G09	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G10	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G11	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G13	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	3 original, 4 replacement	Original	2.0	2	30	24	24
G14	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	7 original, 0 replacement	Original	2.0	2	30	24	24
G15	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G16	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G16	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G18	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G18	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G17	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G17	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Original	2.0	2	30	24	24
G19	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G21	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	0 original, 7 replacement	Original	2.0	2	30	24	24
G21	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G22	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G22	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G23	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	1 original, 6 replacement	Original	2.0	2	30	24	24
G23	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G24	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G24	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G25	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Original	2.0	2	30	24	24
G25	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Original	2.0	2	30	24	24
G26	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Extension	2.0	2	30	24	24
G26	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	0 original, 7 replacement	Extension	2.0	2	30	24	24
G27	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	6 original, 1 replacement	Extension	2.0	2	30	24	24
G27	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Extension	2.0	2	30	24	24
G29	GC	Wall	Window panes	Glass	0	86	0	0	14	0	100	5 original, 2 replacement. Hole in 1 original pane	Extension	2.4	5	30	19.8	3
G30	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Extension	2.0	2	30	24	24
G30	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Extension	2.0	2	30	24	24
G31	GA	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Extension	2.0	2	30	24	24
G31	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	5 original, 2 replacement	Extension	2.0	2	30	24	24
G32	GB-GC	Wall	Window panes	Glass	0	86	0	0	14	0	100	4 original, 2 replacement, 1 broken	Extension	2.4	5	30	19.8	3
G32	GC	Wall	Window panes	Glass	0	100	0	0	0	0	100	4 original, 3 replacement	Extension	2.0	2	30	24.6	24

Prepared for
Cox Architecture
ABN: 72 426 372 646

AECOM

Structural Compliance Assessment Report

Hobart Railway Goods Shed

07-May-2025
Macquarie Point Multi-Purpose Stadium
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Revision 01 – 07-May-2025
Prepared for – Cox Architecture – ABN: 72 426 372 646

Structural Compliance Assessment Report

Hobart Railway Goods Shed

Client: Cox Architecture
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AECOM
Macquarie Point Multi-Purpose Stadium
Structural Compliance Assessment Report – Hobart Railway Goods Shed

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1.0 Introduction

1.1 Background

AECOM Australia Pty Ltd (AECOM) has been engaged by Cox Architecture (Cox) to carry out a condition, remaining life and structural compliance assessment. The purpose of this engagement was to undertake a gap analysis against Deemed-to-Satisfy (DtS) provisions of National Construction Code (NCC 2022) to identify any departures. This report specifically addresses the structural assessment undertaken to identify any structural non-compliance issues.

Our advanced materials team undertook a condition and remaining life assessment of the goods shed. Advice following this assessment is contained within the following report:

- MPMS-AEC-RP-DU-03-11-01-E Condition and Remaining Life Assessment Report – Hobart Railway Goods Shed

Our fire engineering team has reviewed proposals with respect to the intended use of the Goods Shed and inclusion of the structure in the context of the stadium project. Please refer to the overall Macquarie Point Multi-Purpose Stadium (MPMS) Fire Engineering Brief (FEB) to be developed within the detailed design phase for their advice.

Particularly, this report is focused on the structural assessment of the Goods Shed building for gravity loads (i.e. building self-weight) and lateral loads (i.e. wind and earthquake). The below report summarises our findings following our assessment of the building.

1.2 Building Description

The Hobart Railway Goods Shed was constructed in 1914-1915 and is a predominately a timber structure, consisting of a dual gable timber roof made up of repeated trusses, as well as timber columns, purlins, bracing and struts. The structure incorporates steel in the form of rolled steel angle bracing in the transverse direction, as well as tension tie rods in the trusses (refer to Appendix A). The building also has a mezzanine level, which consists of a timber joist floor system that was retro fitted in 1949. The original structure is detailed to be supported on driven piles (this was not confirmed as it is not intended for the existing footings to be retained). Refer to Figure 1 and Figure 2 for exterior and interior views of the Goods Shed.

Figure 1 Goods Shed exterior

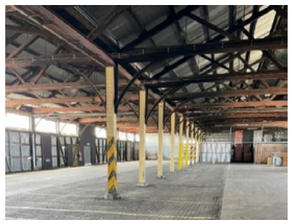


Figure 2 Goods Shed interior

The roof trusses supporting the roof are constructed from a combination of timber and steel. The top and bottom chords of the truss are timber along with the diagonal members while there are steel tension rods extending vertically between the top and bottom chords of the truss (Refer Figure 3).

Figure 3 Goods Shed roof trusses.

The inclined diagonal members of the truss are connected to the chords via a notched connection and the vertical tension tie rods (refer Figure 4).

Figure 4 Roof truss connection details

The roof trusses frame onto timber beams running the length of the shed on each side and through the central grid. These beams are typically spliced every second grid. The most common connection for this splice is shown in Figure 5.

Figure 5 Typical spine beam splice

In the transverse direction of the building there are curved steel angle braces connecting the timber columns with the roof trusses. These steel angle braces are bolted to the timber truss and timber columns as show within Figure 6.

Figure 6 Rolled angle bracing

The columns for the majority of the building are typically sitting on a concrete plinth as shown in Figure 2 above. We note that this condition is not in accordance with the original design documentation.

There was an extension to the Goods Shed which added 6 additional bays to the north end of the structure. The columns within this zone are embedded into a grout/concrete filled steel drum as seend in Figure 7.

Figure 7 Column footing alternative detail

Since its construction, a series of modifications have been made to the Goods Shed including:

- The demolition and replacement of the original timber floor system with concrete sometime between 1963-1983.
- The addition of 6 new structural bays to the north in the mid to late 1940s.
- The addition of a mezzanine level including alteration of the southern façade completed in the late 1940s.
- The addition of a toilet block (likely completed in 1984).
- The introduction of roller doors and removal of bracing and columns in some bays (circa1984).

It should be noted that these changes do not appear to have been undertaken to enhance the structural performance of the original building.

Refer to Table 1 for a technical summary of The Goods Shed Building

Table 1 Technical Summary for Goods Shed Building

Building Information	
Building Name/ Description	The Goods Shed, single story timber framed building on driven piles.
Street Address	44 Evans Street, Hobart
Territorial Authority	City of Hobart Council
No. of Storeys	1 storey, with a mezzanine level.
Area of Typical Floor (approx.)	10500m^2 for ground floor, 1000m^2 for the mezzanine level.
Year of Design (approx.)	1914
Existing documentation available	Original Drawings (Appendix **A**). Drawings documenting proposed changes (Appendices B-D). Survey information from Veris that was prepared for Macquarie Point Development Corporation and made available to AECOM for reference purposes only.
Structural System including Foundations	The superstructure of the building comprises timber columns, timber bracing and struts, as well as a suspended timber floor on timber joists. The roof consists of timber trusses with steel tension tie rods and timber purlins spanning between the trusses, with metal roof sheeting on top. All walls and columns are supported on a reinforced concrete floor, apart from the 6 bays that were added in the 1940s, where the perimeter columns are supported on ground beams and the centre columns are supported on the concrete floor.
Does the building comprise a shared structural form or share structural elements with any other adjacent titles?	Not in its present condition, however, the intention is to relocate and rotate the structure to the North of the Macquarie Point Stadium to be constructed. Hence, all load assessments are based on the Goods Shed in its relocated position.
Key features of ground profile and identified geohazards	The site has been classified by the geotechnical engineer as C_e. The site has been used for several industrial purposes over its history. De-contamination efforts have been undertaken at this site over recent years in preparation for development of the site. Geotechnical risks will be managed by the overall stadium project and are not addressed within this report.

Building Information	
Previous significant alterations	6 bays added in the mid to late 1940s. Reinforced concrete (RC) strip footings and walls beneath the shed's platforms and external walls. Timber decking and sub-floor framing of shed's internal platforms were replaced with concrete slabs. Bays that have had their central columns removed have had the central struts above these columns replaced with steel PFCs to accommodate the increased spans.
Heritage Requirements	Yes, refer to Conservation Management Plan by Purcell.
Other Relevant Information	Existing documentation is limited.

1.3 Proposed building use

The Goods Shed building is currently orientated in the north-south direction at the southern edge of the site at Evans Street. The current location clashes with the proposed stadium and therefore it has been proposed that the Goods Shed building will be relocated to the North of the stadium, where it will be an integral element of the main stadium for its use and operation. This is depicted in Figure 8 below. It will be supported on a combination of shallow footings founded on dolerite rock and the level 1 concourse suspended slab of the stadium.

This repositioning will enable the Goods Shed to be used as a standalone venue space on non-event days, as well as a food and beverage outlet while the stadium is in use. To achieve this, the Goods Shed will also need to be rotated from its current orientation, so that it is longitudinally orientated in the East-West direction in its new position.

The proposed shift in position completely changes the foundation elements that support the Goods Shed, from driven piles to a dual system of shallow footings founded on dolerite rock and a suspended slab. Differential movement between the two support systems will need to be carefully considered in the final design.

It has been identified that the relocated Goods Shed building will need to be fully compliant with either NCC 2022 DtS provisions or a performance based design due to the following:

- The occupancy use of the building is changing from a railway goods shed to a food and beverage venue/function space attached with the stadium (i.e. a change from class 8 building to class 6 or 9b in accordance with NCC 2022.
- The importance level of the building is changing.
- The position and orientation of the building is changing,
- The support structure of the building is changing.

Under the NCC 2022, buildings are classified into different importance levels, based on factors such as:

- The impact of failure of the building in terms of loss of life and property damage.
- The need for the building to remain operational following a natural disaster (post disaster function).

Importance Levels range from one to four, with importance level 1 buildings "presenting a low degree of hazard to life and other property in the case of failure" to importance level 4 buildings being "essential to post-disaster recovery or associated with hazardous facilities." The higher the importance level of a given structure, the more stringent the design requirements are for that structure. The Goods Shed in its final position North of the stadium has been classified as an importance level 3 building by the registered building surveyor (RBS) on the basis that it will be physically connected to the Macquarie

Point Stadium, which is also an importance level 3 building. Buildings with the classification of importance level 3 are "structures that are designed to contain a large number of people." As such, the consequence of failure of these structures is quite severe and may present a hazard to a large number of people. The standards require buildings of importance level 3 to be designed for higher wind and earthquake loads compared with importance level 1 and 2 buildings to address the increased risk to life in the event of a structural failure.

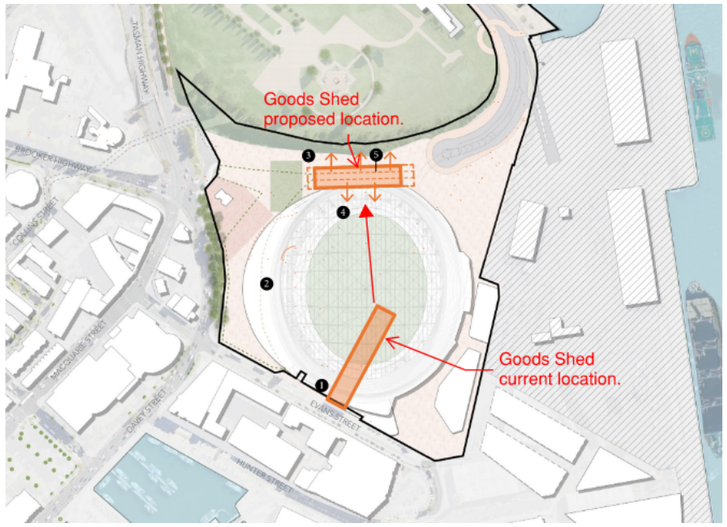


Figure 8 The Goods Shed current position and proposed position

1.4 Other Assessments Undertaken

This report should be read in conjunction with:

- Condition and Remaining Life Assessment Report – Hobart Railway Goods Shed by AECOM
- Fire Engineering Report for Macquarie Point Multi-Purpose Stadium by AECOM
- The Goods Shed Conservation Management Plan by Purcell

1.5 Site Conditions

At the proposed location for the goods shed, existing uncontrolled fill will be excavated allowing for shallow footings of the goods shed and stadium structure to be founded directly on dolerite rock. The Goods Shed will be partially supported by a suspended slab of the stadium and partly by shallow footings directly on the dolerite rock. From the specific geotechnical investigation undertaken for this site by WSP, the soil was deemed to be Subsoil Class C_e in accordance with AS/NZS 1170.4:2007 which relates to a shallow soil site. We assume classification C_e has been deemed appropriate when considering the weathered nature of the rock however this may require revision during the detailed design phase considering the local ground conditions at the proposed position of the Goods Shed.

2.0 Structural Analysis Approach

2.1 Structural Site Inspection

The AECOM investigation began with a site inspection of the Goods Shed. This inspection was a visual inspection carried out from ground level and within the ceiling space of the office at the south end of the building. Elevated working platforms or ladders were not utilised during the inspection and therefore not all structural elements could be measured.

Structural arrangement drawings were created from the reference Veris survey model to enable annotation of items identified during our inspection (Appendix E contains our structural observation marked-up drawings). Annotations made include detailing of typical connections, measured sizes of members and any obvious damaged elements. We note that the Veris survey model has been used for reference only and that final Structural drawings for the shed will be based on Architectural set-out drawings provided by COX/Cumulus.

The measurements taken were compared with the original design drawings to confirm the appropriate element size to include within the structural assessment. The member sizes in addition to the connection details informed the restraint condition inputs of our structural analysis model.

2.2 Catalogued Members

The inspection, along with the drawings from the Veris survey model, enabled members to be catalogued for analysis, as shown in Table 2 below. The locations of the members in this table in section, plan and elevation, are shown in Figure 9, Figure 10 and Figure 11 respectively.

The mezzanine level, toilet block and ground level structure were excluded from the assessment as they are not proposed to be retained.

Table 2 Member Schedule

Tag	Description	Cross Section (mm x mm)	Timber Species
RP1	Roof purlins	100x150	Unknown
RR1	Top Rafter	180x125	Douglas Fir
RB1	Bottom chord (braced bay)	300x120	Douglas Fir
RB2	Bottom chord (typical bay)	300x120	Douglas Fir
TD1	Truss diagonal	120x120	Douglas Fir
TD2	Truss diagonal	115x95	Douglas Fir
HB1	Horizontal bracing	130x100 (on flat)	Douglas Fir
SC1	Central column	230x230	Douglas Fir
SC2	Wall column	230x230	Douglas Fir
STB1	Stub over wall column	230x230	Douglas Fir
WB1	Wall bracing	130x70	Douglas Fir
FM1	Wall mullion	130x90	Douglas Fir
ST1	Wall strut at window height	190x250 (on flat)	Douglas Fir
ST2	Wall strut at eve height	230x210	Douglas Fir
ST3	Main strut along centre of building	230x210	Douglas Fir
RA1	Rolled steel angle brace	90x10 EA	N/A
TR1	Truss tie rod (25 mm dia)	N/A	N/A
TR2	Truss tie rod (21 mm dia)	N/A	N/A
TR3	Truss tie rod (18 mm dia)	N/A	N/A

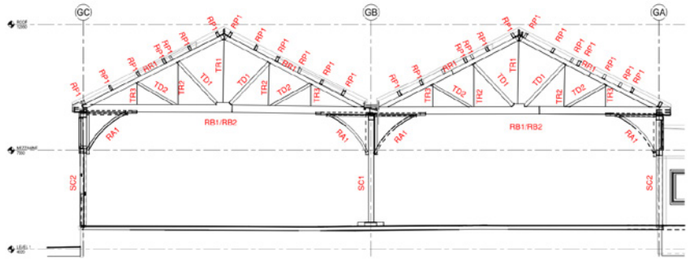


Figure 9 Typical cross section structural members.

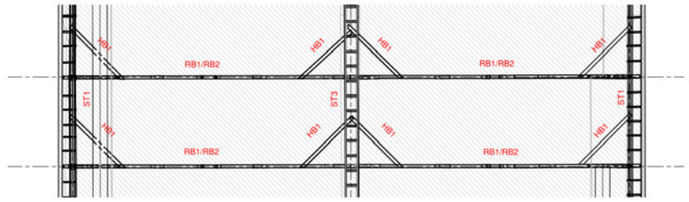


Figure 10 Typical plan at eve level structural members.

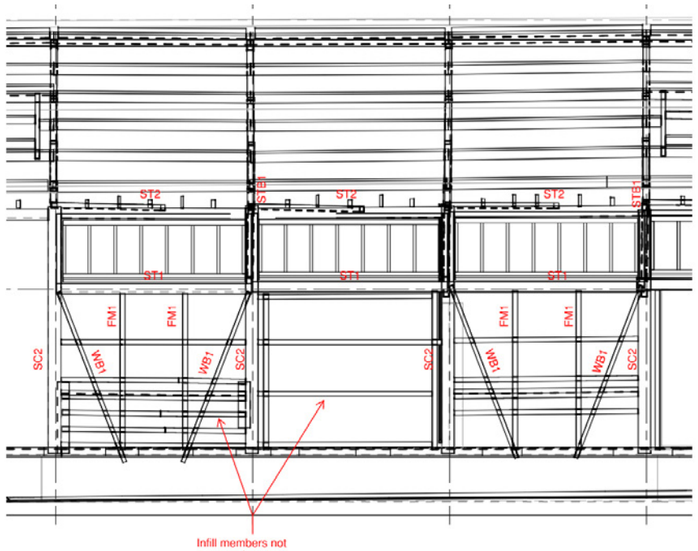


Figure 11 Typical wall elevation structural members.

2.3 Design Criteria

The assessment of the Goods Shed is based on NCC 2022 and the design performance criteria as per Table 3 below.

Table 3 Key Structural Design Performance Parameters

Parameter	Value	Meaning
Importance level	3	Classification in the NCC. Refer to section 1.3 of this report. Importance level 3 applies to buildings or structures that are designed to contain a large number of people.
Design life	50 years	50 years following any required restoration or strengthening works, with regular maintenance. Note, for the purpose of structural design, the design life is utilised to inform the annual probability of exceedance which impacts on the design loading for wind load and earthquakes.
Wind Region	A4 Non-cyclonic	The wind loads utilised for our assessment are only applicable for the proposed relocated position of the Goods Shed within the Macquarie Point site in Hobart, Tasmania.
Wind (non-cyclonic) Design Events for Safety Annual Probability of Exceedance (Ultimate Limit State)	1/1000	The probability of the design wind load for ultimate conditions being exceeded each year, as mandated by the NCC. In this case, the probability of the design wind load being exceeded is 1/1000 or a 0.1% chance. While there is a low chance that this may occur in any given year, it does not mean that it is not possible to occur.
Earthquake Design Events for Safety Annual Probability of Exceedance (Ultimate Limit State)	1/1000	The probability of the design earthquake load for ultimate conditions being exceeded in a given year, as mandated by the NCC. In this case, the probability of the design earthquake load being exceeded is 1/1000 or a 0.1% chance. While there is a low chance that this may occur in any given year, it does not mean that it is not possible to occur.

2.3.1 Serviceability Criteria

Structures under the NCC must also be serviceable. That is, they must be able to function normally after less severe events. In line with this, the Goods Shed was also checked against typical serviceability requirements. The deflection limits for the service cases are listed in Table 4 below and will be referenced in section 0 of this report.

Table 4 Deflection Criteria

Effect	Deflection limit
Sag of rafters/trusses	Span/300 or 25 mm (whichever is less)
Column sidesway	Height/250

Note that the deflection limits proposed above are recommendations only and that they are subject to engineering judgement. For instance, the code recommends H/500 for column sidesway, however, given that the Goods Shed is isolated from adjacent structures, lateral movement is not necessarily going to cause issues to adjacent structures or impact the performance of this building, so Height/500 is too stringent for this application.

2.4 Design Standards

The following design standards have been adopted to inform the design loading to be applied to the building and to calculate the capacity of the existing structure.

Table 5 Design Standards

Standard	Year	Description
AS/NZS 1170.0	2002	Structural Design Actions - Part 0: General Principles
AS/NZS 1170.1	2002	Structural Design Actions - Part 1: Permanent, Imposed and Other Actions
AS/NZS 1170.2	2021	Structural Design Actions - Part 2: Wind Actions
AS 1170.4	2007	Structural Design Actions - Part 4: Earthquake Actions in Australia
AS 1720.1	2010	Timber structures – Part 1: Design methods
AS 4100	2020	Steel Structures

2.5 Design Loading

2.5.1 Dead, Super-imposed Dead and Live Loads

Refer to Table 6 for the adopted dead, super-imposed dead and live loads on the roof structure of the goods shed.

Table 6 Roof Structure Dead, Super-imposed Dead and Live Loads

Load Type	Adopted Loading	Reference
Dead Load (DL)	• Timber framing with a density of 6.5 kN/m^3 • Steel elements with a density of 78.5 kN/m^3	AS/NZS 1170.1
Super-imposed Dead Load (SDL)	0.67 kPa, This load allowance consists of: • 0.25 kPa for roof sheeting • 0.17 kPa for the timber purlins supporting the roof sheeting • 0.25 kPa for fixtures suspended from the ceiling (e.g. lights hanging from the roof).	AS/NZS 1170.1
Live Load (LL)	0.25 kPa	AS/NZS 1170.1

2.5.2 Wind Loading

Wind loading adopted for the Goods Shed was based on the building being positioned to the north of the site and rotated so that the longitudinal length of the building runs out to the east and west. The loading adopted was based on AS/NZS 1170.2 and not wind tunnel testing results. Note the wind tunnel testing results are focused on building structural design parameters for the main dome roof and local cladding loads which are not appropriate for assessment of the overall stability of the Goods Shed.

In accordance with AS/NZS 1170.2 the region wind speed is as follows:

Regional Wind Speed (Ultimate Limit State) V_R: 46 m/s

Regional Wind Speed (Serviceability Limit State) V_R: 37 m/s

The wind directionality factors adopted for analysis are given in Table 7.

Table 7 Wind direction factors

Wind direction	Mz, cat
North	1.04
East	1.04
South	0.83
West	0.75

2.5.3 Earthquake Loading

Earthquake actions were determined in accordance with AS1170.4-2007. Refer to Table 8

Table 8 Earthquake Load Design Factors

Parameter	Value	Comment
Probability Factor K_p	1.3	This factor is directly related to the annual probability of exceedance.
Hazard Design Factor Z	0.08	Geoscience Australia has assessed all of Australia regarding the likelihood and size of earthquakes expected. For Hobart, the appropriate hazard factor published by Geoscience Australia is 0.08.
Structure Height	< 50m	Structure height has an impact on the earthquake design category.
Earthquake Design Category	II	Earthquake design category II represents the minimum category that may be used to carry out the design. This category utilises an equivalent static method of analysis.
Structural Ductility Factor μ	2	This is based on the Goods Shed as a timber structure with either Moment-resisting frames or braced frames (with ductile connections)
Structural Performance Factor S_P	0.77	This is based on the Goods Shed as a timber structure with either Moment-resisting frames or braced frames (with ductile connections).

During this process, it was found that the base shear resulting from earthquake loading is approximately 50% that of a sidesway wind in the West direction and 33% that of a wind in the North direction. As such, wind loads are the governing lateral load case for the stability of the Goods Shed.

2.6 Material Properties

Material properties of the timber members comprising the Goods Shed need to be understood, as timber structural capacity to resist design actions depends heavily on the species of timber and its stress grade. As can be seen from the original drawings in Appendix A, the primary structural timber members are noted as Oregon which is currently noted as Douglas Fir within Australia, with some secondary members called up as Huon Pine.

Given the era the Goods Shed was constructed, it is likely that the Douglas Fir timber was sourced from North America, as Australian and New Zeeland plantations had not yet been established.

Stress grading and testing by a professional was not undertaken due to limitations of taking samples at the time of conducting this structural assessment. Timber strength grades of F5, F7 and F11 were assessed, as they represent the range of stress grades typically expected of Douglas Fir (the Oregon timber called up on the original drawings in Appendix A) today. This was done to inform the extent of materials testing that may be required which has been noted in section 4.2 of this report.

The timber was considered to be seasoned due to the low moisture content remaining in the timber. The characteristic design values for the stress grades used in the assessment are summarised in Table 9 below.

Table 9 Characteristic values used in design.

Characteristic values used in design							
Stress grade	Bending (f'_b)	Tension (f'_t)	Shear (f'_s)	Compression (f'_c)	Elastic modulus (E)	Modulus of Rigidity (G)	Joint group
F5	14	6.5	1.6	11	6900	460	JD4
F7	18	7.9	1.9	13	7900	530	JD4
F11	31	16	2.8	22	10500	700	JD4

All values are expressed in MPa. Values are adopted from Structural Toolkit and cross-checked against Table H2.1 within AS1720.1.

2.7 Design Software & Modelling

A 3-dimensional structural analysis model was created using the computer software program "SpaceGass" to obtain the forces acting on various timber members. As the structure is a repeated two bay frame, modelling of the entire shed is not required to gain an understanding of the Goods Shed's structural behaviour. Four typical bays were modelled instead of the entire shed, two of which being end bays, and two of which contained wall bracing. Images of the analysis model used are displayed in (Figure 12) below.

There is no clear method of how the top of the roof trusses are laterally restrained in the longitudinal direction of the building. It is therefore assumed that restraint to the top of the roof trusses is by the roof sheeting acting as a diaphragm. While this may be the case in reality, the restraint offered by the roof sheeting would be marginal and is difficult to quantify for use in analysis. In addition, it was not able to be inspected at the time of conducting site inspections, so we were unable to gain an idea of its condition and ability to perform this function. Given the above reasons, it was concluded that the roof sheeting should not be relied upon as a lateral load resisting system for the building, and it was hence omitted from the analysis model.

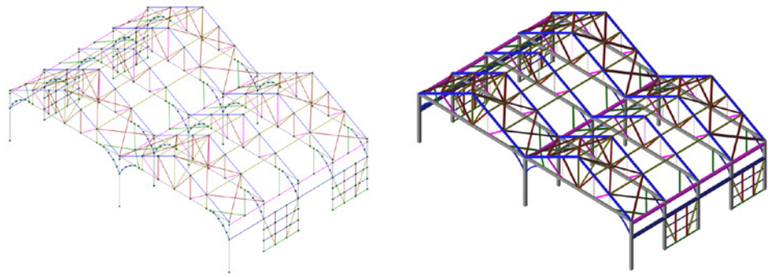


Figure 12 Wireframe and rendered views of the SpaceGass analysis model used.

3.0 Structural Assessment Outcome

We have undertaken an assessment of the member capacity for the roof framing members based on the available information listed in Table 1, as well as information obtained during our site inspections carried out in January-2025. Our analysis assumes that the roof members are in good condition. Members that have been subject to deterioration, rot, splitting and other damage (e.g. impact) have not been assessed and would need to be replaced or strengthened. Refer to the Condition and Remaining Life Assessment Report for the Hobart Railway Goods Shed by AECOM for further clarification.

As noted previously, the timber had not been stress graded at the time of this report (this requires a competent professional experienced in stress grading timber and carrying out testing of elements). As such, we have reported the structural capacities based on the range of stress grades anticipated in accordance with AS1720.2 based on the Douglas Fir (Oregon) timber species noted in section 2.0 of this report (refer to Table 9 for timber parameters that informed these structural capacities). The assessment of member capacity has not considered the effect of the end connections which may require modification to achieve the stated capacities. The effect of notching and penetrations within the roof members has also not been assessed at this stage, which would further reduce the stated capacities.

Additional bracing was introduced to the model within the roof plane to account for restraint that the roof sheeting would provide. Inclusion of similar members will need to be considered for the relocated structure so that there is not reliance on the roof sheeting to restrain primary structural members. These additional bracing members are shown in (Figure 13) below.

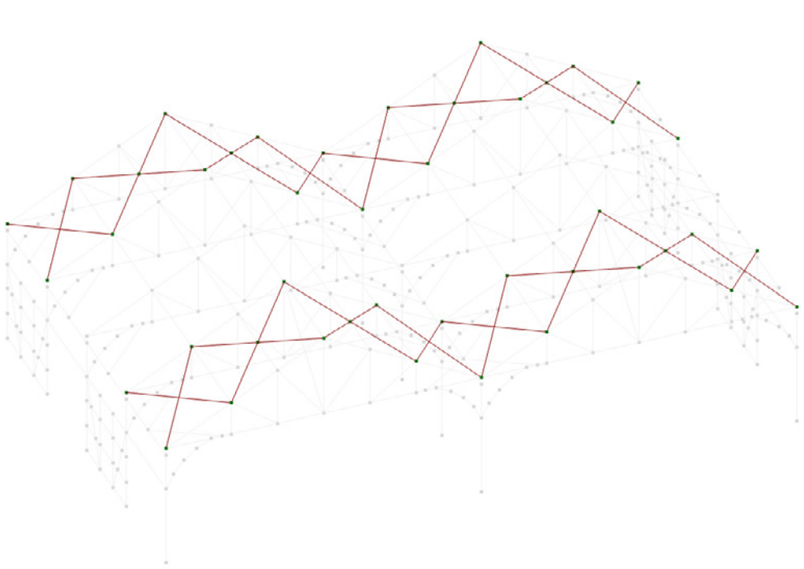


Figure 13 Wireframe diagram of added bracing to get structural analysis model to run.

3.1 Strength limit state

Structural member utilisations under factored gravity loading only are shown in Table 10, while member utilisations under combined factored gravity and wind (lateral) loads are presented in Table 11.

Values less than or equal to one for a given timber strength grade represents members that pass, while if the value is greater than one, the member fails the design check. Note, members that fail were not checked against equations E5(1) and E5(2) in the appendix of AS1720.1 as these equations exponentially extorts the capacity ratio for failing members.

Table 10 Member Utilisations (1.35G factored gravity load)

Member	F5	F7	F11	Comments
RP1	4%	3%	2%	
RR1	109%	86%	55%	
RB1	69%	55%	29%	
RB1 (over bracing)				Marginal under gravity
RB2	61%	49%	26%	
RB2 (over bracing)				Marginal under gravity
TD1	33%	28%	20%	
TD2	47%	40%	29%	
HB1				Marginal under gravity
SC1	49%	41%	28%	
SC2	28%	23%	14%	
STB1				Not critical under gravity (refer to SC2 capacity)
WB1				Marginal under gravity
FM1				Marginal under gravity
ST1	4%	3%	2%	
ST2	15%	12%	7%	
ST3	17%	13%	7%	
RA1	15%			Steel member
TR1	26%			Steel member
TR2	9%			Steel member
TR3	0%			Steel member

Pass 0-89% utilisation)

Pass 90-100% utilisation

Fail

Table 11 Member Utilisations (gravity + wind)

Member	F5	F7	F11	Comments
RP1	95%	74%	43%	This includes kl factors
RR1	335%	282%	262%	
RB1	688%	511%	305%	
RB1 (over bracing)	442%	387%	229%	
RB2	185%	151%	95%	
RB2 (over bracing)	263%	206%	116%	
TD1	90%	80%	57%	
TD2	140%	120%	85%	
HB1	334%	301%	217%	
SC1	346%	273%	164%	
SC2	280%	220%	129%	
STB1	415%	350%	237%	Fails in shear (utilisations are based on shear only and do not consider bending/axial interaction).
WB1	427%	369%	264%	
FM1	48%	38%	22%	
ST1	30%	25%	17%	
ST2	315%	249%	139%	
ST3	298%	233%	134%	
RA1	361%			Steel member
TR1	47%			Steel member
TR2	59%			Steel member
TR3	85%			Steel member

Pass 0-89% utilisation)

Pass 90-100% utilisation

Fail

The tension TR members are assumed to have a yield stress of 170 MPa, which is what is permitted by CL2.2.3 in AS4100 for unidentified steel. A higher yield stress and thus capacity may be used if it is confirmed via testing in accordance with AS1391. RA1 was assessed assuming that the steel angles have a 300 MPa yield stress and as such, the utilisation ratios given in Table 10 and Table 11 are based on this assumption. Uniaxial tensile testing will be required to confirm this is the case. Note that this testing method is destructive and will mean that the sample is unable to be used in the structure after testing.

On review of the calculated capacities, it is evident that the Goods Shed, while able to withstand gravity loads, is not able to resist lateral loading from wind actions in accordance with the current NCC 2022 requirements. This would need to be remedied for the Goods Shed to be compliant with NCC 2022.

3.2 Serviceability limit state

The Goods Shed's deflection was checked under gravity and wind to gain an understanding of its behaviour under service loading. Figure 14 and Figure 15 show the deflections of the roof members under gravity. Figure 16 and Figure 17 shows the deflection of the columns under longitudinal (West) wind and transverse (North) wind respectively. When viewing the figures, it should be noted that positive Z is considered upwards in the model, positive X is West and positive Y is South deflection in mm.

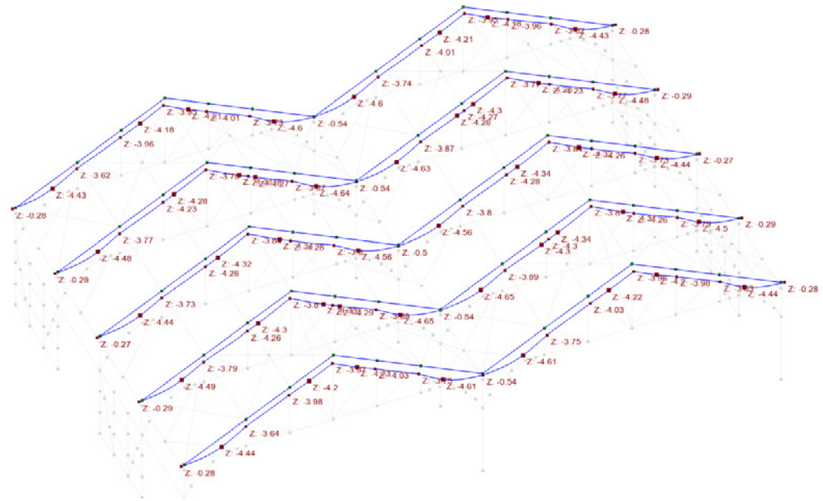


Figure 14 Vertical deflection of top rafters (RR1) under gravity loads (DL + SDL)

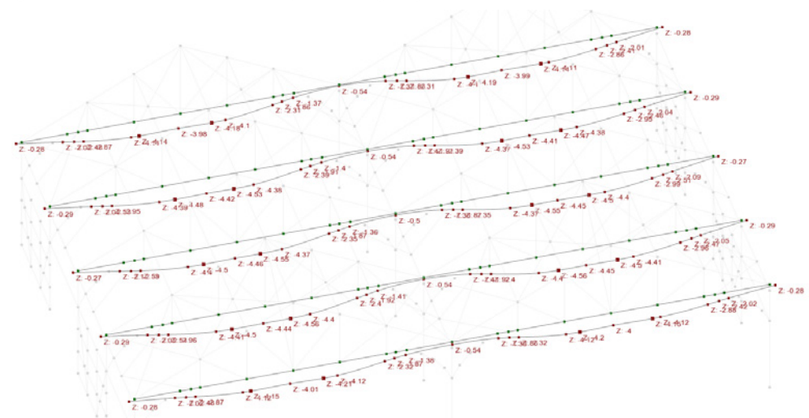


Figure 15 Vertical deflection of truss bottom chord (RB1/RB2) under gravity loads (DL + SDL)

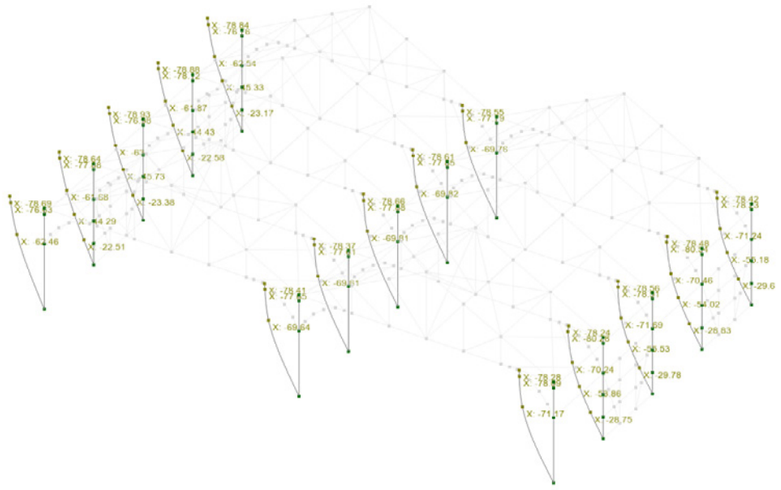


Figure 16 Column (SC1/SC2) lateral deflection under a North wind

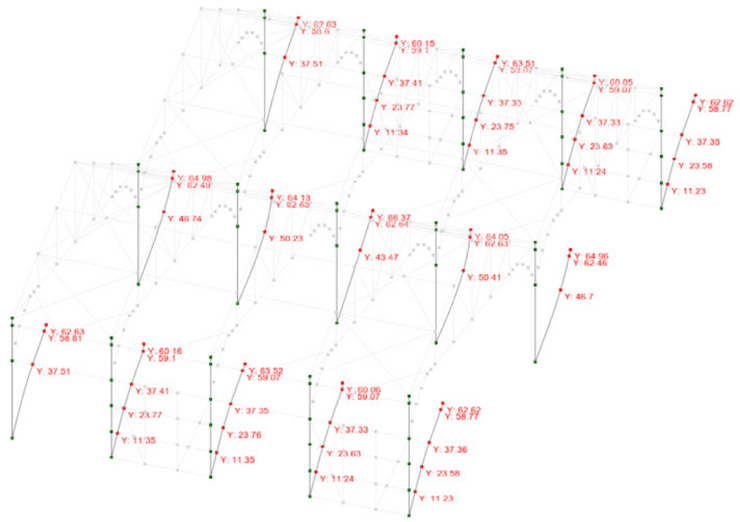


Figure 17 Column (SC1/SC2) lateral deflection under a West wind

While the deflections under gravity loads are within recommended limits, the deflections resulting from wind sidesway actions are in excess of the limits suggested in AS1170.1 and listed in Table 4. The deflection limit of an SC1 or SC2 member is 4425/250 = 17.7 mm, however Figure 16 and Figure 17 above show lateral deflections of approximately 79 and 63 mm, respectively.

Wind loading also results in vertical deflection of the roof trusses. The worst vertical deflection under wind loading can be observed in Figure 18 and Figure 19. These values are considered within acceptable deflection limits provided in AS1170.1 and have been included for completeness. Vertical deflection due to live load is small and does not govern the design, so it has been omitted from the report.

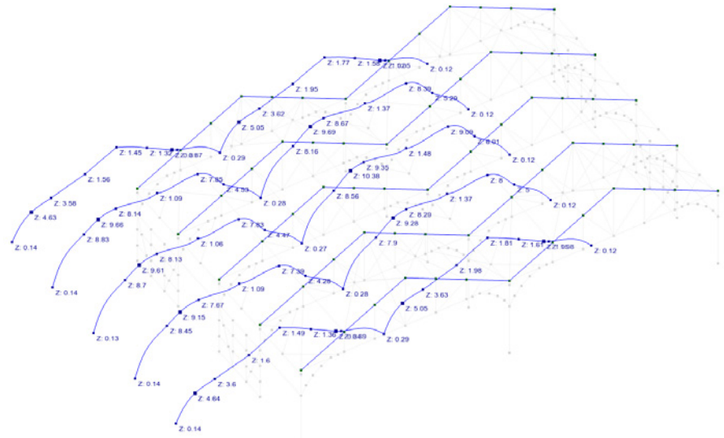


Figure 18 Vertical deflection of top rafters (RR1) under wind loading

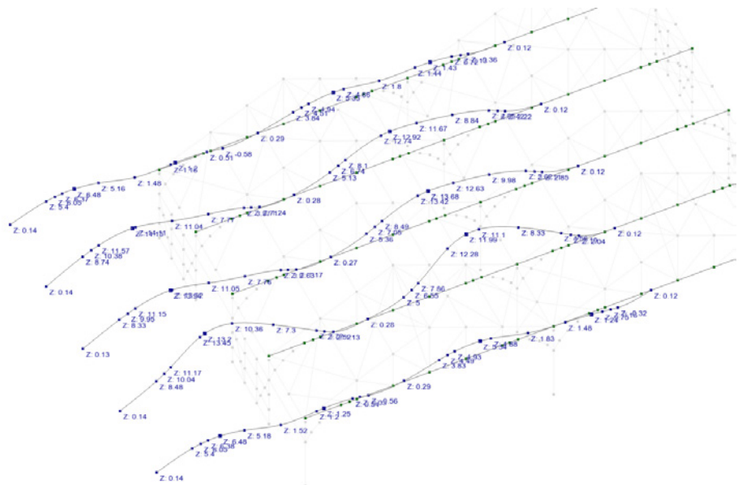


Figure 19 Vertical deflection of truss bottom chord (RB1/RB2) under wind loading

4.0 Conclusions

As discussed above, the Goods Shed appears to have sufficient capacity for gravity loads if the timber is at least grade F7 or greater but has an overall lateral stability issue which needs to be resolved to bring the building up to current code requirements.

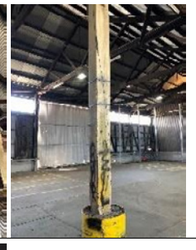
A significant number of members fail the design checks at ultimate limit state for combined gravity and wind load combinations. The Goods Shed structural frame also deflects sideways more than recommended criteria in Australian Standards. Note that the deflections in Section 0 of this report are after additional bracing shown in Figure 13 was added into the analysis model.

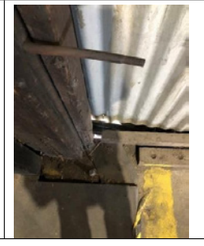
Further to this, the site inspection revealed that numerous bracing members had been cut or compromised in some way (refer to Appendix E) which has not been assessed in the analysis model. Any compromised members or bays would need to be replaced to achieve the stated results in this report.

4.1 Identified Structural Defects

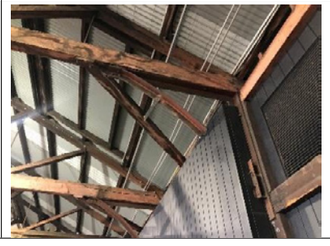
Structural defects identified from the site inspection conducted in January 2025 are listed in Table 12 below.

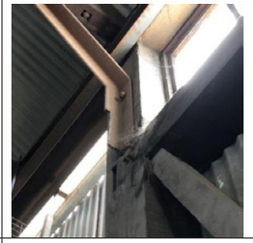
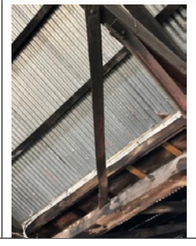
Table 12 Identified Structural Defects

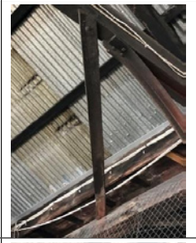
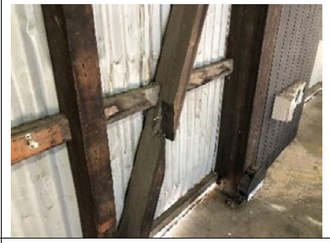
Defect	Element	Grid Location	Images
Timber column face bowed inwards indicating that there may have been a change to the timber material properties affecting its strength	SC1	GB/G5	
Split/damaged column	SC1	GB/G31	
Connection damage/splitting	SC1 & RR1	GB/G31	

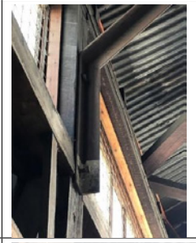
Defect	Element	Grid Location	Images
Connection damage/splitting	HB1	GB between G19 and G20	
Connection damage/splitting	HB1 to RB1	GB between G31 and G32	
Connection damage/splitting	WB1 to FM1	GA between G26 and G27	
Connection damage/splitting	ST1 to SC2	GC/G8	
Connection damage/splitting	FM1	GC between G11 to G12	

Defect	Element	Grid Location	Images
Connection damage/splitting	RB2 to TD1	G14 between GB and GC	
Connection damage/splitting	RB2 to TD1	G17 between GB and GC	
Connection damage/splitting	RB2 to HB1	GB19 between GA and GB	
Connection damage/splitting	RB2 to HB1	G30 between GB and GC	

Defect	Element	Grid Location	Images
Connection damage/splitting	WB1 to FM1	G32 between GB and GC	
Connection damage/splitting	FM1	GB32 between GA and GB	
Curved bracing cut/impacted	RA1	GA/G9	
Curved bracing cut/impacted	RA1	GA at grids G12 to G17, G19 to G22, G26, G28 & G29	

Defect	Element	Grid Location	Images
Curved bracing penetrated by pipe	RA1	GC/G28	
Curved bracing partially cut	RA1	GA/G28	
Notch in member	HB1	GA between G22 to G23	
Member has buckled	HB1	GB between G22 to G23	

Defect	Element	Grid Location	Images
Member has buckled	HB1	GB between G22 to G23	
Timber member has been cut	WB1	GC between G19 to G20	
Timber member has been cut	WB1	GC between G21 to G22	
Bolts/nuts not bearing properly for bolted connections	SC1 to RA1	GB/G5	
Bolts/nuts not bearing properly for bolted connections	RA1 to SC2	G30 between GB to GC	

Defect	Element	Grid Location	Images
Bolts/nuts not bearing properly for bolted connections	RA1 to SC2	G31 between GB to GC	
Gap in underside of rafter	RR2	GC/G29	

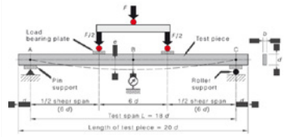
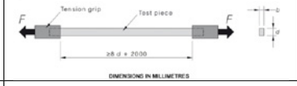
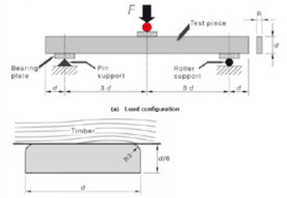
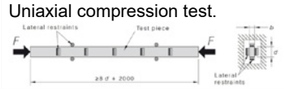
Note that this list is not exhaustive and does not include all material related defects (refer also to Condition and Remaining Life Assessment Report – Hobart Railway Goods Shed). More defects may exist that were not visible during the inspection due to access constraints.

4.2 Recommended next steps

Taking into consideration the outcome of the assessment, we recommend the following actions:

1. Planning and coordination with the architect and heritage consultant on methods to strengthen the structure to resist lateral loads. Possible methods include bracing the top rafter (RR1) in first and last bays, adding in struts at the midspan of the bottom chord to restrain them from buckling, as well as the incorporation of steel members / timber elements of higher grade in some locations. Note that the strengthening possibilities listed are conceptual only to give an indication of what might be possible. Any strengthening work requires further detailed assessment and design to be undertaken.
2. Undertaking sufficient testing to determine the stress grade of timber members and steel rolled angles.
3. Timber testing requirements are given in Table 13 and Table 14 below. Note that unless otherwise noted by red text in Table 14, the cross section of the sample can be the same as the cross section of the actual member, as noted in Table 2. This reduces the need for unnecessary handling/work with the timber and allows it to be reused in the structure in the case of non-destructive tests. For destructive tests, smaller samples than what would be required if the current cross section of the member is adopted may be used to limit the extent of timber destroyed when performing the tests (refer section 4.2.1 for further clarification).
4. Incorporate the impact the existing condition of the timber as described within the Condition and Remaining Life Assessment Report – Hobart Railway Goods Shed into the structural design.

Table 13 Timber tests and requirements

Material property	Test and description	Destructive?	No. of samples required/ sampling method
Bending strength (f'_b)	Four point bending test. 	Not always. A load range of 10-40% of the failure load has been found to be sufficient to determine the linear portion of the load-deformation plot.	30 samples (Methods 1 and 3)
Tension strength (f'_t)	Uniaxial tension test. 	Destructive.	30 samples (Methods 1 and 3)
Shear strength (f'_s)	3 point bending test.  Steel bearing plate	Destructive.	30 samples (Methods 1 and 3)
Compression strength (f'_c)	Uniaxial compression test. 	Destructive.	30 samples (Methods 1 and 3)

Sampling methods correspond to the methods given in AS4063.2 2010. Note that figures are taken from section 2 of AS/NZS4063.1.

Table 14 Length of specimen required for each test type based on current member cross section.

Member	Bending strength (f'b)	Tension strength (f't)	Shear strength (f's)	Compression strength (f'c)	Elastic modulus (E)	Modulus of rigidity (G)	Max member length available
RR1	3600	3440	1440	3440	3600	3240	6000
RB1	6000	4400	2400	4400	6000	5400	11000
RB2	6000	4400	2400	4400	6000	5400	11000
TD1	2400	2960	960	2960	2400	2160	2600
TD2	2300	2920	920	2920	2300	2070	2100
HB1	2600	3040	1040	3040	2600	2340	2600
SC1	4600	3840	1840	3840	4600	4140	4400
SC2	4600	3840	1840	3840	4600	4140	4400
STB1*	4600	3840	1840	3840	4600	4140	
WB1	2600	3040	1040	3040	2600	2340	3000
FM1	2600	3040	1040	3040	2600	2340	2900
ST1	3800	3520	1520	3520	3800	3420	3500
ST2	4600	3840	1840	3840	4600	4140	3500
ST3	4600	3840	1840	3840	4600	4140	3500

All dimensions in the above table are in mm. Red text indicates that the member lengths in the Goods Shed are not long enough to meet the sample geometry requirements stipulated in AS/NZS4063.1 if the full timber cross section is used. Hence, the cross section of the timber sample will need to be reduced from the dimensions in Table 2 so that the sample length can subsequently be reduced in line with the testing requirements of AS/NZS4063.1.

*The properties for STB1 can be obtained from testing SC2. Hence, separate tests on STB1 are not required.

4.2.1 Suggested Sampling Rationlisation

We note that Table 13 details four unique tests that are required to determine the bending, tension, shear and compressive strength of members. Each of these tests is required to occur for 30 samples.

There may be a difference in strength between various groups of member types, we therefore recommend that the material properties for the 4 groups of members tabulated within Table 15 is determined where each group would require a minimum of 30 samples.

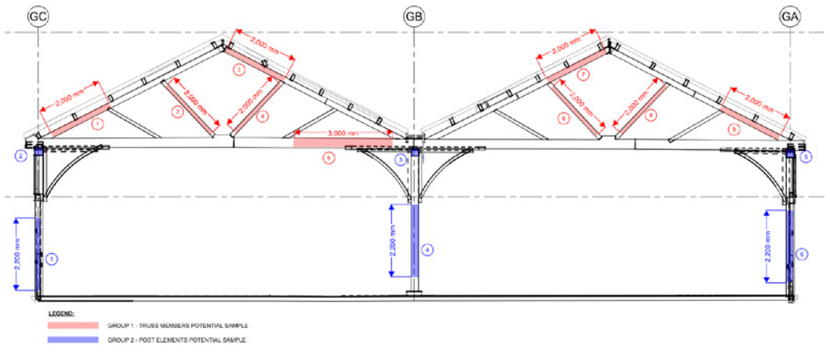
Table 15 Member Testing Groups

Group	Description	Species	Element Tags
1	**Truss Members**	Douglas Fir	RR1 Top Rafter RB1 Bottom Chord RB2 Bottom Chord TD1 Truss Diagonal TD2 Truss Diagonal (note 1)
2	**Post Elements**	Douglas Fir	SC1 Central Column SC2 Wall Column STB1 Stub Column (note 2) ST2 Wall Strut ST3 Wall Strut
3.	**Other Framing Elements**	Douglas Fir	HB1 Horizontal Bracing WB1 Wall Bracing FM1 Wall Mullion ST1 Wall Strut
4.	**Roof Purlins/Battens**	Unknown (Huon Pine)	RP1 Roof Purlins

In accordance with clause 2.4 note 1 within AS/NZS 4063.2 multiple tests may be performed from a sample piece. To reduce the length of sample required, a section may be cut into 4 smaller members (i.e. a 300x120 member can be divided into 4 sections that are 150x60) providing 4 test specimens that are shorter in length. This would allow for each of the 4 test types to be carried out on one sample.

Refer to Figure 20 for an indication of the maximum number of samples and length of samples per bay that are possible for Group 1 Truss Members and Group 2 Post Elements when each element is divided into 4 smaller sections. Note, final selection of samples to be structured to minimise potential bias (i.e. not all samples should be obtained from 3 trusses only for Group 1 Truss Members).

Figure 20 Example Maximum Number of Samples Per Bay Where Member is Divided into 4 Smaller Members

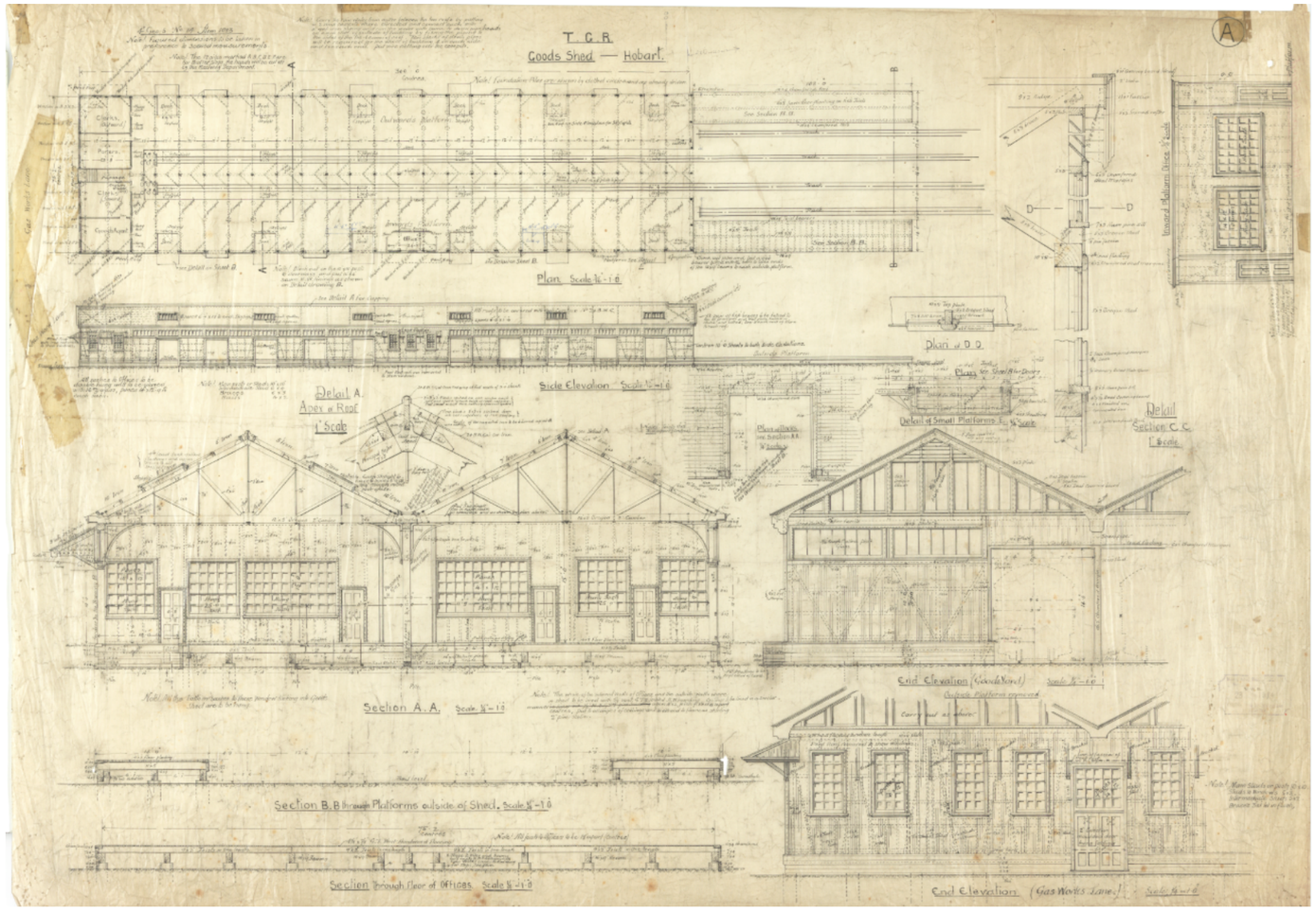


Appendix A

Drawing of the original Goods Shed

Revision 01 – 07-May-2025
Prepared for – Cox Architecture – ABN: 72 426 372 646

Appendix A Drawing of the original Goods Shed



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Appendix B

1958 Proposed Office Alterations

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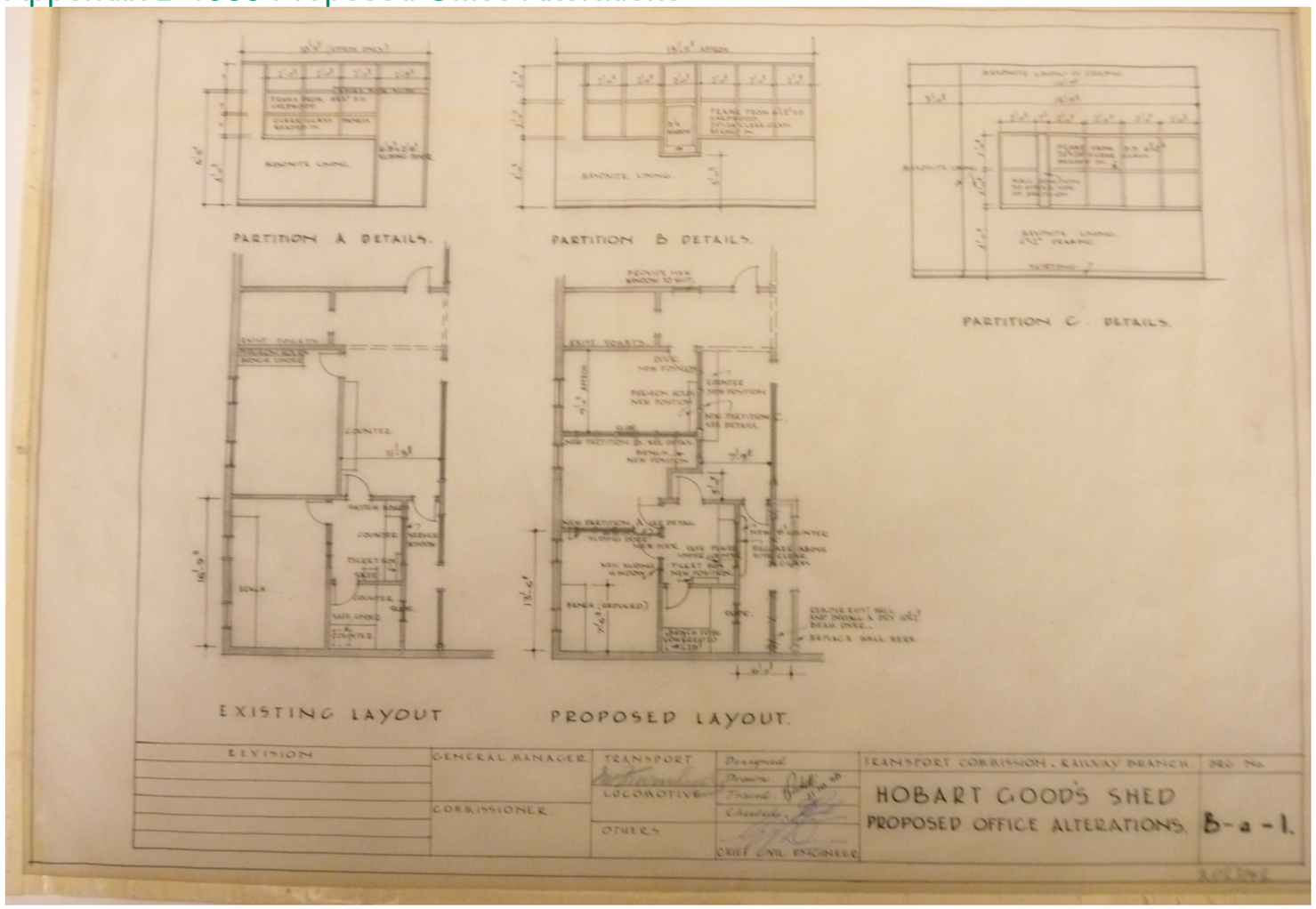
Prepared for – Cox Architecture – ABN: 72 426 372 646

Appendix B 1958 Proposed Office Alterations



Appendix C

1964 Joinery Details for Proposed Goods Shed Offices

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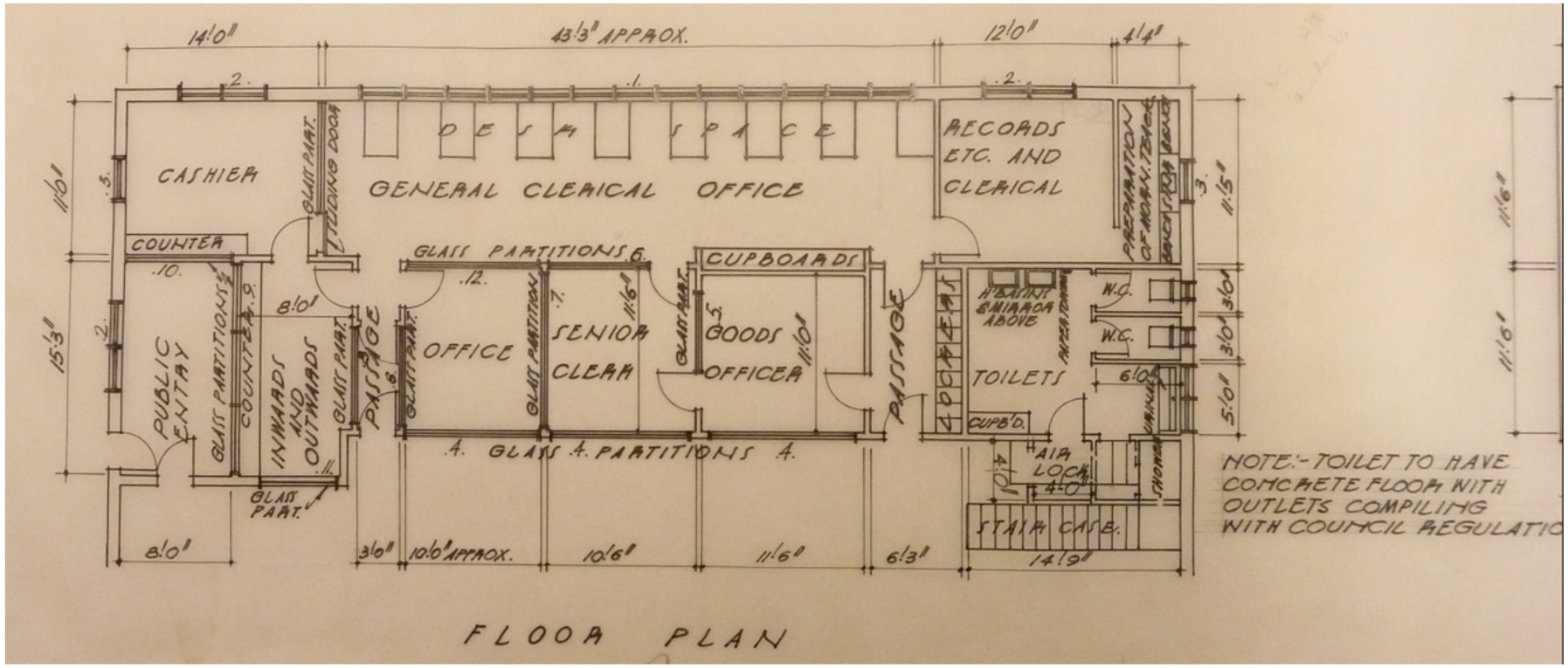
Prepared for – Cox Architecture – ABN: 72 426 372 646

Appendix C 1964 Joinery Details for Proposed Goods Shed Offices

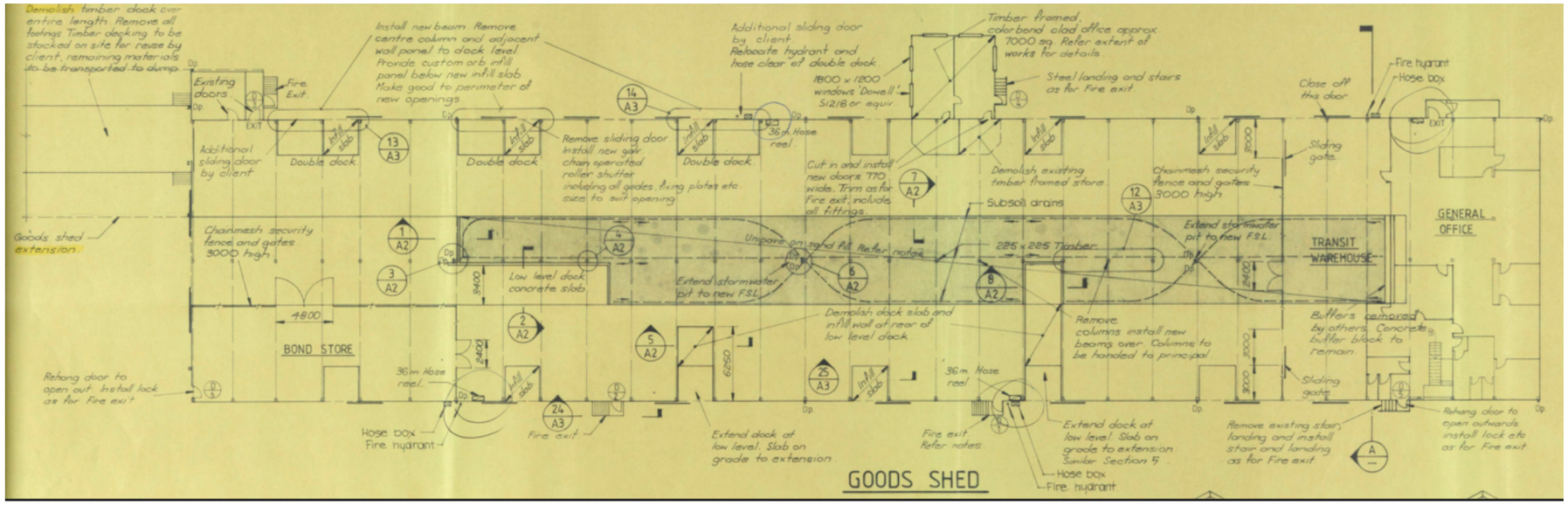


Appendix D

1984 Goods Shed Alterations Plan and South Elevation

Revision 01 – 07-May-2025
Prepared for – Cox Architecture – ABN: 72 426 372 646

Appendix D 1984 Goods Shed Alterations Plan and South Elevation



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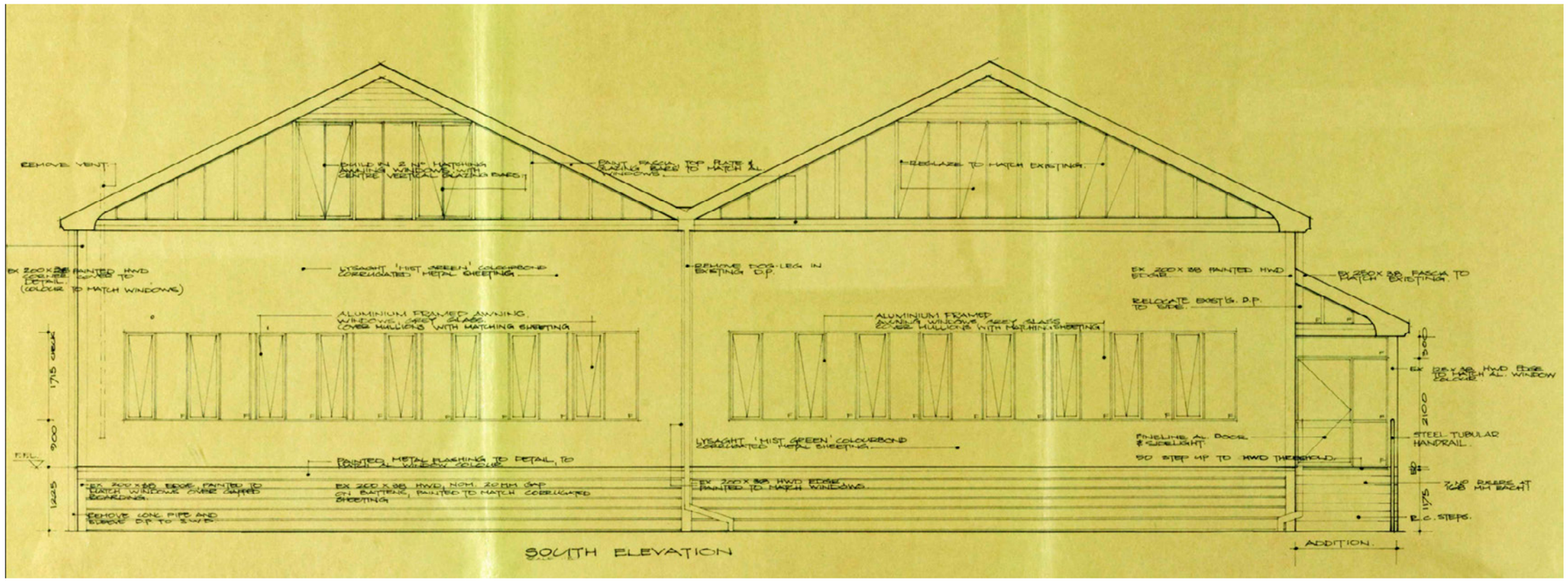

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Appendix E

Structural Observation Comments following Site Inspection on 28-30/01/2025

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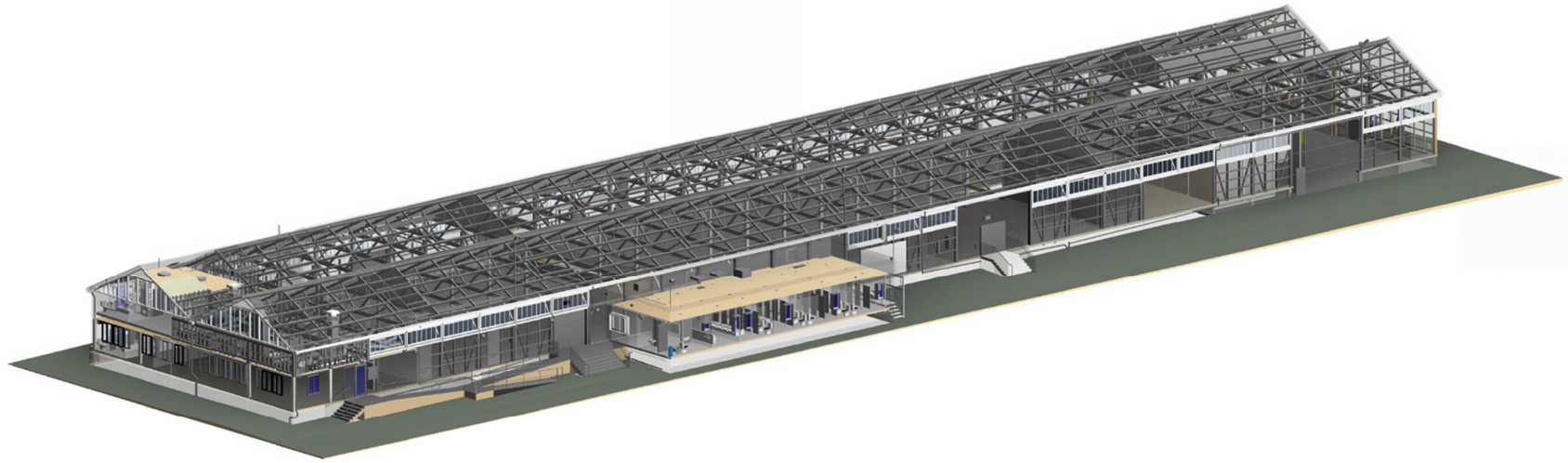
MACQUARIE POINT DEVELOPMENT CORPORATION

41 Evans St, Hobart TAS 7000

MACQUARIE POINT MULTIPURPOSE STADIUM STRUCTURAL



STRUCTURAL DRAWING LIST1	
SHEET NUMBER	**SHEET NAME**
MPS-AEC-DR-ST-XX-00000	COVER SHEET & DRAWING INDEX
MPS-AEC-DR-ST-XX-01000	GROUND LEVEL - GENERAL ARRANGEMENT PLAN - ZONE 1
MPS-AEC-DR-ST-XX-01001	GROUND LEVEL - GENERAL ARRANGEMENT PLAN - ZONE 2
MPS-AEC-DR-ST-XX-01002	GROUND LEVEL - GENERAL ARRANGEMENT PLAN - ZONE 3
MPS-AEC-DR-ST-XX-01200	ROOF LEVEL (BOTTOM CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 1
MPS-AEC-DR-ST-XX-01201	ROOF LEVEL (BOTTOM CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 2
MPS-AEC-DR-ST-XX-01202	ROOF LEVEL (BOTTOM CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 3
MPS-AEC-DR-ST-XX-01300	ROOF LEVEL (UPPER CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 1
MPS-AEC-DR-ST-XX-01301	ROOF LEVEL (UPPER CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 2
MPS-AEC-DR-ST-XX-01302	ROOF LEVEL (UPPER CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 3
MPS-AEC-DR-ST-XX-02000	BUILDING ELEVATIONS - SHEET 1
MPS-AEC-DR-ST-XX-02001	BUILDING ELEVATIONS - SHEET 2
MPS-AEC-DR-ST-XX-02002	BUILDING ELEVATIONS - SHEET 3
MPS-AEC-DR-ST-XX-02100	BUILDING SECTIONS - SHEET 1
MPS-AEC-DR-ST-XX-02101	BUILDING SECTIONS - SHEET 2
MPS-AEC-DR-ST-XX-02102	BUILDING SECTIONS - SHEET 3
MPS-AEC-DR-ST-XX-02103	BUILDING SECTIONS - SHEET 4
MPS-AEC-DR-ST-XX-02104	BUILDING SECTIONS - SHEET 5
MPS-AEC-DR-ST-XX-02105	BUILDING SECTIONS - SHEET 6
MPS-AEC-DR-ST-XX-02106	BUILDING SECTIONS - SHEET 7

NOTE:
THE FOLLOWING DRAWINGS WERE CREATED FROM THE REFERENCE VERIS SURVEY MODEL AND WERE PRODUCED FOR THE SOLE PURPOSE AS A BASE FOR OUR ANNOTATIONS FOLLOWING OUR SITE INSPECTION.
THE SITE INSPECTION CARRIED OUT WAS A VISUAL INSPECTION ONLY AND OCCURRED FROM GROUND LEVEL WITHOUT THE USE OF ELEVATED WORK PLATFORMS OR LADDERS.

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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000

CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx

PROJECT TEAM INITIALS

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DESIGNED BY	
CHECKED BY	
APPROVED BY	

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ISR	DATE	DESCRIPTION

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0 2500 5000 mm
1:100

NORTH

SHEET TITLE
STRUCTURAL
COVER SHEET & DRAWING INDEX

PROJECT NUMBER
60731376

DRAWING NUMBER REVISION
MPS-AEC-DR-ST-XX-00000

Last Saved: 20/01/2025 2:15:38 PM
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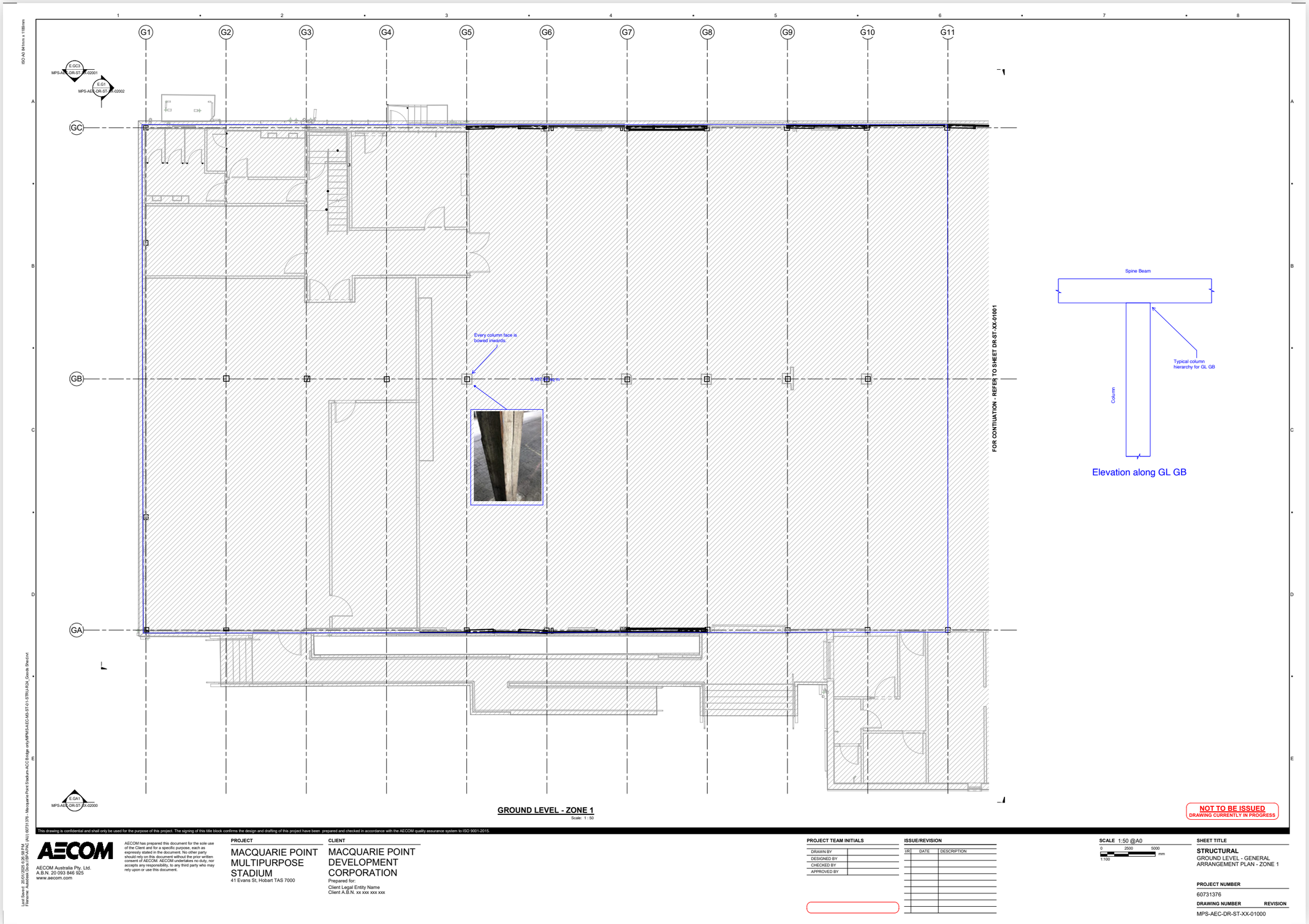
G1
G2
G3
G4
G5
G6
G7
G8
G9
G10
G11
GC
GB
GA
Every column face is bowed inwards.
Spine Beam
Typical column hierarchy for GL GB
Column
Elevation along GL GB
FOR CONTUATION - REFER TO SHEET DR-ST-XX-01001
GROUND LEVEL - ZONE 1
Scale: 1 : 50
NOT TO BE ISSUED
DRAWING CURRENTLY IN PROGRESS
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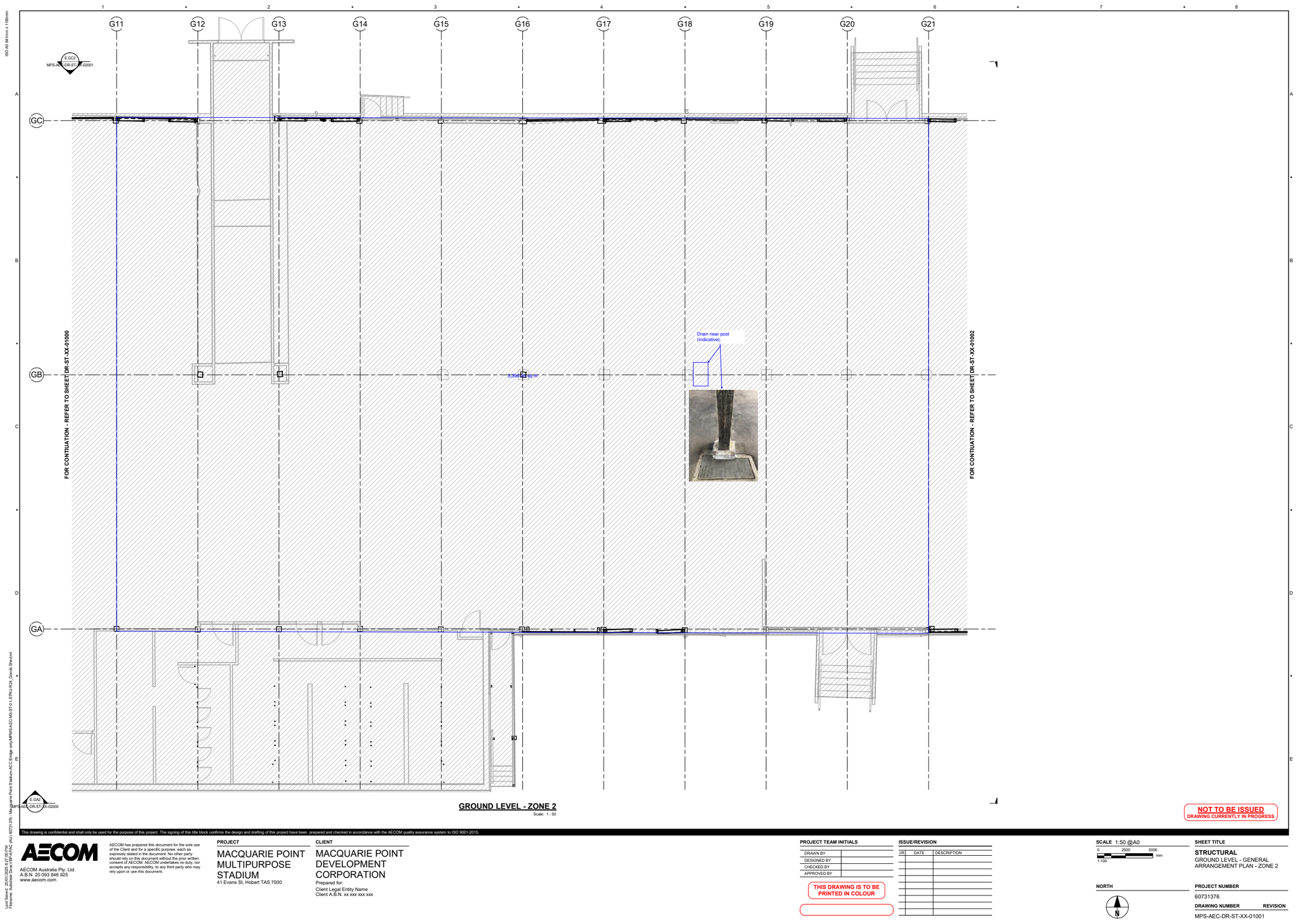
41 Evans St, Hobart TAS 7000
CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
SHEET TITLE
STRUCTURAL
GROUND LEVEL - GENERAL ARRANGEMENT PLAN - ZONE 1
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-01000


G11
G12
G13
G14
G15
G16
G17
G18
G19
G20
G21
GC
GB
GA
Drain near post (indicative).
FOR CONTINUATION - REFER TO SHEET DR-ST-XX-01000
FOR CONTINUATION - REFER TO SHEET DR-ST-XX-01002
GROUND LEVEL - ZONE 2
Scale: 1 : 50
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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000
CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
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Client A.B.N. xx xxx xxx xxx
PROJECT TEAM INITIALS
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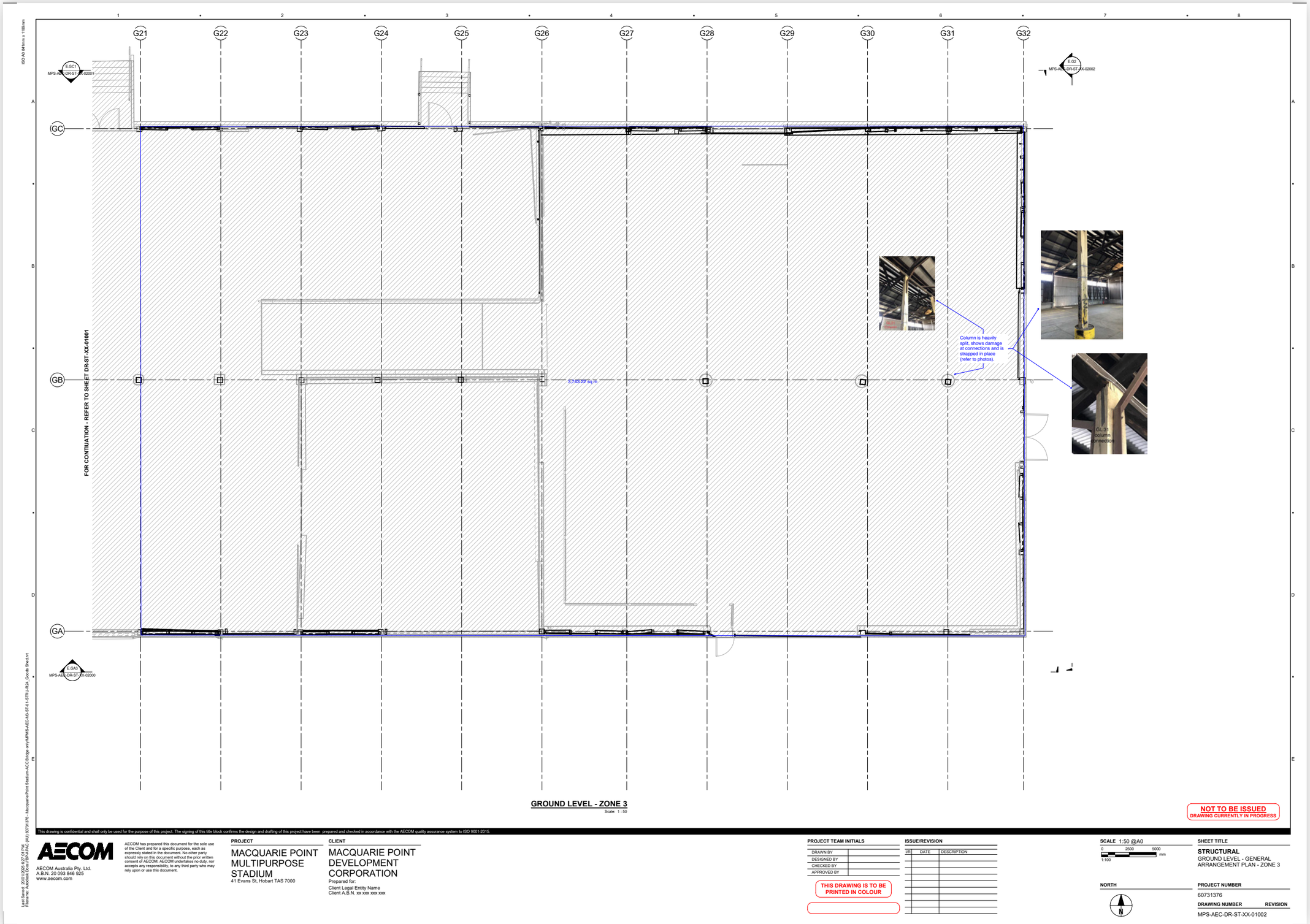
SCALE 1:50 @A0
0 2500 5000 mm
1:100
NORTH
SHEET TITLE
STRUCTURAL
GROUND LEVEL - GENERAL ARRANGEMENT PLAN - ZONE 2
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-01001
REVISION



GROUND LEVEL - ZONE 3
Scale: 1 : 50

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41 Evans St, Hobart TAS 7000

CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx

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0 2500 5000 mm
1:100

NORTH

SHEET TITLE
STRUCTURAL
GROUND LEVEL - GENERAL ARRANGEMENT PLAN - ZONE 3

PROJECT NUMBER
60731376

DRAWING NUMBER REVISION
MPS-AEC-DR-ST-XX-01002

Last Saved: 20/01/2026 4:27:01 PM
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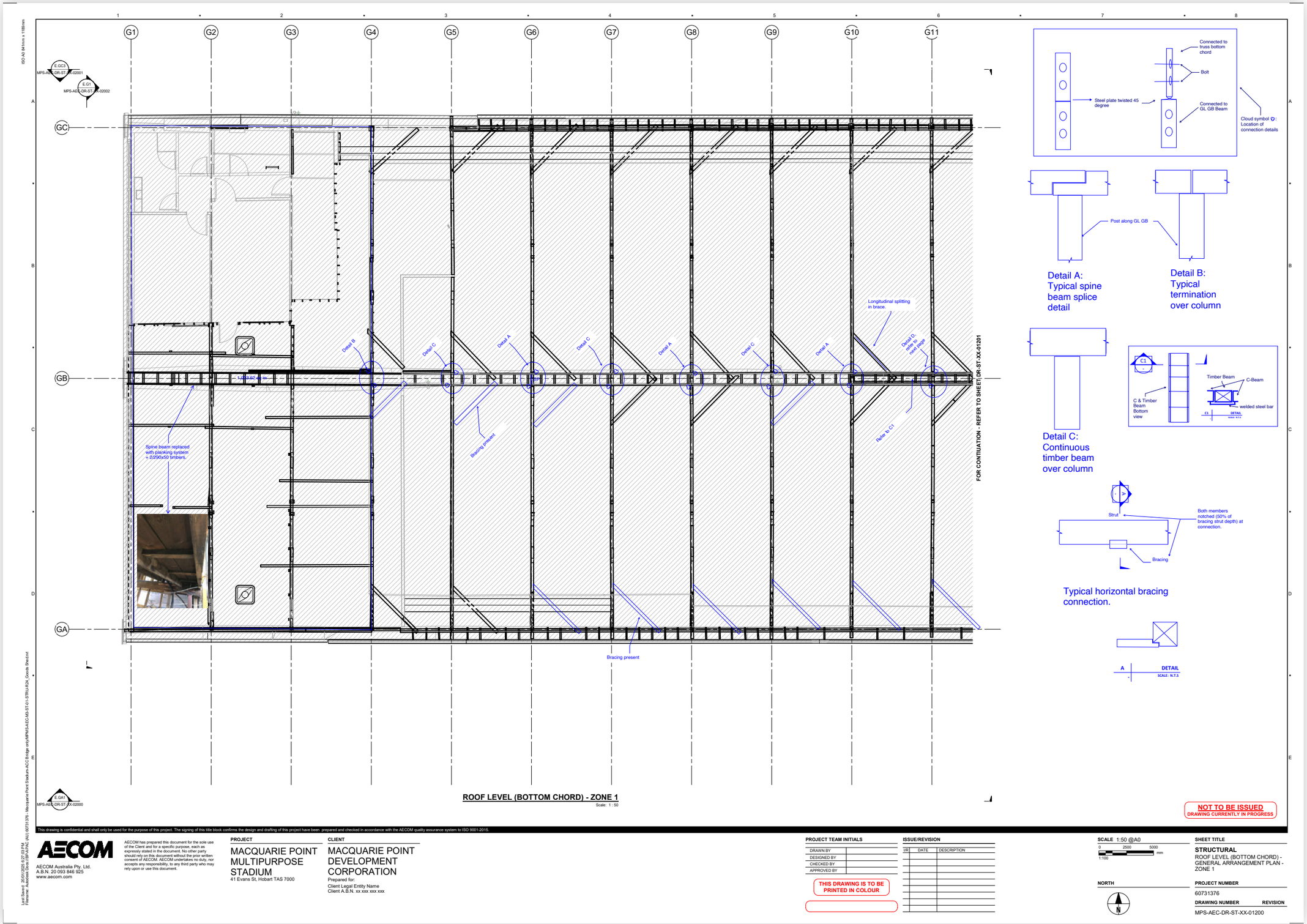
G1
G2
G3
G4
G5
G6
G7
G8
G9
G10
G11
GC
GB
GA
Detail B
Detail C
Detail A
Detail C
Detail A
Detail C
Detail A
Detail D - make a new hinge
Longitudinal splitting in brace.
Spine beam replaced with planking system - 2/290x50 timbers.
Bracing present
Refer to C1
Bracing present
FOR CONTINUATION - REFER TO SHEET DR-ST-XX-01201
Steel plate twisted 45 degree
Connected to truss bottom chord
Bolt
Connected to GL GB Beam
Cloud symbol : Location of connection details
Post along GL GB
Detail A: Typical spine beam splice detail
Detail B: Typical termination over column
Detail C: Continuous timber beam over column
C1
Timber Beam
C-Beam
C & Timber Beam Bottom view
welded steel bar
DETAIL
SCALE: N.T.S
Strut
Both members notched (50% of bracing strut depth) at connection.
Bracing
Typical horizontal bracing connection.
A
DETAIL
SCALE: N.T.S
ROOF LEVEL (BOTTOM CHORD) - ZONE 1
Scale: 1 : 50
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Prepared for:
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Client A.B.N. xx xxx xxx xxx
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SCALE 1:50 @A0
0 2500 5000 mm
1:100
NORTH
SHEET TITLE
STRUCTURAL
ROOF LEVEL (BOTTOM CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 1
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-01200
REVISION
Last Saved: 20/01/2026 5:27:03 P.M
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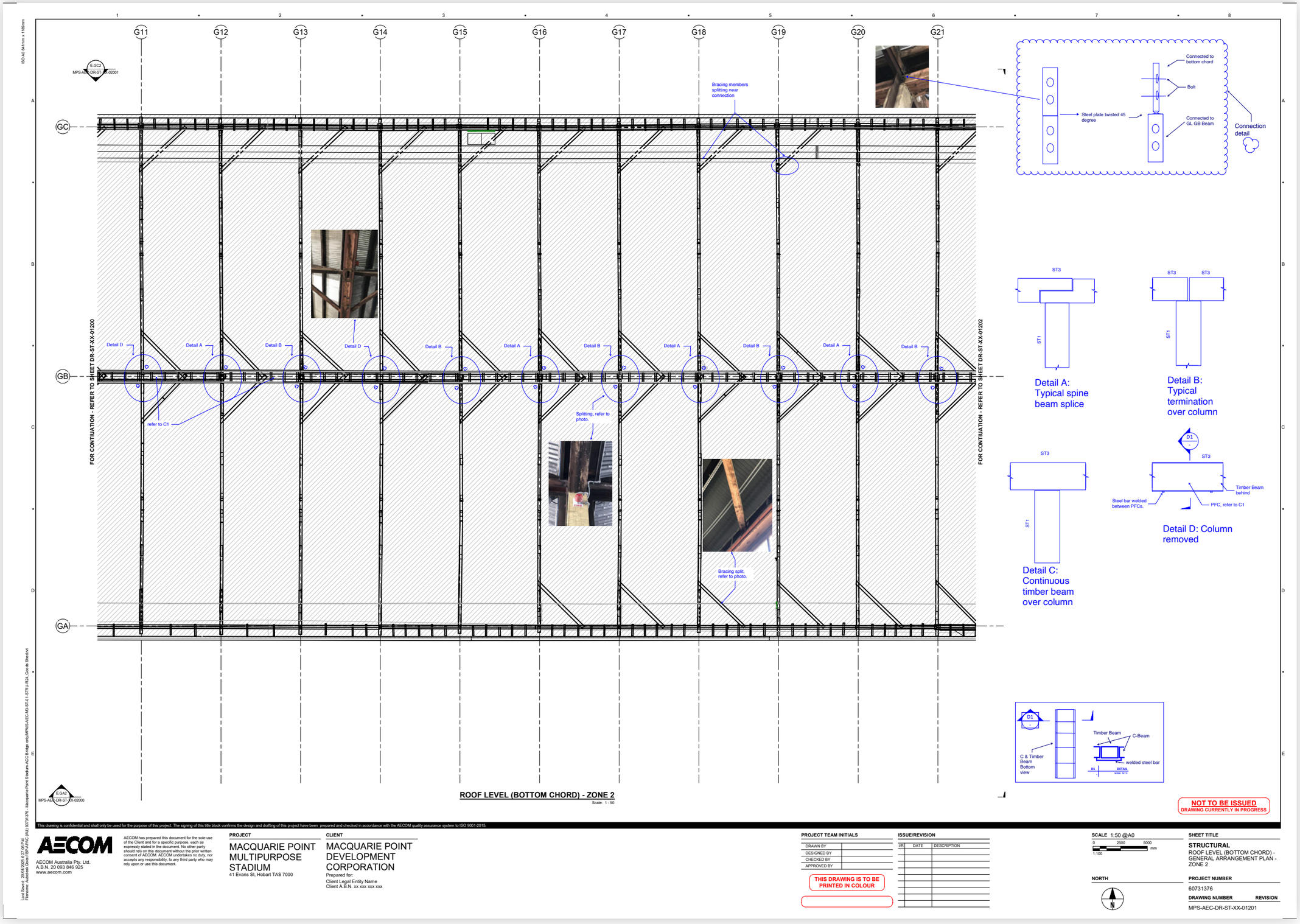
G11
G12
G13
G14
G15
G16
G17
G18
G19
G20
G21
GC
GB
GA
Bracing members splitting near connection
Connected to bottom chord
Bolt
Steel plate twisted 45 degree
Connected to GL GB Beam
Connection detail
Detail A
Detail B
Detail D
refer to C1
Splitting, refer to photo.
Bracing split, refer to photo.
FOR CONTINUATION - REFER TO SHEET DR-ST-XX-01200
FOR CONTINUATION - REFER TO SHEET DR-ST-XX-01202
ST3
ST1
Detail A: Typical spine beam splice
Detail B: Typical termination over column
Detail C: Continuous timber beam over column
Timber Beam behind
PFC, refer to C1
Steel bar welded between PFCs.
Detail D: Column removed
Timber Beam
C-Beam
welded steel bar
C & Timber Beam Bottom view
ROOF LEVEL (BOTTOM CHORD) - ZONE 2
Scale: 1 : 50
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41 Evans St, Hobart TAS 7000
CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx
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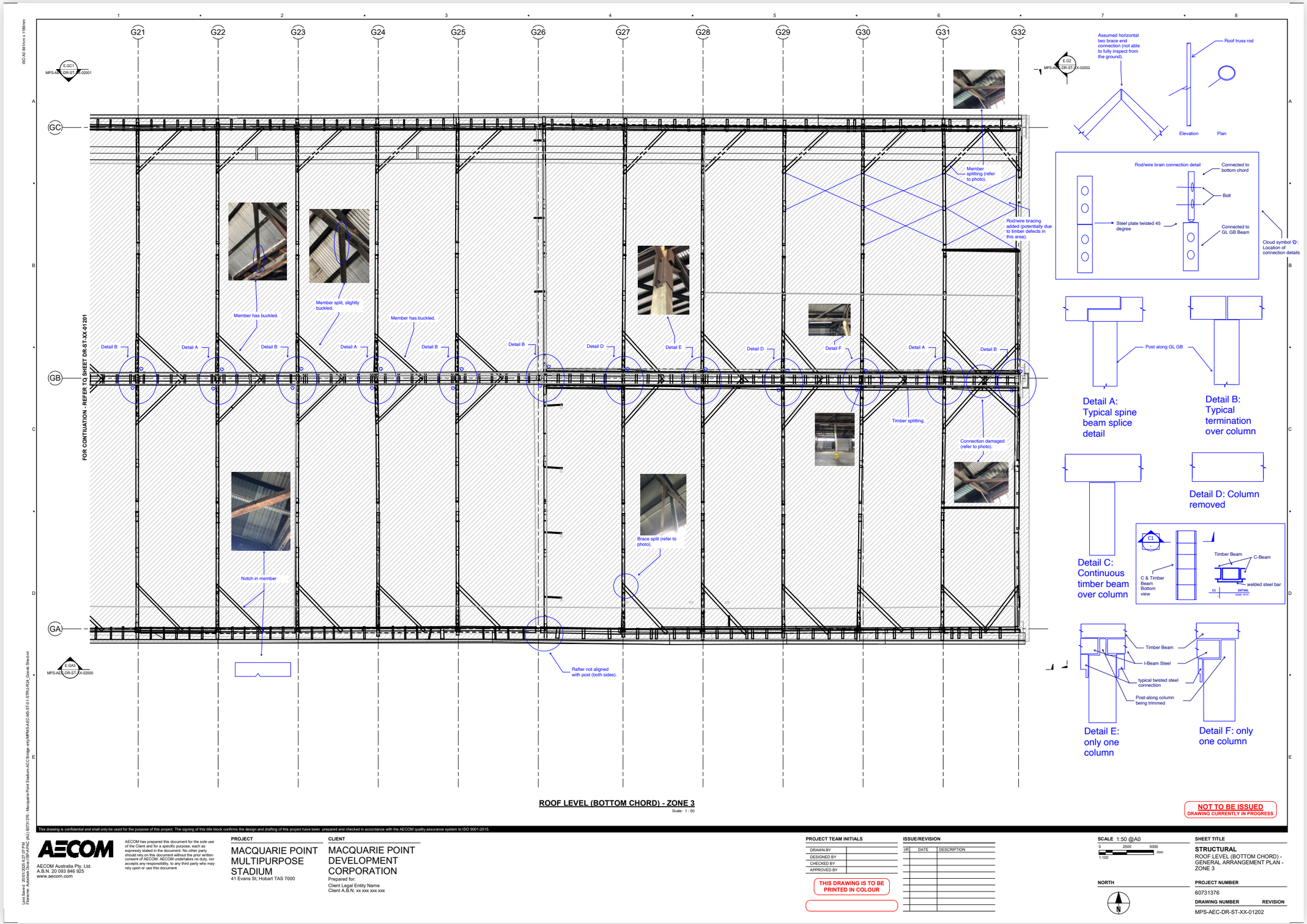
DR | DATE | DESCRIPTION
SCALE 1:50 @A0
1:100
NORTH
SHEET TITLE
STRUCTURAL
ROOF LEVEL (BOTTOM CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 2
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-01201
REVISION



ROOF LEVEL (BOTTOM CHORD) - ZONE 3

Scale: 1 : 50

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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000

CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx

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IR	DATE	DESCRIPTION

SCALE 1:50 @A0
0 2500 5000 mm
1:100

NORTH

SHEET TITLE
STRUCTURAL
ROOF LEVEL (BOTTOM CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 3

PROJECT NUMBER
60731376

DRAWING NUMBER REVISION
MPS-AEC-DR-ST-XX-01202

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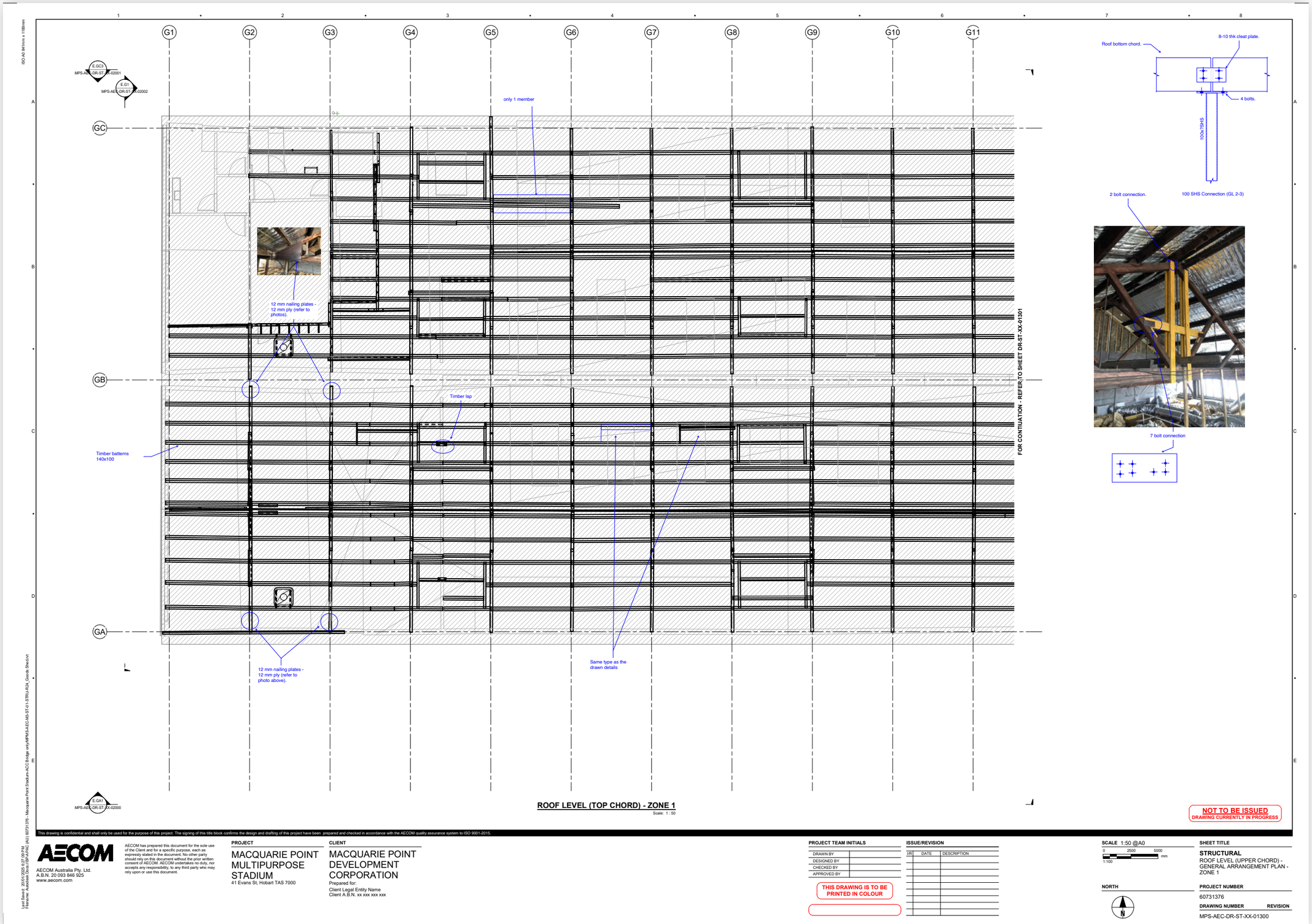
only 1 member
12 mm nailing plates - 12 mm ply (refer to photos).
Timber lap
Timber batterns 140x100
12 mm nailing plates - 12 mm ply (refer to photo above).
Same type as the drawn details
FOR CONTINUATION - REFER TO SHEET DR-ST-XX-01301
ROOF LEVEL (TOP CHORD) - ZONE 1
Scale: 1 : 50
Roof bottom chord.
8-10 thk cleat plate.
4 bolts.
100x75SHS
100 SHS Connection (GL 2-3)
2 bolt connection.
7 bolt connection
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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000
CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx
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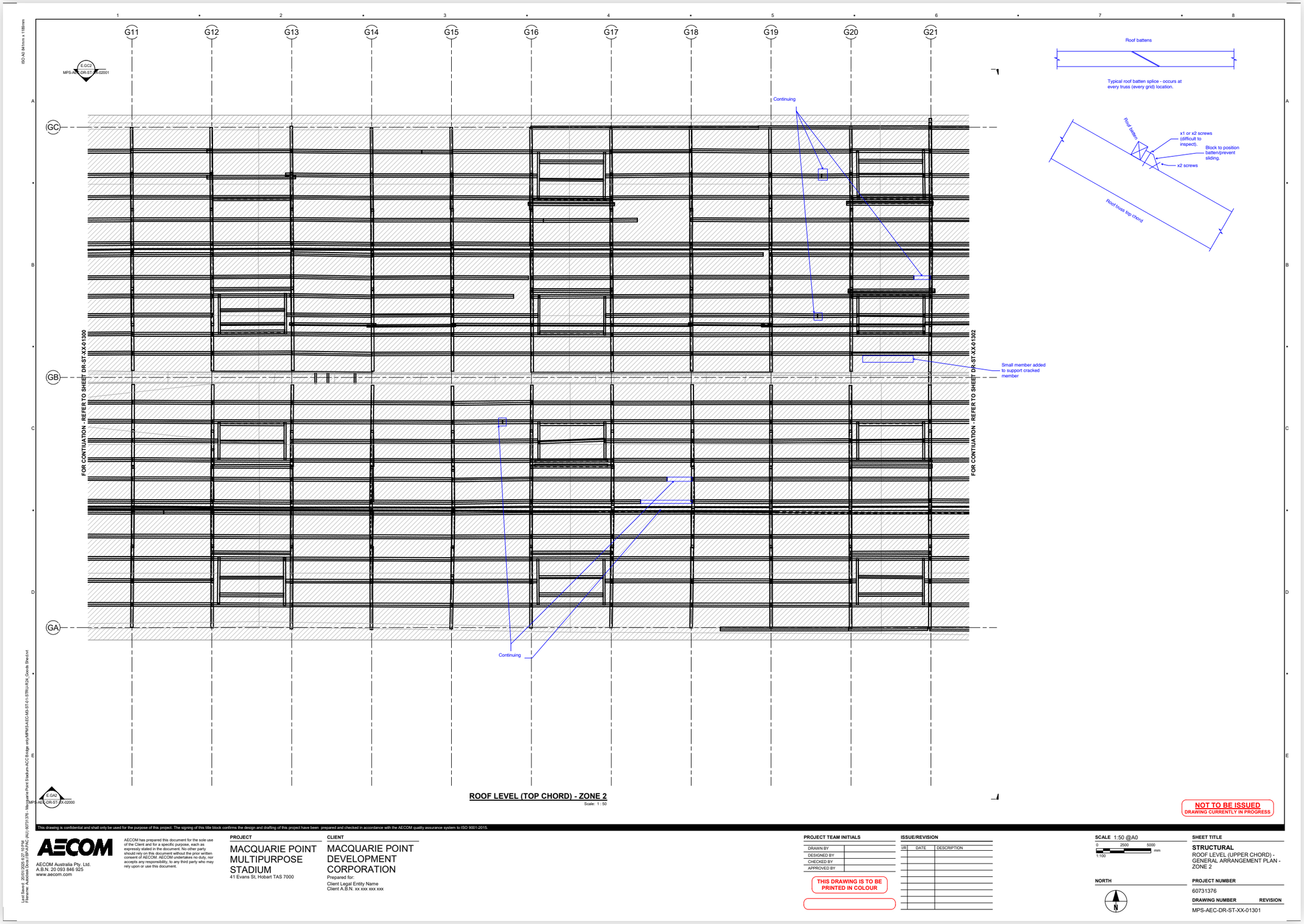
SCALE 1:50 @A0
1:100
NORTH
SHEET TITLE
STRUCTURAL
ROOF LEVEL (UPPER CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 1
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-01300
REVISION


G11
G12
G13
G14
G15
G16
G17
G18
G19
G20
G21
GC
GB
GA
Continuing
Continuing
Small member added to support cracked member
FOR CONTIUATION - REFER TO SHEET DR-ST-XX-01300
FOR CONTIUATION - REFER TO SHEET DR-ST-XX-01302
Roof battens
Typical roof batten splice - occurs at every truss (every grid) location.
Roof batten
x1 or x2 screws (difficult to inspect).
Block to position batten/prevent sliding.
x2 screws
Roof truss top chord
ROOF LEVEL (TOP CHORD) - ZONE 2
Scale: 1 : 50
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41 Evans St, Hobart TAS 7000
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MACQUARIE POINT DEVELOPMENT CORPORATION
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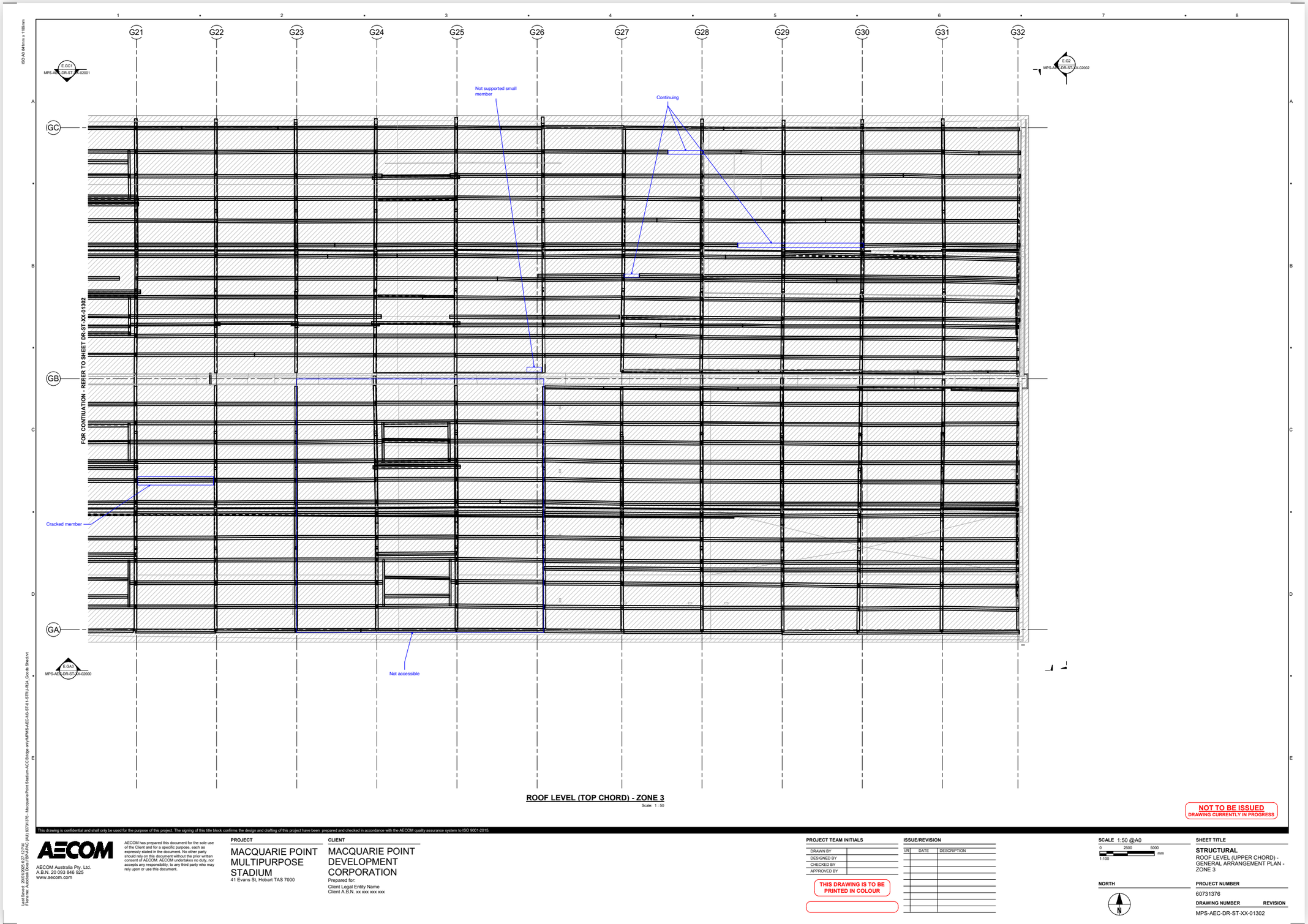
SCALE 1:50 @A0
0 2500 5000 mm
1:100
NORTH
SHEET TITLE
STRUCTURAL
ROOF LEVEL (UPPER CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 2
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-01301
REVISION



ROOF LEVEL (TOP CHORD) - ZONE 3

Scale: 1 : 50

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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000

CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx

PROJECT TEAM INITIALS

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SCALE 1:50 @A0
0 2500 5000 mm
1:100

NORTH

SHEET TITLE
STRUCTURAL
ROOF LEVEL (UPPER CHORD) - GENERAL ARRANGEMENT PLAN - ZONE 3

PROJECT NUMBER
60731376

DRAWING NUMBER REVISION
MPS-AEC-DR-ST-XX-01302

Last Saved: 20/01/2026 6:27:13 PM
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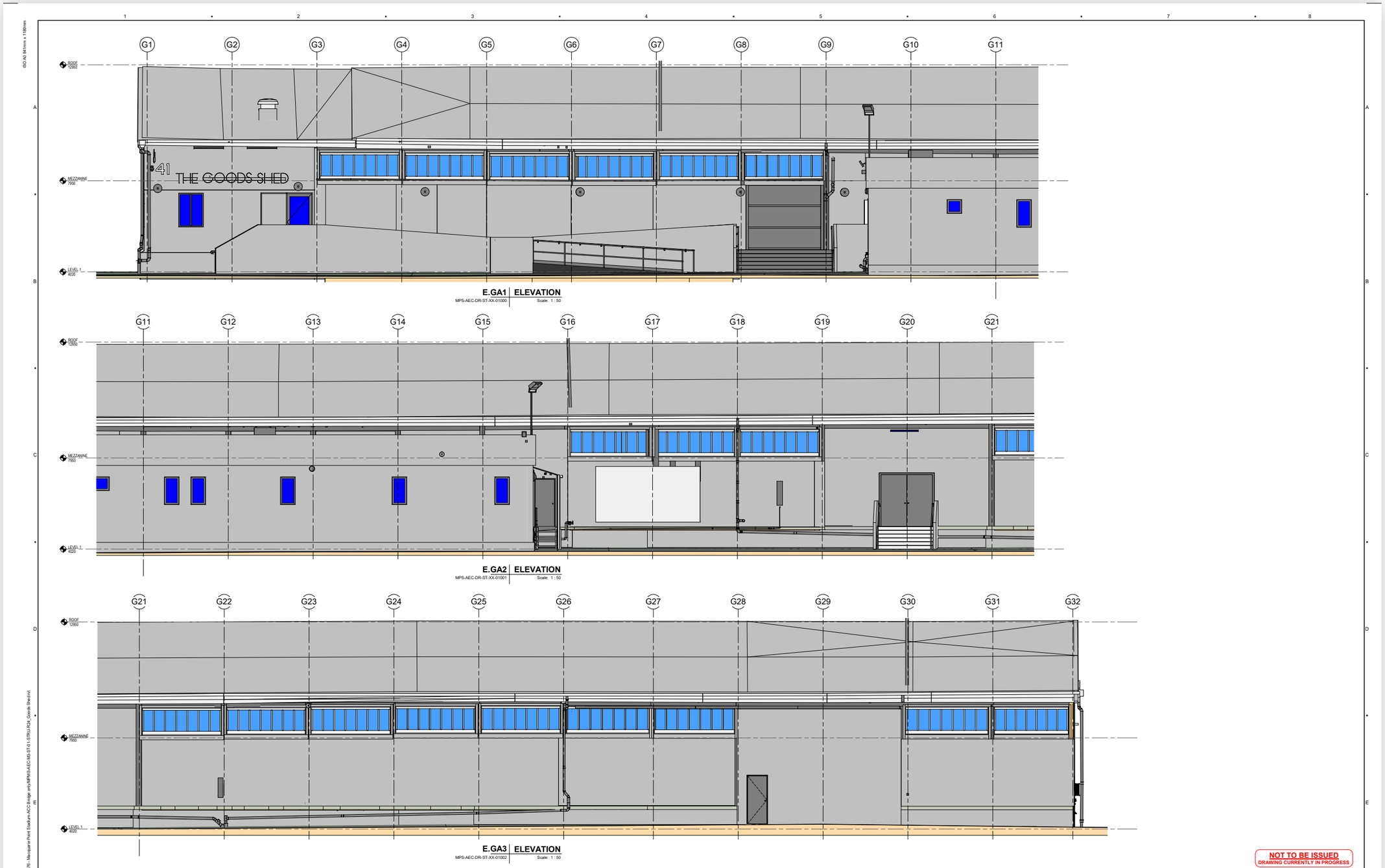
ISO A0 (841mm x 1189mm
1 2 3 4 5 6 7 8
A
B
C
D
E
G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 G11
ROOF 10950
MEZZANINE 7950
LEVEL 1 4020
41 THE GOODS SHED
E.GA1 ELEVATION
MPS-AEC-DR-ST-XX-01000
Scale: 1 : 50
G11 G12 G13 G14 G15 G16 G17 G18 G19 G20 G21
ROOF 10950
MEZZANINE 7950
LEVEL 1 4020
E.GA2 ELEVATION
MPS-AEC-DR-ST-XX-01001
Scale: 1 : 50
G21 G22 G23 G24 G25 G26 G27 G28 G29 G30 G31 G32
ROOF 10950
MEZZANINE 7950
LEVEL 1 4020
E.GA3 ELEVATION
MPS-AEC-DR-ST-XX-01002
Scale: 1 : 50
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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000
CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx
PROJECT TEAM INITIALS
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ISSUE/REVISION
I/R DATE DESCRIPTION
SCALE 1:50 @A0
0 2500 5000 mm
1:100
NORTH
SHEET TITLE
STRUCTURAL
BUILDING ELEVATIONS - SHEET 1
PROJECT NUMBER
60731376
DRAWING NUMBER REVISION
MPS-AEC-DR-ST-XX-02000
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G32 G31 G30 G29 G28 G27 G26 G25 G24 G23 G22 G21
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
GRID G1 - BUILDING SECTION
Scale: 1 : 50
G21 G20 G19 G18 G17 G16 G15 G14 G13 G12 G11
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
GRID G1 - BUILDING SECTION
Scale: 1 : 50
G11 G10 G9 G8 G7 G6 G5 G4 G3 G2 G1
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
THE GOODS SHED 41
GRID G1 - BUILDING SECTION
Scale: 1 : 50
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41 Evans St, Hobart TAS 7000
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MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx
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SHEET TITLE
STRUCTURAL
BUILDING ELEVATIONS - SHEET 2
PROJECT NUMBER
60731376
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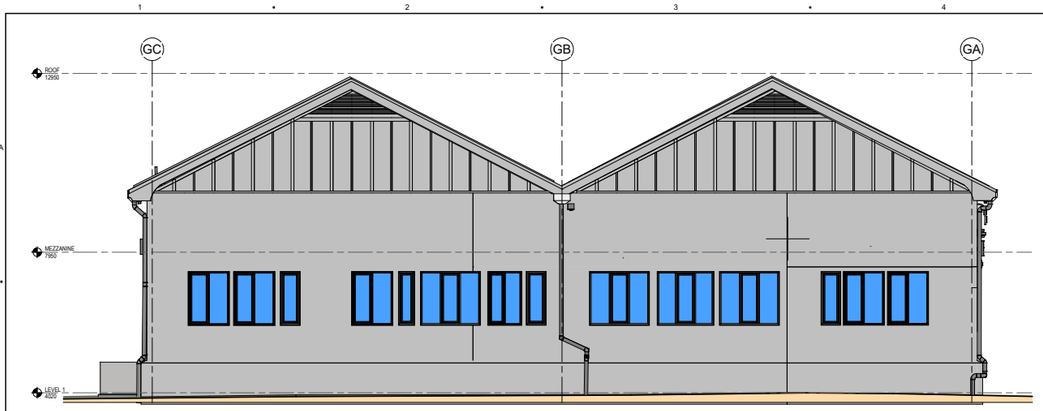
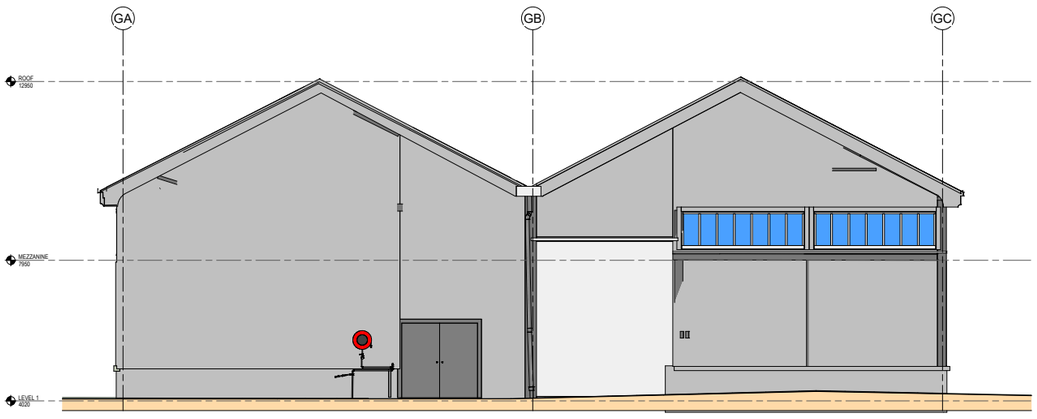


GRID G1 - BUILDING SECTION
Scale: 1 : 50



GRID G1 - BUILDING SECTION
Scale: 1 : 50

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41 Evans St, Hobart TAS 7000

CLIENT
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SHEET TITLE
STRUCTURAL
BUILDING ELEVATIONS - SHEET 3

PROJECT NUMBER
60731376

DRAWING NUMBER REVISION
MPS-AEC-DR-ST-XX-02002

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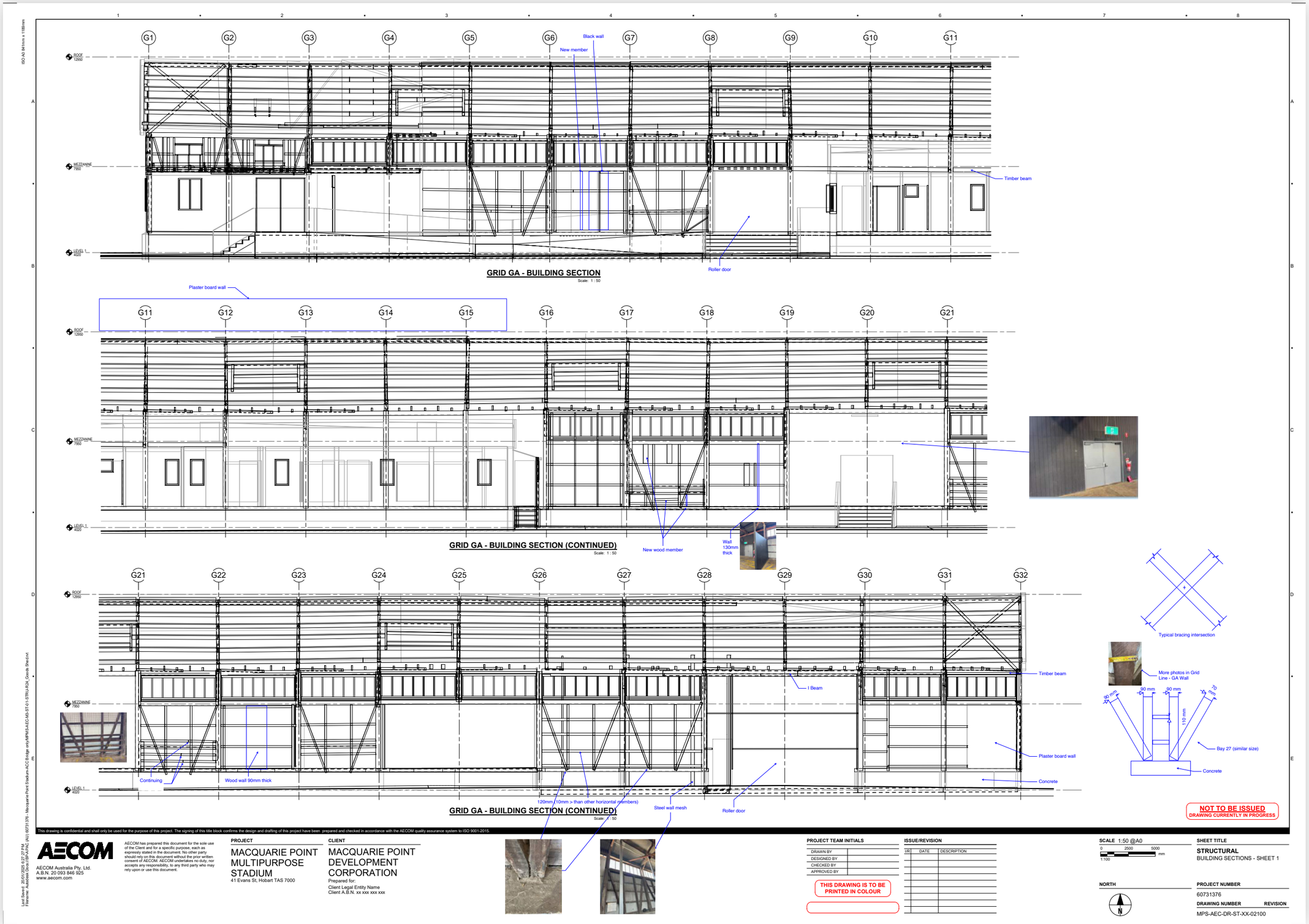
G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 G11
Black wall
New member
Timber beam
Roller door
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
GRID GA - BUILDING SECTION
Scale: 1 : 50
Plaster board wall
G11 G12 G13 G14 G15 G16 G17 G18 G19 G20 G21
New wood member
Wall 130mm thick
GRID GA - BUILDING SECTION (CONTINUED)
Scale: 1 : 50
G21 G22 G23 G24 G25 G26 G27 G28 G29 G30 G31 G32
Timber beam
I Beam
Plaster board wall
Concrete
Continuing
Wood wall 90mm thick
120mm (10mm > than other horizontal members)
Steel wall mesh
Roller door
GRID GA - BUILDING SECTION (CONTINUED)
Scale: 1 : 50
Typical bracing intersection
More photos in Grid Line - GA Wall
90 mm
90 mm
90 mm
70 mm
110 mm
Bay 27 (similar size)
Concrete
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MACQUARIE POINT DEVELOPMENT CORPORATION
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STRUCTURAL
BUILDING SECTIONS - SHEET 1
PROJECT NUMBER
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DRAWING NUMBER
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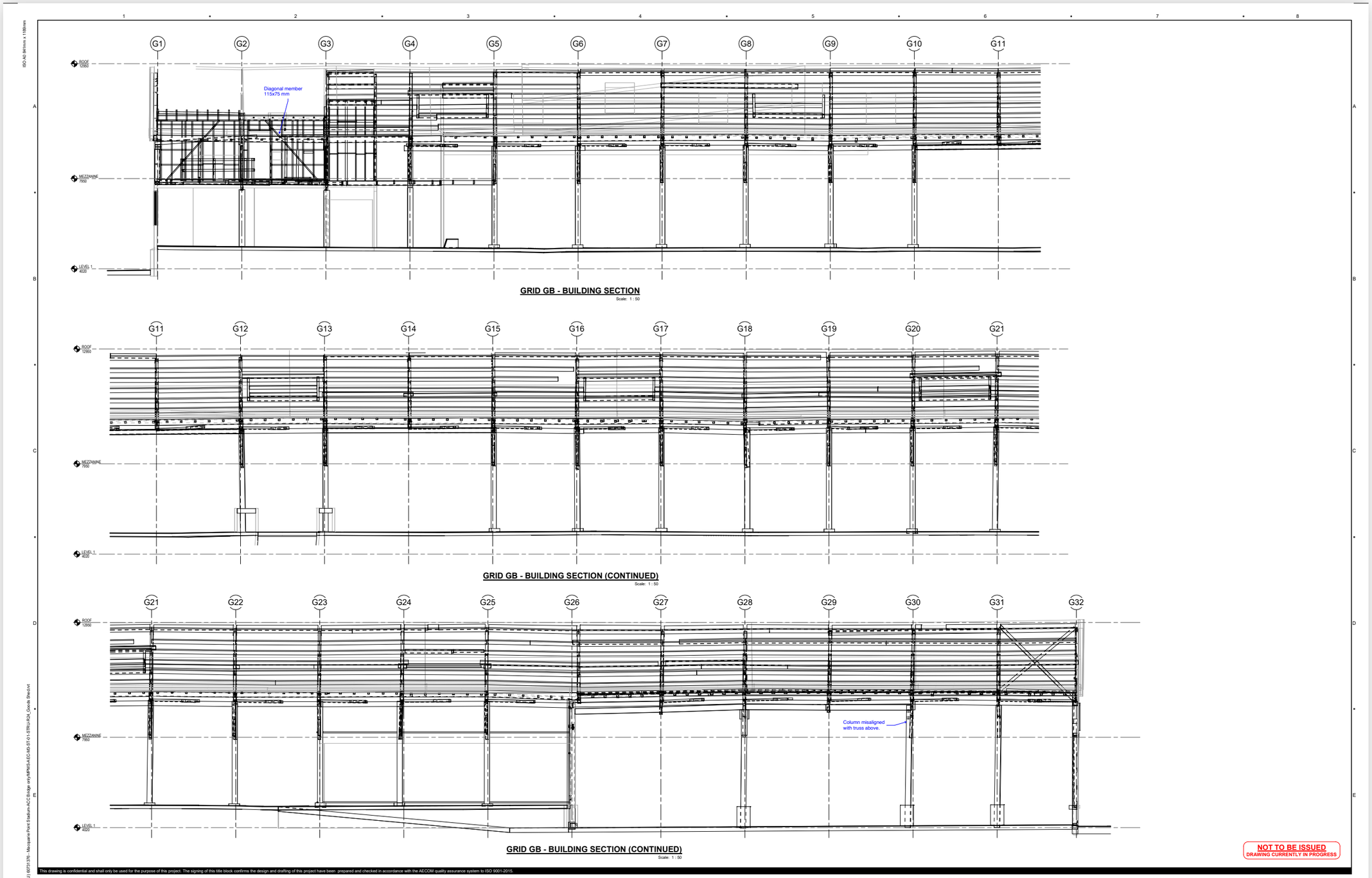
G1 G2 G3 G4 G5 G6 G7 G8 G9 G10 G11
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
Diagonal member 115x75 mm
GRID GB - BUILDING SECTION
Scale: 1 : 50
G11 G12 G13 G14 G15 G16 G17 G18 G19 G20 G21
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
GRID GB - BUILDING SECTION (CONTINUED)
Scale: 1 : 50
G21 G22 G23 G24 G25 G26 G27 G28 G29 G30 G31 G32
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
Column misaligned with truss above.
GRID GB - BUILDING SECTION (CONTINUED)
Scale: 1 : 50
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STRUCTURAL
BUILDING SECTIONS - SHEET 2
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G32 G31 G30 G29 G28 G27 G26 G25 G24 G23 G22 G21
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
135x95 all framing members
Roller door to fly brace connection.
90x30
90x45
95x50
95x45
120x50
50x50 SHS frame (unable to determine wall thickness)
Refer to photos for connections.
90x35
140x35
Unable to inspect area.
Bracing member effectively cut.
Concrete ledge approximately 160 deep (varies significantly).
Bottom of vertical member not attached (hanging freely).
Member is split towards the bottom.
Member members are split.
GRID GC - BUILDING SECTION
Scale: 1 : 50
G21 G20 G19 G18 G17 G16 G15 G14 G13 G12 G11
Unable to inspect area.
90x50
115x50
85x45
Member split and twisted.
Split in timber
Bracing member cut.
Member split
Member disconnected.
GRID GC - BUILDING SECTION (CONTINUED)
Scale: 1 : 50
G11 G10 G9 G8 G7 G6 G5 G4 G3 G2 G1
Angle has been provided.
Poor connection
110x35
115x45
130x70
130x90
Member split
230 x 90
95x50
Additional members connected to posts by x2 nails. 3 noggins provided per post.
Split full length of member.
Refer to photos for connections
GRID GC - BUILDING SECTION (CONTINUED)
Scale: 1 : 50
Typical wall bracing bottom connection
Typical connection to strut (bottom of window)
-Note that steel base plates for timber columns appear to be 16 mm thk.
-Splices for struts at high level are the same as spine beam splices along GL GB (Refer to dwg 01201)
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Client A.B.N. xx xxx xxx xxx
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STRUCTURAL
BUILDING SECTIONS - SHEET 3
PROJECT NUMBER
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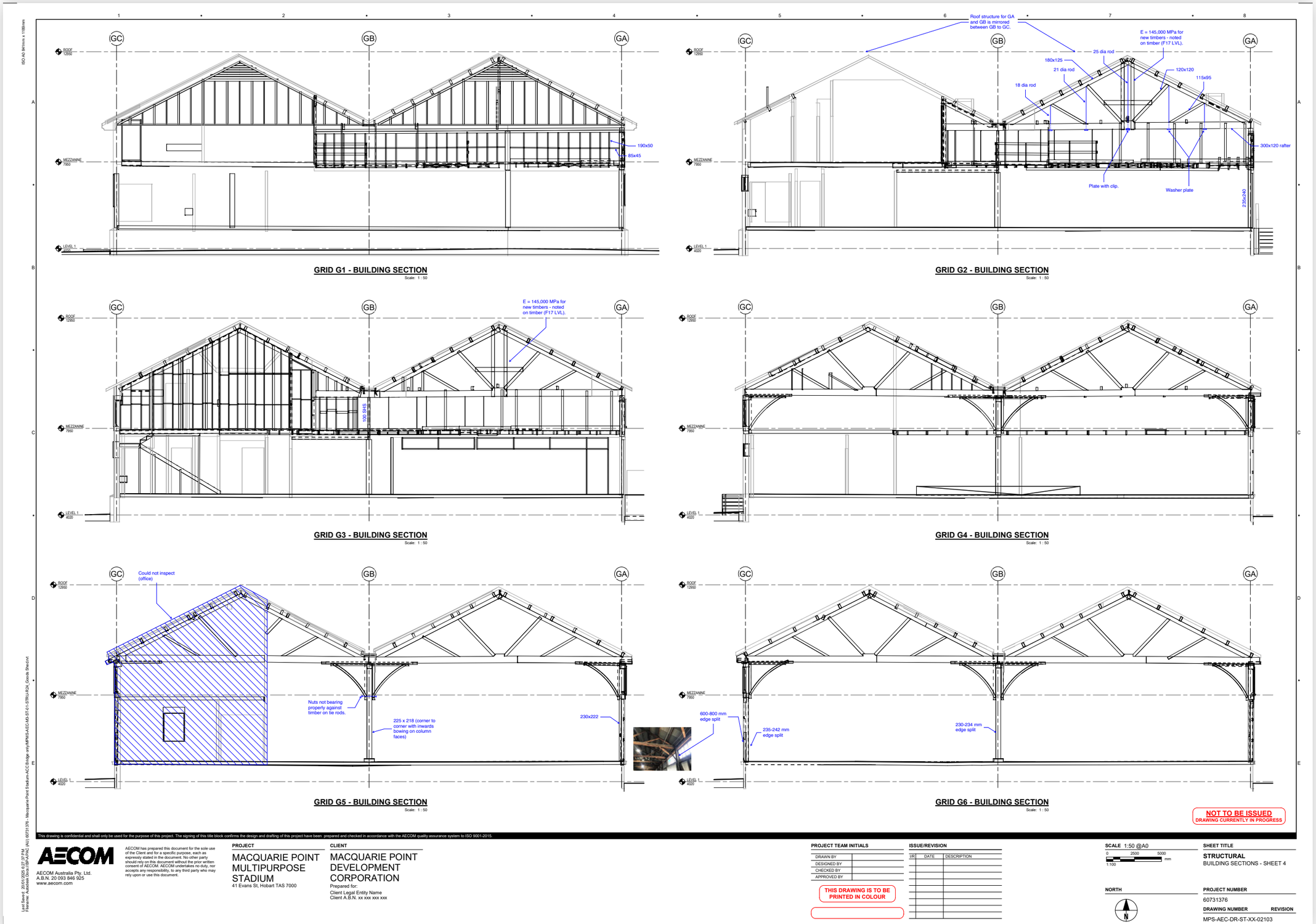
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
GC
GB
GA
190x50
85x45
GRID G1 - BUILDING SECTION
Scale: 1 : 50
Roof structure for GA and GB is mirrored between GB to GC.
E = 145,000 MPa for new timbers - noted on timber (F17 LVL).
25 dia rod
180x125
21 dia rod
18 dia rod
120x120
115x95
300x120 rafter
Plate with clip.
Washer plate
235x240
GRID G2 - BUILDING SECTION
Scale: 1 : 50
E = 145,000 MPa for new timbers - noted on timber (F17 LVL).
100.5HS
GRID G3 - BUILDING SECTION
Scale: 1 : 50
GRID G4 - BUILDING SECTION
Scale: 1 : 50
Could not inspect (office)
Nuts not bearing properly against timber on tie rods.
225 x 218 (corner to corner with inwards bowing on column faces)
230x222
600-800 mm edge split
235-242 mm edge split
230-234 mm edge split
GRID G5 - BUILDING SECTION
Scale: 1 : 50
GRID G6 - BUILDING SECTION
Scale: 1 : 50
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MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000
CLIENT
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BUILDING SECTIONS - SHEET 4
PROJECT NUMBER
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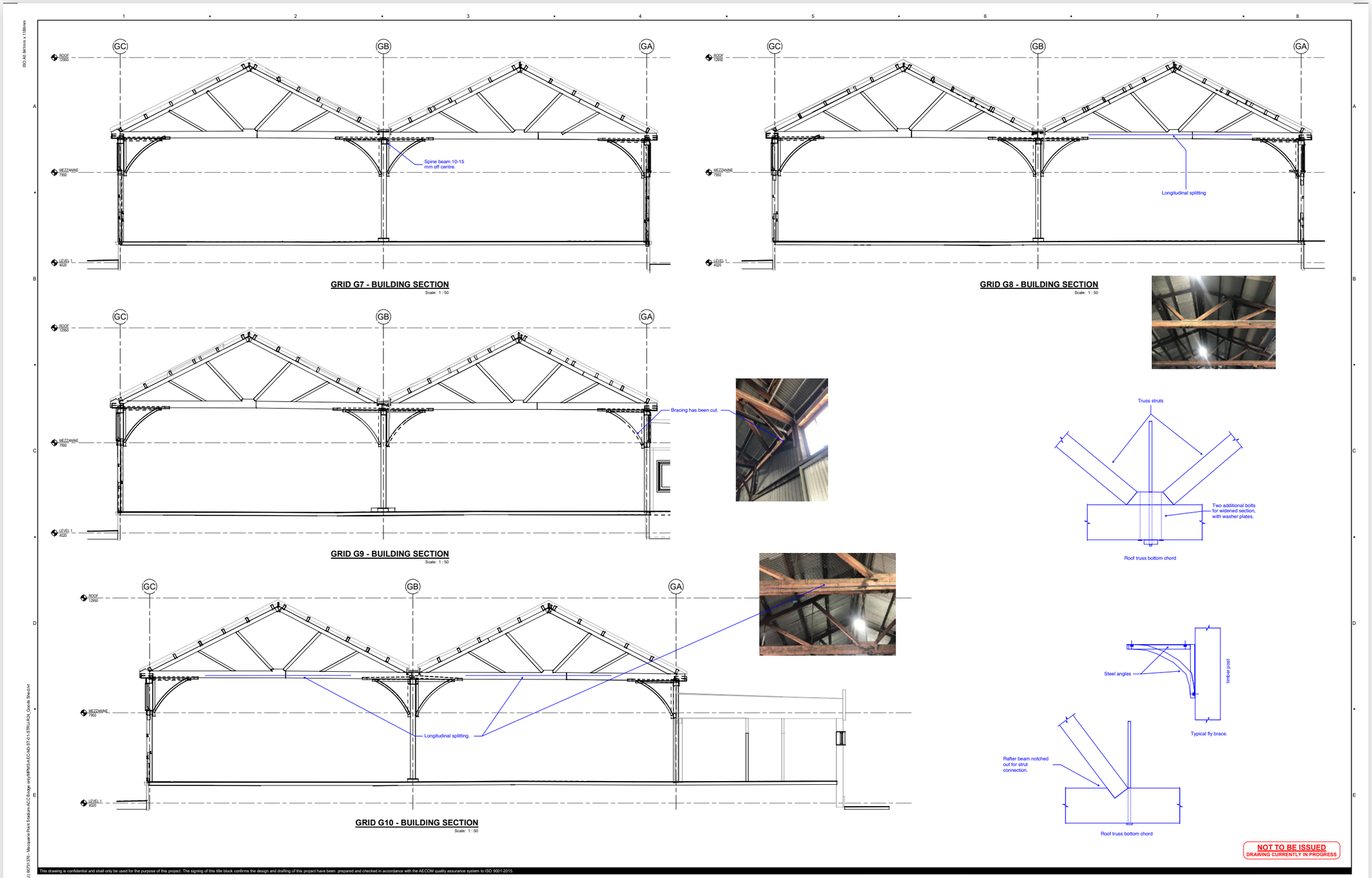
1
2
3
4
5
6
7
8
A
B
C
D
E
GC
GB
GA
ROOF
12950
MEZZANINE
7950
LEVEL 1
4020
Spine beam 10-15
mm off centre.
GRID G7 - BUILDING SECTION
Scale: 1 : 50
Longitudinal splitting
GRID G8 - BUILDING SECTION
Scale: 1 : 50
Bracing has been cut.
GRID G9 - BUILDING SECTION
Scale: 1 : 50
Longitudinal splitting.
GRID G10 - BUILDING SECTION
Scale: 1 : 50
Truss struts
Two additional bolts
for widened section,
with washer plates.
Roof truss bottom chord
Steel angles
timber post
Typical fly brace.
Rafter beam notched
out for strut
connection.
Roof truss bottom chord
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MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000
CLIENT
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BUILDING SECTIONS - SHEET 5
PROJECT NUMBER
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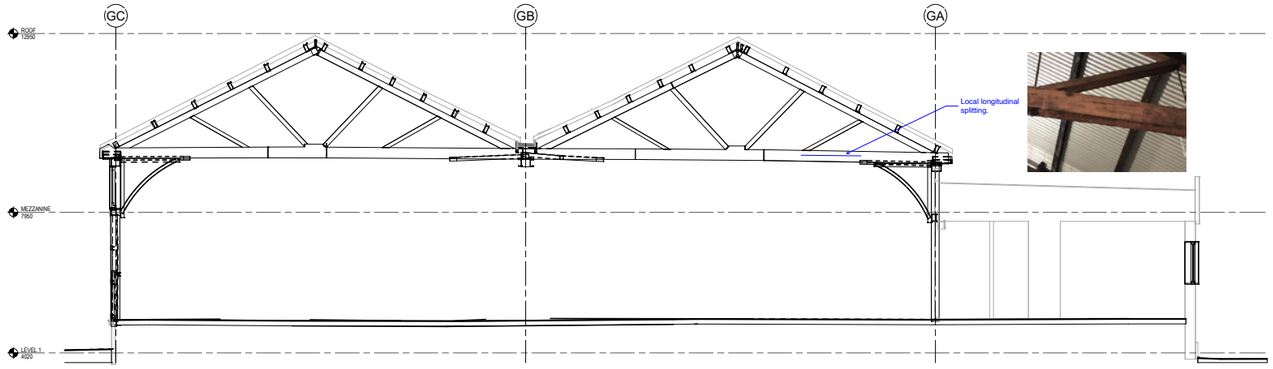
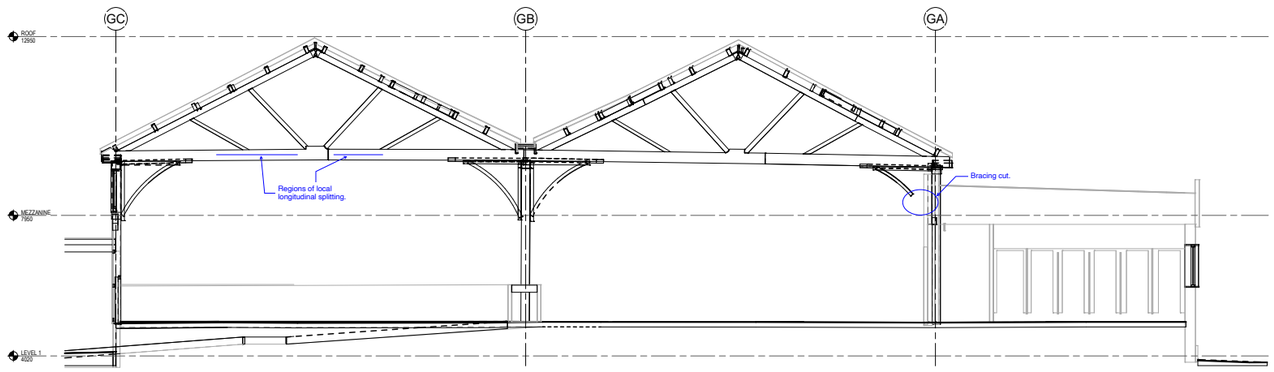


GRID G11 - BUILDING SECTION
Scale: 1 : 50



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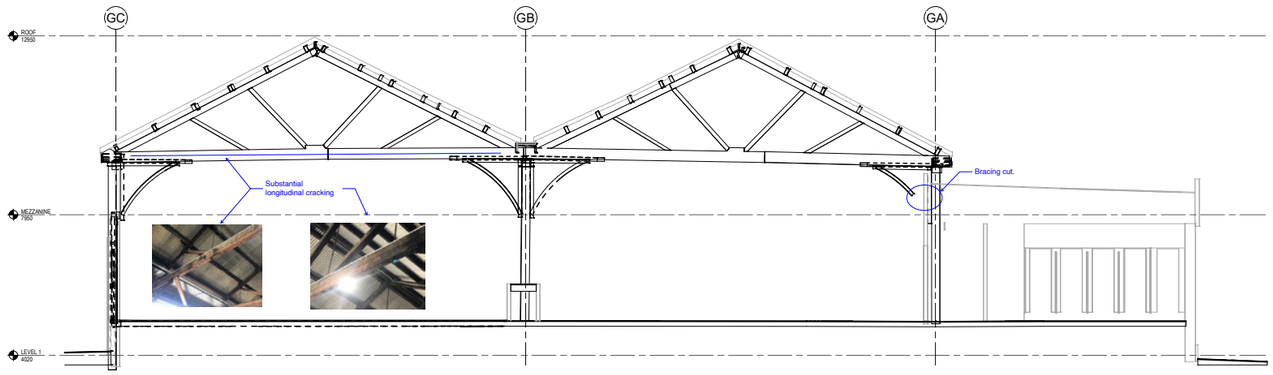
Scale: 1 : 50



GRID G13 - BUILDING SECTION
Scale: 1 : 50

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MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000

CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx

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STRUCTURAL
BUILDING SECTIONS - SHEET 6

PROJECT NUMBER
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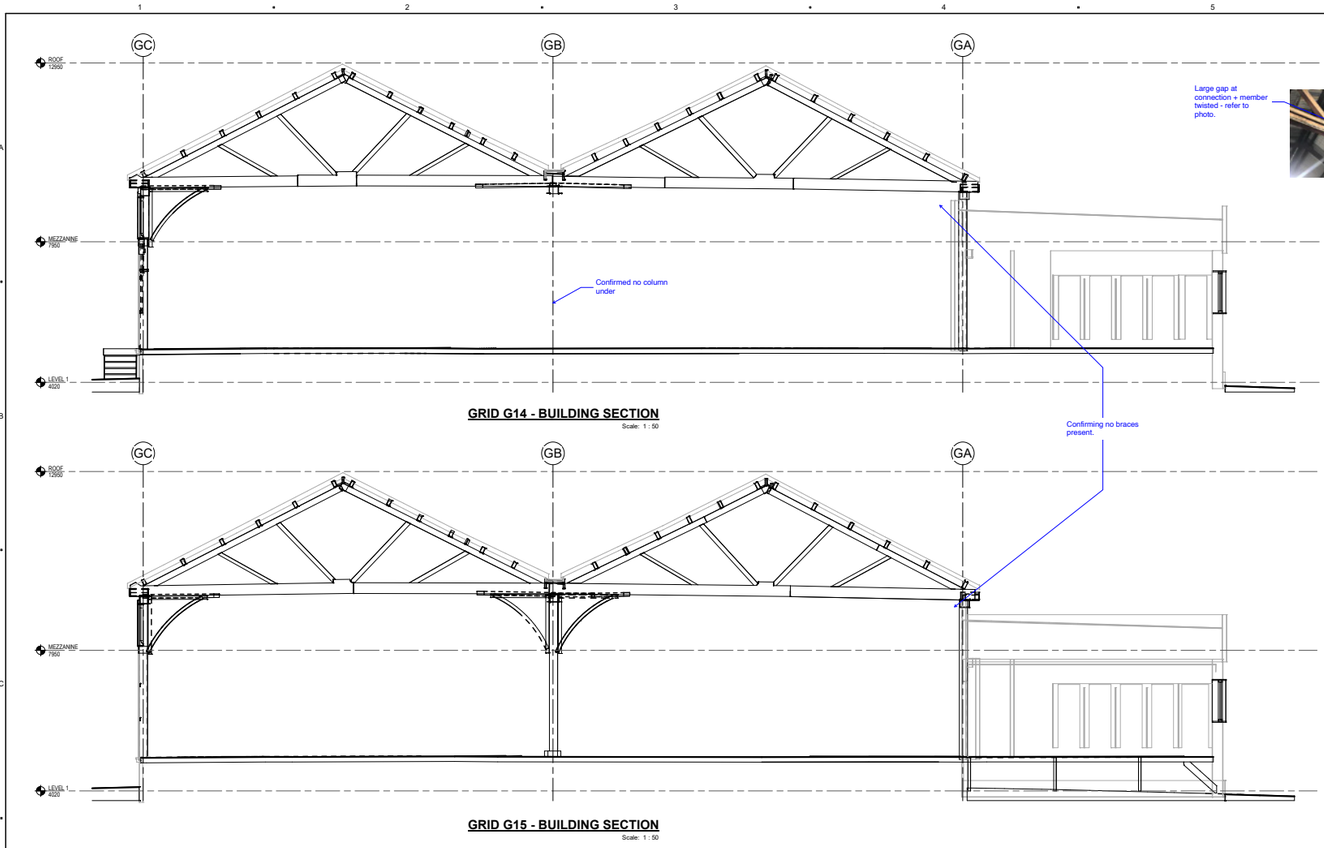
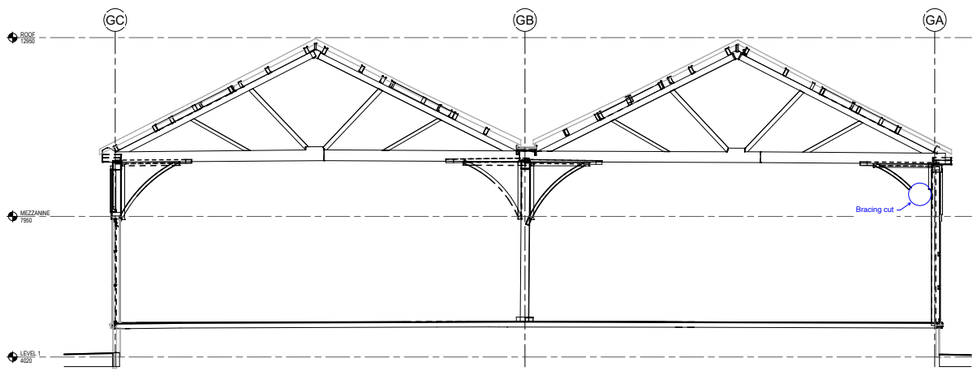


GRID G14 - BUILDING SECTION
Scale: 1 : 50

GRID G15 - BUILDING SECTION
Scale: 1 : 50



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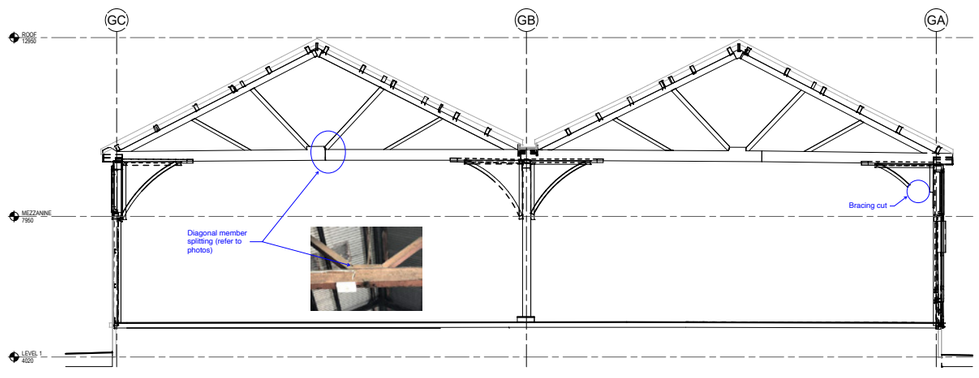

GRID G17 - BUILDING SECTION
Scale: 1 : 50

Confirming no braces present.

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Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx

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BUILDING SECTIONS - SHEET 7

PROJECT NUMBER
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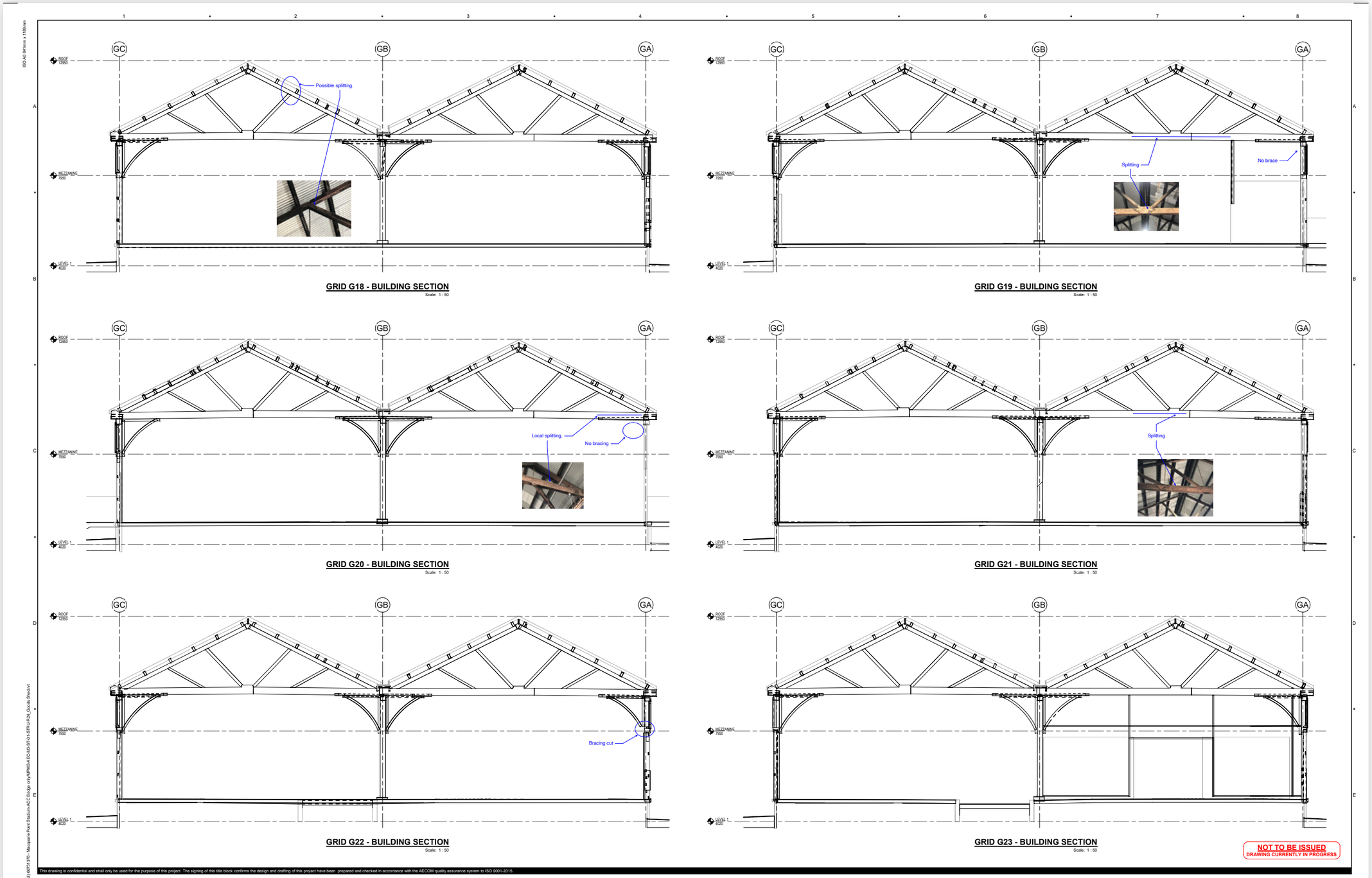
Possible splitting.
GRID G18 - BUILDING SECTION
Scale: 1 : 50
Splitting
No brace
GRID G19 - BUILDING SECTION
Scale: 1 : 50
Local splitting.
No bracing
GRID G20 - BUILDING SECTION
Scale: 1 : 50
Splitting
GRID G21 - BUILDING SECTION
Scale: 1 : 50
Bracing cut
GRID G22 - BUILDING SECTION
Scale: 1 : 50
GRID G23 - BUILDING SECTION
Scale: 1 : 50
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PROJECT
MACQUARIE POINT MULTIPURPOSE STADIUM
41 Evans St, Hobart TAS 7000
CLIENT
MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
Client Legal Entity Name
Client A.B.N. xx xxx xxx xxx
PROJECT TEAM INITIALS
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DESIGNED BY
CHECKED BY
APPROVED BY
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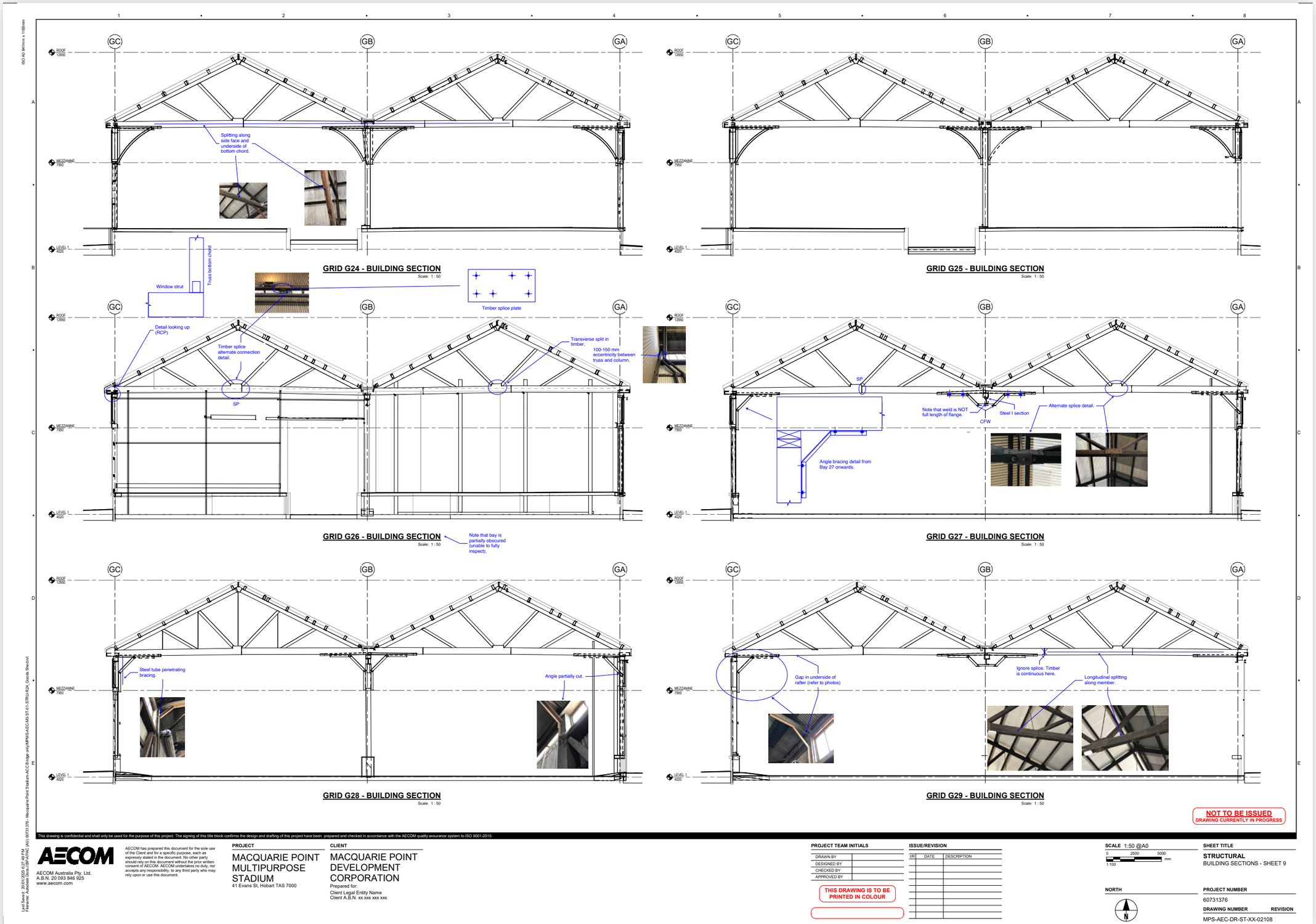
1:100
SHEET TITLE
STRUCTURAL
BUILDING SECTIONS - SHEET 8
NORTH
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-02107
REVISION


GC
GB
GA
ROOF 12950
MEZZANINE 7950
LEVEL 1 4020
Splitting along side face and underside of bottom chord.
GRID G24 - BUILDING SECTION
Scale: 1 : 50
GRID G25 - BUILDING SECTION
Scale: 1 : 50
Window strut
Truss bottom chord
Timber splice plate
Detail looking up (RCP)
Timber splice alternate connection detail.
SP
Transverse split in timber.
100-150 mm eccentricity between truss and column.
Angle bracing detail from Bay 27 onwards.
Note that weld is NOT full length of flange.
CFW
Steel I section
Alternate splice detail.
GRID G26 - BUILDING SECTION
Scale: 1 : 50
Note that bay is partially obscured (unable to fully inspect).
GRID G27 - BUILDING SECTION
Scale: 1 : 50
Steel tube penetrating bracing.
Angle partially cut.
Gap in underside of rafter (refer to photos)
Ignore splice. Timber is continuous here.
Longitudinal splitting along member.
GRID G28 - BUILDING SECTION
Scale: 1 : 50
GRID G29 - BUILDING SECTION
Scale: 1 : 50
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MACQUARIE POINT DEVELOPMENT CORPORATION
Prepared for:
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0 2500 5000 mm
1:100
NORTH
SHEET TITLE
STRUCTURAL
BUILDING SECTIONS - SHEET 9
PROJECT NUMBER
60731376
DRAWING NUMBER
MPS-AEC-DR-ST-XX-02108
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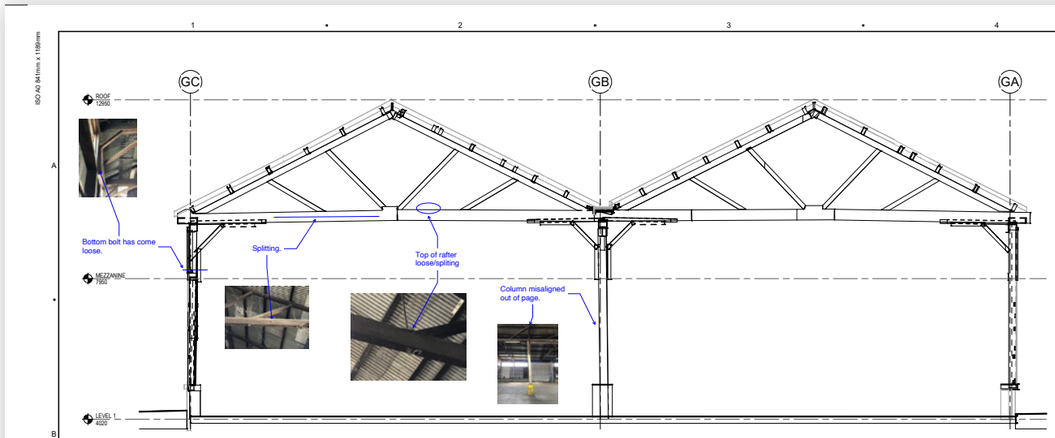
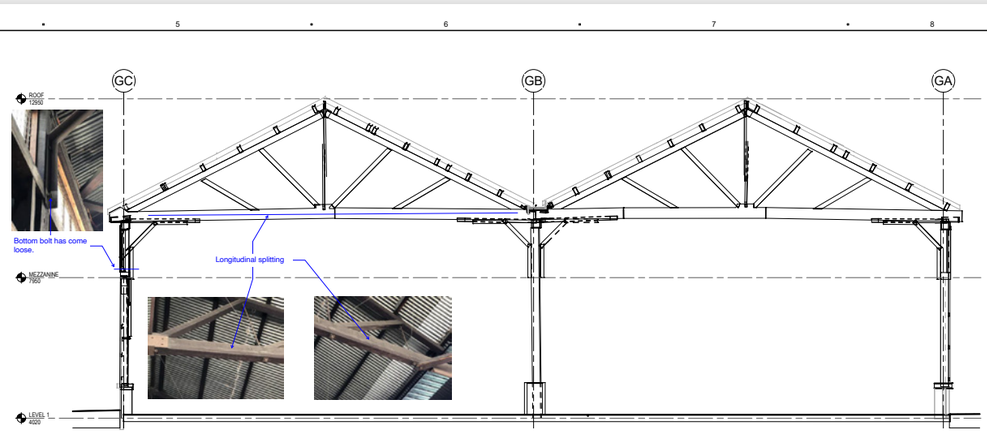
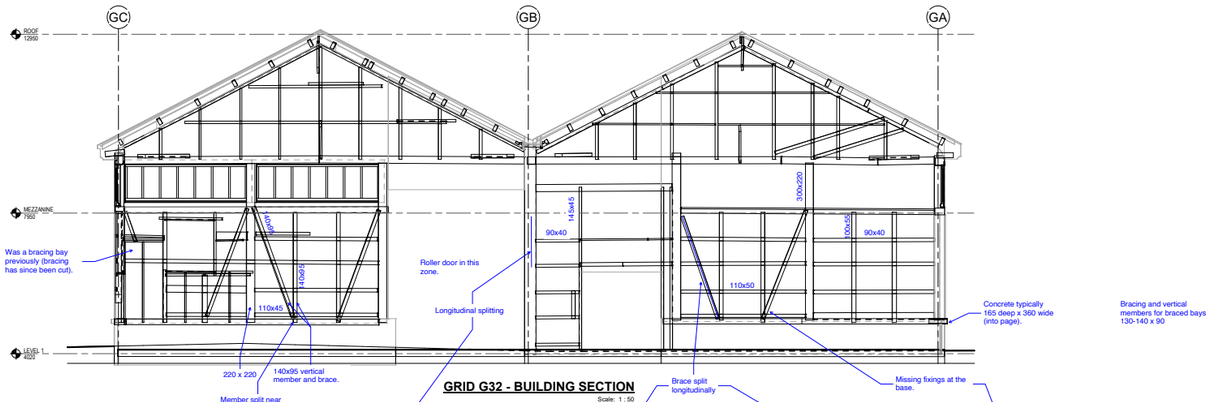


GRID G30 - BUILDING SECTION
Scale: 1 : 50



GRID G31 - BUILDING SECTION
Scale: 1 : 50



GRID G32 - BUILDING SECTION
Scale: 1 : 50

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PROJECT TEAM INITIALS

DRAWN BY	
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0 2500 5000 mm
1:100

NORTH

SHEET TITLE
STRUCTURAL
BUILDING SECTIONS - SHEET 10

PROJECT NUMBER
60731376

DRAWING NUMBER REVISION
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