HER MAJESTY'S THEATRE BALLARAT

FEASIBILITY REPORT

December 2006

swanbury penglase architects *of human space*

CONTENTS

1.0 EXECUTIVE SUMMARY

Introduction
This report was commissioned by Ballarat City Council in January 2006 and concluded in December 2006. As part of the ongoing commitment to Her Majesty's Theatre Ballarat this study focused on the following;

The aim is to provide an enduring solution to the brief that will be well conceived within the framework of the CMP and developed through a well resourced and facilitated consultation process, designed to ensure that the outcome is clearly owned by the key stakeholders.

There are a suite of 3 documents in response to the project brief, they are:

- **The Conservation Management Plan** October 2006 – *McDougall & Vines*
- **The Theatre design Report** September 2006 – *RTMi*
- **This Feasibility Report** – *Swanbury Penglase et al December 2006*

1.1 Conservation Management Plan

This "stand along document" involved:

- *Site investigation*
- *Review of all previous documentation*
- *Additional research*
- *The development of a clear record of the building*
- *Negotiation with relevant authorities*
- *Detailed analysis of the building and its context from a heritage perspective*
- *Identifying levels of significance*
- *The inclusion of clear policy guidelines for future use and development of the theatre*
- *A clear acknowledgment of the potential national significance of the theatre*

The result is a sound working document which will act as a clear guide to negotiation and management of conservation and adaptation within the building. It clearly articulates the significant areas of the building whilst acknowledging the need for the building to change highlighting opportunities for that to happen. The report has received endorsement from Heritage Victoria.

1.2 Feasibility Study

The focus of the following report is on the sustainment and enhancement of the facility to meet the increasing demands on regional theatres in optimising their use as performing arts centres.

Clearly this significant theatre is an exceptional example of its type and is much loved by the local community and beyond. It is however under pressure in terms of its ability to meet the exacting standards both in terms of patrons' and performers' comfort and safety and its ability to meet the exacting requirements of professional and touring companies as well as supporting a significant usage.

1.2.1 Compliance & Conformance

There are several key areas that need attention:

Services

- *Fresh air supply to building doesn't meet current codes*
- *Exhaust rates to the amenities don't meet code*
- *Comfort conditions are not always achieved under peak demand*
- *Main power supply is close to its limit in terms of capacity*
- *Light levels are below standard in many areas*
- *Exit and emergency lighting needs upgrading*
- *Fire booster panel doors obstructs the egress route when in operation*

Fire & Life Safety

- *Disabled egress is currently not addressed and has been highlighted as a non-conformance issue by the local fire authority*
- *Automatic fire curtain and drencher operation not installed (not a statutory requirement but advisable)*
- *Reinstate fire proofing to proscenium wall penetrations*

Amenities & Access

- *Disabled access to the building does not currently comply and will not meet the latest amendment or the clear intent of the Disability Discrimination Act*
- *Disabled toilets do not comply with the current standard*

OH&S

- *Remove tripping hazard of steps in main entry door*
- *Replace under sized goods lift to reduce manual handling*
- *Install power flying to stage to reduce current risk from manual system (will be regulated in due course).*

"Oh You Beautiful Stage" Benchmark (November 2006)

The following issues need to be addressed to meet the current AAH rating for performance arts centres, (modified top rating allowing for Heritage Context).

- *Upgrade signage to support security and safety requirement*
- *Upgrade corporate entertaining and function areas*
- *Upgrade stage and fly tower to facilitate touring companies and safer access*
- *Upgrade facilities for mobility impaired and aged*
- *Upgrade and mechanise "bump in bump out" operations*
- *Install power flying*
- *Maximise computer based production control*
- *Provide adequate backstage areas for storage and amenity*
- *Provide improved seating, sightlines and accessibility*
- *Provide an operational stage trap*
- *Provide a new orchestra pit and thrust stage*
- *Provide one large dressing room with alternative uses*
- *Provide upgraded dressing rooms and facilities*
- *Provide increase wing space*
- *Provide for a rehearsal room (potential studio space).*

1.2.2 Condition of Fabric

The building is in fair to good condition; however the following areas require attention as part of programmed maintenance to avoid further deterioration.

Externals

- *Minor roof repairs*
- *Replacement of rusted and inappropriate downpipes*
- *Investigate downpipe connections underground stormwater system*
- *Repair / replace timber windows*
- *Repaint windows*
- *Some areas of masonry require re-pointing and cleaning*
- *Buttresses require capping (render)*
- *Repair/upgrade external fire stair*

Internal

- *Reinstate fire proofing to proscenium wall penetrations*
- *Finishes generally in good condition – monitor*

Structural

- *The structural engineer highlighted no major issues other than noted above*

1.2.3 Development Proposal

As the brief describes there are several operational issues for the theatre, many of which are related to compliance, OH&S and benchmarking.

To test the brief, a series of options were developed and reviewed by the PCG, theatre management and the consultant team. The following is the final proposal for a staged development to meet the brief, including all the PCG selected priority items in Stage 1 and addressing the potential relocation of the organ and the acquisition of adjoining land in Stage 2 & 3.

Stage 1

This involves a development within the confines of the current ownership and with the replacement of the existing Lewis Street extension *(refer appendix B for plans)*

- *Organ retained*
- *No thrust stage or new orchestra pit*
- *No major modification to Administration*
- *New level automatic entrance doors*
- *New box office and refreshment bar*
- *Main doors closed and steps in-filled*
- *New lift to access all levels*
- *New access toilets*
- *New plant room and minor modifications in Admin*
- *New bar and operable wall to Long Room*
- *New seating and configuration at all levels*
- *Upgraded and expanded wing space*
- *Replacement of the Lewis Street rear stage extension*
- *Link to Mechanics Institute stage area via Lewis Street*
- *New goods and passenger lift to stage area*
- *Power flying system*
- *New extended fly tower, grid and access*
- *New green room*
- *Large dressing room formed*
- *New piano store*
- *New stores*
- *New stage trap*
- *Upgrade of lighting & fire systems*
- *Upgrade of power infrastructure*
- *Upgrade of air conditioning*
- *Compliance with Building Codes & Standards*
- *Not fully compliant with the theatre benchmark standards*
- *Compliance with CMP policies*

As part of this review consideration was given to alternative locations for the organ within the building. Unfortunately there are no viable alternatives other than relocation to another venue in accordance with the recommendations from the theatre consultant RTMi.

Stage 2

In recognition of the recommendation regarding the organ, this stage includes *(refer appendix B for plans):*

- *Relocation of the Organ to another site*
- *Installation of the thrust stage/new orchestra pit*
- *Refurbishment and fit out of administration*
- *Installation of a cry room*
- *Roof space link between Bio Box and Grid*
- *Fully compliant with theatre benchmark standards*

Stage 3
This assumes the acquisition of 21 Lydiard St, its demolition and development of a new connected facility to provide *(refer appendix B for plans):*

- *New main entrance and foyer*
- *New box office and refreshment bar*
- *Previous foyer used as exhibition/gathering space*
- *New ground level toilets*
- *New administration at ground level*
- *New large dressing room with operable wall*
- *New rehearsal/studio space*
- *New store*
- *New bonus commercial office space for lease*

1.2.4 Planning Context and Adjoining Sites

As part of the study a review was undertaken of the following opportunities and constraints within the current planning context for the theatre based on the obvious need for additional space within the confines of a significant heritage building.

Conservation Management Plan (CMP) Impact
The proposal has been reviewed in the context of the CMP and is endorsed by the specialist consultant and Heritage Victoria representative (Mandy Jean) as meeting the policy objectives.

Links to the Ballarat Mechanics Institute Building
This aspect has been explored and backstage links and synergies incorporate into the proposal. A Memorandum of Understanding is being developed by Ballarat City Council to facilitate this aspect, which involves an agreed encroachment on the Institute's building.

Adjoining Land
The study looked at other adjoining properties and found as follows:

- *Unicorn Lane Site – now being redeveloped and thus not an option*
- *No. 11 Lydiard Street South – some space available for lease, not ideally configured or located*
- *No. 21 Lydiard Street South – existing building is available for sale, not ideally configured but well located. If replaced with a new extension to HMT would greatly assist in the long term viability to the theatre (see stage 3)*
- *Remote buildings were discounted as part of the study based on the management impact.*

Lewis Street Extension
As part of the proposal, the City of Ballarat has agreed to support the reconstruction of the rear extension including encroachment into part of Lewis Street. This will require a special agreement to be put in place.

Arts Precinct
The findings of this study will feed well into the potential precinct approach being developed by the City of Ballarat.

1.2.5 Order of Costs & Staging

Rider Hunt as the cost consultants has provided cost advice on the project including incorporating advice from Architectural, Structural, Services & Theatre consultants.

The overall project costs are summarised here as follows:

Stage 1	**$12.25M**
Stage 2	**$0.40M**
Stage 3	**$4.96M**
TOTAL	**$17.61M + GST**

It is of note that the costs do not include escalation beyond 2008 and assume continuous project for Stage 1. Stages 2 & 3 costs would be subject of review once the timing is known.

Exclusions

- *Specialist lighting and stage lights*
- *Relocation of the organ – all costs ($1.0m approx)*
- *GST*
- *Land costs and purchase of adjoining property for Stage 3 ($2.3m approx)*
- *Temporary accommodation*
- *Lost income and retention of staff costs during disruptions or theatre closure*
- *License / legal costs, costs associated with funding applications*
- *Finance costs*

Staging & Program

The following is assumed:

Stage 1

Stage 1 is completed over a 12 – 18 month period and is escalated to 2008. The most cost effective approach is to close the theatre for the duration of the works due to the extent of disruption.

Stage 2

The timing for Stage 2 would depend on funding and an alternative location for the organ being found. If it could be integrated into Stage 1 then there would be overall cost savings.

Stage 3

Stage 3 has the advantage of being able to be constructed independently of the theatre and the final links made at the end with minimal disruption.

Program

	Stage 1	**Stage 2**	**Stage 3**
Business Planning/Approvals	12 months	3 months	3 months
Pre-construction	12 months	6 months	12 months
Construction	16 – 18 months	3 – 4 months	8 – 9 months
Commissioning	1 month	1 month	1 month
	41 – 43 months	12 – 15 months	21 – 22 months
	3.5 years	***1.0 year***	***2 years***

Thus if **Stage 1** were to commence in **January 2007** then completion would be **April 2010.**

Compliance and Sustainment

If the redevelopment proposal were not to proceed at all or the decision deferred then there would need to be a commitment to the immediate compliance and sustainment issues highlighted in this report and Ballarat City Council's asset reports. This would require an expenditure of between $0.7 and $0.8 m. In addition Ballarat City Council will need to review the current and future risks through OH&S and conformance initiatives. The additional cost of this exercise will be in the order of **$5 to 6m** + GST.

Both of these scope of works are fully covered in the Stage 1 proposals and it should be noted that it will be more cost effective in Stage 1 than in a stand alone project as above. The savings would be in the order of 10-15 % excluding any disruption costs for the operation of the theatre.

There are various combinations from the "future Items" which will impact on adjoining areas and operation of the facility. The final costs will be subject to a more detailed review but do give an order of costs.

It is of note that this scenario does not include many of the items considered a priority by the Project Control Group.

1.2.6 Recommendations & Next Steps

Priorities

There are a range of issues which need to be addressed regardless of the redevelopment proposal. All priority issues would be addressed in Stage 1. Should Stage 1 not proceed, the priority works have been established by the Ballarat City Council and scheduled separate to this report.

Funding & Business Planning

In order to achieve **Stage 1** of the proposals a significant investment is required **($12.25M)** and such a level of investment is not currently available to the theatre or the Ballarat City Council.

There are various sources of funding available for projects such as this. It is understood that HMT in conjunction with the Ballarat City Council will prepare the business case in support of the significant funding required for this project.

Next Steps

The following actions are required for this study to be implemented:

- The report be endorsed by the PCG and recommended to the Board and Ballarat City Council
- The business plan be prepared for this project
- The Ballarat City Council endorses the findings and commit to Funding measures
- The Ballarat City Council develop an M.O.U with Ballarat Mechanic's Institute
- A detailed project management plan be prepared and resourced
- A detailed feasibility study be undertaken
- An interest in the potential purchase of 21 Lydiard Street South be maintained

2.0 SCOPE & METHODOLOGY

2.1 Introduction

Swanbury Penglase Architects were engaged by the Ballarat City Council in January 2006 to prepare a conservation management plan and preliminary feasibility study for Her Majesty's Theatre Ballarat.

Swanbury Penglase Architects have teamed up with conservation experts McDougall & Vines, bringing their combined skills and resources to enhance heritage outcomes. This association is further enhanced with a strong experienced team of support consultants. The project has been run through Swanbury Penglase's Melbourne Office under Director David Bagshaw.

This is clearly a unique opportunity for this significant theatre to be acknowledged and sustained as a viable, flexible performance centre within a thoroughly sound conservation framework. It will enable decisions about its ongoing future to be made with absolute confidence in terms of appropriate responses to its heritage significance and financial viability

The aim is to provide an enduring solution to the brief that will be well conceived within the framework of the CMP and developed through a well resourced and facilitated consultation process, designed to ensure that the outcome is clearly owned by the key stakeholders.

There is a suite of 3 documents in response to the project brief, they are:

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- **This Feasibility Report** – *Swanbury Penglase et al December 2006*

2.2 Background

The briefing document prepared by the Ballarat City Council (ref 05129 Dec 05, see Appendix F) is very comprehensive and well constructed. The brief outlines in detail the history and background to the current situation of the theatre. This includes that in 1996, Arts Victoria in conjunction with VAPAC (Victorian Association of Performing Arts Centres) commissioned a 'Survey of Rural and Metropolitan Performing Arts Centres' which identified Her Majesty's Theatre, Ballarat, as one of only three of Victoria's theatres with important heritage characteristics but which was restricted in their staging capacity by historic character of the building complex.

In response to the above survey, it is noted that many of the facilities at the theatre have been upgraded and in November 2003, consultants Sinclair Knight Mertz completed a 'Performing Arts Precinct Feasibility Study' of the site. However, this report was considered to not adequately address the current and future needs of the Theatre. The Theatre's needs were further investigated in the 'Her Majesty's Theatre Best Value Report' (July 2004) and all this information has been made available to the consultant team for use in the study along with the previous Conservation Management Plan (CMP).

2.3 Vision and Goals

The brief clearly articulates the visions and mission statements of the organisation with goals as follows:

- To actively participate in, and provide leadership for, the development of performing arts and culture strategies within the Ballarat City Council.
- To maximise the use of Her Majesty's Theatre.
- To present quality, diverse theatrical programs which entertain and educate.

- To cultivate interest in the performing arts within the community by encouraging participation.
- To establish and operate within a viable annual budget.
- To create and implement strategies to enhance the opportunities available for local performing arts groups and organisations.
- To promote Her Majesty's Theatre as the premier performing arts centre in the Western Victorian Region.

2.4 Project Purpose

As outlined in the brief, the purpose of this Project is to provide the Ballarat City Council, Her Majesty's Theatre and Heritage Victoria with a suite of documents that will provide a definitive assessment of the architectural and heritage limitations on desired development proposals, and the associated financial aspects of any of those development proposals that are identified as statutorily feasible.

It is anticipated that in the next phase of the project, programs can be estimated, detailed budgets planned, funding opportunities identified, permits granted by Heritage Victoria, and funding applications made to both the State and Federal governments for re-development work at Her Majesty's Theatre.

The tasks for the project as articulated in the brief are as follows:

- review all relevant documentation and reports, undertake existing fabric analysis as necessary, and update the 'Conservation Analysis and Conservation Policy of the Royal South Street Memorial Theatre' (2 vols) prepared in August 1987 by Clive Lucas and Partners Pty Ltd in association with Civil and Civic Pty Ltd;

and

- investigate the feasibility of a number of identified development proposals in accordance with the developed Conservation Policies, and provide concept designs, costings and a prioritised list of those proposals agreed by the Project Control Group to be functionally and statutorily possible

2.5 Approach and Methodology

The approach to this study has been a collaborative team approach, facilitating engagement and input from a range of stakeholders in a well managed way.

Specifically the team has brought the following skills and approach:

- Understanding of the full context for the site
- Understanding of the environmental and heritage requirements.
- Understanding of the current and desired operational objectives in terms of management, performance, staffing, supervision, security and financial modelling.
- Experience with the specific needs of the user groups.
- An excellent understanding of the current and future issues in Regional Theatre and performance environments, both legislative and operational.
- A flexible approach to problem solving ensuring that the solution supports the desired operational needs within the heritage context and conservation policies, including thinking *"outside the square"*
- No pre-conceived design agenda

The above approach has been applied to all stages of the project. During this study an outline scope of work will be established covering the priority development of the theatre within an approved budget and CMP. This will allow the project to proceed with confidence.

2.6 Stage 1 –Conservation Management Plan

The brief is quite clear in terms of this aspect of the project and the consultant team will follow those stages and associated tasks, as they are typical of CMP preparation. It is noted that a review of the draft is required before Stage 2 is undertaken. This task has been managed by *Swanbury Penglase* and undertaken principally by McDougall & Vines with input from other members of the team as required.

Heritage Victoria's requirement of a Conservation Management Plan is that it should provide clear and justifiable direction for owners and permit issuing authorities in the management of the particular place for which it has been prepared. Clear and justifiable policies and actions need to be negotiated during the process of preparing the report.

Stage One – Part A: Conservation Analysis
The 'Conservation Analysis and Conservation Policy of the Royal South Street Memorial Theatre' (2 vols- prepared in August 1987 by Clive Lucas and Partners Pty Ltd in association with Civil and Civic Pty Ltd) has been the starting point for the CMP preparation and has been systematically reviewed in light of the subsequent alterations to the building, investigations and reports. The reports outlined in the brief have been reviewed, and a detailed inspection undertaken of all areas and fabric.

The main objective of the Conservation Analysis has been to:

- to identify and assess the historical or cultural significance of Her Majesty's Theatre, including its contribution to the surrounding streetscapes.
- outline an historical summary and physical survey of the fabric of the place and set out its developmental sequence and changes to the fabric.
- provide an analysis of the significance of all areas of the building to enable the formation of a hierarchical listing from most to least significant, and the reasons why.

Stage One – Part B: Statement of Cultural Significance
The Victorian Heritage Register Statement of Significance has been updated to the standard format required for a Statement of Significance required by Heritage Victoria and as set out in 'Guidelines to the Burra Charter: Cultural Significance'.

The Statement of Cultural Significance has established the reasons for the Theatre's overall significance, the reasons for the significance of any component part and outlined the relative significance of the parts of the place, as well as the significance of the place as a whole. The rationale for the determination of relative significance has been given. The assessment will be carried out against the Heritage Council's criteria for the Victorian Heritage Register.

Stage One – Part C: Conservation Policy
The conservation policies have set the framework for the assessment of development proposals associated with the site. These have been outlined during the course of the CMP preparation. And provide practical policies focused on achieving outcomes for the conservation of the building and building users.

The Conservation Policy is based on the Statement of Significance for the place and incorporates recommendations for preservation, restoration, reconstruction, adaptation and interpretation as appropriate.

The main Conservation Policy provides*:*

- a framework for the future management of Her Majesty's Theatre
- makes recommendations, as necessary, for policies and strategies for the preservation, restoration, reconstruction, adaptation or removal of any and all areas and features in the building
- prepares recommendations for the future management of the site which comply with or enhance the 'Statement of Significance'.

The conservation policy contains recommendations for works that can be undertaken without a permit under the Victorian *Heritage Act 1995,* Sections 33, 42 (2) and 66.

2.7 Stage 2 & 3 –Preliminary Feasibility Study

The preparation of a comprehensive CMP allows the heritage significance to be fully understood so that the appropriate proposed development works can support the building's continuing use and development.

These stages were to be undertaken after the successful completion of the draft Conservation Management Plan. However some of the tasks have been undertaken concurrently, where they have not been reliant on the policy development i.e. site analysis etc. All the re-development proposals have been examined in the light of the development opportunities and constraints that have been identified in the CMP.

This part of the study has been undertaken principally by *Swanbury Penglase* with specific input from McDougall & Vines, RTMi and the other sub-consultants as required.

Stages 2 & 3 of this project has involved the investigation of the preliminary feasibility of a number of desired re-development proposals, some of which will only be possible if theatre activities can be extended into adjoining sites. It is noted, however, that the adjoining properties are not presently in the ownership of Her Majesty's Theatre, or of the Ballarat City Council. It was agreed that an early exploration of this aspect would be essential to determine the development constraints both now and in the future.

Recommendations and concept designs prepared during this study have been well researched, using a creative and practical approach, taking into account the multiple constraints and stakeholders involved.

The requirements of the current Building Code of Australia (BCA), and of the Disability Discrimination Act 1992, have been considered in relation to the current and future development/ use of the building. Reference has been made to relevant guidelines for implementing issues raised by these statutory requirements in heritage places.

The scope of the study is outlined in the brief and is summarised as follows:

Foyer and Box Office Area
- Foyer Space enhancement
- Commercial Outlets advice
- Late Room / Crying Room provision
- Disabled Access to Foyer and Upper areas
- Foyer Signage:
- Long Room Usage options

Her Majesty's Theatre Auditorium
- Improved Seating Configuration:
- Provision of disabled Seating:

Roof and Grid Area
- Structure Evaluation of the roof (Stage1)
- Grid Height: increase to 18m
- Automated Flying System
- Bio Box Covered Access

Backstage and Loading Area
- Rear Stage Extension to maximise space
- Enclosed Stage Goods Lift
- Stage Passenger Lift
- Suitably sized and sound-proofed Rehearsal Room
- Theatre Vehicle Parking and storage
- Large Dressing Room (40 people)
- Alternative Uses and access for Dressing Rooms
- Replacement Dressing Room Mirrors

Stage
- Operational Stage Trap
- Replacement of Stage Floor, review rake
- Thrust Stage option
- Organ Location and raising
- Increase Wing Space

Miscellaneous Works
- Ballarat Mechanics' Institute
- Re-site Administration & Box Office
- Fire Engineering & Ambulant disabilities Evacuation
- Lighting
- Storage Areas
- New Performance Spaces
- Facility Rating

2.8 General Methodology

The following sets out the general methodology and process adopted for Stage 2 & 3 of the project:

2.8.1 Investigate feasibility of re-development proposals

This has involved the team members in an analysis of the context of the building and the expectations of the project goals, including:

- preliminary audit of the site/building constraints and conditions
- review adjoining properties/ownerships and potential
- review current documentation
- review of the development planning constraints
- review the brief and development proposals
- consultation with stakeholders to define key issues / understand desired outcomes / brief clarification
- review and establish a detailed program
- establish relevant standards and benchmarks
- review compliance issues
- review of theatre planning aspects (RMTi)
- consultation where required, with relevant government departments, local authorities and certifiers
- participate in comparative benchmarking review
- participate in preliminary budget review
- review draft CMP

2.8.2 Theatre Planning

RMTi under the direction of Swanbury Penglase have focused on the Theatre planning aspects, in the context of the CMP and in collaboration with the consultant team. Appraising the existing facility and optional developments in terms of:

- Sightlines
- Row and seat spacing;
- Disabled access (visual, aural and physical)
- Advice on stage planning, actor access egress, wing space, backstage and crossover; including stage traps
- Orchestra pit size, shape, access and egress and instrument access
- Sound and lighting positions
- Technical circulation
- Room Planning (size, number of and inter-relationship of rooms and spaces)
- Backstage facility planning
- Advice on front of house planning and facilities
- Forestage lifts, cargo and passenger lifts
- Equipment suspension systems, including power flying/manual counterweight system, fly tower grid/ suspensions, galleries, platform masking systems
- Lighting bridges, catwalks
- Assist the cost consultant and others on the design team in the design estimate

2.8.3 Concept Designs, analysis and review of re-development options

Following the above appraisals preliminary concept sketch designs have been developed and tested against the brief, including:

- prepare preliminary concept plans / proposals
- conduct critical appraisal of options
- preparation of order of costs
- prepare risk management advice
- program/staging formulation

2.8.4 Report, Approvals and Reviews

- Prepare Draft report on the Feasibility
- Achieve sign off from the Client
- Attendance at scheduled PCG and team meetings
- Present final report

2.9 Stage 4 – Management Strategy

This stage involved the development of a Management Strategy for the implementation of the findings of Stages 1, 2 and 3. It has been developed in consultation with the stakeholders to allow for the implementation of the selected development options and the conservation policy in the context of the potentially changing circumstances.

As per the brief the strategy includes:

- A prioritised schedule of works agreed to in Stages 2 & 3 by the PCG, containing the agreed short and long-term development requirements and indicative budgets, together with recommendations for the next stages - implementation
- A prioritised schedule of works containing short and long-term conservation and maintenance requirements in sufficient detail to guide more detailed specifications in the next stages - implementation
- The Process and resources that may be needed in the implementation stages of recommendations in the management strategy
- Recommendations regarding sources of financial and technical assistance in the implementation stages
- Any other recommendations considered to be necessary for the long term management of Her Majesty's Theatre.

2.10 Project Control Group

The project has been co-ordinated via the Project Control Group (PCG) Meetings. *Swanbury Penglase* has been able to facilitate the process in consultation with The Director of Her Majesty's Theatre, Janice Haynes.

A Project Control Group (PCG), comprised representatives from the Ballarat City Council, Her Majesty's Theatre (HMT), and Heritage Victoria, have overseen this project and provided comment and guidance. The PCG has been responsible for agreeing on the best options to be developed to concept design stage, costed and prioritised by the consultants.

The Director of the Theatre has acted as Project Co-ordinator.

2.11 Stakeholders

Swanbury Penglase has arranged in Consultation with HMT for collective stakeholder meetings as noted in the brief and has facilitated one public discussion forum with a report prepared outlining the outcomes of the discussions with the stakeholders. (see later)

2.12 Project Team

Swanbury Penglase would like to acknowledge the contributions from the following team in this study.

2.12.1 The Client Team

Her Majesty's Theatre and the Ballarat City Council have made significant input into this study. In particular, Janice Haynes, Wendy Hall and Stephen O'Neil for their quick and considered input. Mandy Jean for her thorough review of the CMP and concept reviews. George Sossi and his team for the Ballarat City Council input.

- Janice Haynes, Director of HMT
- Wendy Hall, Deputy Director of HMT
- Stephen O'Neil, Technical Operations Manager HMT
- Peter Frend, Publicist HMT
- Val Sarah, Chairperson HMT Board
- Cr Peter Innes, Councilor Ballarat City Council
- George Sossi, Executive Director, City Marketing, Ballarat City Council
- Phillip Garvey, Facilities & Property Coordinator, Ballarat City Council
- Mandy Jean Heritage Advisor Ballarat City Council /Heritage Victoria

2.12.2 Primary Consultant Swanbury Penglase

Swanbury Penglase has acted as primary consultant and project manager for this study.

This role has been undertaken by the specialist project director David Bagshaw who has been actively involved at all stages, establishing a constant personal relationship with the project and the client.

Responsible for:
Project Management / Leadership
Stakeholder Meetings
Brief Development
Site Appraisals
Compliance Reviews
Report Preparation
Concept Drawing Preparation
Report Presentation

Personnel

Project Director	David Bagshaw
Associate	Andrew Klenke
Architect	Suzanne Hall
Quality Assurance	Peter Smith

2.12.3 Specialist Conservation Architects – McDougall & Vines

Elizabeth Vines is the conservation architect in charge of Part 1 the detailed development of the CMP and directing all conservation aspects of the project including reviews in Part 2 & 3.

Personnel

Conservation Leader	Elizabeth Vines
Historical Research	Kate McDougall
Heritage Consultant	Amy Nhan

2.12.4 Specialist Theatre Design & Management Expertise RTM International

RMTi

Theatre Design Consultant appraisal of existing facility benchmarking analysis and feasibility studies on back of house and auditorium components. Advice on budgets and strategic operational issues.

Personnel

Consultant:	Robert Mitchell

2.12.5 Specialist Structural Engineer, Trevor Huggard & Associates

Trevor has undertaken of all structural engineering aspects of the proposals. Trevor has extensive experience with structural aspects of historic buildings and is well recognized for his work.

Personnel

Consultant:	Trevor Huggard

2.12.6 Support Consultants

Simpson Kotzman	Services Consultant – Robert Spencely
Rider Hunt	Cost Consultant – Phil Robinson
MBS Building Surveyors	Certification advice BCA

2.12.7 Ballarat Mechanics Institute (BMI)

There has been a series of meetings with the working group looking after the BMI and shared interests and HMT. This group includes:

- Tony Diamond — Ballarat City Council
- Sue Howard — Ballarat City Council
- Phil Roberts — BMI
- Rex Bridges — BMI
- Frank Hurley — BMI
- Wendy Jacobs — Wendy Jacobs Architects

3.0 CONSERVATION MANAGEMENT PLAN

3.1 Conservation & Adaptation Tool

The Conservation Management Plan was prepared as part of this overall commission and is a stand alone document representing a comprehensive and complete assessment as of June 2006, drawing on and acknowledging previous CMP's and completed conservation works.

It has been developed as a tool to inform conservation and adaptation of the building and whilst reflecting specifically some of the current briefed requirements with regards to heritage constraints it is not limited in any way.

3.2 Summary of Recommendations

3.2.1 2.2.1 Heritage Significance and Conservation Objectives

Her Majesty's Theatre is included within the Lydiard Street Heritage Precinct under the Heritage Overlay of the Ballarat City Council Planning Scheme. The theatre is also included on the Register of the National Estate as item number 15722 and on the Victorian Heritage Register as item number H0648 and file number 604232 (see Appendix 3 of CMP for details).

The following statement of significance updates the current statement in the Victorian Heritage Register to reflect the additional significant values identified in this Conservation Management Plan. It is recommended that this revised statement of significance be used for future planning and reference (Refer Section 3 of CMP for a detailed assessment of significance in relation to the criteria under the Heritage Act 1995):

> Originally known as the Academy of Music, Her Majesty's Theatre is of considerable importance to Victoria's theatrical history. As one of the few Ballarat and Bendigo theatres which, in the nineteenth century, rivaled those in Australia's capital cities, the theatre has been in use since 1875. Used in its early days to provide entertainment for miners working on the central gold fields, the theatre's name was changed to Her Majesty's Theatre in 1898 with a period between 1966 and 1988 where it was known as the South Street Memorial Theatre.
>
> The theatre incorporates the designs of two distinguished nineteenth century architects, George Browne and William Pitt, both of whom specialised in the design of theatres. Browne, who was responsible for the original 1874 design, also designed Melbourne's rebuilt Theatre Royal in 1872 (now demolished). Pitt, who designed the 1898 alterations and additions, was responsible for the new Princess Theatre in 1886, the Bijou (rebuilt after the fire of 1889) and the 1891 design and 1901 rebuilding of the Melbourne Opera House. Pitt was also responsible for alterations to the interior of the Melbourne and Hobart Theatre Royal in 1904 and 1911 respectively and Her Majesty's Theatre in Melbourne at the turn of the century.
>
> Her Majesty's Theatre is a good example of typical nineteenth century theatre planning and exhibits the principal 'Boom' style characteristic of the 1880's and the evolution of theatre design through the unique integration of old and new design features. Whilst there have been extensive renovations to the theatre over time, the theatre has landmark value and retains significant sections dating back to the original building and the 1898 period. The original 1874 Lydiard Street facade, which survives partially intact, is of a Victorian Italianate style, providing a contributory element to the Lydiard Street precinct and the rear façade is a strong visual element that closes the vista along Lewis Street.
>
> The theatre is a resource for the study of the development of theatre design from Victorian times to the present. As the most intact of only four surviving nineteenth century public theatres in Australia, the theatre contains the only complete (and partially operable) late Victorian stage remaining in Australia. The fly gallery and the flying system, is also understood to be the only manual (non-counterweight) hand-line system in existence in Australia. While the double horse-shoe shaped balconies, added from the designs of William Pitt in 1898, are the last example of this type of theatre design in the State.

> The theatre has had associations with Ballarat's social and cultural life for more than a century, including links with notable theatrical figures, William Cyster, Dame Nellie Melba, Gladys Moncrieff and Amy Castles as well as the Sun Aria competitions, which resulted in the discovery of many important Australian singers. Since 1896, the theatre has been associated with the Royal South Street Society, a Ballarat organisation (who owned the building from 1965 to 1987) dedicated to the promotion of excellence in the performing arts.
>
> The theatre also has associations with Sir William J. Clarke (1831-1897), the landowner, stud breeder and philanthropist for whom it was built in 1874-75, and with a number of Ballarat's leading citizens, most notably William Collard Smith (1830-1894), agent, investor and politician.

The objective for any work or adaptations both externally and internally, should allow for the continued use of the theatre as a performing arts facility and to continue the representation of theatrical development within the region. All original building materials and fittings should be handled in a conservative manner, and all elements of high cultural significance (as outlined in Section 3 of the CMP) should be retained.

3.2.2 Requirements for Ongoing Use of Building

Section 4.4 of the CMP sets out the requirements for the ongoing use of the theatre by the community, performers, the Director and staff. The present theatre building is considered by the director and users to be lacking in space and amenity in a number of areas.

Areas of the building complex identified by the building users as requiring adaptation and upgrading are assessed in this section in relation to possible impacts on the heritage character of the building. It is essential that any changes and upgrades to Her Majesty's Theatre ensure the continued use of the theatre by the community. These matters are addressed in greater detail in the Development Feasibility Study.

3.2.3 Heritage Listing Implications

As the Ballarat Her Majesty's Theatre is included on the Victorian Heritage Register, there are statutory obligations to refer works to Heritage Victoria for heritage permits. It should be noted that Her Majesty's Theatre has a Permit Exemption Declaration which allows certain classes of works or activities to be carried out without the need to obtain a permit from Heritage Victoria (refer Section 4.2 of the CMP).

Furthermore, as the Ballarat Her Majesty's Theatre is included within the Lydiard Street Heritage Precinct under the Heritage Overlay of the Ballarat City Council Planning Scheme, there are statutory obligations to refer works to the Ballarat City Council for planning and building permits.

3.2.4 Conservation Policies

Section 5.3 of the CMP details the Adaptation and Change Policy which can be summarised as follows:

- Ensure the ongoing use of the theatre is achieved through appropriate adaptation and change. Adaptations and changes should balance current performance and user requirements with the significant heritage qualities of the theatre.

Sections 5.4 to 5.6 of the CMP cover in detail external, internal and site conservation policies as well as specific recommendations for their implementation.

3.2.5 Maintenance Program

It is recommended that a maintenance program be adopted for Her Majesty's Theatre as outlined in Section 7.3 of the CMP and later in this report. Maintenance should not be undertaken in response to crisis situations, but should be a methodical and continuous process to prevent deterioration of elements of this significant building complex.

3.2.6 Interpretation and Tourism

It is recommended that an interpretation program be established (as outlined in Section 7.4 of the CMP) such that users and visitors have a means of understanding the cultural value of the place. A display or information leaflets could be provided which give details to the history of the theatre, its architecture, early theatre equipment and its changing use. Future tourism programs should look at the promotion of the theatre as a 'unique' theatre experience.

3.2.7 National Heritage Listing

It is possible that Her Majesty's Theatre may qualify for listing in the National Heritage List. A preliminary assessment of the theatre indicates that the theatre satisfies five of the nine criteria used by the Australian Heritage Council to assess whether a place should be listed on the National Heritage List (refer Section 7.6 of the CMP). It is recommended that further assessment be undertaken to investigate this opportunity. Inclusion on the National Heritage List would elevate the theatre's heritage status as well as open up possibilities for National funding.

3.2.8 Funding Sources

Funding sources currently available for heritage works are identified in Section 7.7 of the CMP and include grants or loans offered by Heritage Victoria and the Department of the Environment and Heritage.

Other potential sources of non-heritage funding for venue development and upgrade include Arts Victoria through the 'Moving Forward' Memorandum of Understanding between the Ballarat City Council and the State Government of Victoria, and the Australian Government's Department of Communication, Information Technology and the Arts.

3.3 Feasibility

As part of the feasibility McDougall & Vines have made a specific commentary on the proposed options and adaptations considered here. The options have all been appraised in terms of their heritage impact as summarized on the schedule in Section 6.0 of the CMP.

4.0 ASSET APPRAISAL

4.1 Introduction

As part of the CMP and Feasibility, an appraisal of the existing facility has been undertaken in terms of:

- Fabric Condition - McDougall &Vines and Swanbury Penglase
- Structural Condition - Trevor Huggard & Associated
- Services Overview - Simpson Kotzman

In addition a review of compliance with statutory requirements including a review of previous reports:

- August 2006, Audit by the Dixon Group for The Ballarat City Council
- March 2006, Report by the Fire Authority (CFA)

4.2 External Fabric

4.2.1 External Roof & Stormwater

The roof is clad in corrugated iron, showing signs of weathering but is in fair condition. It has some minor damage and loose vents with evidence of some damp penetration. Half-round guttering discharges to round galvanised downpipes which are set on off-set stirupped brackets. The building would originally have had ogee profile guttering, and this is the preferred guttering profile for any new works. Some of the downpipes are rusting and have been replaced with PVC pipes in some areas.

Roof stormwater discharge needs to be checked as it is unclear as to whether the downpipes are connected to the underground stormwater system. Some evidence of water egress.

Recommendations: Repair minor damage to roof, rusted and PVC downpipes need to be replaced in the long term with round galvanised downpipes on stand-off brackets, to match the original. Regular monitoring of roof and gutters should be undertaken. Downpipes (together with gutters) require assessment to ensure they are sufficient in capacity.

4.2.2 External Joinery

The joinery is generally in good condition, and requires regular re-painting as part of overall external maintenance. Some evidence of deterioration is noted to the high level windows to Lydiard Street South (long room) and the north and south elevations.

Recommendations: continue to maintain timber and regularly repaint as required to prevent deterioration, include for repairs and replacement to appropriate heritage details.

4.2.3 Brickwork

All external walls (except for the front elevation) are constructed in red brick to the upper levels. Brickwork is generally in good condition, however there are large sections of mortar missing in areas, particularly above the roof line. Render is missing on the coping of the buttresses and brick cappings and this is causing the brickwork to deteriorate steadily. There is some black soiling adjacent to some of the brick pilasters.

Recommendations: all brickwork should continue to be maintained and cleaned. Re-point with lime mortar to match existing where required. An accurate assessment of works by an experienced brickmason will provide an indication of the scope of works required and costing for these works.

4.2.4 Stonework

All external walls (except for the front elevation) are constructed in bluestone to the lower levels. The stonework is generally in good condition, and is supported by brick and stone buttresses on the northern and southern elevations.
There are some areas of stonework where sections of mortar are missing and there is some soiling of the stone face where water run-off from render and brick cappings have collected and discharged.

Recommendations: all stonework should continue to be maintained and cleaned. Re-point with lime mortar to match existing where required. An accurate assessment of works by an experienced stonemason will provide an indication of the scope of works required and costing for these works.

4.2.5 Front Façade

The front façade is rendered and is in excellent condition. Conservation works in 1988-90 have successfully reconstructed the façade to c1912 detailing. Of particular significance are the reconstructed cast iron portico and balconettes, parapet, stucco ornamentation and opening configurations.

Recommendations: continue to maintain the front façade with regularly cleaning of cement render and painting as required. Monitor and maintain the condition of the parapet, portico and balconettes and other detailing.

North Elevation (Unicorn Lane)

Analysis	**Recommendations**
There is an easement adjacent to the bluestone base to a width of 1600 mm and windows at the upper level (belonging to the auditorium) have been in filled. This elevation includes brick and stone buttresses with rendered coping and sloping tops (note that render is missing to top of buttresses) and there are iron wall ties connecting sections of the pilasters. There is also black soiling adjacent to one of the brick pilasters. This elevation also provides a view of the proscenium arch wall which is projecting above the roof line in red brick. This area of brickwork has large sections of mortar missing. This wall projects through the roof and has brick cappings without any rendered coping, causing the brickwork to deteriorate steadily.	▪ Window joinery requires repair & re-painting. ▪ Window sills require re-rendering and general repairs. ▪ This elevation requires some urgent maintenance work including the re-pointing and repairs to the brick chimneys and the projecting brick proscenium arch wall.
Fire escape and entrance – The c1898 fire escape provides egress to timber stairs leading to Unicorn Lane. While repairs and reconstruction was undertaken to the escape stairs during the 1988-90 works, the timber stair treads are deteriorating and splitting. A new entrance with a glass enclosure was constructed c1992 beneath the fire exit stairs. At the same time, an entrance portico was constructed (echoing the portico on the Lydiard Street frontage) to provide sheltered access to the entrance. The roof to the entrance is in corrugated iron, which is accumulating debris and brick fragments.	▪ Check that the fire escape meets relevant building codes and repair or replace defective timber treads. ▪ Clean the roof to the entrance of debris and continue to monitor.

East (Rear - Lewis Street) Elevation

Analysis	Recommendations
Generally it is in good condition, although there are areas of brickwork where mortar is missing, in particular below the upper southern window which corresponds to a crack which appears to travel down the building. This has resulted in missing mortar to the brickwork and bluestone at the lower levels. There are a number of surface mounted conduits and pipes to this elevation including the natural gas supply pipe, plastic stormwater pipes and PVC plumbing drainage pipes.	▪ Continue to maintain this elevation. ▪ Re-point missing mortar to sections of brickwork and stonework. ▪ Surface mounted pipes are not considered appropriate and no further external piping or fittings should be permitted. In the long term, internal relocation of current surface mounted plumbing pipes is recommended.

South Elevation

Analysis	Recommendations
This elevation includes the roof of the southern section of the building, supporting the air-conditioning plant, partially screened by horizontal slatting. Two original window openings remain at the lower level with deteriorating timber infill. The visible sections of this elevation display similar problems to the north elevation, namely deteriorated fascia and deterioration to the coping at the top of the pilasters.	▪ Fascias require painting (or renewal) where rotten. ▪ Infilling of window openings in a more robust manner is recommended. ▪ This elevation requires some urgent maintenance work including re-rendering of the coping of the pilasters.

4.3 Internal Fabric

The interior of the building survives substantially intact without any major changes. The following policies should guide conservation and adaptation work to the interior of the building.

4.3.1 Floor Surfaces

The floor surfaces of the theatre are generally in good condition and comprise carpet, timber floors, tiles, slate and concrete. Of particular significance are the original timber floors to the galleries and fly gallery and the patterned tiles in the central foyer. The auditorium floor was replaced in 2000.

Recommendations: continue to maintain slate, timber floors, tiles and carpet. If replacement of carpet is necessary, ensure that the new carpet is of a complimentary style to the character of the building.

4.3.2 Internal Joinery

The original 1898-99 galleries designed by Pitt survive to this building. The seats were installed in the theatre in 1930-40 and are of interest.

Joinery is generally in good condition, but requires regular re-painting/staining as part of overall internal maintenance. A clear stain finish is recommended for the balustrades and seating. Elsewhere on architraves, cornices, skirtings, paneling and doors a paint finish in the same colour scheme is appropriate.

Recommendations: retain original joinery within the building. Continue to maintain timber and regularly re-paint as required to prevent deterioration.

4.3.3 Wall and Ceiling Surfaces

The internal walls are in good condition, with only some hairline cracks appearing mostly at the junction of dissimilar materials. The ceilings in the auditorium and dress circle foyer are of particular significance.

Recommendations: continue to maintain walls, ceilings and decorative moulding. Repair cracks in the wall and re-plaster if necessary using a compatible plaster mix. If repainting is required, use the same colour scheme.

4.4 Proposed Works

Following from the analysis and recommendations provided in the CMP the following priorities are recommended:

4.4.1 Urgent Works

- Downpipes – check that downpipes are connected to the underground stormwater system.
- Stone and brick conservation – repair render to all coping and cappings and repoint brickwork.
- Proscenium wall – reinstate fire rating of wall.
- Repairs to damaged windows

4.4.2 Medium Term Works

- Gutters and downpipes – replace rusted and PVC downpipes. Check that gutters and downpipes are of sufficient capacity.
- Stone conservation – clean brick and stone, re-point brickwork and stonework where required.
- Cracks - structural rectification of cracks.
- Auditorium – provide interpretative plaque for the dome panel and address safety issues associated with the orchestra pit and height of hand rails at balcony level.
- Entrance foyer – install a signage system visible to all patrons.
- Disabled Access – address disabled access, parking and seating issues.

4.4.3 Long Term Works

- General – continue to maintain and monitor the condition of the interior and exterior including walls, mouldings, joinery, carpet, timber floors and tiles.
- Roof, gutters and downpipes - continue to maintain roof, dormers, downpipes and gutters. When gutters require replacement, replace quad guttering with ogee profile guttering.
- Electrical and Lighting – replace chandeliers in auditorium with a design reminiscent of the original gas sun burners. Develop more appropriate method for lighting and cabling.
- Dressing Rooms – replace dressing room lights and consider options for renovating to provide more useable space.

- Offices – consider options for renovating offices to provide more comfortable work spaces. Interpret the Unicorn mines area beneath the Director's office.
- Entrance foyer and passages – consider options for increasing foyer space. Undertake restoration and reconstruction works to northern and southern passages.
- Auditorium – consider options for increasing seating capacity, comfort and sightlines. Reinstate painted mural of dome. Make the stage trapdoor(s) and associated lift functional. Remove adjudicator's dais and reconstruct dress circle balustrade.
- Bio Box – consider options for access from the fly gallery to the bio box.

4.4.4 Maintenance

A systematic program of maintenance is required for the theatre to ensure no elements further deteriorate. It is recommended that a record of maintenance be undertaken and an example of an external maintenance schedule is included as Appendix 6 of the separate CMP report.

4.5 Structure

A detailed report is attached, see Appendix D, a summary of the findings are included here.

Summary of Recommendations of Report

This theatre has performed well over time and is generally in very good condition despite obvious areas of past maintenance neglect which have allowed water entry to the brickwork and roof to occur.

Apart from the obvious deflection and sagging of the roof in the vicinity of the dome the building is relatively free of distortion and movement.

Provided the recommendations listed below are implemented within a reasonable time frame (as noted) a long and satisfactory structural performance for this building can be guaranteed.

Summary of Observations

4.5.1 Sagging and deformation of Roof (Observation 1)

The sagging and deformation of the roof is historic rather than current or ongoing. The new steel remedial trusses designed by W.L. Meinhardt & Partners Pty Ltd, Consulting Engineers in 1989 for Civil and Civic are performing well and the roof has stabilized. Although the distortion of the roof will remain, it will not increase in the future.

Steel support frame to front (west) parapet is showing some rust staining on the roofing iron. The angle frame should be painted with galvanic primer to ensure protection to frame and cladding (within 12 months).

4.5.2 Brick firewall of Proscenium Arch (Observation 2)

The compartmentalisation of the front of house and back of house is ineffective as a service pipe penetrates the brick firewall to the Proscenium Arch and has not been sealed off. An expanding foam fire sealant such as 'White Frost' or similar could be employed to the void surrounding the pipe or alternatively the void could be mortared up with a near dry 1:1:10 Lime/cement/sand mortar mix. Note that the former recommendation is the quickest and simplest given the difficulty of working access (within 12 months).

Access hatch adjacent to windlass is not fire rated through proscenium arch fire wall. It is recommended that the hatch is sealed off with two layers of 'FIRECHECK' plaster over a stud frame installed into the opening (within 12 months).

4.5.3 Structural Stability of Roof Under-Purlins (Observation 3)

Some roof under-purlins have split longitudinally and have been clamped with angle iron and 'Allthread' rods. This under-purlin strengthening is structurally satisfactory for the current roof loads (monitor).

4.5.4 Stormwater and Dampness Issues (Observation 4)

Damp problems are generally caused by falling damp. Water penetration into the building should be corrected and the roof gutters, downpipes, rain heads, gutter falls and stormwater spillages should all be corrected as identified in the report as soon as possible to stop further deterioration of the building fabric (within next 12 months).

4.5.5 Structural stability of dome structure (Observation 5)

The Dome structure has clearly settled as a result of the original Oregon timber truss structure deflecting and spreading after being cut when the dome was inserted by William Pitt in 1898. The dome is now stable and does not represent an immediate danger of structural failure. The steel trusses inserted in 1989 have arrested the sag and settlement and no current or future deflection will occur beyond its present position. The end supports of the new truncated steel scissor trusses on the external masonry walls indicate no evidence of outward spread .

4.5.6 Masonry cracking (Observation 6)

Cracking in brickwork and stonework was carefully inspected the building is typical for its age does not have control joints to allow for brick growth. Cracking was old and no evidence of current movement or recent cracking was apparent. No evidence of footing failure is evident. Cracking is not of structural significance and brickwork could be simply re-pointed if desired. Interior cracks can be periodically filled at the time of repainting and maintenance repairs (monitor).

It is recommended that the stormwater system is regularly maintained to ensure that localised soil moisture content remains stable and no localised saturation of footings is possible.

Any old former electrical services penetrations need to be made good and re-bricked to stop water entry. Similarly window openings need to be proofed against water entry to masonry (12 months).

Cracking to external brickwork should be repointed with ½ 1,9 lime, cement, sand mortar and internal cracks with a softer lime rich mortar 1,3/4,15 lime, cement, sand.

4.5.7 Surface Drainage Issues (Observation 7)

The disused former building site on the north of the theatre (between Unicorn Hotel, the Mechanics Institute and the theatre) is not well maintained and surface drainage appears to be impeded in this area. This area should be further investigated to determine exactly where downpipes drain to (within 12 months).

4.5.8 Structural Stability of Fly Tower (Observation 8)

The Fly Tower is structurally sound and while the mechanical elements are relatively antiquated they have been well maintained and access ladders and walkways provide good inspection access.

The proposal by Thoms Gibcus McGrath Pty Ltd to repair the crack in the truss top chord by nail plates with steel angle clamps, fully tensioned rods and injected glue into the crack is satisfactory.

No heavy loads for future new equipment or fly tower upgrades should occur without further structural engineering advice (see later).

4.6 Services Appraisal

A preliminary appraisal has been undertaken by Services Consultants, Simpson Kotzman as part of this study. Their full report is included in Appendix D. Their report establishes an opinion on the current condition and highlights the following issues which need to be addressed.

4.6.1 Mechanical

- Limited capacity in Plant room for future expansion
- Quantity of fresh air supply does not meet current code requirements
- Exhaust rates for the toilets in some areas are below code
- Battery room has no mechanical ventilation
- Condenser servicing the box office a/c unit is located inside the building with inadequate ventilation
- Comfort conditions are not maintained in all areas under max occupancy

4.6.2 Hydraulics

- No major issues

4.6.3 Electrical

- Main power supply is close to the limits of its capacity
- Light levels in many areas are below current standards

4.6.4 Fire Services

- Exit and emergency lighting is in need of a minor upgrade
- Fire curtain and sprinkler operation is not currently automatic
- See elsewhere re egress and compartmentation issues

4.6.5 Communications

- Current PABX has limited capacity
- Adaptation of the hearing augmentation system is limited

Whilst not an exhaustive review it would appear that the systems currently support the use, with the above exceptions and the systems are well maintained.

There is however limited capacity within the systems to accommodate major re-development or expansion and any changes would require infrastructure review and upgrade (see later).

This appraisal has taken into account previous audits and documentation made available to the study.

4.7 Compliance

The issue for all buildings is the ongoing risk of compliance with current codes and regulations.

The triggers for compliance are:

a) Major upgrade/refurbishment
b) Receipt of a legal enforcement notice following an audit or complaint
c) Risk management processes

Major Upgrade/Refurbishment
A major refurbishment is defined as works which impact on at least 50% of the building, although it is still at the overall discretion of the approving authority.

Receipt of a Legal Enforcement Notice Following an Audit of Complaint
Legal enforcement could be instigated, for example by the local Council, Fire Authority, Work Safe Australia or a complaint under the Disability Discrimination Act. Given the public nature of the facility it is clearly a target for such attention.

Risk Management Processes
The building owner can be proactive in this regard and make risk assessments on the non compliant issues associated with the building and develop a program of improvements to mitigate future risks.

Her Majesty's Theatre and the Ballarat City Council have conducted regular reviews of this aspect through routine inspections by a private building consultant – The Dixon Group and the local Fire Authority. Reports from both organisations have been assessed as part of this study.

A preliminary review of the building has been made by the consultant team in terms of compliance with current regulations (2006) and anticipated regulation revisions e.g. Disabled Access changes. It is assumed that the building in its current form complied at the time of its last major upgrade or has documented dispensations under the Building Regulations at the time.
The main focus for theatre buildings is fire and life safety on the basis that as a place of public assembly, the degree of familiarity with the building by patrons is potentially low. As such the emergency access and egress is a primary concern for both front of house and back stage.

The following is a summary of the issues which need to be addressed in terms of compliance:

4.7.1 Disabled Access

Disabled access to the Auditorium (stalls) via the lift and access toilets do not meet the current code. This is in terms of ramp gradient, lift car size, maneuvering space & toilet compartment configuration. It is currently providing some facility & amenity but of a low standard.

The current code requires the provision of 6 designated wheelchair spaces within the auditorium. This is currently provided but not necessarily in an equitable manner.

4.7.2 Disabled Egress

Whilst it is possible for wheelchair users and semi ambulant people to enter the stalls level of the auditorium there is currently no provision for emergency egress for such users, as highlighted by the CFA report 07/03/06. It is of note that the BCA (Building Code of Australia) whist referencing requirements for egress in the event of a fire make no specific provisions for methodology for egress for disabled patrons.

Clearly there is a responsibility to ensure the safe egress of all patrons in the event of an emergency. There are various options available and the final solution may be a combination of the following:

- Fire safe lift
- Fire safe haven or room
- Managed assisted evacuation

Whatever the solution(s) adopted, the operators of the theatre will need to put in place appropriate training and procedures to supplement the existing protocols regarding safe evacuation of the building in an emergency.

The final package of measures will need to be agreed with the local authorities as part of the overall fire and safety package (see later).

4.7.3 Ambulant Evacuation

Currently the building is well served with entrances and exits, in fact in excess of the current regulation requirements. The analysis of the building indicates that 2 exits per level evenly distributed would meet the minimum requirements.

Level	Current			Minimum	
	No. Existing Exits	Required Aggregate Width	Actual Aggregate Width	Minimum No. of Exits	Aggregate Width
Balcony	3	2.5m	3.8	2	2.6m
Dress Circle	4	2.5m	5.0	2	2.6m
Stalls	3	4.5m	6.1	2	4.6m
Basement	2	N/A	N/A	2	N/A
Sub Basement	3	N/A	N/A	2	N/A

Based on the above the number of exits could be reduced to 2 per level. It is noted however that the theatre management would like to maintain all the current exits. If it is chosen to maintain the same number of exits, then the existing external stairs in particular will need to be upgraded/repaired to ensure they are safe and fully compliant

It is recommended that this aspect be reviewed in the next stage as part of a more dynamic life/fire safety modeling exercise.

Meanwhile the maintenance and compliance aspects need to be monitored and resourced.

4.7.4 Toilet Provisions

A review of the existing toilets indicates the following provision:

PATRON TOILETS – EXISTING & REQUIRED

Stalls 481
Dress Circle 224
Balcony 254
Total **959** (assume 50/50 gender balance so 480 males + 480 females)

		Male			**Female**		**Disabled**	
	Level	Pans	Urinal	H-basins	Pans	H-Basins	Pans	H-basins
EXISTING	1	4	7	4	11 (orig. 10)	4	2[2]	2[2]
	4	1	4	3	3	4		
	Total	4	7	7	14	8	2	2
	Required	2	5	4	7	4	1	1
	Difference	+2	+2	+2	+7	+4	+1	+1

[1]urinals – assume 1m minimum length per person
[2]non-compliant

DRESSING ROOM TOILETS – EXISTING & REQUIRED

- 4m^2 per person required
- Space for 46 persons (NOT including 40 person dressing room – STAGE 3)
- Assume 50/50 gender balance

	Male				**Female**			**Disabled**		
Level	Pans	Urinal	H-basins	Shower	Pans	H-basins	Shower	Pans	H-basins	Shower
1	2	1-2	2	1	3	1	2	-	-	-
2	2	2	2	1	4	2	2	-	-	-
Total	4	3-4	4	2	7	3	4	0	0	0
Required	2	3	3	3	3	3	5	1	1	-
Difference	+2	=/+1	+1	-+	+4	+1	-1	-1	-1	-

The review has split the provision between front and rear of house to cater for the obvious split and coinciding peak demands.

The front of house is currently well provided for although the distribution and access is not currently ideal and some congestion is experienced during heavy demand periods.

The front of house access toilets whilst in excess of current requirements do not comply with the current standard as noted earlier. This represents a risk under the DDA, particularly as the access is also non-compliant.

The rear of house is under supplied in shower provisions and does not currently have any access toilets or showers. It is understood that users can end up competing with front of house patrons during South Street Dancing competitions.

The requirements are generally met by the current provisions; however the access facilities and shower provisions are below standard. This aspect will need to be improved in any upgrade.

4.7.5 Services Compliance

This aspect covers ventilation, heating, lighting and emergency systems. These aspects have been addressed elsewhere in the services report (3.4 & Appendix D).

4.8 Theatre Benchmarking

This aspect is quite critical to the ongoing success of Her Majesty's as a first class venue and takes into account the requirements of both local and touring companies. The current profile of this theatre indicates a high local content as indicated by the annual report 05/06.

Royal South Street Competitions	58.46%
Local & not for profit hires	31.08%
HMT Entrepreneurial Activities	7.09%
Commercial Hires	3.37%
	100.00%

Clearly the local content is close to 90% of the usage, with professional companies representing the balance of users. From a business perspective the proportion of commercial/professional companies is relatively low and hence impacts on the income potential. This aspect of benchmarking is not part of this study and will be subject to further investigation as part of the business planning (see later).

In terms of facilities, Robert Mitchell of RTMi, renowned theatre consultants, has reviewed the theatre in terms of its relationship to the current and proposed benchmarking document 'Oh You Beautiful Stage'. This report is a separate document and its main findings are summarised here:

4.8.1 Introduction

This part of the study aims to identify those areas that do not meet the Benchmarks for Performing Arts Centre as outlined in the document 'Oh You Beautiful Stage' published by the Victorian Association of Performing Arts Centres (VAPAC) and the current physical limitations of the building that are causing difficulties for patrons and performers, particularly in the foyers and backstage areas.

In 1996 a thorough investigation was undertaken culminating in a facilities audit report distributed by Arts Victoria specifically outlining the shortfalls of the facility, with upgrade recommendations required to be carried out to achieve the A1 and furthermore the AA rating. This investigation specifically revealed and documented that Her Majesty's Theatre at the time fulfilled most of the A1 category apart from technical shortcomings and further recommended the potential to achieve the AA benchmark with sufficient financial commitment from Council.

This financial commitment would provide additional backstage facilities in greater wing space,

storage, safer loading, rehearsal room etc. relevant to the then current AA benchmarks. The document further suggested that if this development to AA/H category was not adopted as policy with the necessary financial commitment then HMT would be categorised as an A1 facility as it would be unable to achieve the AA benchmark.

A rigorous investigation and review of the theatre has been undertaken by RMTi based on their knowledge of the benchmark document and current technological trends that are impacting and forcing change to the benchmarks previously required for AA best practice facilities.

This report is built on current AA Best Practice and is in line with the update of the 'Oh You Beautiful Stage' document ratified and approved by VAPAC in November 2006.

4.8.2 Overview

Her Majesty's Theatre is seen as a valuable asset and maintains a high awareness and strong support by: the community, touring productions, local arts bodies, professional national and international theatre companies and performers. It is the focus for the Performing Arts in Ballarat and the greater Western Region of Victoria.

HMT has developed into one of the major touring houses for theatrical and performance both state and nationally and is one of the major players on the Victoria Association of Performing Arts Centres (VAPAC) and Australian Performing Arts Centres Association (APACA) touring circuit. It is acknowledged by RTMi that Her Majesty's Theatre is recognised as one of the most significant heritage theatres in Australia and extreme care has been taken in this report to retain this history whilst attempting to achieve a workable facility that meets the demands of today's performing criteria. Careful consideration has been given to retaining the technical heritage aspects and preserving them for the future.

It has become obvious throughout this investigation that the facility is run by a small team of individuals who are passionate and dedicated to providing the best in the performing arts to the community and users alike who are continually forced to push the boundaries of the facility well beyond its capabilities in order to satisfy the demands of the day of both patron and performer.

This report focuses mainly on the building, technical and management areas of the facility, with observations documented and recommendations made based on the brief to achieve AAH benchmark rating.

Currently the HMT is subjectively rated as A1, though RTMi suggests that this benchmark position, as not yet fully achieved, is further under threat; based on the review and update of benchmarks recently undertaken by the Victorian Association of Performing Arts Centres (VAPAC)

This revised benchmark document, as ratified by VAPAC will bring forth the current demands of compliance, performer criteria and public expectations. It is recommended that a thorough comparison is made in relation to HMT facilities against the 'Oh you Beautiful State' updated benchmark.

It should be noted that RTMi's design notes – comply with this draft document as far as the listed re-development proposals within the brief to the updated AA benchmarks. There are, however, a number of technical and additional requirements within the draft document that would see HMT falling short of the AA rating and these should be considered and benchmarked by HMT now that document is completed and approved.

4.8.3 Summary of Recommendations

The following represents an overview summary of the detailed design notes T01 to T33 (see RTMi separate Theatre Design Report for details). They represent a response to each particular area designated for review under the Re-Development Brief:

T01 Foyer Space enhancement
Rationalisation of existing foyer as per the Stage 1 proposal is of limited benefit. Expansion into adjoining property (21 Lydiard Street South) will provide a more viable multi use space of adequate capacity.

T02 Commercial Outlets
Again Stage 1 is limited to existing facilities; only in Stage 3 will the facilities provide opportunity for value adding and commercial hiring take place.

T03 Late Room / Crying Room
This facility proposed in Stage 2 at the rear of the auditorium in the stalls. The recommended alternative would be MATV (monitors and sound) in the foyer space, as per the current arrangement.

T04 Disabled Access (Foyer)
This aspect is dealt with adequately in Stage 1

T05 Disabled Access (Upper)
This aspect is addressed adequately in Stage 1

T06 Foyer Signage
The existing signage will be upgraded to a mixture of static and electronic signage covering event, images and way finding.

T07 Long Room Usage
This should be seen as the VIP room in the theatre and will be upgraded to provide a more flexible usage including performances and functions.

T08 Seating Configuration
The sightlines and comfort levels are well below current standards.

It is suggested that the replacement of the 959 seats in the auditorium is undertaken; draft seating layouts have been developed using the Hadley Lyric seat. This has been based on 500mm + 530mm centres with row spacings of 975mm with further manipulation of the 15 different widths available it should be possible to achieve near the same number of seats that currently exist. The criteria for the replacement seat should be supreme comfort and support, zip-off covers for dry cleaning, silent gravity tilt, robust and low maintenance. Consideration of the heritage look suggests the ability to manufacture duplicate aisle ends and arms to retain current visual impact. If the current seating were retained the size would remain the same and refurbishment costs would far outweigh the price of new seating.

Two possible layouts are included in the report. It is of note that the benchmark sightlines will never be achieved due to the heights of the circle and balcony. The new seating will improve and optimise the sightlines.

The layouts will yield 867 and 965 respectively excluding forestage option (Stage 2) of an extra 36 seats. The cry room would reduce the yield by 30+ seats in Stage 2.

The final configuration will be subject to a more detailed sight line analysis. It is clear that new seating will enhance enjoyment and improve access and equity for the patrons with potentially only a modest reduction in capacity.

T09 Disabled Seating
The current allocation for disabled seating would not meet the "Access Code for Buildings". This is currently a draft document awaiting ratification which is ensured. It is recommended that the draft code is adopted in any upgrades to this area. The following would apply under a Class 9B – Assembly Building.

Number of fixed seats – between 801 – 10,000 requires 16 (sixteen) wheelchair spaces plus 1 (one) additional space for each additional 100 (one hundred) seats of part thereof in excess of 800 seats – it also suggests a minder's seat is also allocated to each of these wheelchair positions. Grouping and allocation must be at least 2 single spaces and at least 2 groups of 2 spaces and not more than 5 spaces in any group. The location of spaces is to be representative of the range of seating provided. Tool-less removable seating will be designed for quick removal and reinstatement.

T10 Structural Evaluation
Inspection of the roof areas revealed substantial works having been carried out over the main auditorium inner chamber. Substantial steel trusses have been inserted in this areas and does not require any structural evaluation. The same however cannot be said for the fly-tower roof/structure. This area still retains the original timer trusses. Whilst seemingly in good condition, the design layout of this fly-tower was not designed nor constructed for the load that is forced upon it by today's performing standards.

Refer to detailed proposal from the Structural Engineer for details of the upgrade to meet the brief.

T11 Grid Height
The current grid and fly-tower was designed for lightweight hemp rope head block pulleys and timber battens to generally provide backdrops and basic lighting for early theatre productions. It was not designed to deal with today's modern theatre. The drift of the fly-tower, calculated at 2.5 times the proscenium height as an industry standard falls short of this calculation prompting either a cut down of touring sets, top and tailing of cloths of a standard height, made to measure sets, or a decision to not tour the venue. The addition of counterweight fly lines has not only put strain on the fly-tower structure but infringes on much needed wing space. The gallery over and associated handrail system are also under strain due to being used as tie off, counterweight storage, dimmer racks, etc. It is highly recommended the fly-tower be bought up to the current benchmark and power winches are employed.

The proposal includes for the provision of new fly tower with an 18m drift with a 20 tonne capacity. It will also include a second extended gallery improved grid access links to the Bio-Box and a new lantern store and dimmer patch room.

T12 Automated Flying
Current benchmarks call for automated power flying in new and refurbished theatres, concert halls, places of entertainment. This is due to a number of reasons in the area of OH&S, theatrical accuracy and staffing costs. Winch rooms can be installed in the fly-tower grid during refurbishment. **This is essential from the OH&S point of view.**

T13 Bio Box Access
It is suggested that the current catwalk existing from the control through the auditorium ceiling be accessible from stage. It is possible to break into the fly tower both O.P and Prompt sides and extend catwalk to future galleries. Minor modifications to a small section of the outer roof at proscenium wall both sides will be required.

T14 Rear Stage Extension
This is an area of the backstage that is too small from a benchmarking perspective and with the proposed extension over Lewis Street, this aspect can be much improved.

T15 Stage Goods List
The proposal includes an enclosed car hoist with a carry load of 2,500kg measuring 6m x 4m to meet the briefed requirements.

T16 Stage Passenger Lift
This is recommended with a capacity of 6-8min people including wheelchair and stretcher pocket.

T17 Rehearsal Room
A clear requirement of the benchmark this can only be provided in Stage 3 of the proposal.

T18 Theatre Vehicle Parking
Facility is included 3 parking spaces off Lewis Street.

T19 Large Dressing Room
An important facility for the benchmarking and in the proposals it is only achieved in Stage 3.

T20 Alternative uses for Dressing Rooms
Current dressing rooms are below ground level in most instances. Refurbishment of Comms/IT, lighting will be required, as would access to FOH and other BOH areas. Whilst some flexible rooms are provided in Stage 1 (BOH), it is only in Stage 3 that this facility is realised.

T21 Dressing Room Mirrors
It is suggested that a minimum would be 3,500 degree Kelvin fluorescent would be appropriate allowing maximum lamp hours and make up applied would match colour temperature on stage. It is also suggested that they be dimmable to allow artist to view in low stage light. This has been included in Stage 1.

T22 Stage Trap
Whilst the current stage trap is ingenious in its manufacture it has been shut down for some time, once can only assume that its fixed position does not always coincide with trapped performance sets. The current benchmark is to have the full stage floor sacrificial to allow trap to be cut into any area of the performers' footprint. This is not feasible on heritage grounds and a permanent trap is included.

T23 Stage Floor
Repair and or replacement of the stage would be a simple undertaking. The option of removing the rake would create a sightline problem from the audience perspective. The auditorium levels would not be able to be raised, short of full removal and rebuild. Removal of the rake is not an option from a physical heritage perspective.

T24 Thrust Stage – Orchestra Pit
Upon inspection of the orchestra pit, the organ has taken precedent and eliminated any way of inserting a vertical lift that would normally travel between stage +200 to a sub stage level with intermediate stops at auditorium and orchestra pit whilst remaining in current position. The recommendation is that this **cannot** be achieved without removal of the organ. It is a desirable attribute and can only be achieved in Stage 2.

T25 Organ Location
A re-position of the theatre's organ to rise directly to stage could be achieved with a re-shuffle of spaces below stage level and trap and vertical lifter installed. It however will further compromise other functions and limits achieving the benchmark standards. There are no alternative locations within the theatre and it is strongly recommended that the organ be relocated to a more suitable venue.

T26 Increase Wing Space
Replacement of counterweight lines (for power fly) frees up OP wing by removal of lines and safety cage. Removal of walls on prompt to access offstage space is included in the proposal.

T27 Ballarat Mechanics Institute
Links via the rear stage extension in the proposal offers opportunities for sharing facilities and costs.

T28 Re-Site Administration and Box Office
This is only fully achieved in stage 3 and presents real operational advantages.

T29 Fire Engineering and Ambulance Disability Evacuation.
Refer main report.

T30 Lighting
Refer main report.

T31 Storage Areas
This aspect has been addressed within the proposals within the confines of the available spaces in Stage 1, 2 & 3.

T32 New Performance Spaces
The studio / rehearsal space is only available in Stage 3. However opportunities exist within the Mechanics Institute with their performance space given the proposed link at BOH

T33 Facility Rating
With all the stages complete then the AAH rating can be assured. Other stages will require some negotiation to get over the line.

An audit against the new benchmark November 2006 is recommended.

4.8.4 Benchmark in Pictures

They say that a picture says a thousand words, RTMi has compared areas of HMT with that of a AA rated Australian theatre (Full Report –separate document) These comparisons are real and may assist to give a more tangible vision to where the HMT currently sits in respect of its counterparts and what is expected within a theatre environment. This has been extracted from the main RTMi report here to emphasise those clear shortcomings between HMT and the benchmark.

Her Majesty's Theatre

Prompt Corner Panel

Benchmark Theatre

Her Majesty's Theatre		Benchmark Theatre
	Grid	
	Fly Lines	
	Performance Dimmers	
	Goods Lift	
	Orchestra Pit	
	Box Room	

Her Majesty's Theatre		Benchmark Theatre
	Dressing Room	
	Control Room	
	Box Office	
	Audio AV Racks	
	Stage Manager Desk	

4.8.5 Conclusion

Whist every effort has been made by the in house team to maintain the facility to statutory requirements there are a number of areas that do not comply with current codes and statutory requirements and need to be addressed as a priority. These issues are noted in part within this document and furthermore in the body of the main report within the structural and services reports.

It is further recommended that a review of the operations of the facility, particularly in the back stage area is undertaken in respect of the current OH&S guidelines and that risk assessment is carried out within these areas.

These comments in no way suggest any wrong doing by the in house team who go well beyond their call of duty and work in extremely difficult situations based on the demands of a performance and the limited resources available to them in a facility that verges on museum status. It simply suggests that the facility is not able to keep up with the demands of the patron and performer of today. A commitment to bringing this facility to the AA benchmark will resolve these issues.

Clearly as the brief for this study and the detailed report articulates, there are many areas which need improvement and significant investment to combat OH&S issues as well as ensuring the theatre meets the stringent demands of performers and patrons alike.

5.0 PLANNING CONTEXT & OPPORTUNITIES

5.1 Introduction

Part of the brief recognises the need for additional space if the long term objectives are to be realised. In particular the lack of rehearsal space and or studio performance space limits the type of performance options and the availability of the main stage for other uses during the rehearsal phase of a production.

In reviewing the opportunities this study has investigated the following:

- Current planning context
- Heritage Context
- Adjoining sites
- Remote sites
- Lewis Street encroachment
- Links to the Mechanics Institute
- Arts precinct

Location Plan (NTS)

5.2 Current Planning Context

The theatre is currently located in Business 1 zone in the Ballarat City Council within the Lydiard St Heritage precinct (overlay H070). In the commercial heart of the city its current use is consistent with all aspects of the local and state planning frameworks.

The overriding constraint on adaptation and development is the theatre's Heritage Status not only in the Ballarat City Council but on the State Register (Item No. H0648) and National Estate register (Item No. 15722). To this is added the significance of the theatre to the local community as patrons and performers over the years. It is clearly a well known and well loved icon, which needs to continue to contribute at all those levels for years to come.

The Conservation Management Plan (Oct '06) by McDougall & Vines provides a clear picture of its significance and establishes a framework for general adaptation and within the context of the known expectations of the project brief.

Unless the theatre changes it will not meet the competing demands placed on it. Such changes must be carried out within the guidelines set by the CMP and be subject to detailed approvals by the Heritage authorities.

If it were decided to maintain the status quo without upgrading the theatre's facilities, then there would still be significant funds to invest, both now and in the future, without any improvement to the facilities beyond risk minimisation and maintenance.

5.3 Heritage Context

As stated earlier in the report, part of this study involved the development of a comprehensive Conservation Management Plan in recognition of its heritage significance and location within the heritage precinct. The result is a sound working document which will act as a guide and aid to negotiation and management of conservation and adaptation within the building. It clearly articulates the significant areas of the building whilst acknowledging the need for the building to change highlighting opportunities for that to happen. The report has received endorsement from Heritage Victoria.

5.4 Unicorn Lane Site

The vacant site in Unicorn Lane is the former Unicorn Hotel, 127 Sturt Street. The front section and verandah of the original building are heritage listed; the remainder of the original building has been demolished.

The current owner had received a development permit to build apartments on the site. During this study, due to a change in the market the owner decided to revise the permit to develop offices/retail on the site. Discussions were undertaken with the owner to see if there were opportunities for HMT. At the time the owner was interested in considering an option to sell all or part of the site. A proposal was prepared as part of the feasibility (see later), incorporating all or part of the site, however the Ballarat City Council was not in a position to secure and option on the land at that stage and therefore the owner has decided to proceed with their development.

It is recommended that HMT arrange to review their proposals carefully as it relates to the boundary and access issues.

5.5 No. 11 & 21 Lydiard Street South

There are two adjoining office buildings on Lydiard St which have been reviewed as part of this exercise. No. 11 is a 1960's 5 storey (6 storey's at rear) office building of narrow frontage and reduced floor to floor heights. At the time of the study it was not available for sale however it did have a limited amount of office space available which could be considered.

No. 21 is a similar era 2 storey (3 storey's at rear) building with a wider footprint and the owner

at the time of the study was willing to sell the building. Again the Ballarat City Council was unable to commit to an option to purchase at this stage and it is recommended that HMT keep in touch with the owner/agent to ensure the opportunity is not lost. This site is the recommended site if expansion is approved (see later).

5.6 Lewis St Apartments

The former warehouse to the south of the theatre in Lewis St has recently been converted into apartments and at the time of the study one of the rear units was unsold.

Clearly if the whole building was available it would be a great asset in upgrading the cramped stage area. However the unit is not strategically well located and would be of little value.

5.7 Lewis Street Extension

As part of the review consideration has been given to the replacement and extension of the existing 'lean to' on the rear of the theatre (East) to relieve spacial tensions in the stage area and aid improvements. It would also assist in facilitating physical links to BMI. The consultants have conducted successful negotiations with the Ballarat City Council who have given 'in principle' support to the concept (see later).

5.8 Links to the Ballarat Mechanics Institute (BMI)

This aspect has been the subject of earlier reviews and feasibility sketches. In the recent study by SKM (Sinclair Knights Mertz) in 2003, the conclusion and recommendations for physical linkages were not acceptable to the HMT board and have not been implemented.

As part of the study a further review of such opportunities has been undertaken by the consultant team in conjunction with the Mechanics Institute, in the light of the current context at BMI. Indeed they are currently undertaking funded refurbishment works to the BMI to meet OH&S obligations and are actively pursuing funding for a second stage which will involve upgrading the auditorium. An opportunity for collaboration still exists and as a result of the discussions, it is understood that a memorandum of understanding is being proposed by the Ballarat City Council to help facilitate the realisation of the synergies.

A review of the potential physical links has been undertaken and the Lewis St option, between the back stage areas is seen as having the most potential. It is worth noting that the potential links via Unicorn Lane utilising the 2m wide easement has been discounted as the impact on the BMI reading room is high and the operational advantages are questionable.

5.9 Remote Facilities

During the study a couple of remote options were reviewed.

- Citizens Advice/Tourism Office on Sturt Street
- William Booth Memorial Citadel on Albert Street

The former is now no longer available and the Citadel owner/agent did not respond. The main issue with satellite facilities is the impact on management costs. As such this option was not pursued.

5.10 The Arts & Cultural Strategy

The Ballarat City Council is clearly committed to developing their rich cultural and artistic potential as confirmed by the Arts & Cultural Strategic Plan 2005 adopted by the Ballarat City Council in December that year. Her Majesty's is seen as an important part of the wider culture and tourism initiatives and the Ballarat City Council are already demonstrating their commitment to the strategy by vesting interest and leadership in their culture and tourism portfolio and reviewing potential synergies between venues from an operational perspective.

An extract of the key strategies is included here for reference.

> 'Any shift toward a cultural planning approach will only succeed with the support of an engaged Council. This will require political will, strategic support by senior staff across functional areas, and organisational capacity for internal and external collaboration and partnership. Good practice analysis and evidence from the community consultation suggests that there is still work to be done to develop the organisational culture and processes necessary to support a cultural planning approach. As such, the overarching framework and specific activities proposed in the 2006-2010 action strategy are broadly located within a cultural planning framework, with an emphasis on incremental change. 2006-2010 should be viewed as a critical period in which culture is drawn in from the margins to the centre of Council and community planning for sustainability. The strategy must address both the substantive issues of arts and cultural development and the organisational processes and culture needed to support this development. The objectives of the strategy need to be incorporated into broader strategic planning processes. The 2006-2010 strategy contains a strong project-based element, in order to develop achievable targets and milestones which can be celebrated as part of the transition process.'

The development of a more integrated managed approach to the venues and in particular performance venues is clearly part of that strategy and any development proposals should include that aspect in business planning.

6.0 BRIEF DEVELOPMENT & CONSULTATION

6.1 Introduction

As stated in section 1.0 the brief for the study was well articulated and set clear detailed tasks which have been addressed in this report. The brief and associated issues has been further explored and developed throughout the process.

6.2 Methodology

The brief has been explored through a series of workshops with (1) the Management and Staff at HMT, (2) the regular Project Control Groups and (3) a general Public Forum.

The results of (1) are incorporated into this report. The outcomes of (2) were recorded in formal minutes and similarly decisions reflected in this report.

6.3 Public Forum (3)

A general forum was held in the Long Room at HMT on 23rd of March 2006 to review the briefed requirements and gauge any other issues that could be addressed as part of the study. A presentation was made by the consultant team as to the briefed requirements, the constraints, benchmarking and process. The following organisations & people attended:

ORGANISATION REPRESENTED	NAME
Ballarat Lyric Theatre	Beverley Horwood
Ballarat National Theatre	Julian Oldfield
BLOC Music Theatre	Sallie Burke Muller
BLOC Music Theatre & HMT Board User Group Representative	Tim Gay
Ballarat City Council	Tony Diamond
Ballarat City Council - Arts and Cultural Development Coordinator	Emma Barrance
Her Majesty's Theatre Board & Royal South Street Society President	Brian McInnis
Her Majesty's Theatre – Director	Janice Haynes
Her Majesty's Theatre - Deputy Director	Wendy Hall
Her Majesty's Theatre – MajesTix Box Office Manager	Jo Kruse
Her Majesty's Theatre – Technical Operations Manager	Stephen O'Neill
Her Majesty's Theatre Board – Chairman	Val Sarah
Her Majesty's Theatre Board – Deputy Chairman	Peter Morey
Royal South Street Society	Peter Zala
Royal South Street Society	Gayle Border
Royal South Street Society	Lloyd Harvey
Royal South Street Society & Her Majesty's Theatre Board	Barb Dunlop
Royal South Street Society & Her Majesty's Theatre Board	Ric Dunlop
RTM International	Rob Mitchell
Swanbury Penglase	David Bagshaw
Ballarat Theatre Organ Society	Jason Hobble
Ballarat Theatre Organ Society	Winston Loveland
Ballarat Theatre Organ Society	Janet McCulloch
Theatre Organisation - Her Majesty's Theatre Casual Technical Staff	Doug McGregor

Points Raised at Forum

It was generally affirming of the brief and passion for the theatre; and included some interesting points:

Front of House

- Very cramped in foyer
- Steps an issue – step up has flashing lights but still causes problems on occasion
- Coffee shop cramped
- Link to long room poor
- Sales upstairs limited due to access to long room
- Entry doors very heavy
- Stairs to toilets in basement (RSSS) movement of people at peak times unsafe particularly during calisthenics
- Box office could be reduced in size
- Redesign the whole foyer area
- Signage needs to be improved (issues re heritage approvals – takes too long)
- Noise impact of large number of people
- Possible better entry required
- Disabled parking issue – need one outside of theatre (one currently over road)
- Buy adjacent property for expansion
- Concern over potential compromise due to lack of access to adjoining sites? Staging? Master plan (10-15 years)
- UK theatres – foyer may not be the foyer entrance doesn't need to be the entrance no limits
- Make it more than "theatre"? exhibition space, community use – attractive to the public focus for the arts
- Cry room – standard for other theatres – not a high priority
- Auditorium seating 900 people!! Capacity (why not extend front of house into stalls reduce seats?) Average audience 550. Only 790 good seats? Improvement. Acoustic issues under balcony (audio loop 75% coverage). Music theatre 800-900 not uncommon
- Sight line and seat size issues
- Disable seating – should be dispensed throughout all levels
- Removal of central isle – some community groups unhappy, "My soul goes down the isle", quote Edwin Relf
- Access to seats an issue! Site lines (reduced number of seats from 1150->950 in 1990)
- Long rows / access issues safety
- Poles blocking view
- Lighting is poor

Back of house

- Site lines to full set? 6.7m high limits due to proscenium (unlikely to change)
- Rake to stage? Loose ½ dozen productions due to limitations (not able to change)
- Access to Bio Box from stage area
- Sight lines from Craig Hotel tower ref fly tower?
- Rehearsal space needed
- Relocated first aid near back door
- Prop space / storage – could be better
- Wig make up area – could be better
- Designers work with what they have
- Multi uses during competition / short term storage
- Thrust stage and organ in conflict
- Organ not in best place noted as in wrong place
- Studio performance space needed
- Mechanics – investigate links

The above aspects have been addressed in the proposals.

7.0 DEVELOPMENT RESPONSE

7.1 Introduction

The consultant team, based on the following inputs, developed a range of responses or preliminary options for review by the PCG:

- The original brief
- The PCG workshops/forum inputs
- The Conservation Management Plan
- The Theatre Design Report
- The previous documentation
- Consultation with the local authorities.

These were presented in the form of a schematic concept plans to test the brief.

7.2 Concept Development

As the brief describes there are several operational issues for the theatre, many of which are related to compliance, OH&S and benchmarking.

To test the brief, a series of options were developed and reviewed by the PCG, theatre management and the consultant team. The process and detail is not included here, but the following section presents the final option for a staged development including all the PCG selected priority items in Stage 1 and addressing the potential relocation of the organ and the acquisition of adjoining land in Stage 2 & 3

7.3 Development Proposal

Refer to Appendix A and B for the drawings. As a result of the above the following stages were determined:

7.3.1 Stage 1

This would involve a development within the confines of the current ownership and with the replacement of the existing Lewis Street extension

- Organ retained
- No thrust stage or new orchestra pit
- No major modification to Administration
- New level automatic entrance doors
- New box office and refreshment bar
- Main doors closed and steps in filled
- New lift to access all levels
- New access toilets and access
- New plant room and minor modifications in Admin
- New bar and operable wall to Long Room
- New seating and configuration at all levels
- Upgraded and expanded wing space
- Replacement to Lewis Street rear stage space
- Link to Mechanic's Institute stage area via Lewis St
- New goods and passenger lift to stage area
- Power flying system
- New extended fly tower, grid and access
- New green room
- Large dressing room formed
- New piano store

- New stores
- New stage trap
- Upgrade of lighting & fire systems
- Upgrade of power infrastructure
- Upgrade of air conditioning
- Compliance with Building Codes & Standards
- Not fully compliant with the theatre benchmark standards
- Compliance with CMP

As part of this review consideration was given to alternative locations for the organ within the building. Unfortunately there are no viable alternatives other than relocation to another venue in accordance with the recommendations from RTMi.

7.3.2 Stage 2

In recognition of the recommendation regarding the organ, this stage includes:

- Relocation of the Organ to another site
- Installation of the thrust stage/new orchestra pit
- Refurbishment and fit out of administration
- Installation of cry room
- Roof space link between Bio Box and Grid
- Fully compliant with theatre benchmark standards

7.3.3 Stage 3

This assumes the acquisition of 21 Lydiard St, its demolition and development of a new connected facility to provide:

- New main entrance and foyer
- New box office and refreshment bar
- Previous foyer as exhibition/gathering space
- New ground level toilets
- New administration at ground level
- New large dressing room with operable wall
- New rehearsal/studio space
- New store
- New bonus commercial office space for lease

7.4 Stage 1, 2 & 3 Works

The following section and table gives an overview of the works proposed, including commentary on the proposals in relation to the brief and their heritage impact. The following is to be read in conjunction with the plans in Appendix B.

In general the proposal addresses all the key issues in a creative way within the context of a significant heritage building.

Reference to RTMi Design Notes relate to the separate detailed theatre consultants report.

7.4.1 Structural Assessment

The proposals have been reviewed by Structural Engineer Trevor Huggard and Associates in relation to structural viability.

Their attention has been focused on the alterations to the stage area including new wing space and extended fly tower.

The assessment confirms the feasibility of the proposals and a detailed commentary is in Appendix C.

7.4.2 Services Assessment

The proposals have been assessed by Services Engineer Simpson Kotzman in relation to the building systems required to support the proposals and to address the current short comings highlighted earlier.

Their detailed report can be found in Appendix D.

Mechanical Services

The proposal involves the provision of new plant as well as re-using the existing systems. The problems of fresh air and comfort conditions will be addressed by the use of the floor voids as a distribution plenum with a large number of small outlets under the patron's seats. This will have the added benefit of low air velocity and hence low noise levels. By utilising existing duct risers, some new risers, the roof space and the existing floor voids, the impact on the heritage fabric will be minimal.

Upgrade exhaust systems will be installed.

Electrical & Communication Services

As part of the upgrade the main power supply and infrastructure will need to be upgraded to cope with the new electrical loads. This will involve reworking and enlarging the current substation and switch room.

General and emergency lighting will be upgraded to the current standards with reference to the heritage context.

The data and phone system will be enhanced.

Hydraulic Services

The existing systems will be adopted and enhanced to suit the new provisions.

Lift Services

The new fully compliance lifts will be installed to the front of house and backstage area to provide uniform and equitable access. This will include the use of the main lift in a fire/emergency situation, under supervision. This will be to address the disabled egress requirement.

A new goods lift will be installed to the backstage area.

7.4.3 Fabric Upgrade

The proposal includes allowances for the repairs and maintenance highlighted in the report for both external and internal aspects.

All alterations and additions will be carried out within the guidelines set out in the Conservation management Plan and in accordance with Heritage Victoria Requirements.

7.4.4 Compliance with Building Codes & Standards

The proposal includes allowances for meeting the current and potential non-compliance issues highlighted in this report. It will be important in the next stage (detailed feasibility) to develop a supported package of upgrades in association with the local authorities, including appropriate concessions relative to the buildings heritage status. This is likely to involve some fire engineering modeling to prove the solution for approval purposes.

7.4.5 Risk Assessment

If the proposal as described is not undertaken the risks will be as follows:

- Significant funding will be required to meet sustainment and compliance, some of which will be redundant if the proposal were to proceed later.
- If the organ is not relocated in stage 2 then this will prevent the provision of a thrust stage and new orchestra pit
- If 21 Lydiard Street South is not acquired for Stage 3 and the provision of the rehearsal room and large changing room will not be achieved at the theatre
- If an agreement is not reached between Ballarat City Council and the Mechanic's Institute regarding the Lewis Street extension then the rear stage facilities will be compromised.

B R I E F COMPARISON TABLE The following shows how the Stages address the original briefed requirements

ITEMS	STAGE 1	STAGE 2	STAGE 3
1 Foyer and Box Office Area			
(a) Foyer Space: Investigate options for physically enlarging the foyer space at Her Majesty's Theatre and creating larger public gathering spaces and space adjacent to the Box Office (this may require extension into adjacent buildings at the Lydiard Street frontage).	New refreshment bar and smaller box office. Some walls removed for easier access and better use of space. Floor levelled with infill of the entry steps and entry doors closed. Provides for more useable space.	As stage 1	New Entry Foyer at Lydiard St entry combined with existing space. Existing box office/ refreshments relocated. Provides for more than double the original space with better access and amenities. Includes collocation of Box office and administration.
Heritage Impact	This area is made up of high & medium heritage significance and has undergone many changes over the years. The opening up of existing walls to improve access will be done in a way that the original walls will be obvious and hence can easily be reinstated if required. The removal of the southern staircase is perhaps the most significance change, although this has historically already been altered and hence the most compromised of the stairs. The northern stair is more original and will be retained. This significant change is essential to achieve the equitable access. The new auto entry doors will involve replacing the existing southern doors or altering to make them automatic. The existing entry doors will be retained and locked so the stairwell can be in filled with a suspended floor to provide more useable floor space and safer access. The provision will be fully removable. The new refreshment bar and box office will replace existing facilities of no real heritage value.	As Stage 1.	This will involve a large opening being formed in the 'party' wall along with the removal of the box office/refreshment bar, modification to the southern entry door and introducing new doors for security.

ITEMS	STAGE 1	STAGE 2	STAGE 3
(b) Commercial Outlets: Advise on other types of retail outlets that could operate from the facilities e.g. Coffee Shop. Report on the occupancy numbers allowable in the extended areas. Note: Existing usable area is approx 60m^2	Limited opportunities in Stage 1. With smaller box office and level floor the foyer area is 100m^2, a slight increase on the current space with improved access and visibility. Refreshment/Bar areas in Foyer + Long Room. Long Room more flexible (see later)	As for Stage 1.	New Bar/Cafe (85m^2) in new entry foyer making a total space of 207m^2. Better catering facilities available for Long Room as function area.
Heritage Impact	No impact.	No impact.	No impact other than minimal openings to link to the new construction, easily reversible.
(c) Late Room / Crying Room: Investigate options for creating a Crying / Latecomers Room with the capacity for at least 10 people accessible from the foyer into the auditorium, and also with the capacity to be used as a sound-proofed interpreter booth.	Excluded from Stage 1. Continue with the CCTV	Positioned at Stalls level in Auditorium with full accessibility	As stage 1.
Heritage Impact	No impact.	The formation of the Cry Room in the auditorium will involve careful detailing in this high significance area. The new seating in Stage 1 will be designed to accommodate this work. All work will be easily reversible.	No impact.
(d) Disabled Entry (Foyer): Investigate options to enable easy access for disabled patrons. It is preferred that this access be through the Lydiard Street entry to Her Majesty's Theatre into the foyer but other options should be investigated.	Central doors remain locked + floor in filled to Foyer side. New Auto swing double doors provided to south entry (at grade already). Opening up of the walls provides for more accessibility.	As for Stage 1.	Fully accessible entry from Lydiard Street. Additional disabled access from original South doors as per Stage 1.
Heritage Impact	Refer 1(a) above.	No impact.	

ITEMS	STAGE 1	STAGE 2	STAGE 3
(e) Disabled Entry (Upper): Investigate a method of accessing the Dress Circle, Balcony and Long Room via lift for disabled patrons.	Passenger lift installed to all levels. (Note the access to the upper levels is a potential future requirement).	As for Stage 1	As for Stage 1
Heritage Impact	Impact is in the southern stairwell and wall openings to provide access to all levels. It will also involve modifications to the existing floors in the auditorium for balcony and dress circle. This is a major change but will be limited to an area that is of low to medium significance. The southern stairs have been altered and compromised in the past and this is the best strategic location within the current footprint to address the equitable access to all levels with minimal disruption to the fabric.	No impact.	New wall openings in the 'party' wall for access, easily reversible.
(f) Foyer Signage: Investigate a foyer signage and display system that will be visible to all patrons.	Electronic + static signage (Refer RTMi Design NoteT-06).	As Stage 1	Upgraded Electronic + static signage (Refer RTMi Design NoteT-06)
Heritage Impact	No major impact, all signage will be carefully detailed and all associated work will be easily removable.	No impact.	No impact.
(g) Long Room Usage: Investigate extended uses for the Long Room (e.g. performance space, display area, retail/hospitality). Kitchen/catering options	Operable wall & bar/wet area can divide the space in different ways to improve its utilisation.	As for Stage 1 - refer to 05639/SK	As Stage 1 but kitchen facilities also available adjacent to Long Room

ITEMS	STAGE 1	STAGE 2	STAGE 3
Heritage Impact	The space itself is of medium significance with the walls of high significance. The proposal involves the replacement of the non-heritage bar and the introduction of an operable wall. All walls will be easily reversible and minimal impact.	No impact.	No impact.
2 Her Majesty's Theatre Auditorium			
(a) Seating Configuration: Investigate the replacement of the 959 seat frames in the Theatre auditorium, and supply options for re-aligning the seats in the Stalls, Dress Circle and Balcony areas from their current configuration to improve stage sight lines. There is a requirement to retain at least the 959 fixed seats, with a configuration that accommodates more seats with better sight lines and larger seats being favourable.	RTMi Design Note T 08. Provides 2 optional Layouts giving 867 with larger good seats and deletion of the restricted viewing positions & 965 with restricted view seating positions retained. Detailed sight-line analysis, retention of the side sections of original dress circle seating on heritage grounds and disabled seating inclusion at all levels will reduce the yield to low 800's in the *good* seating option.	As for Stage 1 but including Cry Room location. This will result in a reduction of 20 seats; however an extra 36 seats will be created with the thrust stage option.	As for Stage 1.
Heritage Impact	The existing seating whilst original has been changed a good deal over the years including inconsistent spacing and levelling issues. The proposal involves the replacement of the existing seats with new compliant seats in an appropriate style. The retention of small sections of the existing seating in the dress circle sides and balcony sides where sight lines are poor is envisaged to maintain some original seating. Works will be required to the existing floors including new openings & fixings. This aspect has been accepted in principle by heritage Victoria and there is ample precedent for this proposal.	No impact.	No impact.

ITEMS	STAGE 1	STAGE 2	STAGE 3
(b) Disabled Seating: Investigate the placement & position of wheelchair /removable seats and the potential to increase the number of wheelchair / removable seats in the Auditorium.	RTMi Design NoteT-09 determines a future requirement for 18 positions evenly distributed throughout the auditorium on all levels. The new lift will allow for full access to all levels. (Note the access to the upper levels is a potential future requirement. Current requirement is for 6 spaces to be at Stalls level).	As for Stage 1.	As for Stages 1
Heritage Impact	As per 2(a)	As per 2(a)	As per 2(a)
3 Roof and Grid Area			
(a) Structure Evaluation: Investigate the need for a complete Roof structural engineering study and design.	Refer to detailed report from the structural engineer (Trevor Huggard). Indicates that the structure is OK	As for Stage 1.	As for Stages 1
Heritage Impact	No impact.	No impact.	No impact.
(b) Grid Height: Investigate a means to increase the grid height for hanging stage cloths by 4.6 metres to achieve an 18 metre drop.	RTMi Design Note T-11 Refer also to separate report from the structural engineer (Trevor Huggard), which indicates that it is feasible to extend the grid and fly tower to meet the benchmark standard. RTMi Design Note T-13. Subject to heritage approval on the detail.	As for Stage 1	As for Stages 1

ITEMS	STAGE 1	STAGE 2	STAGE 3
Heritage Impact	The extension of the fly tower involves extensive work to a significant part of the original building. However as long as the end truss bay is retained and the extension set back from the facade the extension, essential for the theatre to meet benchmarking, will be acceptable. It will be detailed to minimise the impact on the aspect of this prominent elevation. There are comparable precedents of this work e.g. Princess Theatre Melbourne All original features & equipment i.e. original hand lines, scenery painting frame and weather machine will be retained in their current location or relocated appropriately. This will involve careful detailing. Heritage Victoria has agreed to this in principle.	No impact.	No impact.
(c) Automated Flying: Investigate options for the installation of an automated flying system.	RTMi Design Note T-12. A fully automated flying system included to meet operational needs	As for Stage 1	As for Stage 1
Heritage Impact	Replacement of the hand/counterweight lines is generally acceptable. Any original hand lines to be retained for historical record.	No impact.	No impact.
(d) Bio Box Access: Investigate Options for providing covered access from the fly gallery to the bio box.	Not included in Stage 1.	RTMi Design Note T-13. (Possible to adapt the existing walkway system to provide the required access at minimal cost)	As for Stage 1
Heritage Impact	No impact.	Impact will be minimal, access via new grid access.	No impact.
4 Backstage and Loading Area			

ITEMS	STAGE 1	STAGE 2	STAGE 3
(a) Rear Stage Extension: Investigate options to extend the rear of stage area out over Lewis Street at the rear of Her Majesty's Theatre to create the largest space possible, while retaining services of Storm Water, electrical and sewerage at Ground floor level.	Based on preliminary negotiations with Ballarat City Council it would be feasible to replace the existing extension and build out over Lewis St + incorporate operational links to the Mechanics Institute. (Note the proposal relies on agreement with the BMI re encroachment in front of their building).	As for Stage 1	As for Stage 1
Heritage Impact	The current extension is not original and its replacement does not involve significant fabric. The design and detailing will be sympathetic in scale and style utilising similar materials and scale. Heritage Victoria has agreed to this in principle.	No impact.	No impact.
(b) Stage Goods Lift: Investigate options for providing an enclosed Stage Access Goods Lift to have the dimensions of at least 6m long x 4m wide and a load capacity of 2 Tonne.	The new goods lift can go in the same location, taking advantage of the existing openings and maintaining the symmetry. It will be a through route to the backstage area. It will also allow access to the BMI stage level, subject to agreement.	As for Stage 1	As for Stage 1
Heritage Impact	Generally as for 4(a). Note new lift will be located in the current area making good use of existing openings.		
(c) Stage Passenger Lift: Investigate options for providing a Lift or device to transport people from the Lewis Street/ Stage Door level to the Stage/ Green Room level.	A new Passenger lift is proposed within the new work and combined with 2 chair lifts will enable all levels to be accessible. (Note the access to the upper levels is a potential future requirement)	As for Stage 1	As for Stage 1
Heritage Impact	As for 4(a). Lift incorporated in the new extension. The chair lifts will be in Low significance areas and be reversible.	No impact.	No impact.

ITEMS	STAGE 1	STAGE 2	STAGE 3
(d) Rehearsal Room: Investigate options for providing a sound-proofed and equipped rehearsal room of similar dimensions to the stage and in close proximity to the stage.	Not included in Stage 1.	Not included in Stage 2.	Located at Sub-basement level – accessible by lift or stairs, with rear vehicle access.
Heritage Impact	No impact.	No impact.	No impact reworking office area.
(e) Theatre Vehicle Parking: Investigate options for achieving secure, permanent parking at Lewis Street Level for at least the Theatre's Van and one other vehicle, and to create more Theatre car parking spaces in the vicinity of the Stage Door.	Provided in Lewis Street under the new extension. This will be achieved through the part closure of Lewis Street and a range of Civil works to re-configure the street and define and protect the extension and the parking spaces	As for Stage 1	As for Stage 1.
Heritage Impact	Minimal impact see 4(a)	No impact.	No impact.
(f) Large Dressing Room: Investigate options for providing at least one (1) large dressing room capable of accommodating 40 people.	Not included in Stage 1, although some combining of dressing rooms is included to provide larger options.(see g below)	Not included in Stage 2	Located at Sub-basement level – accessible by lift or stairs.
Heritage Impact	No impact.	No impact.	No impact.
(g) Alternative Uses For Dressing Rooms: Investigate alternative uses for the Dressing Rooms (e.g. Conference break-out rooms) and means of access.	Included in Stage 1, plus minor operable wall between dressing room 11& 12	Not included in Stage 2.	Large Dressing Room has operable wall with entry possible from Unicorn Lane.

ITEMS	STAGE 1	STAGE 2	STAGE 3
Heritage Impact	No impact.	No impact.	No impact.
(h) Dressing Room Mirrors: Investigate options for replacing the Dressing Room Mirror lights with enclosed Units that provide appropriate lighting for the application of stage make-up.	RTMi Design Note T-21 for details on replacement. Included in the proposal.	As for Stage 1.	As for Stage 1.
Heritage Impact	No impact.	No impact.	No impact.
5 Stage			
(a) Stage Trap: Investigate a means of making the Stage Trap operational	RTMi Design Note T-22. Included in proposal	As for Stage 1.	As for Stage 1.
Heritage Impact	Minimal Impact	No impact.	No impact.
(b) Stage Floor: Investigate the replacement (and repair) of the Stage floor, including options for removing the rake.	RTMi Design Note T-23 Not recommended for heritage + sightline considerations.	As for Stage 1.	As for Stage 1.
Heritage Impact	Removal of rake not recommended on heritage grounds.	No impact.	No impact.
(c) Thrust Stage: Investigate options for creating a thrust stage over the orchestra pit, which can be raised or lowered for audience seating depending on the requirements of the performance.	Not included in Stage 1. Due to retention of the Organ This inclusion is desirable for benchmarking, but has a major impact on the organ location.	RTMi Design Note T-24. Include in this stage including a new orchestra pit. Assuming the Organ is relocated.	As for Stage 2.

ITEMS	STAGE 1	STAGE 2	STAGE 3
Heritage Impact	No impact.	The impact is in a low significance area, which has previously been altered. It will have no impact on the proscenium or general stage.	No impact.
(d) Organ Location: Investigate options by which the Ballarat Theatre Organ Society's organ can be raised from the Organ chamber to Stage level.	Not included in Stage 1. (The option of alternative locations in the auditorium were considered but are not feasible) Current arrangement less than ideal. Recommended for relocation to a more appropriate venue, which would free up valuable space to support the benchmarking.	RTMi Design Note T-25 Includes the relocation of the organ to an alternative and appropriate venue, together with the provision of a new orchestra pit.	As for Stage 2
Heritage Impact	No impact.	This is an area of low significance and has been altered several times.	No impact.
(e) Increase Wing Space: Investigate options for achieving more wing space on either side of the Stage	RTMi Design Note T-26. Power flying will free up space on the OP wing and the opening up of the wall on the Prompt will provide the maximum wing space possible. Expansion included to the South.	As for Stage 1	As for Stages 1
Heritage Impact	Opening into the southern space adjoining the stage involve forming a large opening in the original wall. Such an opening is feasible and reversible.	No impact.	No impact.
6 Miscellaneous Works			

ITEMS	STAGE 1	STAGE 2	STAGE 3
(a) Ballarat Mechanics' Institute: Investigate the feasibility of continuing the dialogue with the Ballarat Mechanics' Institute in relation to the re-development of their building, and where possible comment or recommend on the potential for physical linkages which might a) add to the storage space available at Her Majesty's or b) facilitate the use of either Her Majesty's or the Mechanics' Institute facilities (e.g. Sharing of Dressing rooms).	This has been addressed in the proposals with operational links at the rear of the stage including goods and passenger lift. This aspect to be explored further in the business planning regarding synergies and cost sharing	As for Stage 1	As for Stages 1
Heritage Impact	Part of the rear extension will extend to the rear of BMI and as such will impact on that façade. As site of an original 'lean to' such an approach is appropriate and it is intended to utilise the same openings. See 4(a)	No impact.	No impact.
(b) Re-site Administration & Box Office: Investigate options to re-site the Administration and Box Office areas so that efficiencies may be gained from the physical grouping of having these staff located together (e.g. telephones, serving Box Office customers, reception point, easier access to administration staff, improved work facilities etc.). Plans need to include methods of operating the Theatre's IT, Telephone and Box Office networks, along with links to backstage.	Not included in Stage 1. Plant Room and ductwork provision and minor modifications only.	Not included in Stage 2. Sub basement remodelled in current location after organ removed for improved offices.	Located together in new Entry Foyer. Connecting door to Stalls though not direct to Backstage. Sub basement remodelled to provide large flexible dressing room.
Heritage Impact	No impact other than careful making good to finishes disturbed by the changes.	No impact.	No impact other than careful making good to finishes disturbed by the changes.

ITEMS	STAGE 1	STAGE 2	STAGE 3
(c) Fire Engineering & Ambulant disabilities Evacuation Complete a Fire engineering report on the building and design, cost and prioritise a safe means of evacuating people with ambulant disabilities.	Full fire engineering report not included. Broad issues addressed. Fire Engineering package to be developed + negotiated with the authorities in the next stage. The use of the lift in the event of a fire is acceptable. Other strategies including assisted evacuation and safe rooms will need to be explored in the next stage. Included in the budgets.	As for Stage 1	As for Stage 1.
Heritage Impact	The provision of the lift, door upgrades and the installation of fire proof lobbies will have a manageable impact.	No impact.	No impact.
(d) Lighting Design, cost and prioritise lighting improvements at the Lydiard Street frontage and Emergency Evacuation lighting systems throughout the building.	Refer to services consultants report (Simpson Kotzman Appendix D). Included in the budgets. Detailed Engineering package to be developed and negotiated with the authorities in the next stage	As for Stage 1	As for Stage 1.
Heritage Impact	Modifications and detailing of the lighting to be sympathetic to the context.	Modifications and detailing of the lighting to by sympathetic to the context.	No impact.
(e) Storage Areas: Investigate a means to construct storage areas at Her Majesty's Theatre and advise on the best use of these storage areas e.g. Technical equipment, archives etc. At least one area needs to have climate control for historical material, and another needs to have humidity control for the storage of the Theatre's pianos.	Not included in Stage 1	Additional storage areas provided.	Additional storage areas provided.
Heritage Impact	No impact.	No impact.	No impact.

ITEMS	STAGE 1	STAGE 2	STAGE 3
(f) New Performance Spaces: Investigate options for the creation of performance spaces in other buildings linked to Her Majesty's Theatre.	Not included in Stage 1. (The link to the BMI stage area provides back of house options only)	Not included in Stage 2	Rehearsal space would double as a performance space (05639/SK-31).
Heritage Impact	No impact.	No impact.	Minimal impact other than the new opening in the existing wall to link it to the theatre.
(g) Facility Rating: Report on the capacity of Her Majesty's Theatre to attain the "AAH" 'Oh you Beautiful Stage' facility rating with these changes, and any other upgrades that would be needed to achieve Theatre facility benchmarks.	Would not be met fully in Stage 1	Would meet benchmarking Refer RTMi Report New benchmark not in place yet but assessment recommendation made.	As for Stage 1 though more facilities accommodated.
Heritage Impact	Impact covered elsewhere.	Impact covered elsewhere.	No impact.

7.5 Compliance & Sustainment

The proposals for Stage 1, 2 & 3 will all result in a fully compliant building with refurbishment to the fabric including repairs and maintenance i.e. satisfying all the issues in section 4.0 of this report.

If the redevelopment proposal were not to proceed at all or the decision deferred then there would need to be a commitment to the immediate compliance and sustainment issues highlighted in this report and Ballarat City Council's asset reports. This would require an expenditure of between **$0.7 and $0.8 m**. In addition Ballarat City Council will need to review the current and future risks through OH&S and conformance initiatives. The additional cost of this exercise will be in the order of **$5 to 6m** + GST.

Both of these scope of works are fully covered in the Stage 1 proposals and it should be noted that it will be more cost effective in Stage 1 than in a stand alone project as above. The savings would be in the order of **10-15 %** excluding any disruption costs for the operation of the theatre.

The details are as follows:

7.5.1 Immediate Maintenance (excluding annual or programmed maintenance)

Source	Item	Cost	Comment
Dixson Report	General maintenance	$68,000	
CMP	External Fabric Maintenance	$200,000	Could be staged over 2 years
Total		$268,000	

7.5.2 Immediate Compliance

Source	Item	Cost	Comment
Dixson Group	Essential Compliance	$55,000	Emergency, exit lights, sprinkler, fire doors
Fire Authority	Essential Compliance	$15,000	Balance of the work not picked up by Dixon group
Fire Authority	Essential Compliance	$50,000	Fire Egress for Disabled Patrons. Fire proof room at Stalls level and management protocol in place for assisted egress. This would need to be negotiated with the FA/ Building Surveyor
Simpson Kotzman	Ventilation	$NIL	Not required at this stage.
Simpson Kotzman	Toilet Exhaust upgrade to Dress Circle	$10,000	Non compliant upgrade exhaust fans
Simpson Kotzman	Basement stores exhaust upgrade	$6,000	Provision of ventilation
Simpson Kotzman	Box office Condenser relocate (Rm 210)	$6000	Provision of new location of condenser
Simpson Kotzman	Fire Curtain	$ 15,000	Install automatic fire curtain and drenching. Not a stat requirement, but high priority from an asset/life safety perspective.
Simpson Kotzman	Lighting Upgrade	$ 50,000	Bring lighting levels up to code
OH&S	Entry Modification	$25,000	Removing the tripping hazard and providing auto doors
Sub total		$500,000	
Contingency	10%	$50,000	
Fees & costs	15%	$75,000	
FF$E		Excl.	
Preliminaries and on-costs	20 %	$100,000	
TOTAL		$725,000	+ GST

The total immediate commitment in addition to the annual maintenance and the future requirements, and without any operational benefits improvement will be in the order of $700-750,000 + GST.

To this should be added the future compliance risks that have not been addressed in the above; as the pressure on public places increases from the OH&S, Fire/Life safety and DDA perspective.

7.5.3 Future Compliance Risks

Source	Item	Cost	Comment
RTMi	OH&S + future statutory requirement	$ 2,600,000	Power flying if an OH&S requirement cannot be incorporated in the current configuration and can only be achieved if the fly tower is extended with all the attendant works. Thus the cost is significant as the plant and equipment costs are $1.5m. alone
Dixon Group	BCA current	$ 100,000	Foyer and WC Disability upgrade. Problematic solution without major changes, will likely involve compromises
Dixon Group	BCA Future	$ 10,000	Misc
SPA/RTMi	BCA future	$ 200,000	Disability access to upper levels, New lift, including seating modifications
SPA/RTMi	OHS	$1,000,000	The current goods lift meets the code and is maintained. Its size limits the amount that can be carried, leading to a high degree of manual handling via the rear stairs, and consequent risks. So no interim measures are proposed (A new lift is $ 0.85m + associated Building costs say $1.0m)
SPA/RTMi	OHS/ BCA Future	$ 150,000	New lift and disabled WC to back stage. Note impact on existing green room to be reviewed
Sub Total		$4,060,000	
Contingency	10%	$406,000	
Fees & costs	15%	$609,000	
FF&E		Excl.	
Preliminaries and on-costs	20 %	$815,000	
TOTAL		$5,890,000	+ GST

7.5.4 Order of Cost for Sustainment of Compliance

On the above basis a degree of future proofing is included, then the Sustainment Scenario would be in the order of $6.5 – 6.75m depending on the items selected . Clearly there are various combinations from the "future Items" which will impact on adjoining areas and operation of the facility. The final costs will be subject to a more detailed review but do give an order of costs. It is of note that this scenario does not include many of the items considered a priority by the Project Control Group.

None of the costs presented include

- cost in use assessments.
- GST
- Relocation expenses
- Relocation of organ
- Loss of income
- Finance and legal costs etc

8.0 ORDER OF COSTS & PROGRAM

8.1 Order of Cost Basis

Rider Hunt has provided cost advice on the project including incorporating advice from Architectural, Structural Services & Theatre consultants. The costs are indicative and based on the following.

(a) Preparation

- Site visit and walk through the existing building
- Measurement of approximate quantities using SPA documents for the various stages
- Measurement of elemental quantities where details are insufficient e.g. façade to 21 Lydiard Street
- Input of cost items from reports prepared by RTMi and Simpson Kotzman

(b) Costing

- Costs have been applied to measured items based on current market rates for labour, materials & plant
- Rates have been adjusted to take into account working in an existing heritage building
- Rates allow for protection of public and staff
- Major work items, in particular to the rear of the building, include access scaffolding, hoisting and temporary protection works
- Services and theatre consultant reporting costs have been reviewed and imputed

8.1.1 Inclusions

- Design Development Contingency – (5%) to cover work items that are unforeseen at concept stage
- Builders Preliminaries – (15%) to cover insurance costs, supervision, site amenities, temporary services, small plant and tools etc.
- Staging – (2.2%) to stage the works to minimise theatre closures, including erection and dismantling of hoardings, coordination to ensure services are maintained etc.
- Builders overheads & margin (5%) – Management and Profit
- Furniture, Fittings and Equipment (FF&E) – (0.7%) for tables, chairs, fridges, office furniture etc. (assumes some reuse)
- Repair and Maintenance costs – as per the schedule
- Consultants fees – (12%) based on industry practice
- Headworks fees and charges – (0.3%) for fees payable to water, power authorities where an upgrade occurs
- Escalation to completion 2008 – (3%) an allowance for increased costs during the construction phase
- Project contingency – (4.2%) to allow for variations during the Construction Phase

8.1.2 Exclusions

- Specialist lighting and stage lights
- Relocation of the organ – all costs (approx 0.8-$1.0m)
- GST
- Land costs and purchase of adjoining property for Stage 3 (approx $2.0-2.4m)
- Cost adjustment for rental income for office space
- Lost income and retention of staff costs during disruptions or theatre closure
- License / legal costs, costs associated with funding applications
- Finance costs

8.1.3 Order of Costs

The final cost will be subject to a more detailed assessment in the next stage but the following are indicative of the order of costs involved.

It is of note that the costs do not include escalation beyond 2008 and assume a continuous project for Stage 1. Stages 2 & 3 costs would be subject of review once their timing is known and would need to make allowances beyond the figures below, for the relocation of the organ and the purchase of the land for Stage 2 and 3 respectively.

The overall project costs are summarised here as follows:

Stage 1	**$**	**12.25M**	
Stage 2	**$**	**0.40M**	
Stage 3	**$**	**4.96M**	
TOTAL	**$**	**17.61M**	**+ GST**

Refer to the detailed sheet is included in Appendix F of this report for more information

8.2 Staging & Sequencing

Stage 1
As stated earlier, the project assumes that Stage 1 is completed over a 12 – 18 month period and is escalated to 2008. Allowance is included for sequencing the works, however due to the nature of the works the most cost effective approach is to close the theatre for the duration of the works due to the extent of disruption.

Stage 2
The timing for Stage 2 would depend on funding and an alternative location for the organ being found. If it could be integrated into Stage 1 then there would be overall cost savings.

Clearly if Stage 2 were to proceed later the impact would be on the stage area and offices. The degree of disruption would be moderate. It would be possible to decommission the organ progressively whilst the theatre is in use. When the orchestra pit works are undertaken they would be disruptive, but could be scheduled for the off season, assuming that much of the work could be pre-fabricated off site. The office refit could be carried out during the off-season assuming temporary office/storage space could be provided elsewhere (costs not included).

Stage 3
Stage 3 depends on the acquisition of the adjoining property and has the advantage of being able to be constructed independently of the theatre and the final links made at the end with minimal disruption. It would be possible to sequence the works within the existing foyer to be done during down time to avoid disruption. The works within the office area (sub-basement) can be carried out once the offices have relocated whilst the building is operational.

	Stage 1	**Stage 2**	**Stage 3**
Business Planning/Approvals	12 months	3 months	3 months
Pre-construction	12 months	6 months	12 months
Construction	16 – 18 months	3 – 4 months	8 – 9 months
Commissioning	1 month	1 month	1 month
	41 – 43 months	12 – 15 months	21 – 22 months
	3.5 years	***1.0 year***	***2 years***

Thus if Stage 1 were to commence in January 2007 then completion would be April 2010. Depending on commitments there could be overlap between the pre-construction activities to improve delivery[D1].

8.3 Sustainment and Compliance

As noted in section 7.5 should the redevelopment not proceed it will be necessary to commit to the following:

Immediate Needs:	$	0.7 – $0.75m	+ GST
Future Compliance Risks:	$	5.8-$6.0m	+ GST
Total Commitment	**$**	**6.5-$6.75m**	**+ GST**

This order of costs will address all of the compliance issues, but only some of the operational benchmarking issues.

Both of these scope of works are fully covered in the Stage 1 proposals and it should be noted that it will be more cost effective in Stage 1 than in a stand alone project as above. The savings would be in the order of 10-15 % excluding any disruption costs for the operation of the theatre.

9.0 MANAGEMENT STRATEGIES & RECOMMENDATIONS

9.1 Introduction

The purpose of this report is to supply Her Majesty's Theatre with a document and phased plan that can be presented to the Ballarat City Council, and then implemented via the Ballarat City Council processes and funding mechanisms once adopted. This section of the report sets out the recommendations for implementation and Resourcing of the next stage.

9.2 Priorities

There are a range of issues which need to be addressed regardless of the redevelopment proposal. All would be addressed in Stage 1. However should Stage 1 not proceed, then the priority works have been established by the Ballarat City Council and will be addressed independently.

9.3 Funding & Business Planning

In order to achieve Stage 1 of the proposals a significant investment is required ($12.25M) and such a level of investment is not currently available to the theatre or the Ballarat City Council.

There are various sources of funding available for projects such as this. It is understood that HMT in conjunction with the Ballarat City Council will prepare the business case in support of the significant funding required for this project.

9.4 Next Steps

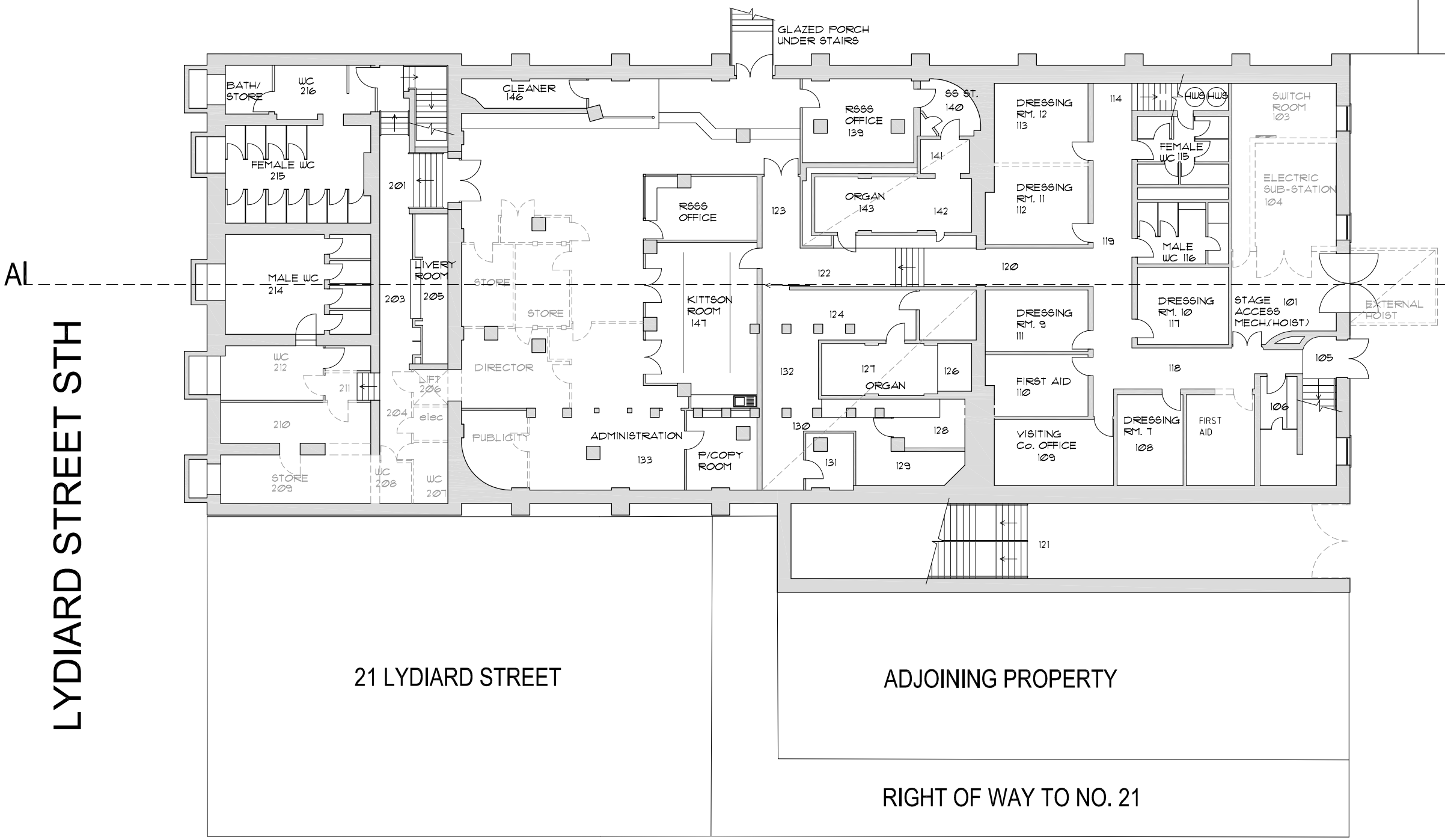
The following actions are required for this project to be implemented:

- The report be endorsed by the PCG and recommended to the Board and Ballarat City Council
- The business plan be prepared for this project
- The Ballarat City Council endorses the findings and commit to Funding measures
- The Ballarat City Council develop an M.O.U with Ballarat Mechanic's Institute
- A detailed project management plan be prepared and resourced
- A detailed feasibility study be undertaken
- An interest in the potential purchase of 21 Lydiard Street South be maintained

10.0 APPENDICES

10.1 Appendix A: Existing Drawings

MECHANICS INSTITUTE



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

DEMOLITION - STAGE 1

EXISTING WALLS

swanbury penglase

03/12/2006

05639/EX-30

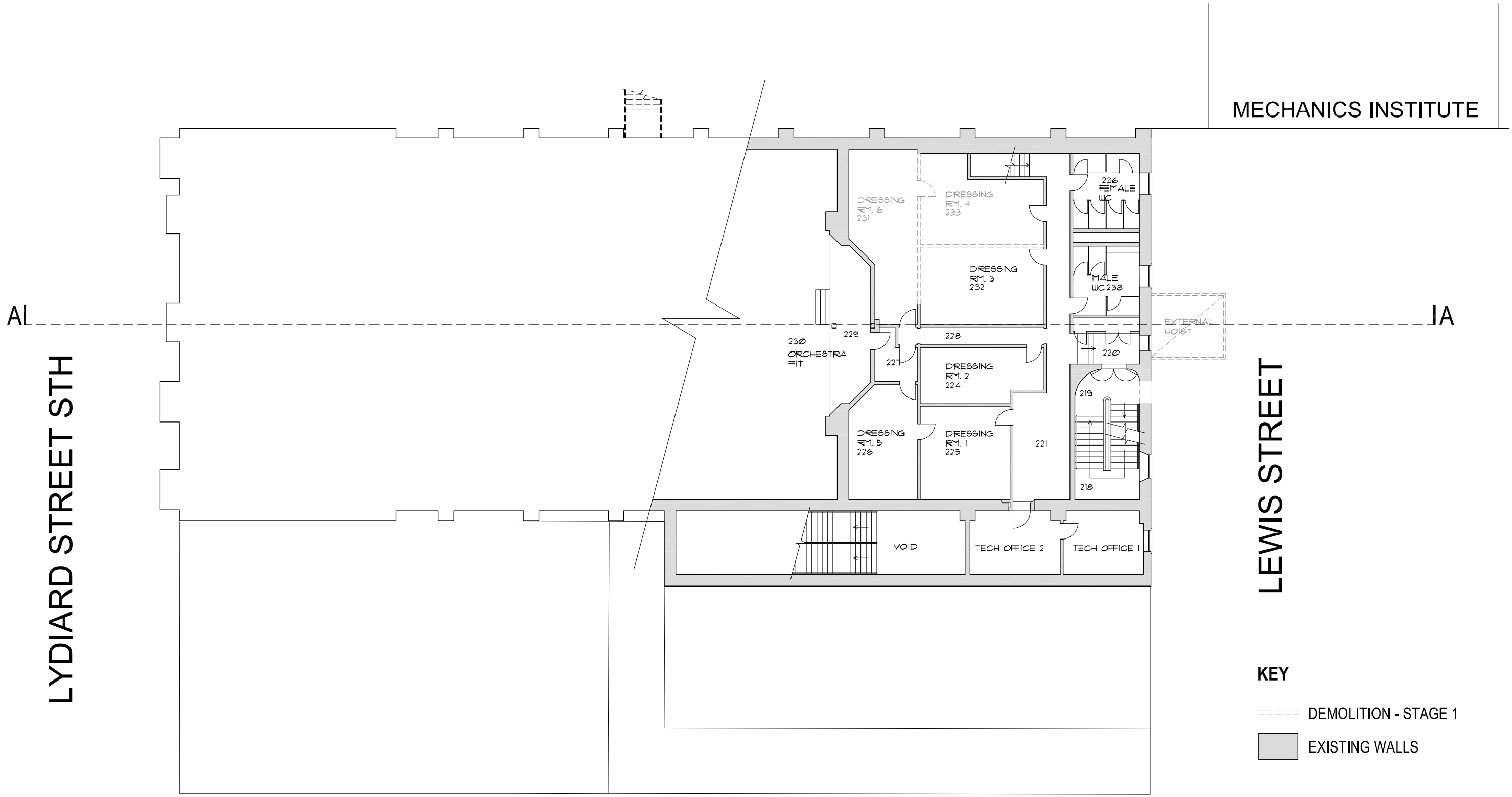
SUB-BASEMENT - LEVEL 1 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

DEMOLITION - STAGE 1

EXISTING WALLS

swanbury penglase

05639/EX-31

BASEMENT - LEVEL 2 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS

MECHANICS INSTITUTE

LYDIARD STREET STH

LEWIS STREET

EXT. FIRE STAIRS

EXT. FIRE STAIRS

OLD B16 AUDIO CONTROL ROOM

ENTRY PORTICO

301 308 309 318 WORKSHOP 320

303 302 PIANOS 321

A1 301 310 STALLS 317 PIT STAGE 319 EXTERNAL HOIST A1

SWITCH 311

306 305 312 313

315 314 327 325 GREEN ROOM 343

PROPS 326 ANTE ROOM 324

328 ROSS STORE

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

DEMOLITION - STAGE 1

EXISTING WALLS

swanbury penglase

05639/EX-32

STALLS - LEVEL 3 **EXISTING**

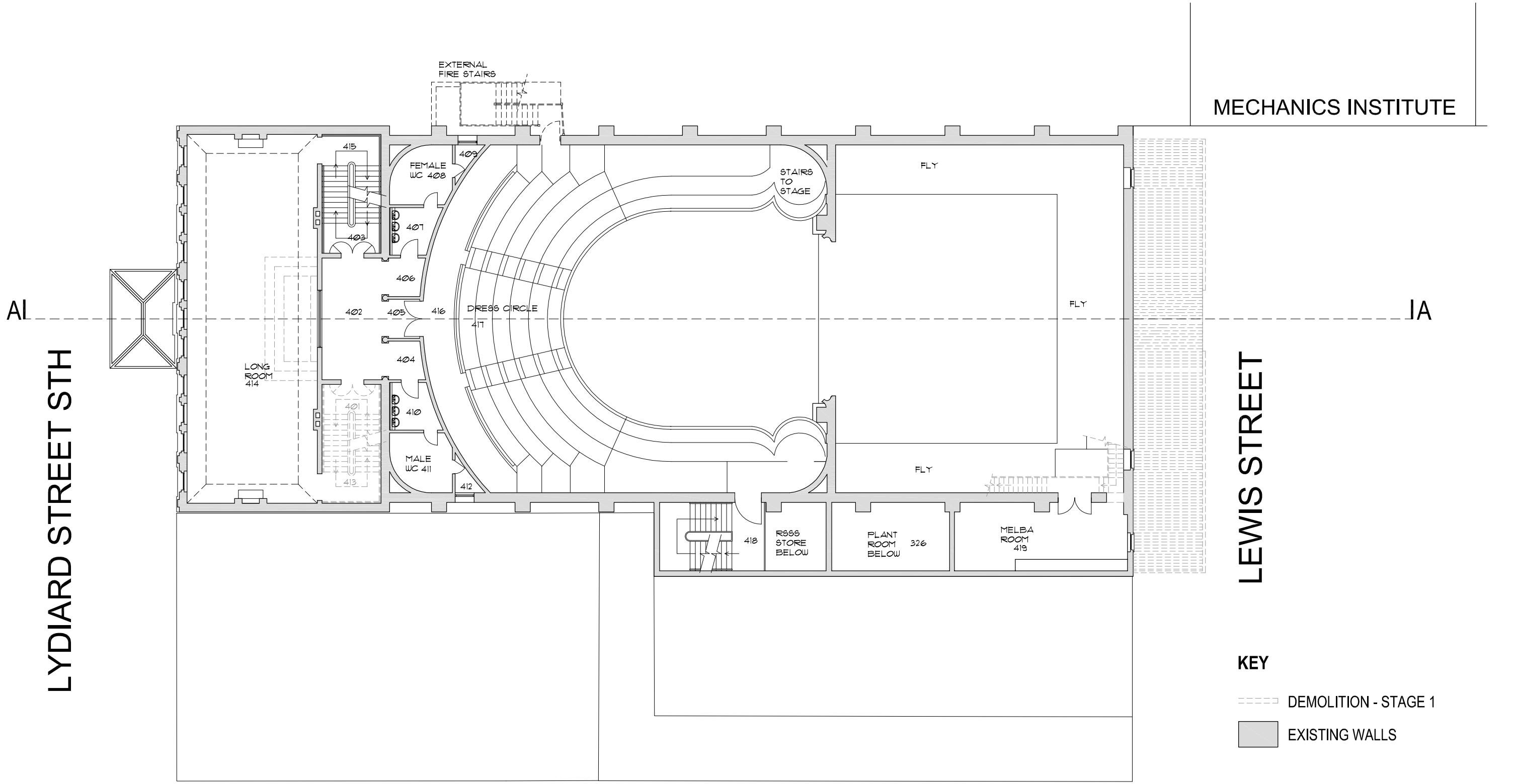
HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

DEMOLITION - STAGE 1

EXISTING WALLS

swanbury penglase

05639/EX-33

DRESS CIRCLE - LEVEL 4 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS

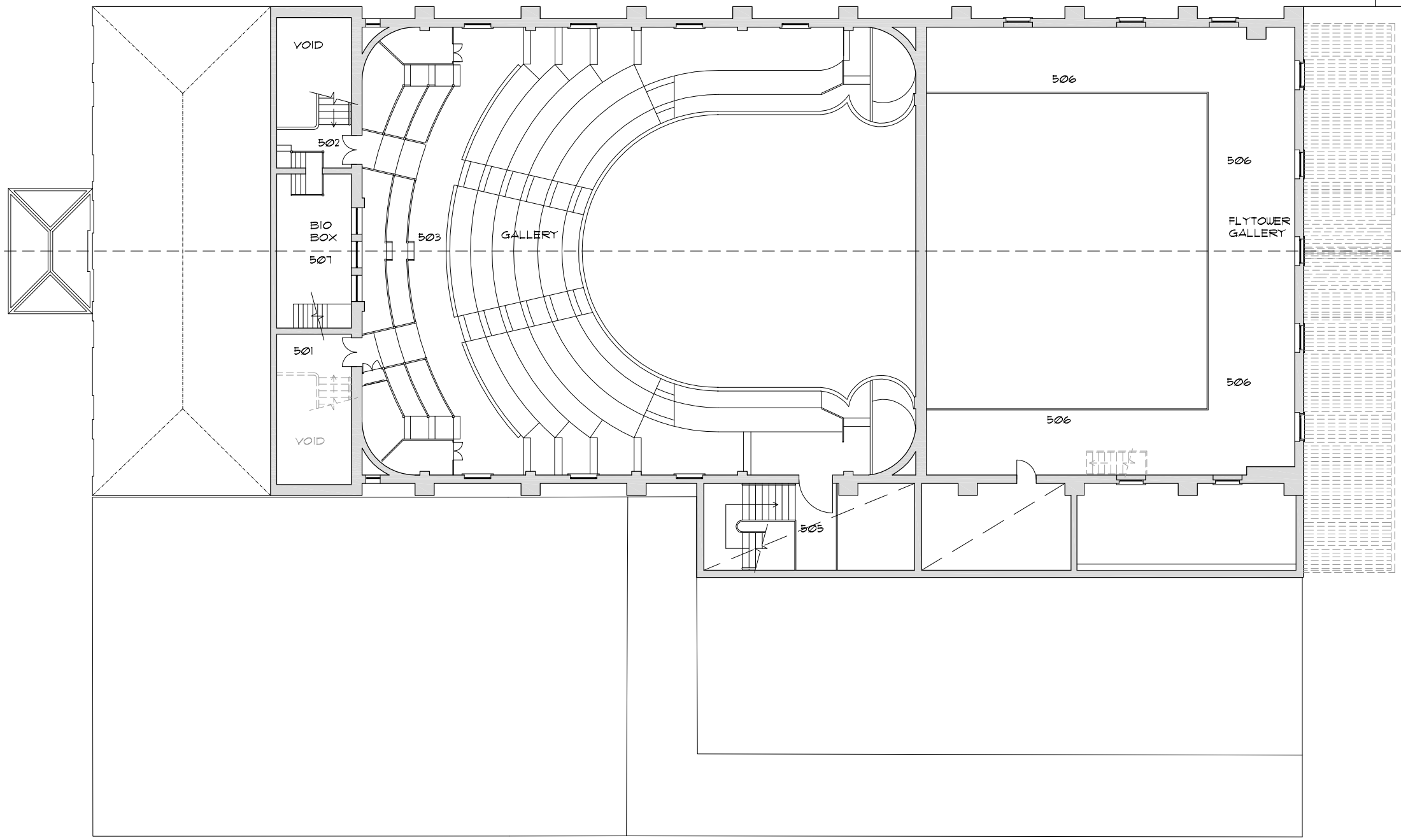
MECHANICS INSTITUTE

LYDIARD STREET STH

LEWIS STREET

A1

1A



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

DEMOLITION - STAGE 1

EXISTING WALLS

swanbury penglase

03/12/2006

05639/EX-34

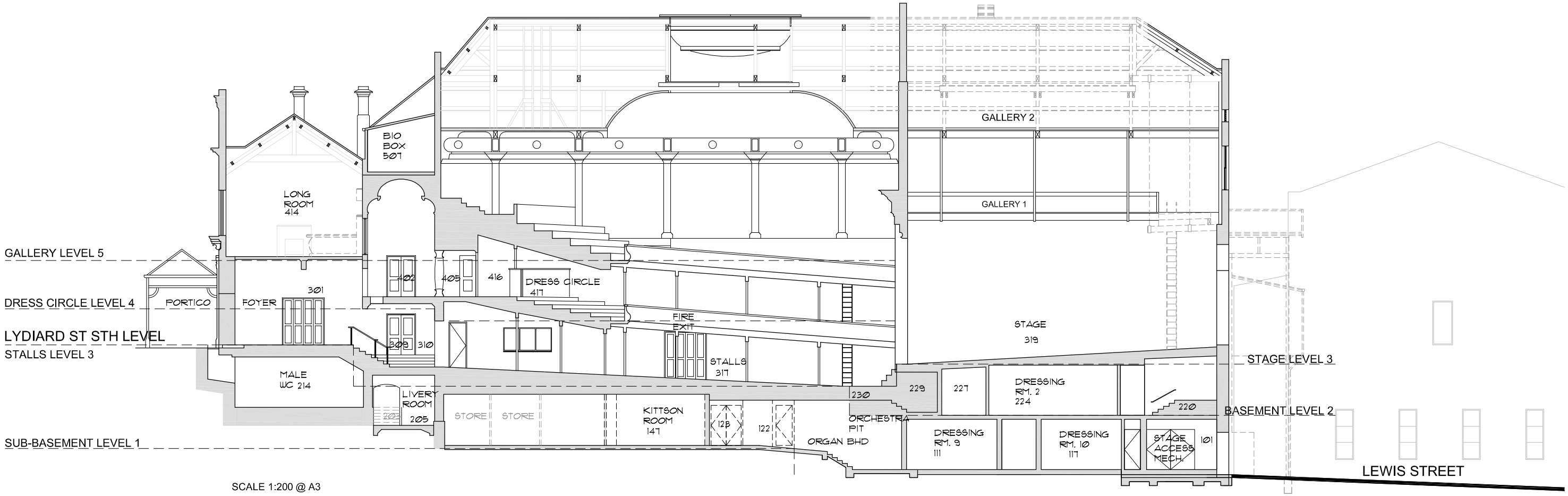
GALLERY - LEVEL 5 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

KEY

DEMOLITION - STAGE 1

EXISTING WALLS

swanbury penglase

03/12/2006

05639/EX-35

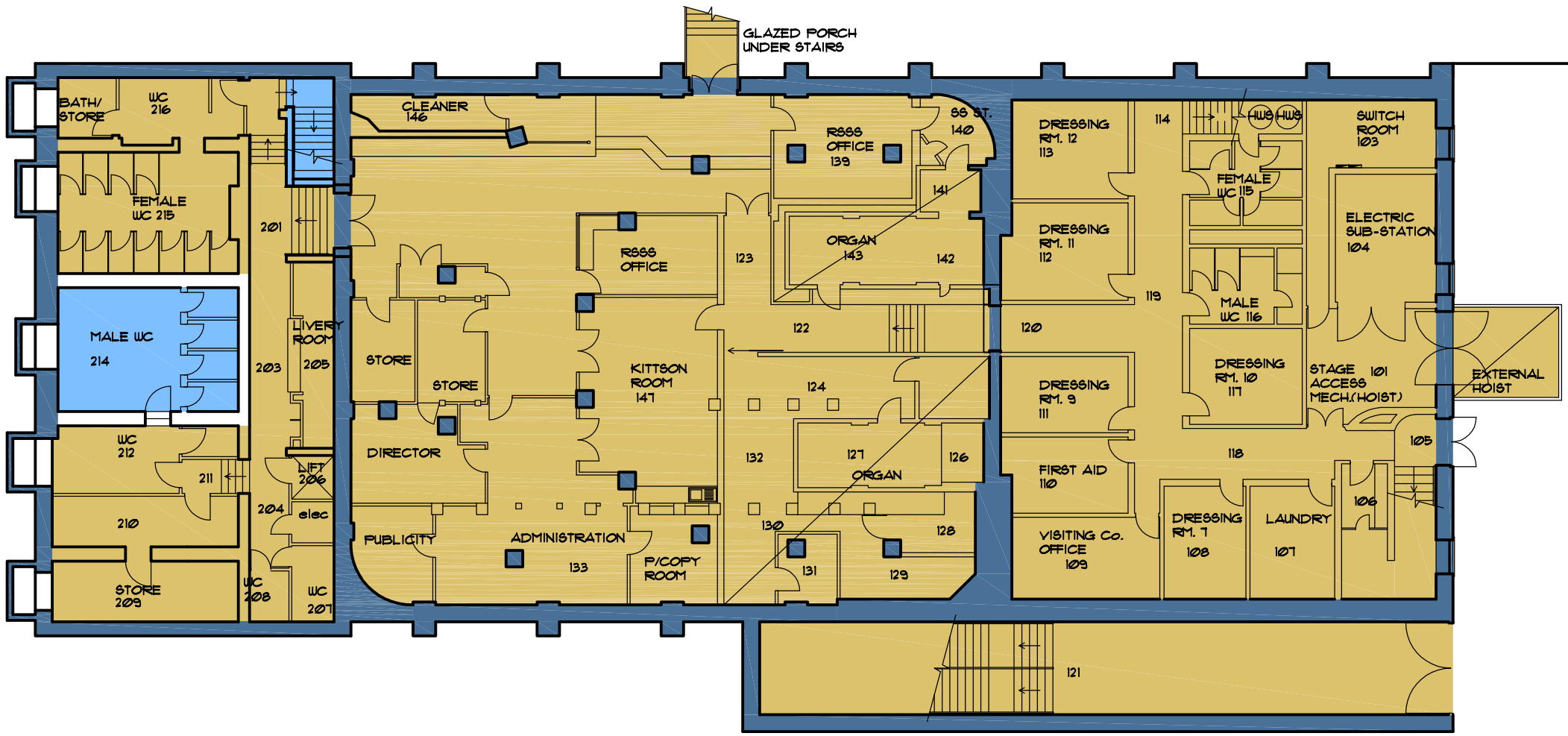
SECTION A-A **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699 E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS

10.2 Appendix B: Areas of Heritage Significance Drawings



AREAS of SIGNIFICANCE

- HIGH
- MEDIUM
- LOW

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase

08/12/2006

05639/EX-36

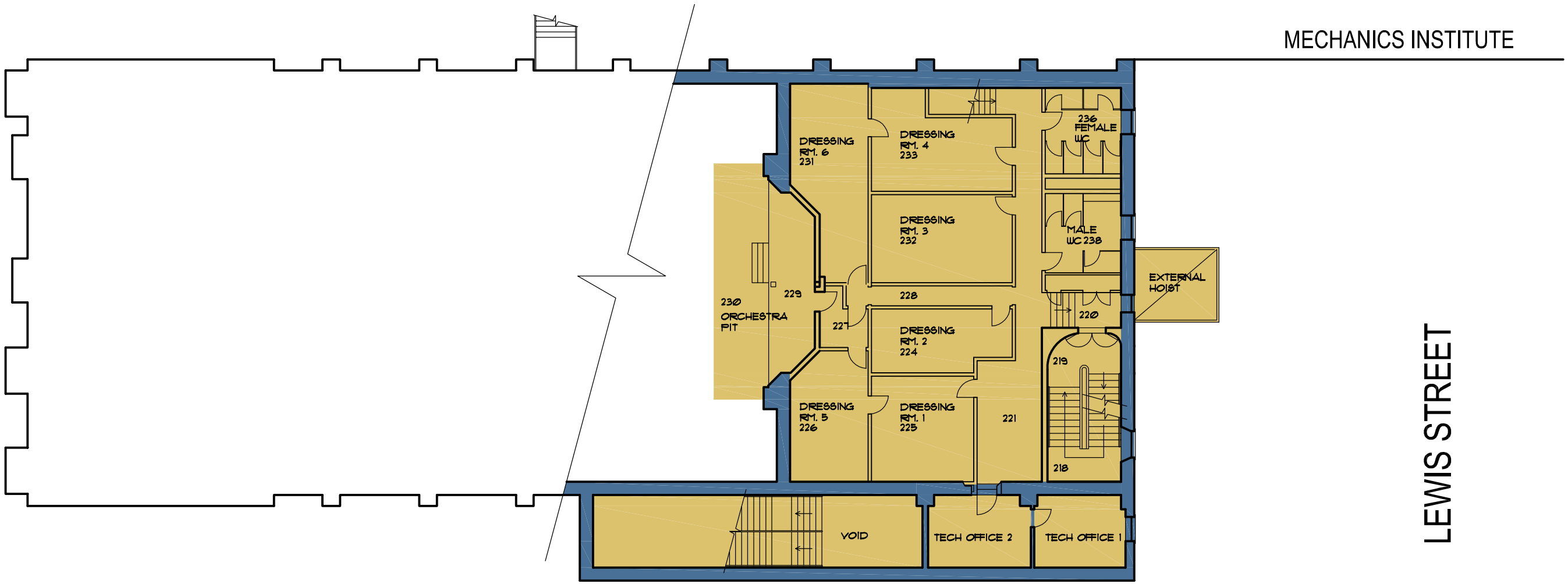
SUB-BASEMENT - LEVEL 1 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



AREAS of SIGNIFICANCE

- HIGH
- MEDIUM
- LOW

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase

08/12/2006

05639/EX-37

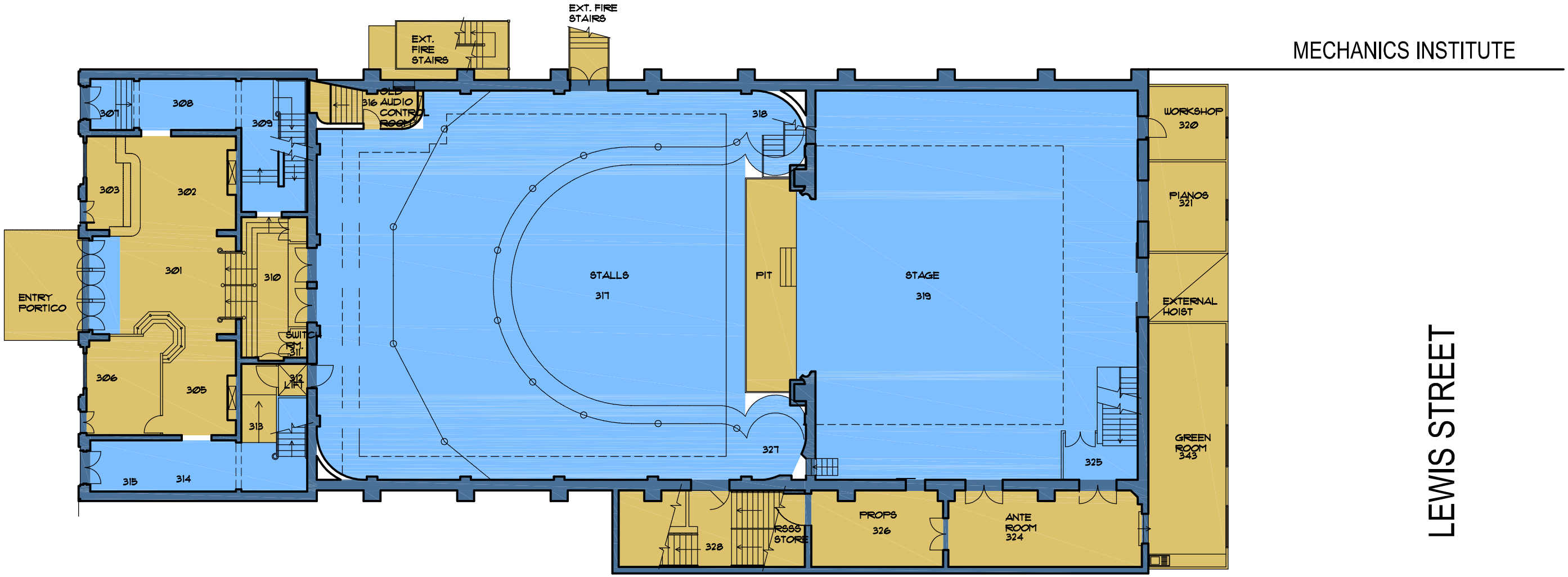
BASEMENT - LEVEL 2 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



AREAS of SIGNIFICANCE

- HIGH
- MEDIUM
- LOW

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase

08/12/2006

05639/EX-38

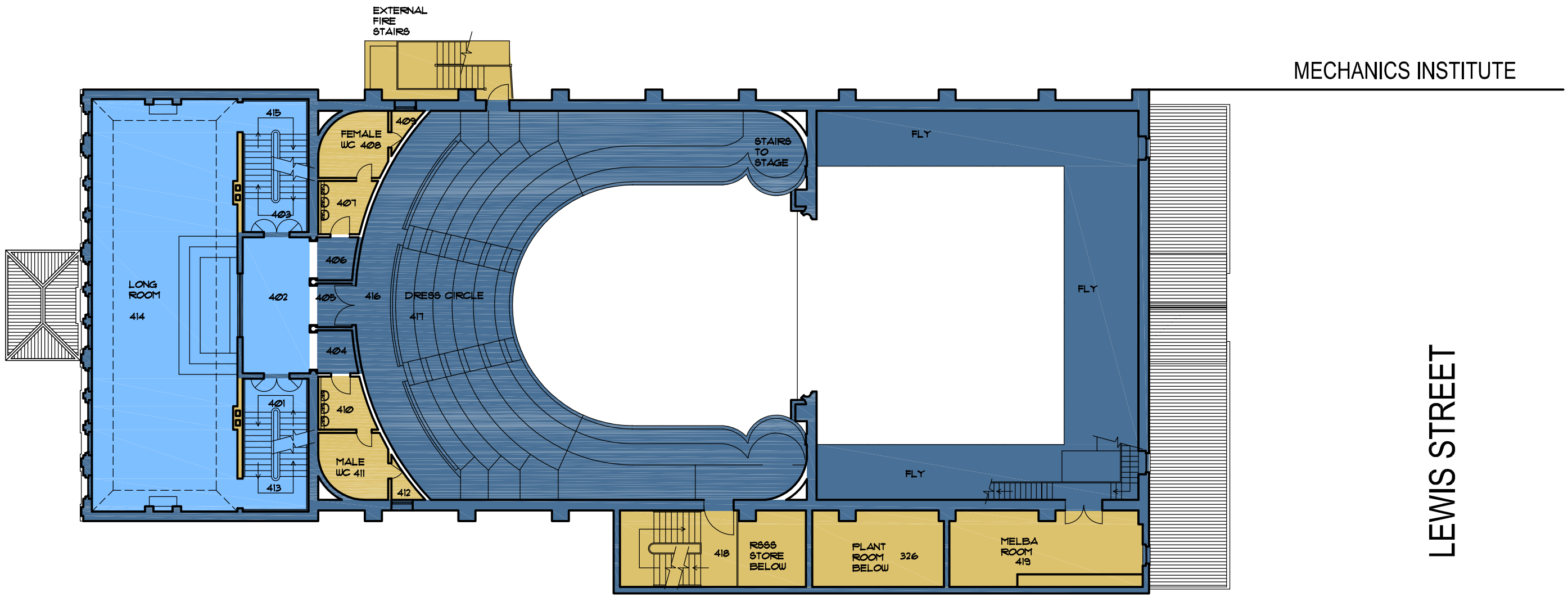
STALLS - LEVEL 3 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



AREAS of SIGNIFICANCE

- HIGH
- MEDIUM
- LOW

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase ARCHITECTS

08/12/2006

05639/EX-39

DRESS CIRCLE - LEVEL 4 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

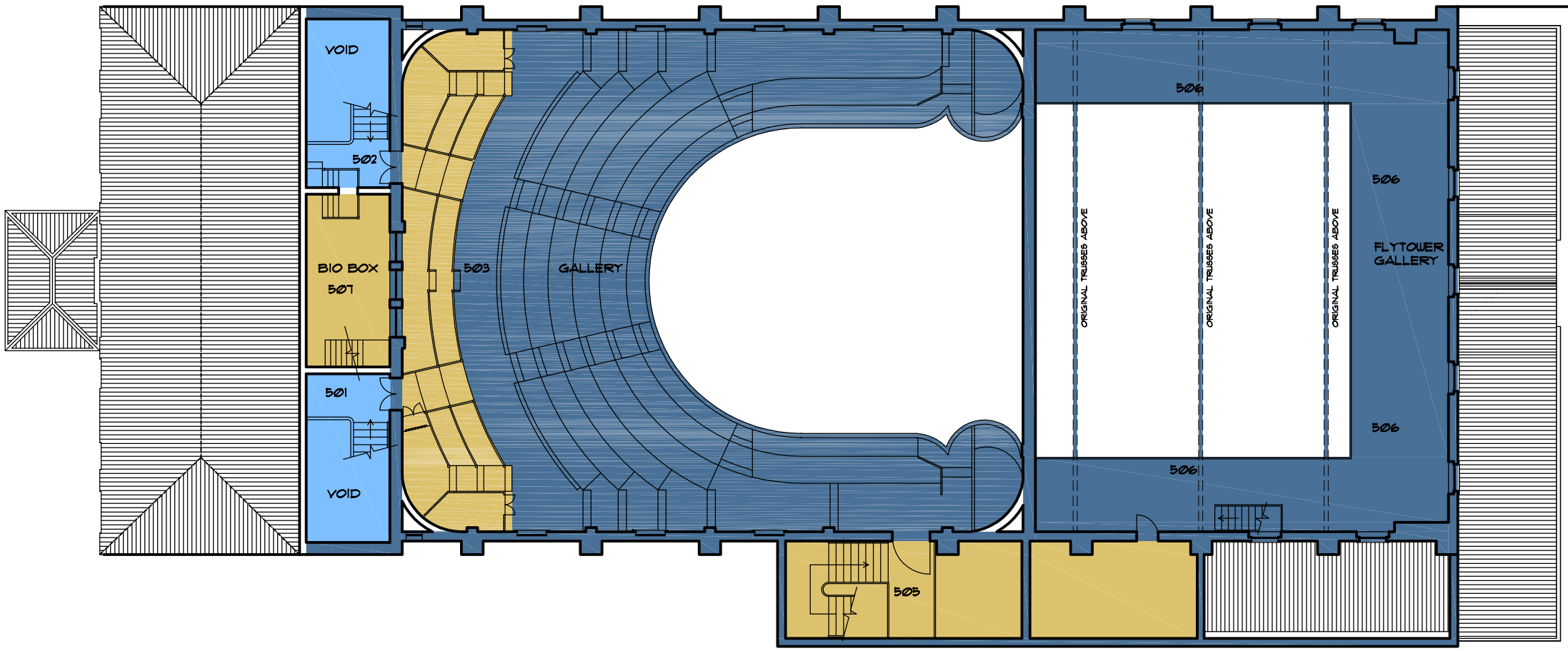
6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699 E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS

MECHANICS INSTITUTE

LYDIARD STREET STH

LEWIS STREET



AREAS of SIGNIFICANCE

- HIGH
- MEDIUM
- LOW

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase ARCHITECTS

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

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08/12/2006

05639/EX-40

GALLERY - LEVEL 5 **EXISTING**

HER MAJESTY'S THEATRE BALLARAT VIC.

SWANBURY PENGLASE ARCHITECTS

10.3 Appendix C: Stage 1, 2 & 3 Drawings

UPGRADE SUB-STATION

NEW BUILD

MECHANICS INSTITUTE

LEWIS STREET

LYDIARD STREET STH

A1

A1

SECONDARY + PERFORMER'S ENTRY

RETAIN EXISTING PORCH (INDICATIVE OUTLINE ONLY)

EXISTING STAIRS OVER (TO BE RETAINED)

ACCESS TO RISERS

BATH/ STORE

WC 216

FEMALE WC 215

MALE WC 214

201

LIVERY ROOM 205

203

CLEANER 146

PLANT + PLENUM

STORE 7.9m²

STORE 7.9m²

NEW INFILL WALL

NEW WALL OPENING

MALE WASHBASINS

NEW DIS.WC

NEW DIS.WC

NEW PASS. LIFT

DIRECTOR

ADMINISTRATION 133

P/COPY ROOM

RSSS OFFICE 139

SS ST. 140

RSSS OFFICE

123

ORGAN 143

141

142

122

KITTSON ROOM 147

124

132

127

126

ORGAN

130

128

131

129

DRESSING RM. 12 113

OPERABLE WALL

DRESSING RM. 11 112

DRESSING RM. 9 111

LAUNDRY 110

VISITING Co. OFFICE 109

DRESSING RM. 7 108

FIRST AID 107

106

114 UP

HWS HWS

FEMALE WC 115

MALE WC 116

118

NEW SUB-STATION + SWITCHROOM

105 UP

BACKSTAGE ENTRY

STAGE DOOR

NEW PASS. LIFT

LINE OF FENCE

SECURE COMPOUND

KERB LINE

PROPOSED GOODS LIFT

LINE OF EXISTING EXTENSION DEMOLISHED

NEW EXTENSION OVER

BOLLARDS

RAMP/ REGRADE TO ALLOW AT GRADE ACCESS

PARKING SPACE

PARKING SPACE

PARKING SPACE

SUPPORT COLUMNS - LAYOUT INDICATIVE ONLY

NEW DOORS

PEDESTRIAN EGRESS

NEW EXTENSION OVER

CROSSOVER

KERB LINE

FILL IN OPENING

NEW WALL OPENINGS

SERVICE RISER

NEW FLOOR

ACCESS TO NEW SERVICE RISER

MAJOR REWORK

21 LYDIARD STREET

ADJOINING PROPERTY

RIGHT OF WAY TO NO. 21

KEY

STAGE 1

EXISTING WALLS

NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase architects of human space

05639/SK-45A

SUB-BASEMENT LEVEL 1 **STAGE 1**

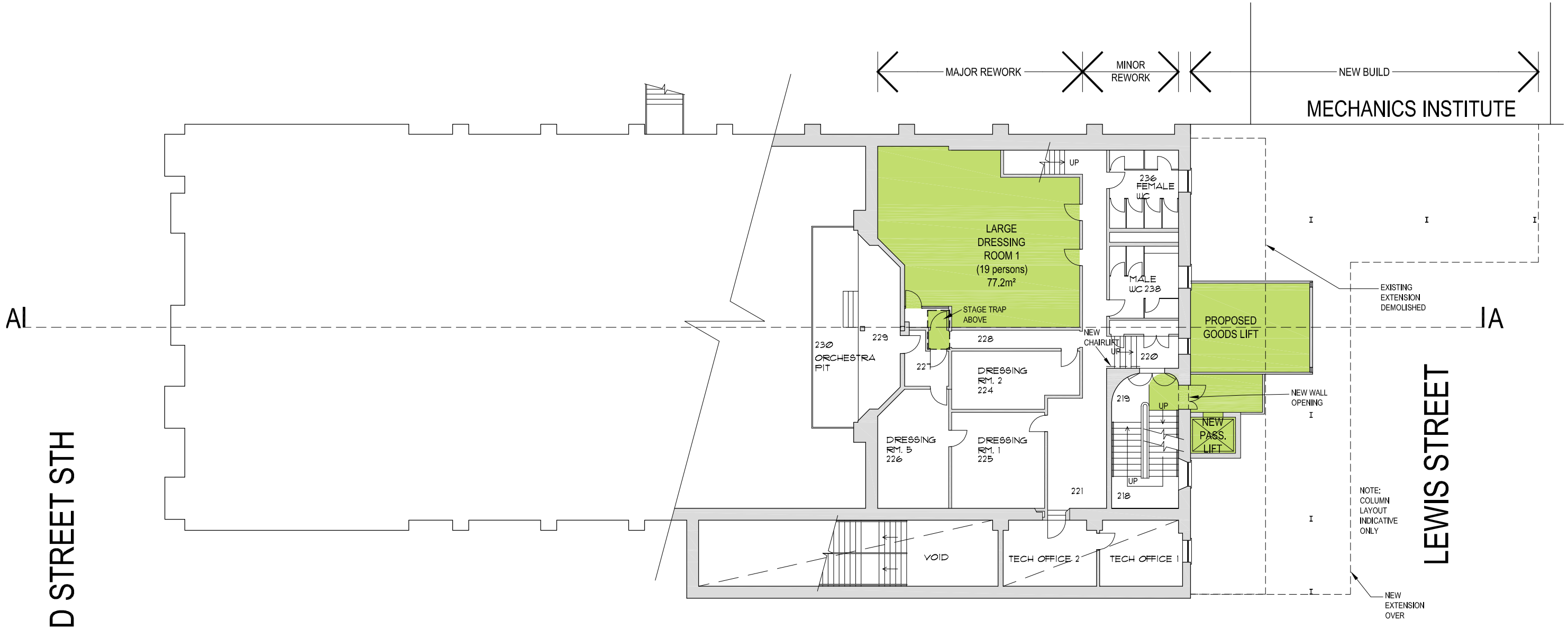
HER MAJESTY'S THEATRE BALLARAT VIC.

3/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



KEY

- STAGE 1
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase architects of human spaces

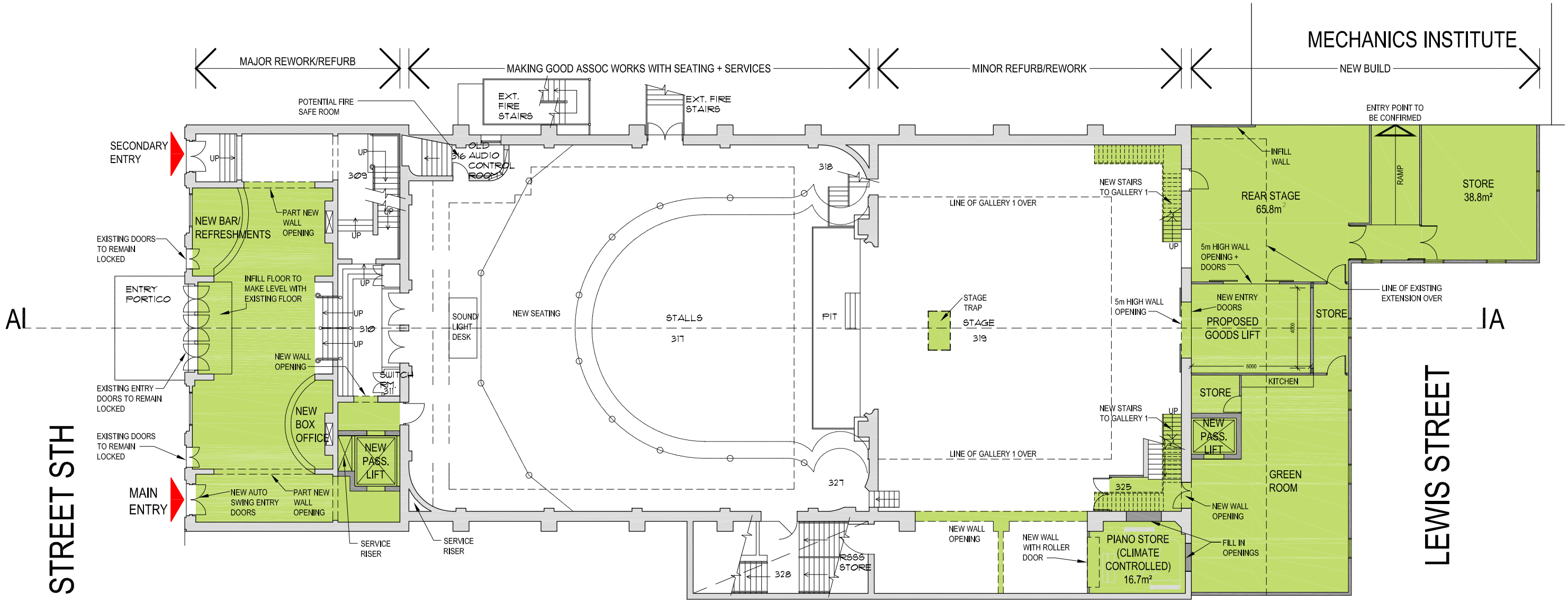
03/12/2006

05639/SK-46A

BASEMENT LEVEL 2 **STAGE 1**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699 E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

- STAGE 1
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

05639/SK-47A

STALLS LEVEL 3

STAGE 1

HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

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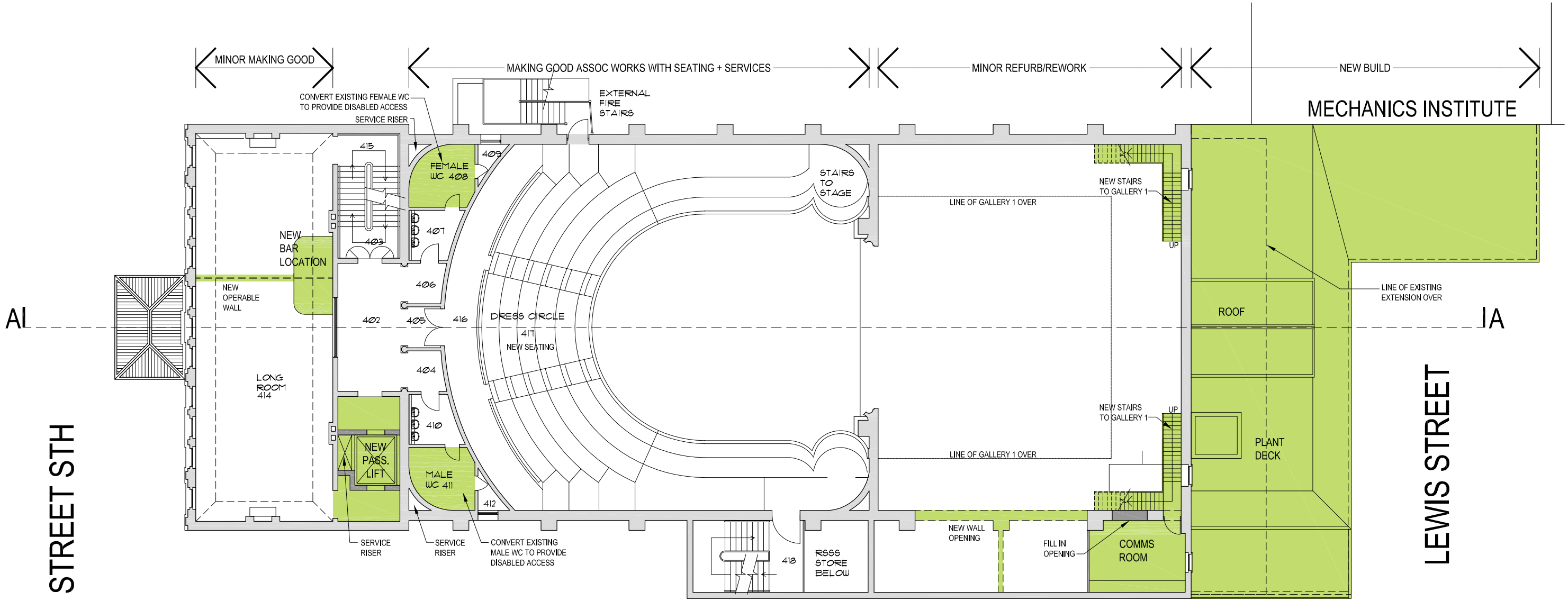
SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

- STAGE 1
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

05639/SK-48A

DRESS CIRCLE LEVEL 4 **STAGE 1**

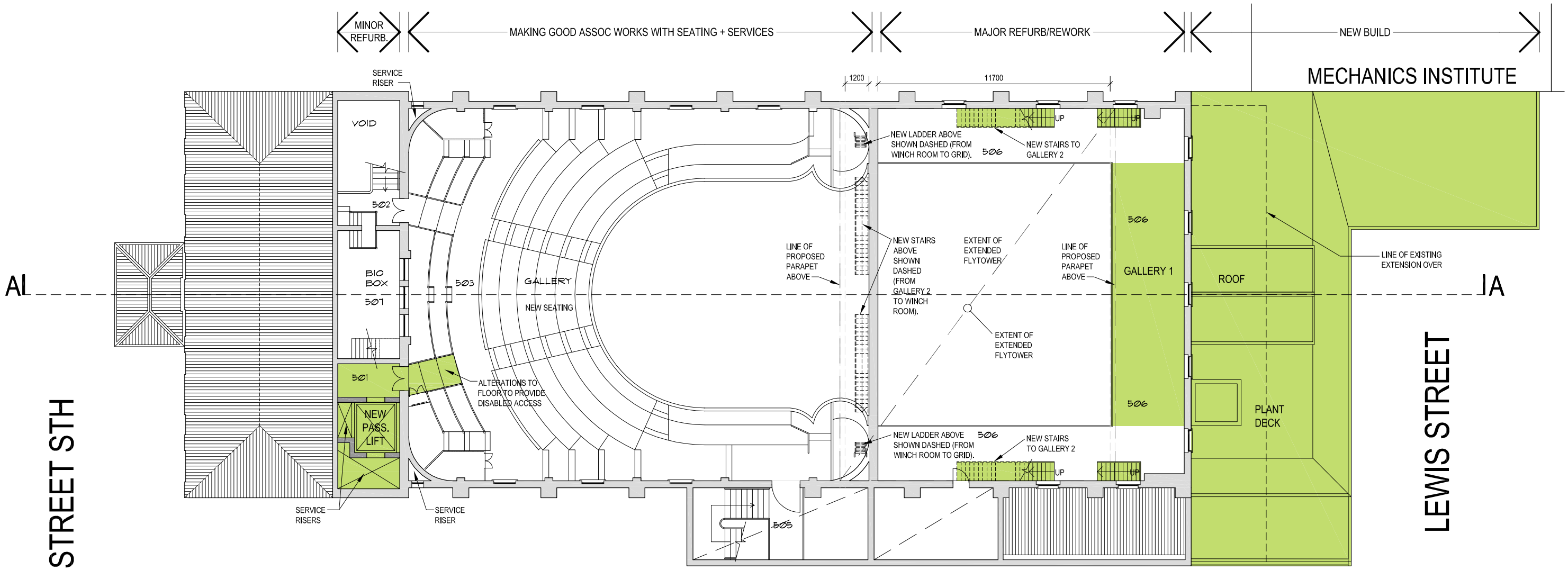
HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

- STAGE 1
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

03/12/2006

05639/SK-49A

GALLERY LEVEL 5

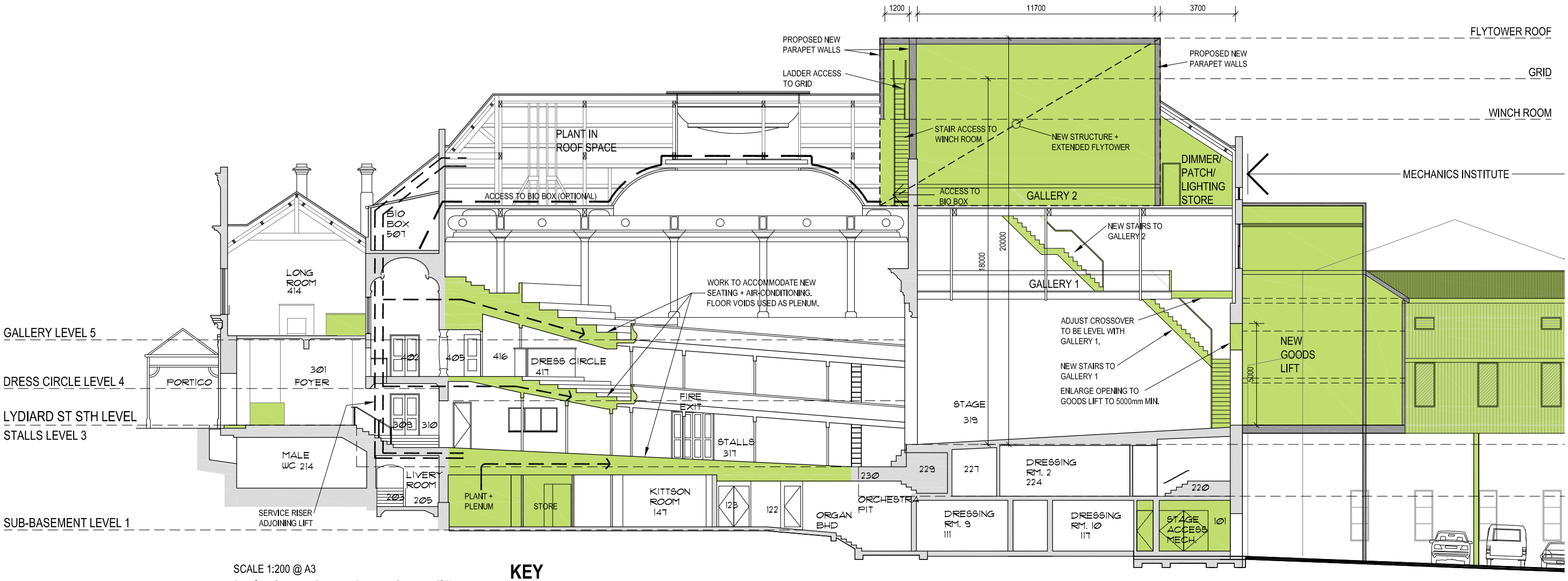
STAGE 1

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

KEY

- STAGE 1
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

03/12/2006

05639/SK-50A

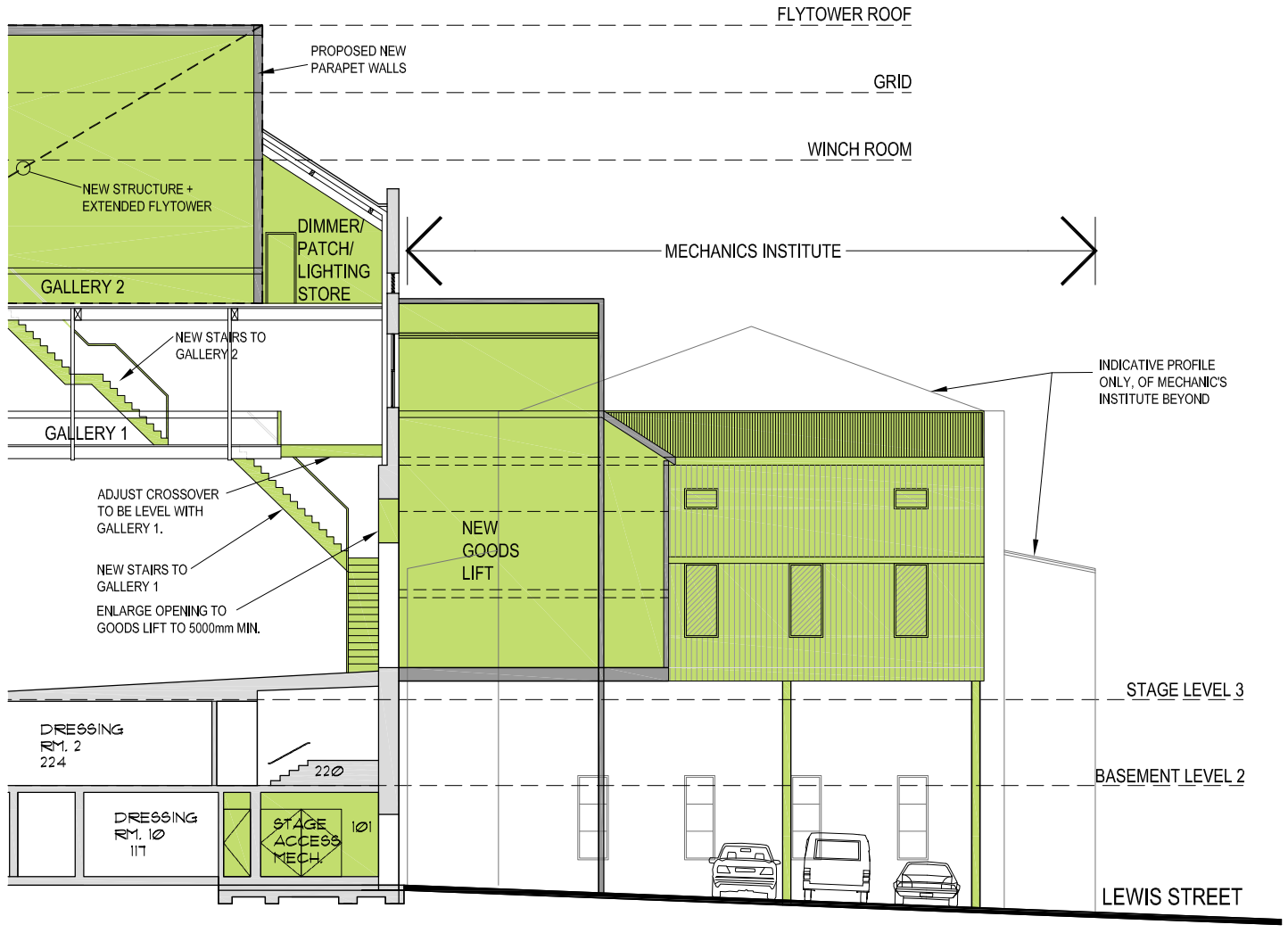
SECTION A-A **STAGE 1**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



PART SECTION A-A + LEWIS ST SOUTH ELEVATION

LEWIS ST EAST ELEVATION

SCALE 1:100 @ A3

0 1 2 4 6 8 10 M

KEY

- STAGE 1
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

03/12/2006

05639/SK-51A

LEWIS ST REAR EXTENSION **STAGE 1**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699 E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

- STAGE 1
- STAGE 2
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

05639/SK-52A

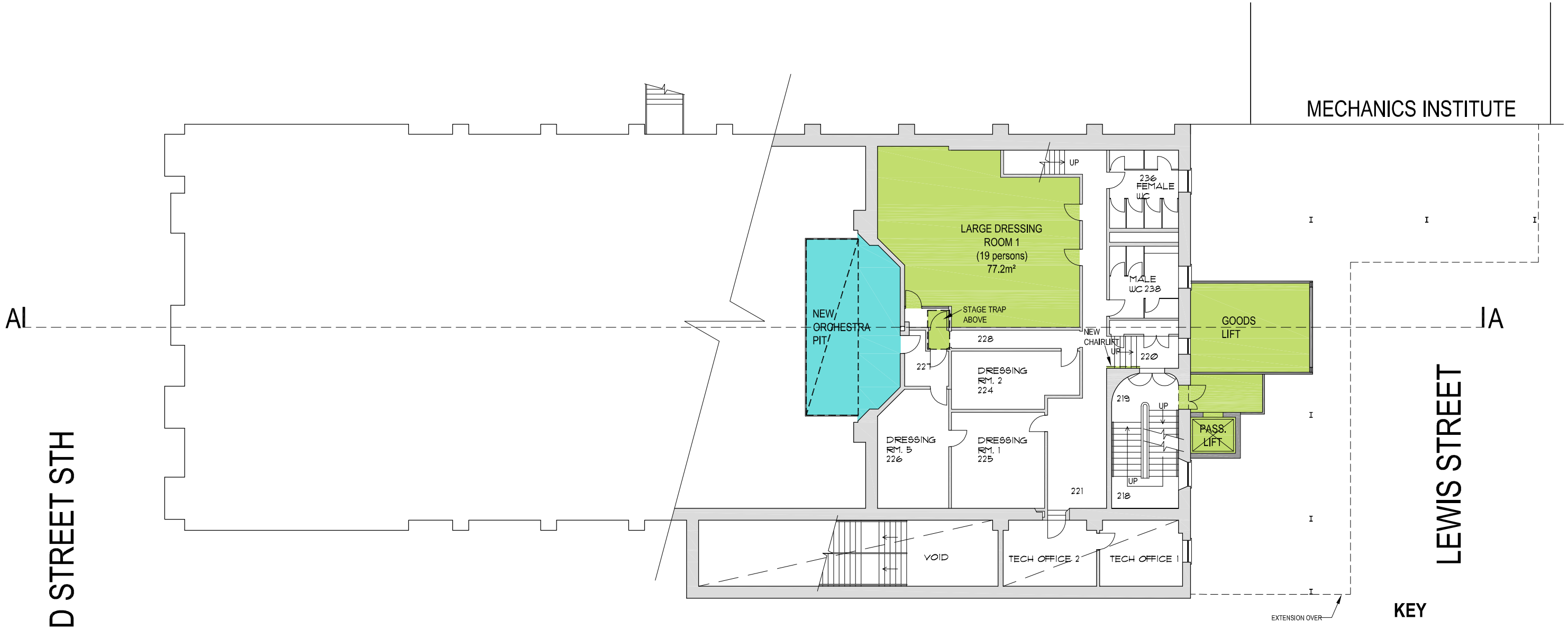
SUB-BASEMENT LEVEL 1 **STAGE 2**

HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699 E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



KEY

- STAGE 1
- STAGE 2
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase architects of human space

03/12/2006

05639/SK-53A

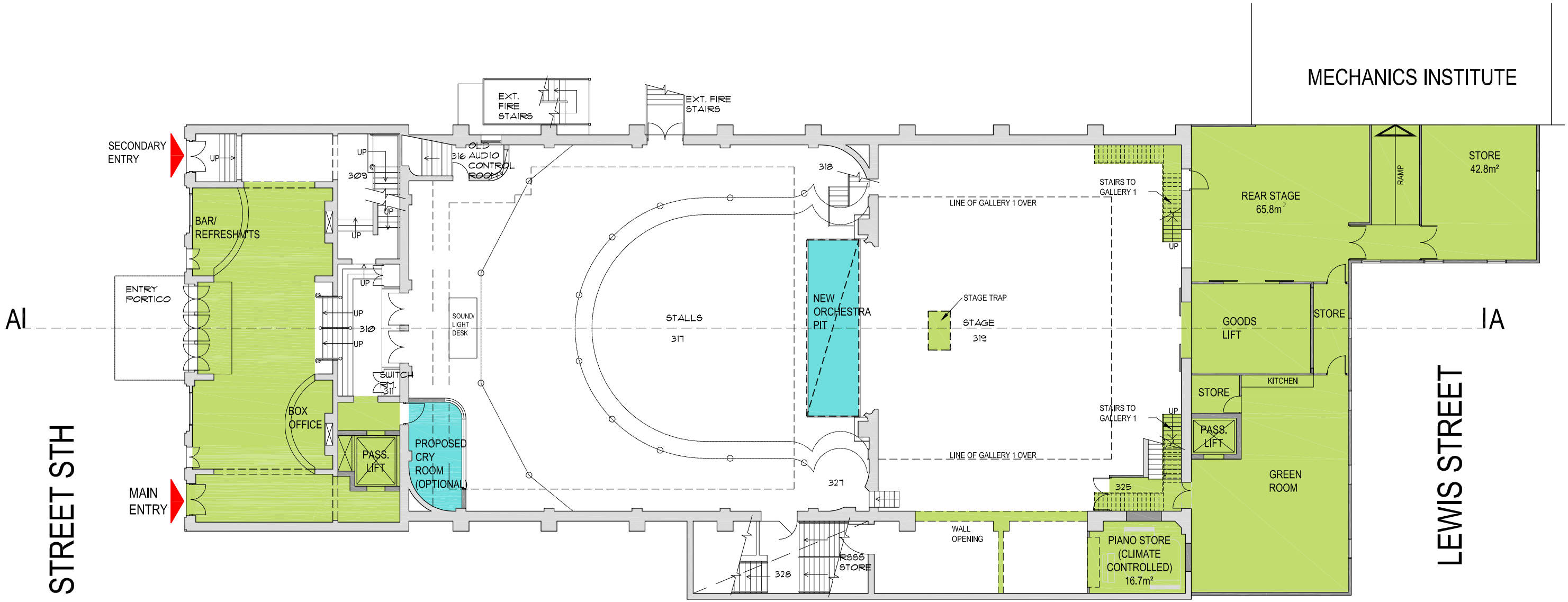
BASEMENT LEVEL 2 **STAGE 2**

HER MAJESTY'S THEATRE BALLARAT VIC.

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

E-MAIL: mail@psa.swanburypenglase.com.au WEB SITE: www.swanburypenglase.com

SWANBURY PENGLASE ARCHITECTS



SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

KEY

- STAGE 1
- STAGE 2
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

swanbury penglase architects of human space

05639/SK-54A

STALLS LEVEL 3

STAGE 2

HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

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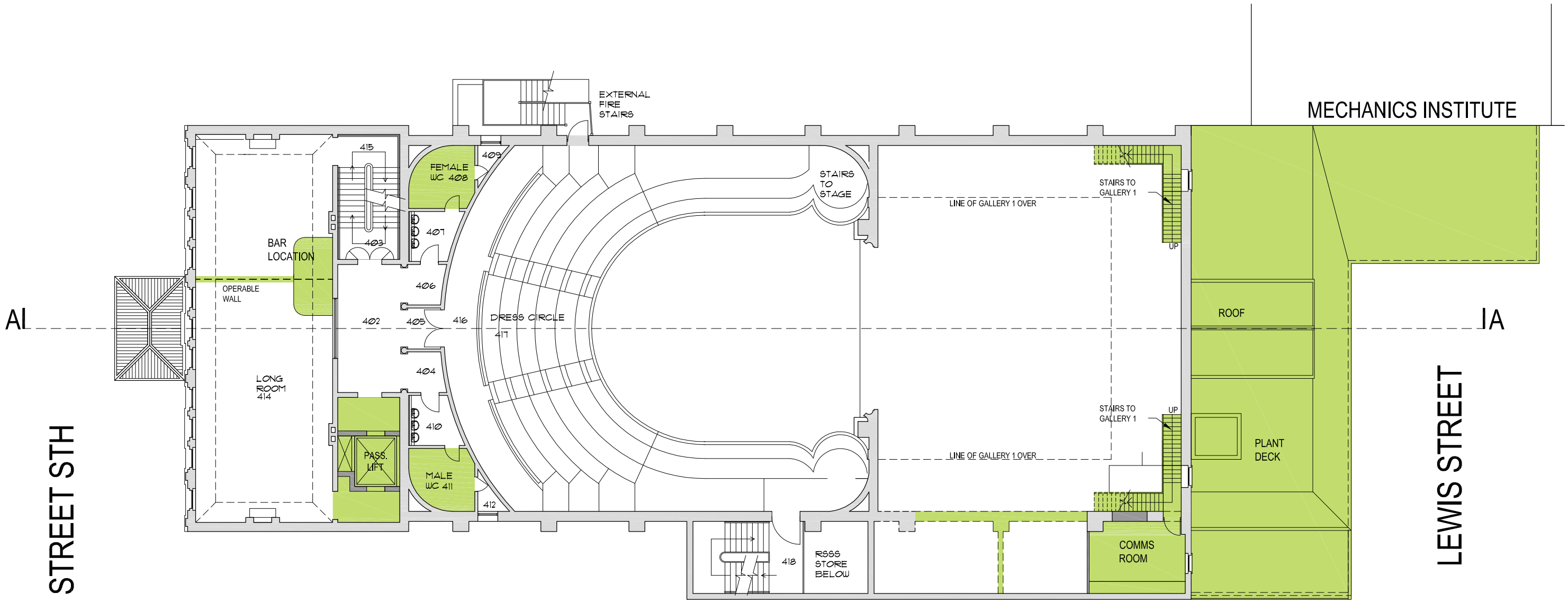
SWANBURY PENGLASE ARCHITECTS



KEY

- STAGE 1
- STAGE 2
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

N

swanbury penglase architects of human space

05639/SK-55A

DRESS CIRCLE LEVEL 4 **STAGE 2**

HER MAJESTY'S THEATRE BALLARAT VIC.

03/12/2006

6 WESTBROOK ST KEW EAST VIC 3102 ABN 32 594 033 519 PHONE +61 3 9857 0688 FAX +61 3 9857 0699

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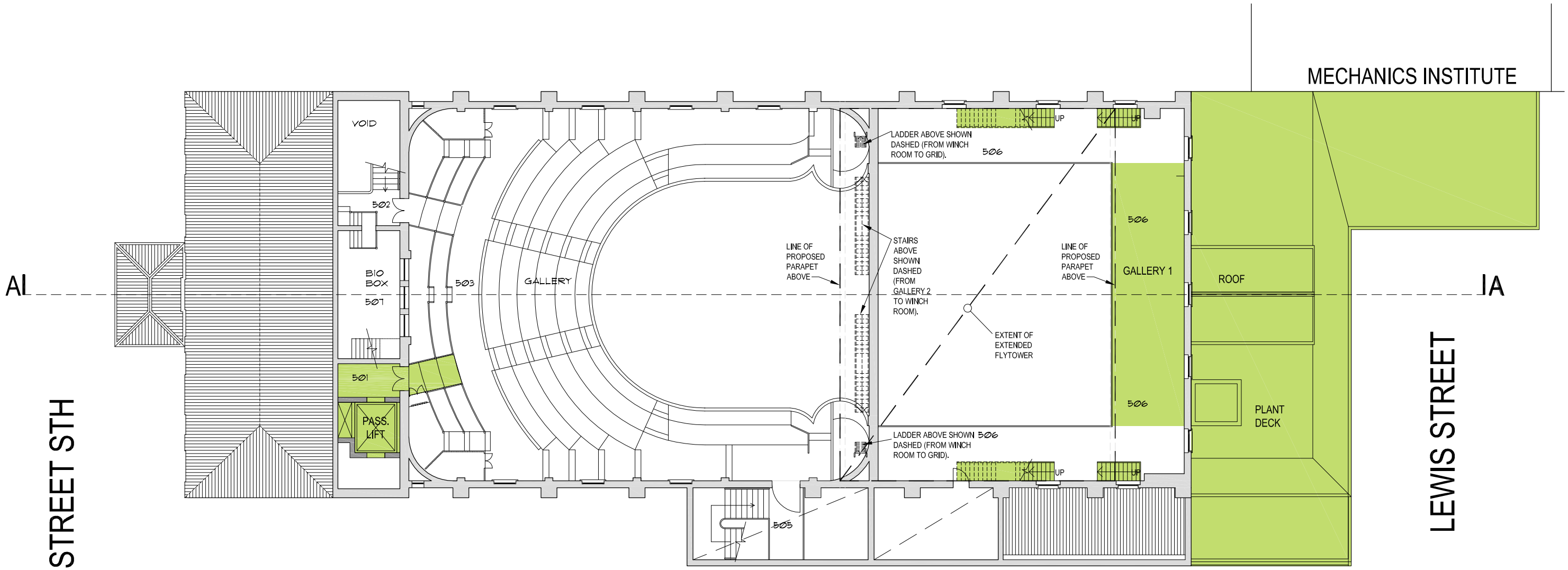

KEY

- STAGE 1
- STAGE 2
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

SCALE 1:200 @ A3

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05639/SK-56A

GALERY LEVEL 5 **STAGE 2**

HER MAJESTY'S THEATRE BALLARAT VIC.

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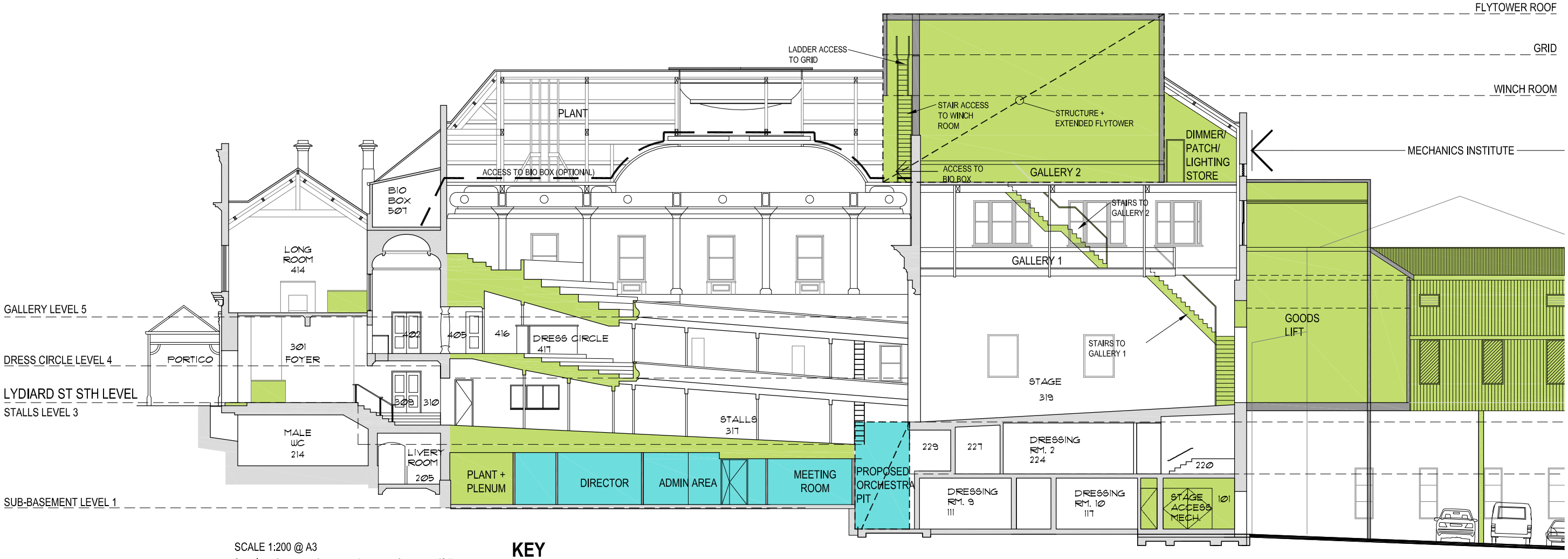

KEY

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- STAGE 2
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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SECTION A-A **STAGE 2**

HER MAJESTY'S THEATRE BALLARAT VIC.

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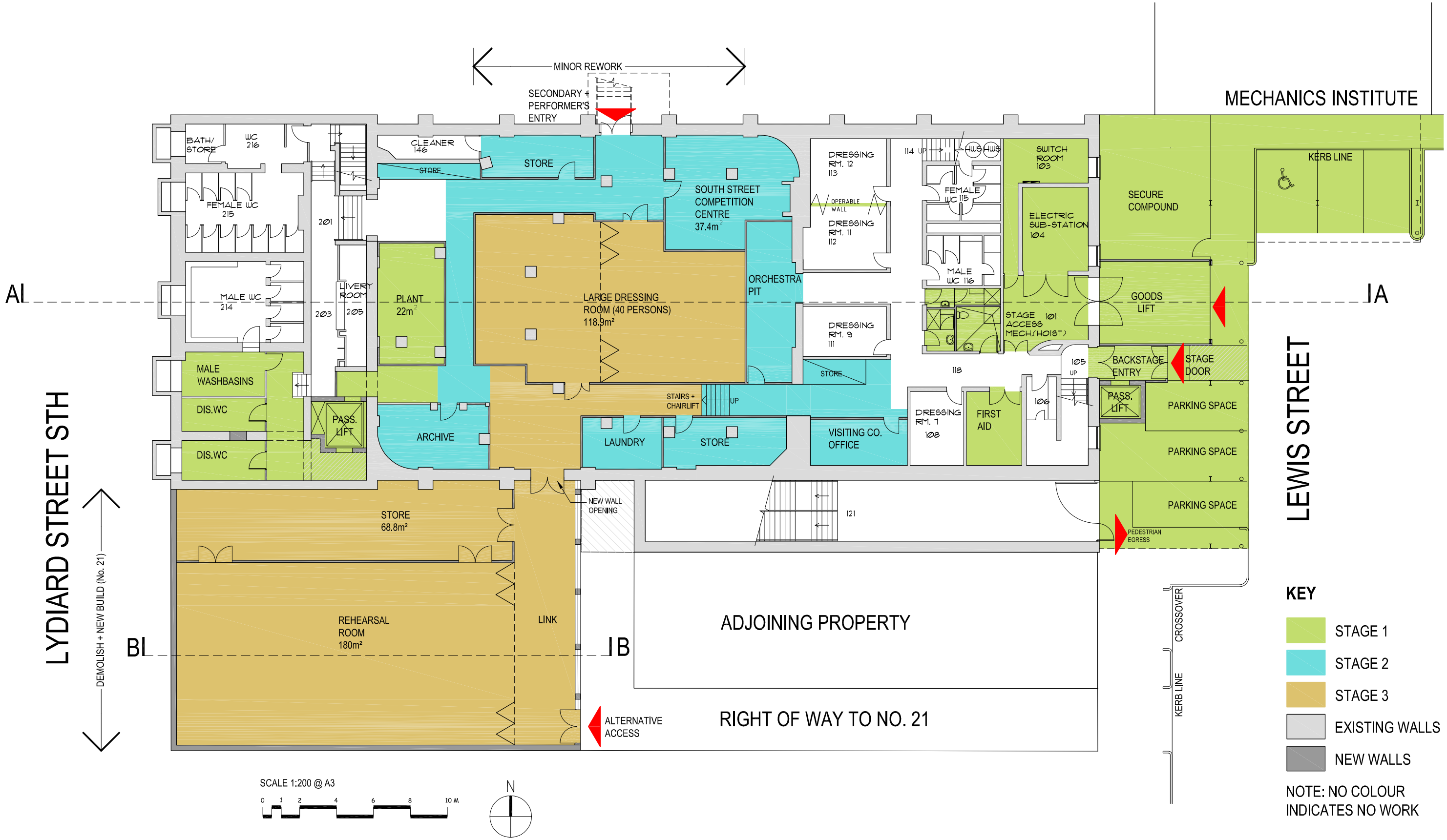

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SUB-BASEMENT LEVEL 1 **STAGE 3**

HER MAJESTY'S THEATRE BALLARAT VIC.

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SWANBURY PENGLASE ARCHITECTS

KEY

- STAGE 1
- STAGE 2
- STAGE 3
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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BASEMENT LEVEL 2 **STAGE 3**

HER MAJESTY'S THEATRE BALLARAT VIC.

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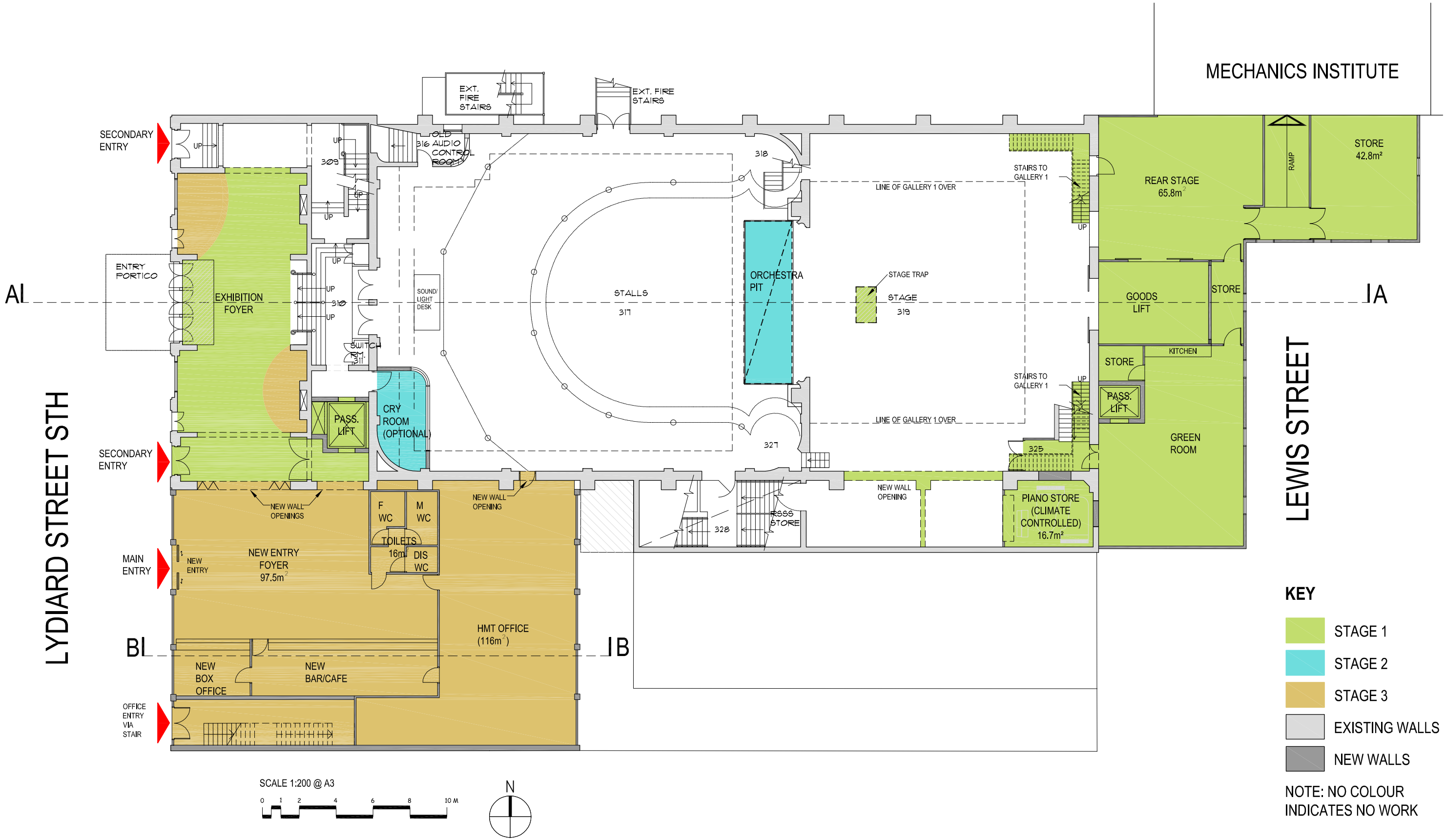

SCALE 1:200 @ A3

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KEY

- STAGE 1
- STAGE 2
- STAGE 3
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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STALLS LEVEL 3 **STAGE 3**

HER MAJESTY'S THEATRE BALLARAT VIC.

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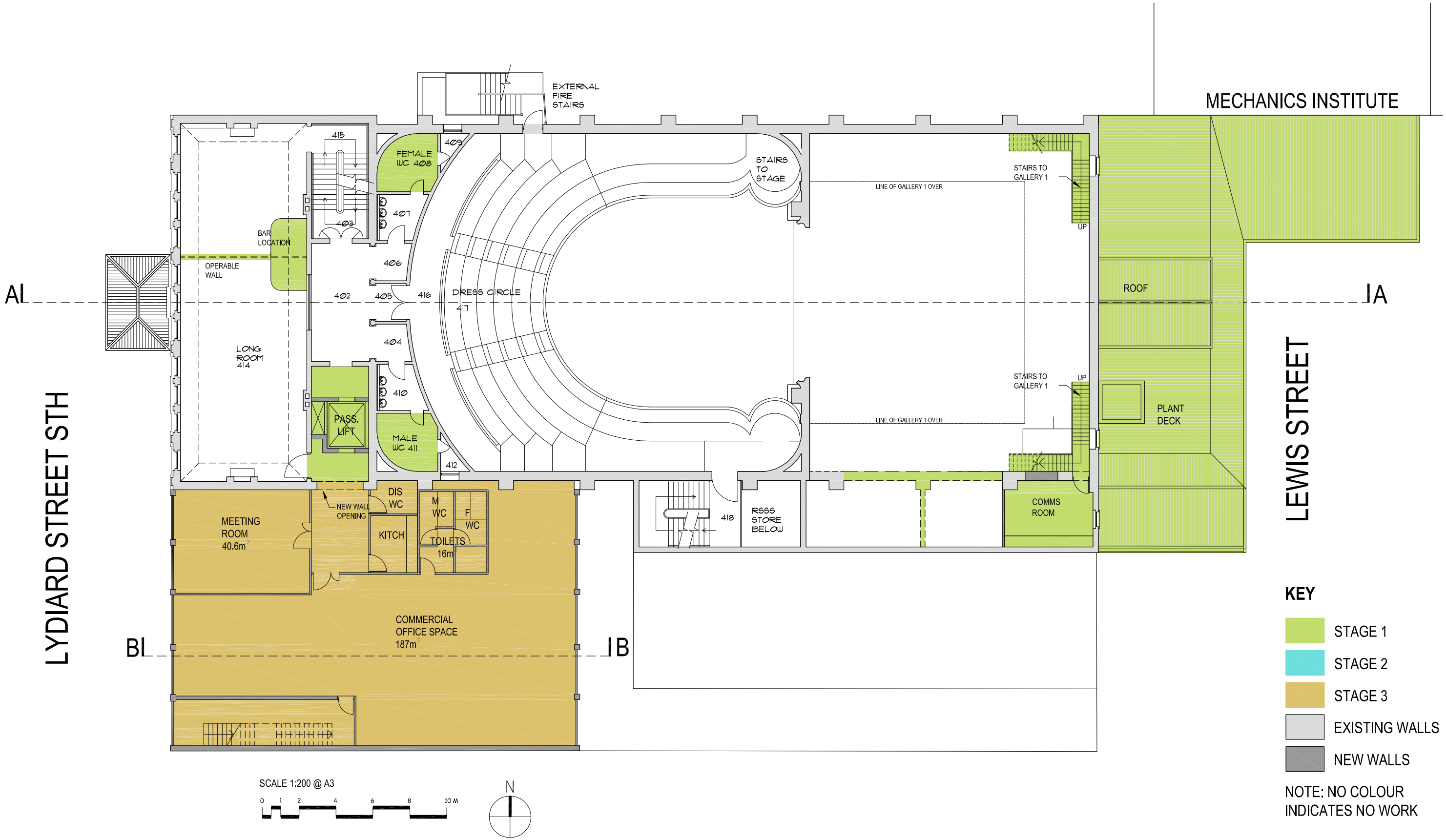

SCALE 1:200 @ A3

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KEY

- STAGE 1
- STAGE 2
- STAGE 3
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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DRESS CIRCLE LEVEL 4 **STAGE 3**

HER MAJESTY'S THEATRE BALLARAT VIC.

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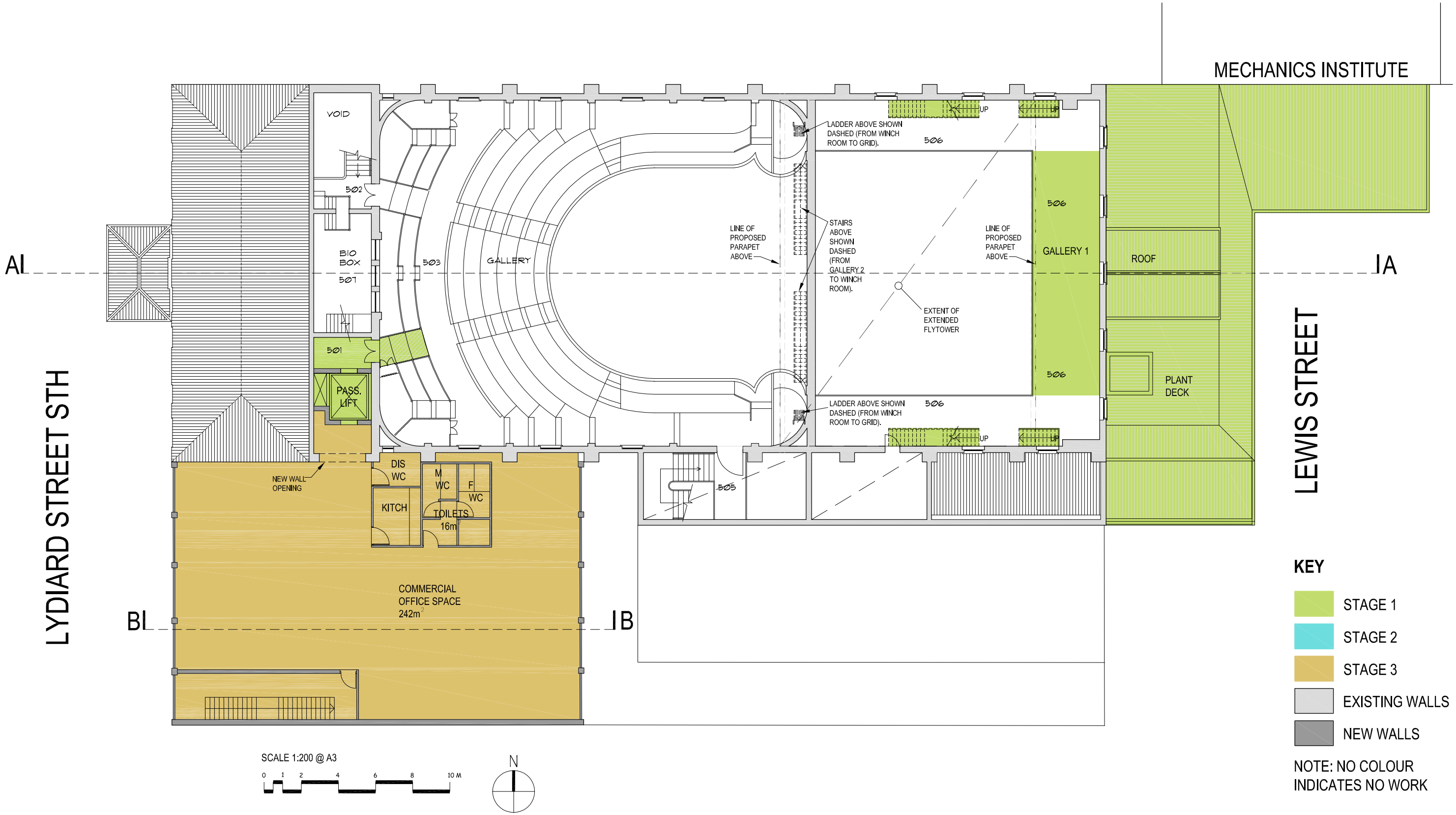

KEY

- STAGE 1
- STAGE 2
- STAGE 3
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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GALLERY LEVEL 5 **STAGE 3**

HER MAJESTY'S THEATRE BALLARAT VIC.

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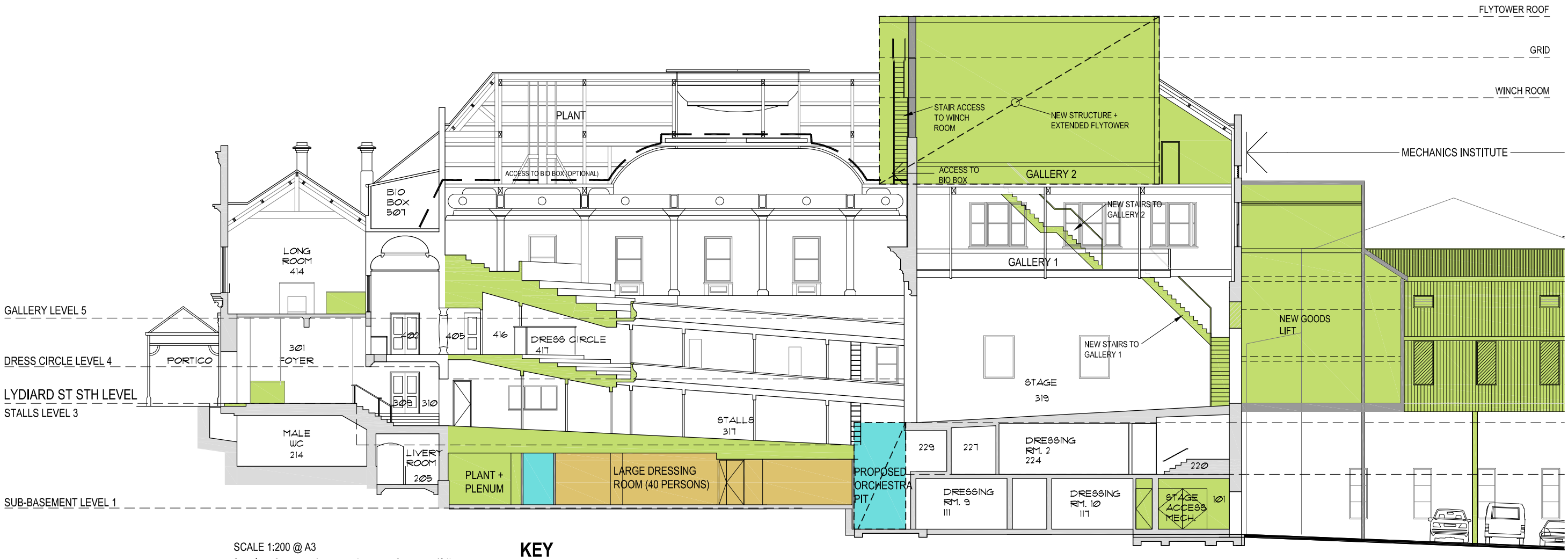

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

KEY

- STAGE 1
- STAGE 2
- STAGE 3
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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SECTION A-A **STAGE 3**

HER MAJESTY'S THEATRE BALLARAT VIC.

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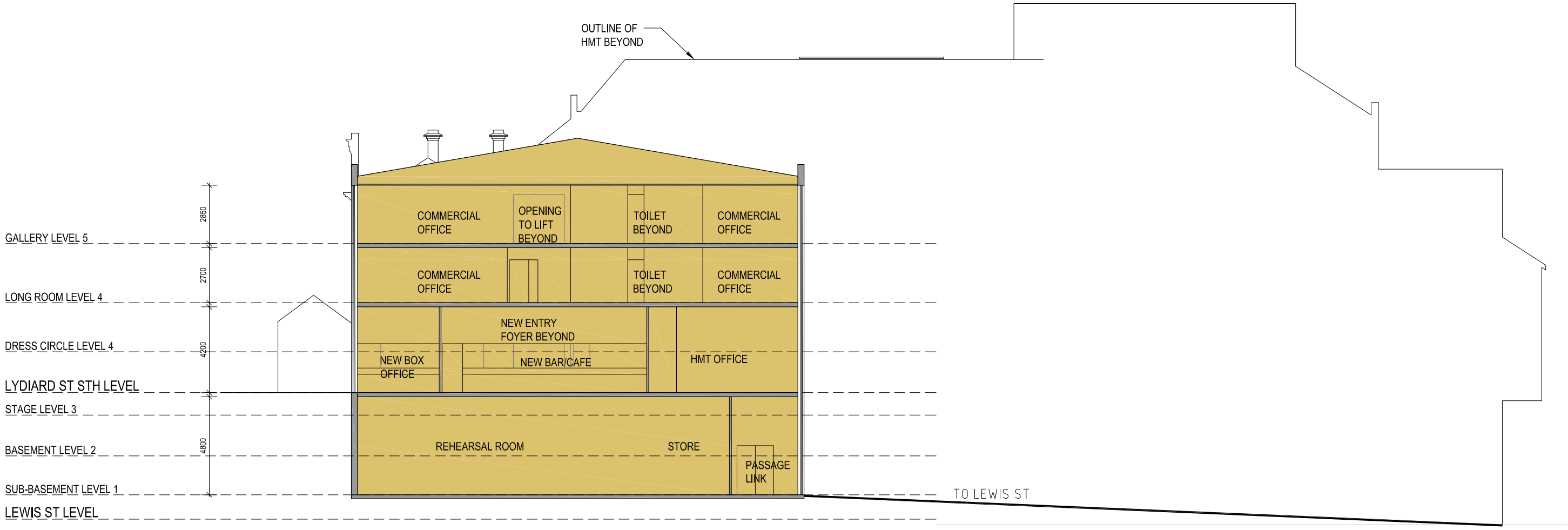
SWANBURY PENGLASE ARCHITECTS



21 LYDIARD STREET SOUTH SECTION B-B

SCALE 1:200 @ A3

0 1 2 4 6 8 10 M

KEY

- STAGE 1
- STAGE 2
- STAGE 3
- EXISTING WALLS
- NEW WALLS

NOTE: NO COLOUR INDICATES NO WORK

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SECTION B-B **STAGE 3**

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SWANBURY PENGLASE ARCHITECTS

10.4 Appendix D: Trevor Huggard - Structural Report

Ref. No:- MAV.4219/1105

STRUCTURAL REPORT

HER MAJESTY'S THEATRE
LYDIARD STREET
SOUTH BALLARAT, 3350

Trevor Huggard and Associates
Consulting Structural Engineers
131 McIlwraith Street
Princes Hill Vic 3054

MAY 2006

SUMMARY OF RECOMMENDATIONS OF REPORT

This theatre has performed very well and is generally in very good condition despite obvious areas of past maintenance neglect which have allowed water entry to the brick construction and roof to occur.

Apart from the obvious deflection and sagging of the roof in the vicinity of the dome the building is relatively free of distortion and movement.

Provided the recommendations listed below are implemented within a reasonable time frame (within 12 months for stormwater issues, within 3 years for all other issues) a long and satisfactory structural performance for this building can be guaranteed.

SUMMARY OF OBSERVATIONS

Sagging and deformation of Roof (refer Observation 1):

The sagging and deformation of the roof is historic rather than current or ongoing. The new steel remedial trusses designed by W. L. Meinhardt & Partners Pty Ltd, Consulting Engineers in 1989 for Civil and Civic are performing well and the roof has stabilized. Although the distortion of the roof will remain, it will not increase in the future.

Steel support frame to front (west) parapet is showing some rust staining on the roofing iron. Angle frame should be painted with galvanic primer to ensure protection to frame and cladding.

Brick firewall of Proscenium Arch (refer Observation 2):

The compartmentalization of the front of house and back of house is ineffective as a service pipe penetrates the brick firewall to the Proscenium Arch and has not been sealed off. An expanding foam fire sealant such as 'White Frost' or similar could be employed to the void surrounding the pipe or alternatively the void could be mortared up with a near dry 1:1:10 Lime/cement/sand mortar mix. Note that the former recommendation is the quickest and simplest given the difficulty of working access.

Access hatch adjacent to windlass is not fire rated through proscenium arch fire wall. It is recommended that the hatch is sealed off with two layers of 'FIRECHECK' plaster over a stud frame installed into the opening.

Structural stability of roof under-purlins (refer Observation 3):

Some roof under-purlins have split longitudinally and have been clamped with angle iron and 'Allthread' rods. This under-purlin strengthening is structurally satisfactory for the current roof loads.

Stormwater and Dampness Issues (refer Observation 4):

Damp problems are generally caused by falling damp. Water penetration into the building should be corrected and the roof gutters, downpipes, rain heads, gutter falls and stormwater spillages should all be corrected as identified in the report as soon as possible to stop further deterioration of the building fabric.

Structural stability of dome structure (refer Observation 5):

The Dome structure has clearly settled as a result of the original Oregon timber truss structure deflecting and spreading after being cut when the dome was inserted by William Pitt in 1898. The dome is now stable and does not represent an immediate danger of structural failure. The steel trusses inserted in 1989 have arrested the sag and settlement and no current or future deflection will occur beyond its present position. The end supports of the new truncated steel scissor trusses on the external masonry walls indicate no evidence of outward spread .

Masonry cracking (Observation 6):

Cracking in brickwork and stonework was carefully inspected The building is typical for its age does not have control joints to allow for brick growth. Cracking was old and no evidence of current movement or recent cracking was apparent. No evidence of footing failure is evident. Cracking is not of structural significance and brickwork could be simply re-pointed if desired. Interior cracks can be periodically filled at the time of repainting and maintenance repairs.

It is recommended that the stormwater system is regularly maintained to ensure that localised soil moisture content remains stable and no localised saturation of footings is possible.

Any old former electrical services connections need to be made good and re-bricked to stop water entry. Similarly window openings need to be proofed against water entry to masonry.

Cracking to external brickwork should be repointed with ½ 1,9 lime, cent, sand mortar and internal cracks with a softer lime rich mortar 1,3/4,15 lime,cement,sand.

Surface Drainage Issues (refer Observation 7):

The disused former building site on the north of the theatre (between Unicorn Hotel, the Mechanics Institute and the theatre) is not well maintained and surface drainage appears to be impeded in this area. This area should be further investigated to determine exactly where downpipes drain to.

Structural Stability of Fly Tower (refer Observation 8):

The Fly Tower is structurally sound and while the mechanical elements are relatively antiquated they have been well maintained and access ladders and walkways provide good inspection access.

The proposal by Thoms Gibcus McGrath Pty Ltd to repair the crack in the truss top chord by nail plates with steel angle clamps, fully tensioned rods and injected glue into the crack is satisfactory.

No heavy loads for future new equipment or fly tower upgrades should occur without further structural engineering advice.

SITE VISIT AND DETAILED FINDINGS

I visited the site on Wednesday, 8th February 2006 with Elizabeth Vines, Conservation Architect, and conducted a detailed structural investigation of Her Majesty's Theatre existing fabric and its surrounding site conditions and made the following observations:

OBSERVATION (1): Sagging and deformation of Roof

Close inspection of the roof both internally and externally indicated that it had suffered some long term dead load creep of the timbers which had resulted in some sagging and deformation of the roof. See photographs 1, 2, 3, 4 and 5 below.

Photograph 1.

Note deflection of roof to the east of the Proscenium Arch brick firewall relative to the Auditorium.

Photograph 2.

Note deflection of the ridge west of the Proscenium Arch brick parapet where the roof has settled over time in the vicinity of the internal ceiling dome.

Inspection indicates that this settlement is historic rather than current or ongoing and the new steel remedial trusses designed by W. L. Meinhardt & Partners Pty Ltd, Consulting Engineers in 1989 for Civil and Civic are performing well and have deflected under their dead load to their final dead load position and no further dead load deflection will occur in the future.

The roof has stabilized in this area and the distortion of the roof remains but will not increase in the future.

Photograph 3.

Note the ridge settlement to the east (Fly Tower) and west (Auditorium) of the Proscenium Arch brick load bearing wall at the line of the brick parapet.

Photograph 4.

Note the deflection of the roof between the perimeter walls and the roof ridge line.

The roofing iron is screw fastened and water tight. No further deflection will occur and this is a visual rather than a structural issue.

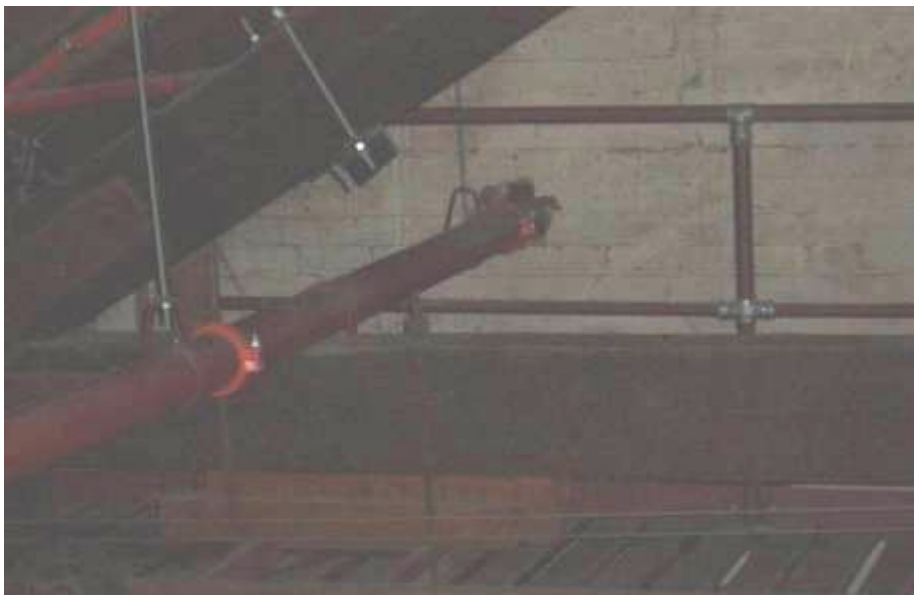
The current roof loading of corrugated iron and some thermal and acoustic insulation is considerably lighter that the original slate roof.

Photograph 5

Steel support frame to front (west) parapet is showing some rust staining on the roofing iron. Angle frame should be painted with galvanic primer to ensure protection to frame and cladding.

OBSERVATION 2: Brick firewall of Proscenium Arch

The fire sprinkler system and access hatch penetrates the brick firewall to the Proscenium Arch and has not been sealed off with a fire-retardant sealant. See photographs 6 and 7.



Photograph 6A.

Note large diameter steel fire service pipe passes straight through the 340 thick brick firewall making the compartmentalization of the front of house and back of house ineffective and allowing a fire to 'leap frog' from one compartment to another.

Photograph 6B.

Note auditorium side of the brick firewall to the Proscenium Arch. An expanding foam fire sealant such as 'White Frost' or similar could be employed or the surrounding void around the pipe could be mortared up with a near dry 1:1:10 Lime/cement/sand mortar mix. The former recommendation is the quickest and simplest given the difficulty of working access.

Photograph 7

Note that an access hatch through the fire wall needs to be sealed off to achieve fire protection. A stud frame with two layers of FIRECHECK plaster would achieve satisfactory separation without having to brick up the opening in a difficult access area.

Note daylight showing through access hatch.

OBSERVATION 3: Structural stability of roof under-purlins

Some roof under-purlins have split longitudinally and have been clamped with angle iron and 'Allthread' rods (see photographs 8 and 9).

Photograph 8.

Note hardwood under-purlin has split longitudinally where it has been notched and supported on the top chord of the Oregon truss.

The steel angle and 'Allthread' rod clamps are structurally adequate to carry the loads.

Photograph 9.

This under-purlin has deflected and split diagonally along the beam due to the sloping grain of the beam over the fly tower grid. Note the Caneite panel ceiling laid over the original roofing battens presumably for acoustic insulation against rain noise from the new corrugated iron roofing. This under-purlin strengthening is structurally satisfactory for the current roof loads.

OBSERVATION 4: Stormwater and Dampness Issues

Defective and blocked roof gutters with the flush mounted fascia gutters used on this roof need to be watched very carefully as water can enter directly onto the ends of the trusses causing end grain rot and ultimately catastrophic collapse and failure of the whole roof.

The ample evidence of water staining of the bottom chord of the truss, rafters, roof battens and top chord can be seen in photograph 10 and the flush mounted roof gutters, some with negative falls can be seen in photograph 11.

In general the roof gutter, downpipes and rain heads are poorly executed and what should be a relatively fool proof, self cleansing system that could only overflow outside and away from the building has many points where the stormwater overflow is directed into or down the face of the building in a concentrated manner potentially causing major deterioration of the building fabric. See photographs 12, 13, 14, 15, 16, 17, 18, and 19.

The subterranean rooms that have some damp problems such as the store, south wall and the ladies toilets are not serious and are not causing a major structural risk to the longevity of the building. They could be pressure injected with water based silicone waterproof to achieve dry storage or dry walls if desired.

Checking of brick walls for moisture by electric moisture meter revealed that where moisture was discovered it was generally from falling damp and not rising damp.

Photograph 10.

Note water penetration has occurred which has water stained the structural timbers, although the crucial ones are still solid and relatively free of end grain rot. It is vital that external roof gutters be effective and well maintained.

A fool proof, self sluicing roof gutter and rain head system with over flow pops given the difficulty of maintenance access to these gutters is recommended

Photograph 11.

Note the flush mounted 'D' mould fascia gutter. If the gutter is blocked by debris or by a hailstone storm, the likelihood of water entry into the roof space is very high particularly as the new gutter has been attached to the old fascia boards in an inconsistent manner.

The gutter brackets have sagged in some locations and the downpipes are ‘propping’ up the gutter to make the drainage points at downpipes higher than the rest of the gutter.

Photograph 12.

Note multiple 90° bends prone to debris blockage rather than 135° bends capable of flushing out debris. Bends should be eliminated wherever possible and have straight runs of 125 diameter downpipes for large roof areas and at least a minimum 100 diameter downpipe rather than the 75 diameter domestic scale downpipes frequently employed on the theatre.

Photograph 13.

Note north wall downpipe corroded at joint and sleeved - but corroded again.

Painted PVC downpipes with glued and pressure sealed joints should be used with a rain head with an overflow pop directed away from the building at the point where the roof gutter enters the downpipe rather than the direct entry from roof gutter to downpipe .

Steel cleats should be removed before they corrode and begin expanding and delaminating causing brickwork damage and future water entry.

Photograph 14

Note huge area of roof runoff with only one small diameter downpipe. Larger downpipes with rain heads are required to stop overflow in heavy rain conditions.

The rendered parging to the top of the brick piers needs to be made good to prevent falling damp entering the brickwork and causing further damage.

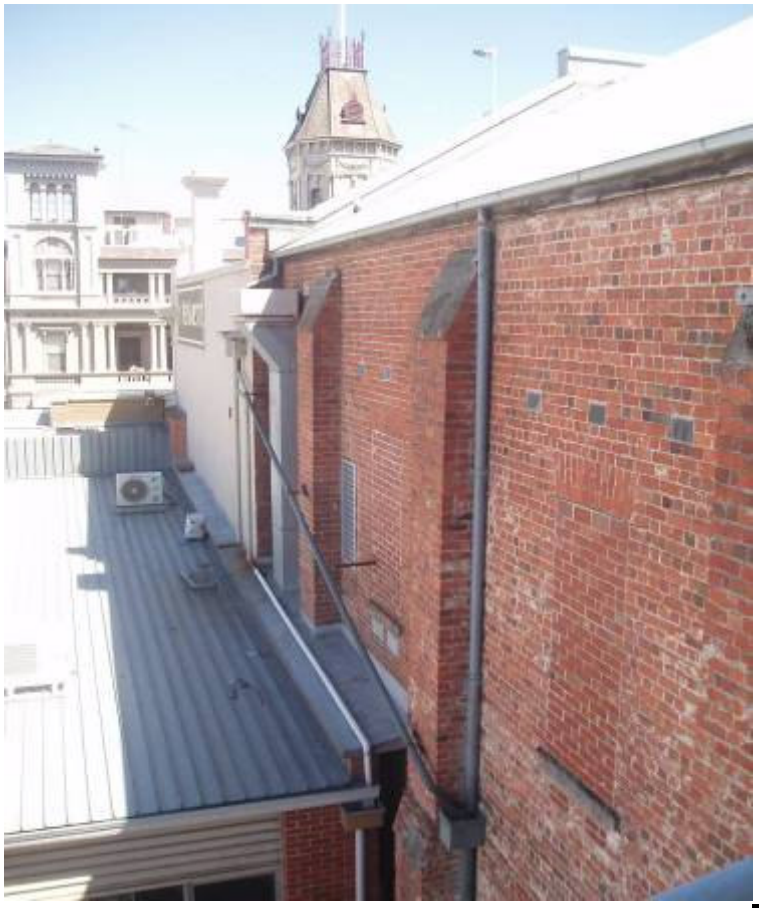
Photograph 15

Note the rain heads and downpipes overhang the southern neighbour's property which is not legal nor desirable. The rain spreader is broken and laying on the neighbour's roof.

This water should be discharged to a legal point of discharge rather than issuing onto the neighbours roof.

Photograph 16

Note sagging of roof gutter at eastern end of this section of the southern roof gutter.



Photograph 17

Note PVC downpipe discharges into neighbours rain head and gutter and metal downpipe appears to be the high point of the roof gutter.

Roof gutter falls should be checked.

Photograph 18

Render parging missing from raked top of brick pier should be made good to prevent falling damp entry to brickwork.

Photograph 19

Note one small diameter single downpipe serving a huge roof area of the auditorium and direct entry of downpipe into roof gutter without a rain head.

This downpipe should have a rain head with over flow pop at the top and be a larger diameter.

OBSERVATION 6: Structural stability of dome structure

In the alterations and additions of 1898-99, the original Oregon timber truss structure was cut and its vital triangulation removed to incorporate a large dome through the original coffered Auditorium ceiling. The Dome structure has clearly settled as a result of the original Oregon timber truss structure deflecting and spreading after being cut.

The timber roof construction employed for this domed ceiling was not triangulated with a continuous bottom chord preventing spreading of the roof. Settlement and deflection of the domed roof relative to the (stiff axially loaded) triangulated trusses adjacent to the dome and the brick proscenium arch fire wall are guaranteed as a result of :

- Settlement of the roof due to the long term dead load creep of the timbers (generally 300% greater deflection than the original deflection over a period of 75 years)
- Bending rather than axial truss loads
- Timber shrinkage over time
- Bearing failure of bolts in the soft Oregon timbers

This did not represent an immediate danger of structural failure but did certainly represent a disturbing aesthetic which was visually offensive to the eye.

The use of the steel trusses inserted in 1989 have arrested this sag and settlement as the steel trusses unlike the timber trusses take up their final deflection under load on day one.

It would not be possible to remove the sag achieved gradually over the past 90 years literally over night as the timber fibres in the roof construction will have 'crept' into a new permanent state of deformed and deflected members and the new strengthening steel trusses could only support the existing roof in such a way as to prevent future sag and movement and retaining the existing roof sag and movement.

The new steel trusses are performing precisely as intended and no current movement is occurring and no future deflection will occur beyond its present position. See photographs 20 to 25. Photographs 26, 27 and 28 show elements of the original opening mechanism for the dome.

Photograph 20

Note steel truncated scissor trusses on each side of original oregon timber truss installed over dome preventing any future sag.

Photograph 21

Note steel truss supports under purlins and ceiling hanging beams as well as oregon trusses.

Photograph 22

Note dome is supported off new steel trusses and steel pipe handrails provide safety for access.

Photograph 23

Note coffered ceiling to west of dome clearly has sagged and settled over time but no evidence of current or ongoing deflection was apparent.

The dome is now stable and no new settlement is occurring.

Photograph 24

Note settlement of dome relative to truss clearly evident but movement of steel trusses and no current deflection has occurred.

Photograph 25

Note bottom chord splitting of Oregon truss. Steel trusses are now providing support to all timber members.

Close inspection of the end supports of the new truncated steel scissor trusses on the external masonry walls indicates that no evidence exists of outward spread of the trusses where they sit on TEFLON sliding supports. The steel trusses are rigidly fixed with steel angle brackets fixed to the top of the brick 450 thick walls with 'chemset' anchors in such a way that if any settlement or spread of the trusses occurred then very visible distortion or shattering of the brickwork would be readily observable. This is not the case.

Photograph 26

Note timber panels to open up top of dome for ventilation run on metal rollers with hanger straps which run on steel rods on top of Oregon beams in foreground.

These are now fixed in position and supported off steel trusses.

Photograph 27

Note timber panels on top of dome are now nailed together and are supported off steel hangers to truss.

Photograph 28

Note former windlass structure to slide dome panels.

OBSERVATION 6: Masonry Cracking

Brickwork and stonework cracking was carefully inspected and noted for its particular structural characteristics and no evidence of footing failure was observed.

The cracking was old and no evidence of current movement or recent cracking was apparent.

Without exception cracking was round edged, cracks were not fresh faced and generally had traffic grime, dust or a patina of age about them inside the cracks. No vertical shear cracks or footing bearing failure was evident and no lateral dislocation or rotational movement was apparent.

Cracking in the rear (east) wall to the north east corner of the fly tower was due to brick growth and was very old. This building typical for its age does not have control joints to allow for brick growth. This cracking is not of structural significance and could be simply re-pointed if desired. Cracking around openings to lintels (see photograph 29) is old and not of structural concern.

There are many minor hairline cracks to the front rooms and lower administrative and amenity rooms none of which are of structural concern. Most are at the junction of different materials and are differential movement cracks rather than footing movement or serious structural movement.

These cracks can be periodically filled at the time of repainting and maintenance repairs.

Photograph 29

Note that old former electrical services connections should be made good and re-bricked to stop water entry.

Photograph 30A **Photograph 30B**

Note very old cracking due to differential movement of stone and brick (not of structural significance).
The existing footings are more than capable of carrying the superimposed Dead, Live and Wind Loads expected of them and no evidence of footing bearing failure was apparent.

While the building sits on the west rocky escarpment of Ballarat at the end of Lewis Street the building is founded in part on a reactive basaltic clay soil prone to movement with variation in soils moisture content and it is imperative that maintenance neglect particularly in regards to stormwater disposal is not allowed to occur to ensure localised soils moisture content remains stable and no localised saturation of footings is possible.

Photograph 31

Note rear (east) elevation has undergone various changes with time.

Photograph 32A

Photograph 32B

Note vertical brick growth crack to northeast corner of fly tower very visible to painted face of brickwork internally and less noticeable to unpainted face brick externally. Crack can be re-pointed if desired and would prevent further water entry into brick wall.

Photograph 33

Upper windows have been bricked and sealed, lower window has not been and has broken window sashes and opportunity for water entry. Opening should be water proofed against water entry to masonry.

OBSERVATION 7: Surface Drainage Issues

It was not clear where the downpipes to the north wall adjacent to the access stairs drain to.

The right of way to the north (Unicorn Lane) has a series of top entry pits which have storm water pipes entering from the direction of the downpipes and this is probably where they drain to,

The disused former building site is not well maintained and surface drainage appears to be impeded in this area and also between the Mechanics Institute Building and the Theatre. This area should be further investigated.

OBSERVATION 8: Structural stability of Fly Tower

The Fly Tower is structurally sound and while the mechanical elements are relatively antiquated they have been well maintained and access ladders and walkways provide good inspection access.

The counterweights to the fly grid were spread over an area by limiting the height of the stacks (see photograph 34) and this is crucial to ensure heavy concentrated dead loads are not exerted on the light timber floors in the future.

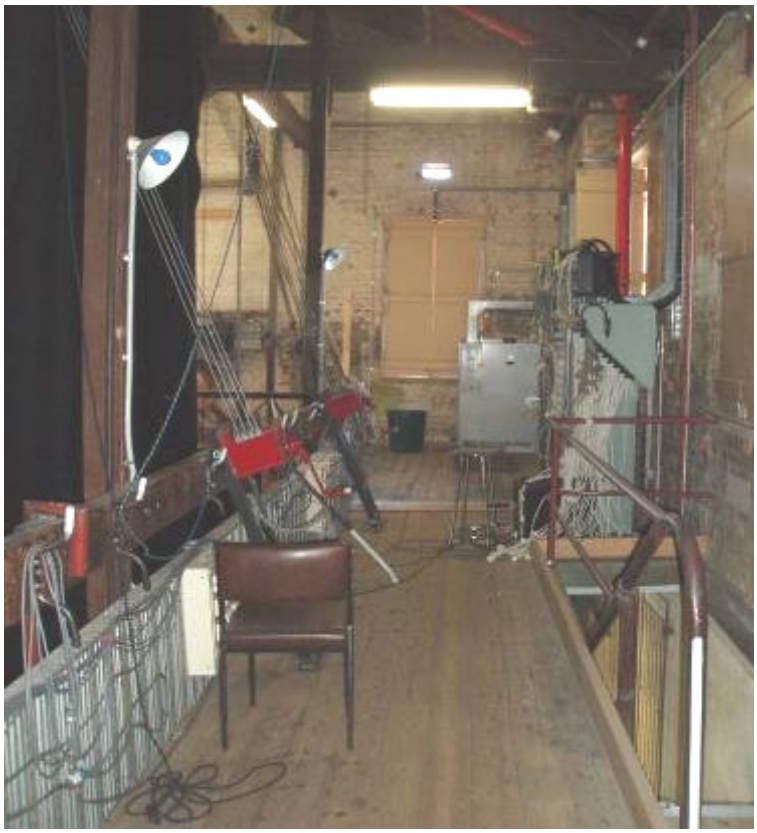
The cracking to the top chords of the fly towers trusses are the most severe but with remedial measures recommended will be quite satisfactory for existing loadings. The proposal by Thoms Gibcus McGrath Pty Ltd to repair the crack in the truss top chord by nail plates with steel angle clamps, fully tensioned rods and injected glue into the crack is quite satisfactory and will carry the anticipated structural loads expected of the truss

No heavy loads for future new equipment or fly tower upgrades should occur without further structural engineering advice.

Photograph 34

Photograph 35

Hand operated winch, fly tower gallery with ratchet lock and steel angle frame.



Photograph 36

Southern fly gallery

Photograph 37

Safety cage to lifting winch south fly tower gallery.

Photograph 38

Steel access ladder and catwalk to rear (east) wall of fly tower. Note old timber set frame that could be raised and lowered through a slot in the rear of the fly tower floor for set painting and preparation.

Photograph 39

Old ‘weather’ machine for making storm weather affects by rotating drum against canvas.

Photograph 40

Rear of fly tower with timber hip half trusses.

Photograph 41

View of fly grid.

Photograph 42

Northern fly gallery showing counterweights stacked and spread appropriately to avoid overloading of floor and fly locks along north wall.

Photograph 43

Northern fly gallery, fly locks, all in very good order.

Photograph 44

Steel RHS slats on flat to the fly gallery provide a very good system.

Photograph 45

Old timber lifting windlass over the fly grid retained but no longer in use.

CONCLUSION

This theatre has performed very well and is generally in very good condition despite obvious areas of past maintenance neglect which have allowed water entry to the brick construction and roof to occur.

Apart from the obvious deflection and sagging of the roof in the vicinity of the dome the building is relatively free of distortion and movement.

Provided the recommendations listed below are implemented within a reasonable time frame (within 12 months for stormwater issues, within 3 years for all other issues) a long and satisfactory structural performance for this building can be guaranteed.

RECOMMENDATIONS

(1.) Water penetration into the building should be corrected as the number 1 priority and the roof gutters, downpipes, rain heads, gutter falls and stormwater spillages should all be corrected as identified in the report as soon as possible to stop further deterioration of the building fabric.

(2.) The penetration of the proscenium arch fire wall by the steel fire sprinkler pipe should be mortared up or filled with a fire resistant filler such as “WHITE FROST’ foam or similar to re-establish the necessary fire separation between the front of house and back of house compartments.

(3.) The render parging to the top of the buttressing wall piers should be repaired and made good.

(4.) Paint steel parapet support frame to front (west) parapet with 2 coats of galvanic primer after wire brush cleaning.

(5.) Re-point external face brick cracks with ½, 1, 9 lime, cement, sand mortar and internal cracks with a softer lime rich mortar (1, ¾, 15 lime, cement, sand).

(6.) Check stormwater disposal to base of building along north wall adjacent to car park and Mechanics Institute Building to ensure water is being directed satisfactorily away from the building.

(7.) The myriad of steel cleats, old services and other disused appendages should be removed from the external face of the brick walls to prevent future damage and water entry into the brick work.

(8.) The many small internal cracks mostly of a hairline nature are generally due to differential movement between different materials and can be attended to by patching and painting at the time of interior decoration repairs and are not of structural significance or are urgent.

I trust this structural report is explanatory enough for your purposes.

Yours faithfully,

Trevor M Huggard
ENGINEER

10.5 Appendix E: Simpson Kotzman – Services Report

SIMPSON KOTZMAN

BUILDING SERVICES REPORT ON CURRENT SCHEMES

FOR

HER MAJESTY'S THEATRE

AT

LYDIARD STREET SOUTH

BALLARAT

Prepared by:

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MECHANICAL SERVICES

Outside Air

The current codes require that the outside air supply is able to satisfy the requirements of the maximum permissible number of persons in all areas. This means what would appear to be an excessive rate of outside air supply is required to comply strictly with the code. While the system must be designed to suit the maximum demand, during normal operation the outside air supply rate could be reduced to suit the actual demand at the time with variable speed drive equipment for example, to assist in lowering energy use.

At this stage, while actual usage requirements and exact areas of the proposed changes are by no means final, preliminary calculations reveal that the total increase in required outside air could be from approximately 5700 L/s to as high as 31 000 L/s throughout the entire building; i.e. the current outside air rate could be less than 20% of that required to comply with current codes. This requirement of 31 000 L/s will likely be reduced once actual plans for the proposed usage of the refurbished basement etc. are finalised and store rooms/corridors taken properly into account.

Dilution factors as per AS 1668.2—1991 are unlikely to offer any reduction of the total quantity of outside air required for the building to comply with current codes. To comply strictly with outside air requirements, the total number of people permissible in each area must be taken into account. This leads to a situation where outside air for over 900 people must be made available in *both* the auditorium and the break out areas. In some cases carbon dioxide sensors can be employed to determine the occupancy levels of the spaces at any one time. This could mean that to lower running costs the air conditioning equipment could be turned down when high fresh air levels aren't required, though acceptance of this sort of system is up to the discretion of the building surveyor. In either case, the air handling plant must be sized according to the maximum demand required to satisfy current codes. Should the building surveyor allow some sort of turn down related to occupancy levels, the central plant could be made smaller to some extent with associated cost savings.

With changes in usage based on final floor plans, it is possible that fresh air requirements to comply with current codes may be reduced to somewhat less than 31 000 L/s. While the figure of required outside air is by no means determined at this stage, it will certainly be higher than current levels, and additional means of introduction of acceptable amounts of outside air will be required.

Cost benefits of an underfloor plenum system for outside and conditioned air.

The raising of the outside air supply levels to bring the building into compliance with current code requirements presents a number of problems for the delivery of the air. It is thought that existing ductwork and air distribution systems are not suitable for the increase in air quantities required. The current system provides 100% outside air, so no increase in outside air is available from the current system by changing its configuration.

While more conventional ducted air supply will be the likely distribution system for other areas of the building, an underfloor air supply system is proposed for the auditorium. The benefits of this type of system include very low sound power levels (typically lower than 20 dB(A)), uniform distribution over the required area, and minimal visual impact. For air distribution to the auditorium for this project, the underfloor plenum system has a number of advantages over conventional solutions, in particular relating to the visual impact of the system. Given the large increase in air supply rate over the current arrangement for the area, the additional ductwork and grilles required to supply air to the space would be extremely difficult to conceal within the building's current appearance. For an underfloor air supply system, there is the potential to use the basement to contain all outside air ductwork for the auditorium.

An underfloor type of supply system can be used in a number of ways, with a number of different outlet types, and these options are outlined below. Note that any costs given are for the distribution systems within the space only; cooling and air handling plant are separate and additional costs, but would be similar for each option. The cost estimates exclude builder's works which include masonry ductwork and risers. It would be necessary to carry out a detailed inspection of the possible plenum areas to determine their feasibility for use, and for this reason it was not possible to compare the complete costs of works entirely accurately.

Options for supplying conditioned air to patrons in the auditorium

Option 1: essential upgrade to comply with codes

Supply required outside air for entire space to stalls level only. Use existing fan coil units to satisfy heating and cooling load for upper levels, relocating stalls level fan coil unit to ceiling space, and possibly introduce additional fan coil unit for upper level seating closer to the stage. Provide relief through ceiling grilles at top level.

Benefits:

- no works required to the fan coil unit in the gallery level subfloor space;
- ability to reuse existing ductwork in risers adjacent the stage;
- no specialised floor plenum required for upper floors.

Disadvantages:

- poor outside air distribution to upper levels;
- poor air distribution in general to upper levels.

Option 2: essential upgrade with additional comfort levels for upper floors

Supply required outside air for entire space to stalls level only. Use existing fan coil units to satisfy heating and cooling load for upper levels, relocating stalls level fan coil unit to ceiling space, and possibly introduce additional fan coil unit for upper level seating closer to the stage. Provide relief both at ceiling level, and through Lydiard Street end of dress circle level to provide better air distribution for dress circle patrons.

Benefits:

- no works required to the fan coil unit in the gallery level subfloor space;
- ability to reuse existing ductwork in risers adjacent the stage;
- no specialised floor plenum required for upper floors;
- better outside air distribution to upper floors than option 1.

Disadvantages:

- still poor air distribution in general to upper levels;
- requires additional penetrations and risers to provide air relief path

Option 3: as for option 2 with better outside air distribution

Supply required outside air for stalls level only to stalls level. Introduce new outside air risers to supply the subfloor space at dress circle and balcony levels to provide fresh air supply for these levels. Relocate stalls level fan coil unit to ceiling space and possibly introduce additional fan coil

unit/s to distribute air at upper levels closer to the stage. Relief provided through ceiling grilles to ventilated roof space.

Benefits:

- ability to reuse existing ductwork in risers adjacent the stage;
- no specialised floor plenum required for upper floors;
- better outside air distribution to upper floors than options 1 and 2.

Disadvantages:

- still poor air distribution in general to upper levels;
- requires additional penetrations and risers to provide outside air to fan coil units;
- difficult to vary the rate of fresh air introduction to fan coil units when full capacity is not required

Option 4: provides best conditions for all patrons

Supply outside air to underfloor plenums at each level for even air distribution throughout the auditorium. Relief provided through ceiling grilles to ventilated roof space. Remove redundant fan coil units in subfloor space of gallery and stalls levels.

Benefits:

- possibility of reusing existing ductwork in risers adjacent the stage for fresh air for upper level underfloor plenums to negate the requirement for additional risers at the Lydiard Street end of the auditorium – further investigation into the feasibility of this required;
- best option for air distribution throughout;
- of all options it provides the best comfort conditions for all patrons;
- quietest option of the four;
- possibility of using existing redundant fan coil for other areas.

Disadvantages:

- may require more disruption to the building structure than other options, further investigation required;
- costly mechanical component compared with other options, though possibly cheaper than options 2 and 3 overall.

Other Options

Option 5: comfort provisions for all patrons without employing underfloor plenums

Supply additional outside air to upper levels through existing ductwork, using existing fan coil units. Add new fan coil units above the ceiling to supply air through reconfigured ductwork in risers adjacent the stage, as well as over gallery level at the Lydiard Street end. Supply additional fresh air to stalls level through existing fan coil unit as well as through an additional fan coil unit located approximately where the organ lift is at present. New ductwork at low level around orchestra pit to distribute air.

Benefits:

- ability to reuse existing ductwork in risers adjacent the stage;
- no specialised floor plenum required for any floor;
- better outside air distribution to upper floors than options 1 and 2.

Disadvantages:

- still poor air distribution in general to all levels;
- requires additional penetrations and risers to provide outside air to fan coil units;
- difficult to vary the rate of fresh air introduction to fan coil units when full capacity is not required;
- potentially visually obtrusive and disruptive to the theatre's structure.

Option 6: least internally disruptive option for introduction of additional outside air

Supply additional outside air through ductwork external to the building and supply air at each level through existing windows where possible. Provide additional riser centrally at Lydiard Street end of the auditorium to assist with air distribution.

Benefits:

- no significant works required within the body of the auditorium;
- potentially visually unobtrusive within the auditorium.

Disadvantages:

- poor air distribution in general to all levels;
- requires additional penetrations and risers to provide outside air to the back of the auditorium;
- requires external ductwork which may be difficult to conceal;

Underfloor Air Distribution Supply Outlets

There are three main types of air diffusion suitable for a project like this when an underfloor air supply system is employed. Swirl diffusers placed throughout the auditorium on the floor is one alternative; the other two options employ a perforated diffuser, either as part of the chair pedestal, or set in the face of steps behind each row. Our recommendation is for the perforated type diffusers to be employed should the underfloor option be taken up. The cost difference between the two types of diffusers is about 20%, where the pedestal type is approximately $120 per seat and the step type diffuser is approximately $95 per seat. Depending on the seat type chosen, and the cost of providing steps behind each row of seating, the cost difference between the two types may change when the associated building works are taken into account.

Cost and Scope of Options

The following items are additional to costs outlined by the quantity surveyor in their preliminary estimates. Costs are approximate only. A new chiller is required at $200 000, with associated pumpset at $15 000. New fan coil units are required at approximately $85 000, new heating water plant at $15 000, and works for relocation of existing fan coil units at approximately $20 000. Additional costs are involved in building works for all equipment as noted below in the *associated works* section, including plant platforms and additional risers – specifically a 3 m^2 riser to the ceiling/roof at the Lydiard Street end of the auditorium. Pipework and ductwork, as well as air diffusion equipment are additional to the above but included in estimates by the quantity surveyor.

Recommended Option

For the least disruptive solution providing the minimum increase to levels of mechanical services required to comply with codes, option number 1 probably provides the best alternative. Since the

works below the Stalls Level are staged to occur before the auditorium works, plant can possibly be installed and ductwork put in place to some extent without prior disruption to the auditorium.

Our recommended option in general is number 4. This option is the potentially the quietest of the alternatives, and is therefore suitable in a theatre environment such as this. Since all options except number 6 require outside air to be ducted into the space internally, this option also requires the least disruptive works to other parts of the building (aside from the floor plenum construction) of all alternatives except number 1.

Another advantage of the plenum system is the ability for the system to turn down when the demand isn't present – while all systems can turn down to some degree, this system suffers little disadvantage to air distribution or effectiveness at low load turndown. The biggest performance advantage of this system however is the general air distribution effectiveness: all patrons are exposed virtually equally to conditioned outside air, thus providing the most comfortable environment for all patrons.

Associated Works

Works associated with the above system options include the following:

- structural preparation of plant platforms;
- new masonry ductwork / risers where described, in particular a 3 m^2 riser for supply to upper floor plenums if option 4 is taken up;
- outside air supply ductwork to all areas, including possible full height masonry ductwork at basement level;
- coordination with mechanical services design to keep ceiling heights below ductwork as high as required;
- preparation of air tight floor plenums where described, including penetrations for installation of seat diffusers or step diffusers where required;
- bulkhead ceilings if required;
- setting aside plant space for air handling plant – 3.5 m × 3.5 m × 2.5 m high including provision for ductwork to and from the space.

Some of the above works are affected by staging should this occur, see *Impact on Mechanical Services of Staging* below for more information.

Impact on Mechanical Services of Schemes 1, 2 and 3

The general trend in the proposed schemes appears to be that the existing administration areas are relocated in order to provide additional space for rehearsal areas, as well as the reconfiguration of the entrance and long room to provide more open break out areas.

In general, breakout areas and rehearsal areas are defined as potentially holding a greater number of people than office areas. For this reason, over and above the current shortfall in outside air quantities for the building as it currently stands, the proposed schemes will all require a greater outside air flow rate than would be required to bring the building as it is at present up to standard. The requirement for new ductwork should be taken into account as each scheme is planned. Since new ductwork would be necessary to bring the building up to standard anyway, the additional outside air requirement is not seen as a significant drawback for the proposed schemes.

Impacts on the proposed systems where a plenum system is employed (as described earlier) by the three different schemes are generally minor (given the layout of the auditorium does not appear to be significantly different in each scheme), but the proposed usage of the basement may provide difficulties in using part of it to introduce the required outside air into the space. The extent that this has an impact on the air supply system would need to be reviewed once plans for the basement are more defined, and the potential to incorporate the system assessed.

Impact on Mechanical Services of Staging

Impact for essentials / do nothing air conditioning (option 1)

The position of new plant required for additional outside air to the building is proposed to be located within the rear stage of works above the green room. This position would allow the platform to be built and the plant put in place prior to other works taking place. The contractor costs for installation of this equipment would be slightly elevated relative to a non-staged project since pipework and control wiring would need to be terminated and made safe for the interim until the following stages happen and new equipment could be connected up. In addition, the ductwork would need to be altered once it is put in place, once auditorium works are underway and floor penetrations can be made. Some access will be required to the subbasement and basement areas during the auditorium works stage for relocation of stalls fan coil units, as well as the connection of the supply diffusers to the plenums below.

Impact for the recommended option (option 4)

While the new plant position causes no further problems than for option 1 described above, this option requires more associated works than option 1. Basement / sub-basement works can take place within the allotted stage, though construction of the floor plenums may require some disruption to basement and subbasement levels. Air handling plant for the upper level plenums can be installed in the ceiling space before construction of the riser at the Lydiard Street end of the auditorium, but no air conditioning would be available within the auditorium before completion of this riser. Some disruption within other works stages would be inevitable with connection of ductwork with plenums, and pipework with equipment.

VERTICAL TRANSPORT

Lift as Egress

The use of the lift for egress is a regulatory issue. Lifts have been employed in some situations as part of a fire engineered egress path, though these are typically in high-rise buildings. A fire engineer would run the process of developing specifications of a lift for use as egress, and the CFA would be involved. In a building such as this one, since lifts are not able to move large numbers of people quickly, a lift used for emergency egress would likely be restricted to use by disabled patrons only.

While the Building Code of Australia has requirements for provisions for entry of disabled persons to buildings, there are no specific requirements for emergency egress of disabled persons. Generally emergency egress provisions need to be to the satisfaction of the building surveyor, including any provisions for disable persons.

ELECTRICAL SERVICES

Lighting

The probable opinion of cost for lighting to all front of house and rehearsal areas excluding specialist lighting and stage light is approximately $200 000. This includes all general lighting to toilets, break out areas and change rooms, as well as the main auditorium.

Emergency Lighting

The probable opinion of cost for a new emergency lighting system including all fittings for the whole building is approximately $25 000.

Power Supply

The probable opinion of cost of upgrading the existing the existing power supply to the building is approximately $300 000. This requires the substation capacity to be increased subject to the requirements of the local distributor. In addition, replacement of the main switchboard may be required to accommodate the additional load requirements. Associated works include upgrade of submains, new local distribution boards, and relocations of existing.

Impact on Electrical Services of Staging

Since the extent of electrical works to be done can generally be completed either in isolation from the rest of the works, or concurrently, the proposal of staging the project has little impact on electrical works.

HYDRAULIC SERVICES

Plumbing Fixtures

Plumbing for sanitary fixtures appears relatively straightforward for the proposed schemes. The additional/relocated toilets are generally nearby existing fixtures and should pose little problem for connection into existing sewers and water supplies.

Impact on Hydraulic Services of Staging

The proposed hydraulic works can generally be completed either in isolation from other works, and while it's possible that some pipework may need to be installed in parts of the building not part of the same stage, this would appear to be unlikely at this stage. Since any fixture relocations appear to be within the same stage of works, there would appear to be little if any impact on hydraulic services by staging.

10.6 Appendix F: Rider Hunt – Detailed Order of Costs

HER MAJESTY'S THEATRE - STAGES 1, 2 AND 3 — Total Cost Summary

GFA: Gross floor area
Rates current at October 2006

Level Zone	%	GFA m^2	Cost/m^2	Total Cost	FRONT	CENTRE	REAR
A LEVEL 1 - SUB BASEMENT				**$464,750**	**$67,840**	**$287,660**	**$109,250**
B LIFTS - LYDRIARD ST & REAR				**$1,417,250**	**$155,000**		**$1,262,250**
C LEVEL 2 BASEMENT				**$73.130**		**$42.460**	**$30.670**
D LEVEL 3 - STALLS				**$1.248.900**	**$166.535**	**$514.950**	**$567.415**
E LEVEL 4 - DRESS CIRCLE				**$394,560**	**$180,660**	**$74,200**	**$139,700**
F LEVEL 5 - GALLERY				**$2,517,985**		**$81,240**	**$2,436,745**
G SIGNAGE				**$50.000**	**$25.000**	**$12.500**	**$12.500**
H SERVICES				**$967,960**	**$241,990**	**$483,980**	**$241,990**
Net Cost		**3,356**	**$2,126**	**$7,134,535**	**$837,025**	**$1,496,990**	**$4,800,520**
Margin & Adjustments							
Design Development Contingency	5.0%			356,727	41,851	74,850	240,026
Scaffolding/Temporary roof	1.3%			100,000	11,732	20,982	67,286
Builder's Preliminaries	15.0%			1,138,689	133,591	238,923	766,175
Staging	2.2%			200,000	23,464	41,965	134,571
Builder's Overheads and Margin	5.0%			446,498	52,383	93,685	300,429
FF&E (unless otherwise noted)	0.7%			75,000	8,799	15,737	50,464
Sub Total		**3,356**	**$2,816**	**$9,451,449**	**$1,108,846**	**$1,983,132**	**$6,359,471**
Brought forward		3,356	$2,816	$9,451,449	1,108,846	1,983,132	6,359,471
Repair and Maintenance Costs	2.2%			220,000	25,810	46,161	148,028
Compliance Costs	0.5%			50,000	5,866	10,491	33,643
Specialist Lighting and Stage Light				Excl.			
Design Consultants Fees	12.0%			1,166,574	136,863	244,774	784,937
Headworks and Authority Charges	0.3%			28,111	3,298	5,898	18,915
Escalation to Completion 2008	3.0%			327,484	38,420	68,714	220,350
Project Contingency	8.9%			1,000,000	117,320	209,823	672,857
Effects of GST				Excl.			
Land Costs				Excl.			
Purchase of Adjoining Property				Excl.			
Rental Income from Office Space				Excl.			
Lost Income During the Works				Excl.			
Licence/Legal costs for Encroachment				Excl.			
Funding Sources/Grants/Contributions				Excl.			
Finance Costs				Excl.			
TOTAL COST FOR STAGE 1		**3.356**	**$3.648**	**$12.243.617**	**1.436.424**	**2.568.993**	**8.238.201**

COSTS FOR STAGE 2

A LEVEL 1 - SUB BASEMENT				200,045		200,045	
C LEVEL 2 BASEMENT				6,430		6,430	
D LEVEL 3 - STALLS				44,450		44,450	
Margin & Adjustments							
Design Development Contingency	5%			12,546		12,546	
Builder's Preliminaries	15%			39,521		39,521	
Builder's Overheads and Margin	5%			15,149		15,149	
Design Consultants Fees	12%			38,177		38,177	
Escalation to Completion 2008	3%			10,690		10,690	
Contingency	10%			36,000		36,000	
TOTAL EXTRA COST FOR STAGE 2				**403.008**		**403.008**	
ADD TOTAL COST FOR STAGE 1				**12,243,617**	**1,436,424**	**2,568,993**	**8,238,201**
TOTAL COST FOR STAGES 1 AND 2		**3.356**	**$3.768**	**$12.646.625**	**1.436.424**	**2.972.001**	**8.238.201**

COSTS FOR STAGE 3

A LEVEL 1- SUB BASEMENT				70,320		70,320	
D LEVEL 3 - STALLS				20,000	20,000		
I 21 Lydiard Street				2,984,535	2,984,535		
Margin & Adjustments							
Design Development Contingency	5%			153,743	150,626	3,117	
Builder's Preliminaries	15%			484,290	474,470	9,819	
Builder's Overheads and Margin	5%			185,664	181,900	3,764	
Design Consultants Fees	12%			467,824	458,339	9,485	
Headworks and Authority Charges	0.3%			13,099	12,833	266	
Escalation to Completion 2008	3%			131,384	128,720	2,664	
Contingency	10%			451,064	441,918	9,146	
TOTAL EXTRA COST FOR STAGE 3				**4,961,922**	**7,837,876**	**108,581**	
ADD TOTAL COST FOR STAGES 1 AND 2				**12,646,625**	**1,436,424**	**2,972,001**	**8,238,201**
TOTAL COST FOR STAGES 1, 2 AND 3		**4,588**	**$3,838**	**$17,608,548**	**$9,274,300**	**$3,080,583**	**$8,238,201**

10.7 Appendix G: Study Brief 05129 Dec 05

PART E
PROJECT BRIEF

1.0 INTRODUCTION AND BACKGROUND

Construction of Her Majesty's Theatre, Ballarat, began in 1874 and the building, then called the Academy of Music, was opened for its first performance on 7 June 1875. A little over 100 years later, the theatre, by then renamed the Royal South Street Memorial Theatre, was identified in Ballarat's earliest Heritage Study (Attachment 1) as being of architectural and historical significance, and recommended for addition to the Historic Buildings Register and the Register of the National Estate.

In October 1980, the Theatre was listed on the Register of the National Estate (Attachment 2), which was compiled by the Australian Heritage Commission from 1976 to 2003 and served as Australia's national inventory of natural and cultural heritage places that were considered to be worth keeping for the future.

In March 1987, in response to the findings of a report completed in September 1986 (Attachment 3), the Theatre was added to the Register of Historic Buildings (now known as the Victorian Heritage Register) as Historical Building No.648, Royal South Street Memorial Theatre, Lydiard Street South, Ballarat (Attachment 4).

In 1987 the Royal South Street Society, owners of the theatre since 1965, gifted the building to the, then, City of Ballaarat. During much of 1987, substantial investigations were undertaken of the building itself, and its market context. The reports that were produced included a 'Market Research and Feasibility Analysis' (Attachment 5), a 'Project Brief' identifying Essential, Desirable and Optional repair and reconstruction works (Attachment 6), and a two volume 'Conservation Analysis and Conservation Policy' (Attachment 7 – Vols. 1 and 2). These documents informed the expenditure of some $6.0 million on the restoration and modernisation of the theatre, which was undertaken from 1988 to 1990.

The Theatre re-opened as Her Majesty's on 1 November 1990.

In 1996, Arts Victoria in conjunction with VAPAC (Victorian Association of Performing Arts Centres) commissioned a 'Survey of Rural and Metropolitan Performing Arts Centres' (Attachment 8). A consultancy group comprising relevant specialists undertook this project to:

- Survey identified Performing Arts Centres to collect data on the venue infrastructure, level of equipment and operations
- Develop Benchmark Categories to categorise the Performing Arts Centres
- Recommend a facilities development program, with prioritised development requirements for the various categories of facilities

The consultants identified Her Majesty's Theatre, Ballarat, as one of only three of Victoria's theatres whose heritage characteristics were considered by the consultants to be important, but which would always be restricted in their staging capacity by aspects of their historic qualities. Consequently, these theatres were categorised in the survey according to the benchmark which could otherwise be achieved without such restrictions, but noted as having a 'heritage qualification'. This was used to indicate the limitation on their capacity to conform fully with the applicable benchmark.

Following their survey of Her Majesty's Theatre the consultants determined that the theatre 'is a superb historic building which fulfils most of the A1 category benchmark, apart from technical shortcomings – the most significant being the loading dock and stage storage.' They also commented that the theatre has the potential to achieve the AA benchmark with sufficient financial commitment, and that two categorisation options could apply:

1. Subject to commitment to purchase the adjacent property to enable backstage expansion, Her Majesty's is recommended for categorisation as an AA/H facility, noting that the proscenium size cannot be altered to meet the AA benchmark. Despite the constraint

imposed by the proscenium, the remainder of the facility should be developed to meet the AA benchmark as fully as possible.
2. If development to the AA/H category is not adopted as Council policy with the necessary financial commitment then Her Majesty's should be categorised as an A1 facility.

As part of the survey, the consultants assessed Her Majesty's Building Facilities, Management, Theatre Fit-out and Building Services and the items considered to need upgrading to meet the category recommendation were designated as Urgent, Essential or Desirable.

In 1997, a local Structural Engineer and a local Architect with extensive experience in the analysis of heritage buildings carried out a series of inspections of the building. They presented their findings in a report (Attachment 9) that gave an appraisal of the condition of the theatre from both a structural and architectural perspective, and advised on maintenance requirements, both urgent and routine. Priority was allocated to maintenance items which were related to safely and to those items which would prevent further deterioration of the building.

Since then, and in response to the 1996 benchmark survey, many of the facilities at the theatre have been upgraded. A list of Capital Works projects completed at the theatre since 1999 is attached to this Brief (Attachment 10).

In November 2003, consultants Sinclair Knight Mertz completed a 'Performing Arts Precinct Feasibility Study' for the City of Ballarat (Attachment 11). This study investigated the economic, architectural and social feasibility of making physical and organisational links between Her Majesty's Theatre and the Ballaarat Mechanics' Institute. It concentrated on the means of re-developing the Ballaarat Mechanics' Institute building into two performance spaces and linking it to the rear of Her Majesty's Theatre. This report noted that there were significant heritage issues associated with the buildings being studied which needed to be considered in the Feasibility analysis. The full details of the heritage issues for each space were outlined is a July 2003 'Issues and Options Paper' while a summary of the critical heritage issues for each venue was included in the final report.

Following receipt of that Study, Her Majesty's Theatre Board of Management prepared a statement for the Ballarat City Council recommending that the options proposed in the report not proceed for the reason that they did not adequately address the current and future needs of the Theatre (Attachment 12).

The Theatre's needs were further investigated and are detailed in the 'Her Majesty's Theatre Best Value Report' July 2004 (Attachment 13) and this brief.

2.0 PROJECT PURPOSE

The purpose of this Project is to provide the City of Ballarat, Her Majesty's Theatre and Heritage Victoria with a suite of documents that will provide a definitive assessment of the architectural and heritage limitations on desired development proposals, and the associated financial aspects of any of those development proposals that are identified as statutorily feasible. It is anticipated that once these architectural and heritage limitations and financial aspects are documented, programs can be estimated, budgets planned and funding opportunities identified, permits achieved from Heritage Victoria, and funding applications made to both the State and Federal governments for re-development work at Her Majesty's Theatre to proceed.

Various investigations and reports undertaken over the past two decades have identified a number of emerging issues concerning the operation, efficiency and viability of the Theatre.

However, under the Victorian Heritage Act 1995, any proposed changes to Her Majesty's Theatre will require a Permit from Heritage Victoria. Under the provisions of this Act, the Heritage Victoria Executive Director, in determining a permit to undertake works to a State Registered place, must consider the extent to which the proposal, if approved, would affect the cultural heritage significance of the registered place. It is therefore critical for the Heritage Victoria Executive Director to understand the impacts of a development proposal on the cultural heritage significance of a registered place.

In the case of proposals other than minor changes or maintenance, the development of a Conservation (Management) Plan, containing analysis of the significance of the fabric of the building along with conservation policies and management strategies for maintaining this fabric, is considered critical to the informing and guiding of potential development options, and the ability of the Heritage Victoria Executive to assess the impact of a proposal when considering a permit application.

Consequently, the City of Ballarat is inviting Tenders from suitably qualified consultants to:

- review all relevant documentation and reports, undertake existing fabric analysis as necessary, and update the 'Conservation Analysis and Conservation Policy of the Royal South Street Memorial Theatre' (2 vols) prepared in August 1987 by Clive Lucas and Partners Pty Ltd in association with Civil and Civic Pty Ltd;

and

- investigate the feasibility of a number of identified development proposals in accordance with the developed Conservation Policies, and provide sketch designs, costings and a prioritised list of those proposals agreed by the Project Control Group to be functionally and statutorily possible

3.0 STUDY AREA

3.1 Description and History

The subject of this project is Her Majesty's Theatre, which is located in Lydiard Street South, Ballarat, and is the City of Ballarat's premier performing arts facility. According to Ross Thorne, a major exponent of this country's theatrical history, the building is 'probably the most significant theatre in Australia today' and is probably the oldest operating theatre in Australia. Thorne also claims that it is the most substantially intact of our remaining 19th century theatres, which include the Theatre Royal in Hobart, the Princess in Melbourne and Her Majesty's in Brisbane[1].

On a Victoria-wide basis, the theatre has special importance for its unique interior. Its double horse-shoe shaped balconies supported on columns, added from the designs of the notable architect William Pitt in 1898, are the last example of this type of theatre design in the State.

The Theatre was first known as the Academy of Music, and was constructed in 1874/75 to supersede Ballarat's Theatre Royal (1858), which stood around the corner in Sturt Street.[2] The Academy was built by the wealthy Clarke family at the initiative of a group of local people and was designed by the architect, George Browne. For the next twenty five years, the Academy of Music was unchallenged as Ballarat's main theatrical venue. In 1898, when Sir William Clarke died, the building was bought by a local consortium and transformed into the theatrical space substantially still seen today. They named it Her Majesty's Theatre.

The new owners commissioned Australia's leading theatre architect, William Pitt, to remodel the interior and improve the stage facilities. Pitt, who had been apprenticed to George Browne, also designed Melbourne's Princess Theatre. The present layout of the horseshoe

1 From the Statement of Significance for Victorian Heritage Register No.H0648

2 Note: in addition to the histories compiled in the documents identified as Attachments 3 and 7, brief and comprehensive histories of the theatre can be found at Her Majesty's Theatre web site – www.hermaj.com

shaped auditorium with two balconies above raked stalls, is Pitt's design. Two levels of dressing rooms and other backstage facilities are located beneath the raked stage.

From the First World War on, the Theatre was increasingly used for cinema presentations, although it was always available for live performances, and was regularly used by J. C. Williamson's and other touring companies as well as local groups. For the last forty years, the Theatre has been used to stage locally produced musical comedies. Her Majesty's was well known for presenting MGM and Paramount movies. A Bio Box (projection room) was built above the Dress Circle Lobby in 1916, and the Theatre was wired for sound in 1930. Earlier, during the silent movie era, a theatre orchestra provided the film accompaniment. In 1982, the Ballarat Theatre Organ Society installed the Theatre's magnificent Compton Theatre Organ.

In 1965, the Theatre was purchased by the Royal South Street Society, and saved from demolition. It was renamed the Royal South Street Memorial Theatre and became the home of the Society's annual competitions, which are still held there between August and November each year. In 1987 the Royal South Street Society gifted the Theatre to the, then, City of Ballaarat.

The City undertook a major renovation of Her Majesty's between 1988 and 1990, restoring key heritage features, including reinstatement of the verandah and the dome, and upgrading the technical and safety facilities. The funding, some $6.0 million, came from a wide range of businesses, individuals and organisations and the Theatre reopened as Her Majesty's on 1 November 1990.

Her Majesty's Theatre is located on the east side of Lydiard Street South, a short distance from Ballarat's main boulevard, Sturt Street, and opposite the State listed Craigs Hotel. Its site is located directly on the steeply sloped edge of the basalt plain upon which the Government Surveyor W.S. Urquhart formally laid the township of Ballarat. The front façade of the building presents essentially as a two storey building in the Lydiard Street streetscape, while the rear façade presents an imposing façade well over five storeys in height that is directly visible along Lewis Street, but is also widely visible from a broad view catchment ranging from a few hundred metres to a kilometre or so in distance. The building forms an integral part of this 'rearscape' of the varied buildings which face Lydiard Street South and Sturt Street.

3.2 Current management and operations

Management

The Theatre is managed and operated by a Business Unit of the 'City Wellbeing' Division of the City of Ballarat, and is assisted in this role by an advisory Board appointed by Council under Section 86 of the Local Government Act.

Programs

The Theatre is an active presenter of professional productions and is a participant in the performing arts centres national touring circuit.

The Theatre's current program consists of local and commercial hires, touring professional productions entrepreneured by the Theatre, and the Royal South Street Society Competitions which run from mid August to early November each year.

During January of each year the theatre undertakes its annual maintenance program.

Staffing

The City of Ballarat Business Unit that operates the Theatre employs eleven permanent staff in the positions of:

(a) Director
(b) Deputy Director
(c) Technical Operations Manager
(d) 3 x part-time Theatre Technicians
(e) MajesTix Box Office Manager
(f) 2 x part-time Box Office staff
(g) Finance Officer
(h) Publicist

In addition, the Unit engages a pool of some forty casual staff in various operational roles.

3.3 Visions, mission statements and goals

Visions

- The Vision of the Business Unit is *to operate pre-eminent performing arts facilities*.

- The Vision of the Board of Her Majesty's is *to be proactive in providing strategic guidance to the City of Ballarat for the operation and development of its performing arts facilities and programs*.

Mission Statements

- The Mission of the Business Unit is *to operate Her Majesty's Theatre as the pre-eminent performing arts facility in the City for the enjoyment, inspiration and education of the people of Ballarat and the wider community*.

- The Mission of the Board is *to actively encourage and foster the participation in and appreciation of the performing arts by the community through the continuing development of quality facilities and programs; and to protect, maintain and promote the City's performing arts heritage.*

Goals

The goals of Her Majesty's Theatre (both the Business Unit and the Board) are:

1. To actively participate in, and provide leadership for, the development of performing arts and culture strategies within the City of Ballarat.
2. To maximise the use of Her Majesty's Theatre.
3. To present quality, diverse theatrical programs which entertain and educate.
4. To cultivate interest in the performing arts within the community by encouraging participation.
5. To establish and operate within a viable annual budget.
6. To create and implement strategies to enhance the opportunities available for local performing arts groups and organisations.
7. To promote Her Majesty's Theatre as the premier performing arts centre in the Western Victorian Region.

4.0 PROJECT BUDGET AND TIMING

The City of Ballarat has allocated a maximum budget within the range of $80-90,000 (excluding GST) for the project.

It is anticipated that the project can be completed within four to five months of appointment.

5.0 KEY CONSULTANCY TASKS AND OUTCOMES

The project will necessarily occur in stages, with each stage informing the next.

5.1 STAGE ONE – Conservation Management Plan

The consultancy is to produce a Conservation Management Plan (CMP) that conforms with the *Australian ICOMOS Charter for the Conservation of Places of Cultural Significance* (Burra Charter) and its guidelines. The process should refer to *The Conservation Plan: A guide to the preparation of conservation plans for places of European cultural significance* by James Semple Kerr, National Trust 1996, and be formatted generally in accordance with the 'Heritage Victoria Conservation Management Plan Brief - March 2003'.

Heritage Victoria's requirement of a Conservation Management Plan is that it should provide clear and justifiable direction for owners and permit issuing authorities in the management of the particular place for which it has been prepared. Clear and justifiable policies and actions should be negotiated during the process of preparing the report.

By justifiable is meant that policy options must be identified and a proper argument made for the policy put forward in the CMP. In particular a rationale must be given for the determination of the relative significance of the parts of a place.

By negotiated is meant that the policies and actions must be determined through consultation with relevant bodies including the client, owners, tenants, committees of management, relevant community groups, the National Trust, the Local Government Authority and Heritage Victoria.

All relevant statutory requirements must be considered in relation to the future development and use of the place. Where necessary, specialist input other than from conservation architects or historians must be sought, such as from a building surveyors engineer, horticulturalist, landscape architect, materials conservators, archaeologists etc.

5.1.1 Stage One - Part A: Conservation Analysis

As indicated in the call for Tenders, the starting point for the production of the required CMP for this project is the 'Conservation Analysis and Conservation Policy of the Royal South Street Memorial Theatre' (2 vols) prepared in August 1987 by Clive Lucas and Partners Pty Ltd in association with Civil and Civic Pty Ltd.

This document needs to be reviewed in the light of the subsequent investigations, reports and capital works that have been undertaken on the building (and are included as attachments to this Brief), and upgraded to accurately reflect the present circumstances of the building. While the attachments to this Brief encompass the majority of resource material to be reviewed, the successful Tenderer will also be required to examine the files for the building held by Heritage Victoria, and undertake an inspection of all areas and fabric to be able to fully and accurately present the significance, condition and integrity of all parts of the building.

The main objective of the Conservation Analysis is:

- to identify and assess the historical or cultural significance of Her Majesty's Theatre, including its contribution to the surrounding streetscapes.

It should include an historical summary and physical survey of the fabric of the place and set out its developmental sequence and changes to the fabric. It should also include analysis of the significance of all areas of the building to enable the formation of a hierarchical listing from most to least significant, and the reasons why.

5.1.2 Stage One - Part B: Statement of Cultural Significance

Even though a Victorian Heritage Register Statement of Significance already exists this is likely to need upgrading in the light of current practices and the present standard format for a Statement of Significance required by Heritage Victoria.

The Statement of Cultural Significance should be prepared as set out in 'Guidelines to the Burra Charter: Cultural Significance'.

The main objective of the Statement of Cultural Significance is:

- to set out concisely the reasons for the Theatre's overall significance and the reasons for the significance of any component part(s).

The assessment of cultural significance should discuss the relative significance of the parts of the place, as well as the significance of the place as a whole. The rationale for the determination of relative significance must be given. The assessment should be carried out against the Heritage Council's criteria for the Victorian Heritage Register.

5.1.3 Stage One - Part C: Conservation Policy

The Conservation Policy is to be based on the Statement of Significance for the place and should incorporate recommendations for preservation, restoration, reconstruction, adaptation and interpretation as appropriate.

The Statement of Conservation Policy should be prepared as set out in 'Guidelines to the Burra Charter: Conservation Policy'. The policy should take into account the current condition of the place, current and future user requirements, statutory requirements, community views, locational and social context, potential risks, tourism potential if relevant, and financial resources. It must address the significant areas and elements.

The main objective of the Conservation Policy is to*:*

- provide a framework for the future management of Her Majesty's Theatre
- make recommendations, as necessary, for policies and strategies for the preservation, restoration, reconstruction, adaptation or removal of any and all areas and features in the building
- prepare recommendations for the future management of the site which comply with or enhance the 'Statement of Significance'.

The conservation policy should also contain recommendations for works that could be undertaken without a permit under the Victorian *Heritage Act 1995,* Sections 33, 42 (2) and 66.

5.2 STAGE TWO - Investigate feasibility of listed re-development proposals

5.3 STAGE THREE - Provide sketch designs, costings and a prioritised list of those proposals agreed by the Project Control Group to be functionally and statutorily possible

Retaining the value of a heritage asset presents certain constraints on development, but this should not necessarily be seen as an impediment to future changes. If heritage significance is fully understood then works can be proposed that achieve the item's continuing use, including future development. Adaptation and development may in fact be inspired by, and enhance, heritage significance, or at least minimise negative impacts.

The preparation of this part of the project shall only commence once the Conservation Management Plan has been developed to a draft stage that is to the satisfaction of the client. It is critical that the feasibility of all the listed re-development proposals be examined in the light of the development opportunities and constraints that have been identified in the CMP. Stages Two and Three are likely to need to be run concurrently.

The present Theatre building is considered to lack space and/or amenity in a number of areas and the second stage of this project involves the investigation of the feasibility of a number of desired re-development proposals, which may ultimately only be possible if theatre activities can be extended into adjoining sites. It should be noted, however, that the adjoining properties are not presently in the ownership of Her Majesty's Theatre, or of the City of Ballarat, and may not be in the immediate future.

The following areas, and their relative components, require investigation to examine the physical, statutory and financial feasibility of the listed re-development proposal and recommendations for their delivery. There will also be the need to provide Heritage Impact Statements for most of the options, where there is the likelihood of extensive impact on significant fabric.

Recommendations and designs will need to demonstrate a researched, well considered, creative and practical approach. They will also be graphically represented wherever possible and demonstrate a thorough understanding of; the Burra Charter; heritage issues; existing research and documents; architectural design principles; maintenance impacts and requirements; project costing and the interests of special interest groups and community responses.

The requirements of the Building Code of Australia (BCA), and of the Disability Discrimination Act 1992, must also be considered in relation to the future development and use of the building. Reference should also be made to relevant guidelines for implementing issues raised by these statutory requirements in heritage places.

Re-development proposals requiring investigation are as follows:

- **Foyer and Box Office Area**

(a) Foyer Space:
- Investigate options for physically enlarging the foyer space at Her Majesty's Theatre and creating larger public gathering spaces and space adjacent to the Box Office (this may require extension into adjacent buildings at the Lydiard Street frontage).
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(b) Commercial Outlets:
- Advise on other types of retail outlets that could operate from the facilities eg. Coffee Shop. Report on the occupancy numbers allowable in the extended areas.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(c) Late Room / Crying Room:
- Investigate options for creating a Crying / Latecomers Room with the capacity for at least 10 people accessible from the foyer into the auditorium, and also with the capacity to be used as a sound-proofed interpreter booth.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(d) Disabled Entry (Foyer):
- Investigate options to enable easy access for disabled patrons. It is preferred that this access be through the Lydiard Street entry to Her Majesty's Theatre into the foyer but other options should be investigated.
- All proposals must comply with OH & S regulations (including steepness of ramp to lift, replacement of heavy entry doors and installation of airlock, removal of foyer steps etc.)

- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(e) Disabled Entry (Upper):
- Investigate a method of accessing the Dress Circle, Balcony and Long Room via lift for disabled patrons.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(f) Foyer Signage:
- Investigate a foyer signage and display system that will be visible to all patrons.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(g) Long Room Usage:
- Investigate extended uses for the Long Room (e.g. performance space, display area, retail/hospitality).
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

➢ **Her Majesty's Theatre Auditorium**

(a) Seating Configuration:
- Investigate the replacement of the 959 seat frames in the Theatre auditorium, and supply options for re-aligning the seats in the Stalls, Dress Circle and Balcony areas from their current configuration to improve stage sight lines. There is a requirement to retain at least the 959 fixed seats, with a configuration that accommodates more seats with better sight lines and larger seats being favourable.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(b) Disabled Seating:
- Investigate the placement & position of wheelchair /removable seats and the potential to increase the number of wheelchair / removable seats in the Auditorium.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

➢ **Roof and Grid Area**

(a) Structure Evaluation:
- Investigate the need for a complete Roof structural engineering study and design. Note: this part of the project may best be incorporated and carried out in Stage One
- Cost and prioritise any repairs required to prevent any further damage to roof or grid beams at Her Majesty's Theatre.
  Note: this part of the project may best be incorporated and carried out in Stage One

(b) Grid Height:
- Investigate a means to increase the grid height for hanging stage cloths by 4.6 metres to achieve an 18 metre drop.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(c) Automated Flying:
- Investigate options for the installation of an automated flying system.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(d) Bio Box Access:
- Investigate Options for providing covered access from the fly gallery to the bio box.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

➢ **Backstage and Loading Area**

(a) Rear Stage Extension:
- Investigate options to extend the rear of stage area out over Lewis Street at the rear of Her Majesty's Theatre to create the largest space possible, while retaining services of Storm Water, electrical and sewerage at Ground floor level.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(b) Stage Goods Lift:
- Investigate options for providing an enclosed Stage Access Goods Lift to have the dimensions of at least 6m long x 4m wide and a load capacity of 2 Tonne.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(c) Stage Passenger Lift:
- Investigate options for providing a Lift or device to transport people from the Lewis Street/ Stage Door level to the Stage/ Green Room level.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(d) Rehearsal Room:
- Investigate options for providing a sound-proofed and equipped rehearsal room of similar dimensions to the stage and in close proximity to the stage.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(e) Theatre Vehicle Parking:
- Investigate options for achieving secure, permanent parking at Lewis Street Level for at least the Theatre's Van and one other vehicle, and to create more Theatre car parking spaces in the vicinity of the Stage Door.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(f) Large Dressing Room:
- Investigate options for providing at least one (1) large dressing room capable of accommodating 40 people.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(g) Alternative Uses For Dressing Rooms:
- Investigate alternative uses for the Dressing Rooms (e.g. Conference break-out rooms) and means of access.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(h) Dressing Room Mirrors:
- Investigate options for replacing the Dressing Room Mirror lights with enclosed Units that provide appropriate lighting for the application of stage make-up.

- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

➢ **Stage**

(a) Stage Trap:
- Investigate a means of making the Stage Trap operational
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(b) Stage Floor:
- Investigate the replacement (and repair) of the Stage floor, including options for removing the rake.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(c) Thrust Stage:
- Investigate options for creating a thrust stage over the orchestra pit, which can be raised or lowered for audience seating depending on the requirements of the performance.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(d) Organ Location:
- Investigate options by which the Ballarat Theatre Organ Society's organ can be raised from the Organ chamber to Stage level.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(e) Increase Wing Space:
- Investigate options for achieving more wing space on either side of the Stage
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

➢ **Miscellaneous Works**

(a) Ballaarat Mechanics' Institute:
- Investigate the feasibility of continuing the dialogue with the Ballaarat Mechanics' Institute in relation to the re-development of their building, and where possible comment or recommend on the potential for physical linkages which might a) add to the storage space available at Her Majesty's or b) facilitate the use of either Her Majesty's or the Mechanics' Institute facilities (eg. Sharing of Dressing rooms).
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(b) Re-site Administration & Box Office:
- Investigate options to re-site the Administration and Box Office areas so that efficiencies may be gained from the physical grouping of having these staff located together (eg. telephones, serving Box Office customers, reception point, easier access to administration staff, improved work facilities etc.). Plans need to include methods of operating the Theatre's IT, Telephone and Box Office networks, along with links to backstage.
- Provide sketch designs and indicative indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(c) Fire Engineering & Ambulant disabilities Evacuation
- Complete a Fire engineering report on the building and design, cost and prioritise a safe means of evacuating people with ambulant disabilities.

(d) Lighting
- Design, cost and prioritise lighting improvements at the Lydiard Street frontage and Emergency Evacuation lighting systems throughout the building.

(e) Storage Areas:
- Investigate a means to construct storage areas at Her Majesty's Theatre and advise on the best use of these storage areas eg. Technical equipment, archives etc. At least one area needs to have climate control for historical material, and another needs to have humidity control for the storage of the Theatre's pianos.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(f) New Performance Spaces:
- Investigate options for the creation of performance spaces in other buildings linked to Her Majesty's Theatre.
- Provide sketch designs and indicative costings for those options agreed by the PCG to be functionally and statutorily possible.

(g) Facility Rating:
- Report on the capacity of Her Majesty's Theatre to attain the "AAH" 'Oh you Beautiful Stage' facility rating with these changes, and any other upgrades that would be needed to achieve Theatre facility benchmarks.

5.4 STAGE FOUR – Management Strategy

The final part of this project will be to devise, in consultation with the client, a Management Strategy for the implementation of the findings of Stages One, Two and Three. The strategy should allow for the implementation of the conservation policy under changing circumstances.

The strategy should include:
- A prioritised schedule of works containing short and long-term development requirements. Indicative costings of those proposals agreed to in Stage Three by the PCG to be functionally and statutorily possible are to be included in this prioritised list and any recommendations for further design development;
- A prioritised schedule of works containing short and long-term conservation and maintenance requirements. The level of detail in this schedule should be sufficient to guide more detailed specifications if needed;
- The technical, and other staff, that may be needed in the implementation of recommendations in the management strategy;
- Sources of financial and technical assistance;
- Any other recommendations considered to be necessary for the long term management of Her Majesty's Theatre.

6.0 PRESENTATION OF DOCUMENTATION

The consultant will supply the Project Coordinator with the following documents during, and at the conclusion of the consultancy:
- Six (6) bound sets and one (1) unbound set of the draft report for each stage in an A4 size bound document. The unbound set shall be suitable for reproduction purposes. Coloured plans should be reduced and included in the document as A3 foldouts.

- Six (6) bound sets and one (1) unbound set of the final report in an A4 size bound document. The unbound set shall be suitable for reproduction purposes. Coloured plans should be reduced and included in the document as A3 foldouts.
- One electronic copy of the final report in a PDF format compatible with web publishing

The City of Ballarat shall arrange all other printing, reproduction or extractions of the documents at its own expense.

7.0 SUBMISSIONS

It is expected that submissions will address the Key Selection Criteria and provide the following information to assist the assessment panel in its evaluation and selection processes:

- Relevant details (qualifications and experience) of the proposed team;
- Description of the project methodology, including identification of stages and associated tasks and the timeframe within which each stage would be completed;
- A lump sum price with a costing for various components of the project, including a break-down of rates for each team member;
- A client list for previous work of a comparable nature;
- Ability to commence and complete work within the designated timeframe.

8.0 KEY SELECTION CRITERIA

All valid tenders will be evaluated in general accordance with the criteria set out below. Criteria are intended to give tenderers an indication of the major factors the Principal will be considering in evaluating the tenders received. Tenderers should therefore ensure that they provide sufficient information to enable their tenders to be given proper consideration.

Should a tenderer not provide the information to allow evaluation of the criteria the submission shall be considered not complying and will be disregarded for further consideration.

Criteria
Tenderers should use the following list of selection criteria in preparing their submission. A written submission should accompany the mandatory schedules and forms in support of the selection criteria.

1. Experience and Capability.
Applicants must demonstrate experience in projects of this kind, or the various components of this project, and will be assessed on:
- Past performance & current commitments;
- Experience in projects of this type, scope and complexity;
- Ability to undertake a project of this varying nature that requires a multi disciplinary approach;

2. Understanding of the Key Issues of the Project
- Applicants must provide details of:
- The approach and methodology proposed to achieve the project requirements;
- Proposed consultants, subcontractors and other personnel to be used in the project;
- Indicative proposed work program and timeframe

3. Specific Skills, Experience and Knowledge
Applicants must provide details of:
- Expert knowledge and experience in Heritage Building projects of this nature;
- Knowledge of regional communities;

- Expert knowledge of performing arts centre operations;
- Business Planning / Evaluation.

4. Fees

The amount of the fees submitted by applicants, and the scope, scale and value of the work that is proposed to be completed for those fees.

5. Compliance with Conditions of Tender;

6. Ability to commit to the project;

9.0 CONTRACTUAL MATTERS AND CONDITIONS OF ENGAGEMENT

The Principal will be the City of Ballarat.

The Principal reserves the right to:

- Seek clarification for further information in connection with any submission.
- Not proceed with issuing of tender documents.
- Amend the submission documents and provide further information by giving written notice to the tenderers.
- Seek tender submissions from a selected number of the submissions at a date to be advised or deal directly with one or more of the submissions without formal tendering.

The contract between the Principal and the Consultants will be based on AS 4122 General Conditions of Contract. The following conditions shall also apply:

- The appointed Consultant will not be considered or deemed to be an employee of the Ballarat City Council, particularly with regard to Workcover, superannuation, public liability and professional indemnity. The Consultant will be required to provide Council with evidence that public liability and professional indemnity insurance has been obtained before commencement of the project.

- The Consultant shall ensure their employees/sub-contractors are covered under the provisions for Workcover and supply verification that the policy is correct and fully paid prior to commencing work on the contract. Vehicles operated by the Consultant shall be fully registered and insured in accordance with Statutory requirements, including a current vehicle license, if required.

- No submission shall be deemed to have been accepted unless and until confirmation of such acceptance has been notified to the successful consultant in writing by the Council.

- All submissions will be treated as strictly confidential. The Ballarat City Council will not disclose details of any submission or part thereof to any other party without prior written consent.

- The Contractor must not during or after the contract divulge to any person whatever or otherwise make use of any confidential information concerning the Ballarat City Council.

- All communication, transportation, office and other costs must be met by the consultant, unless otherwise agree to and confirmed in writing by the City of Ballarat.

10 RESOURCE MATERIAL

The documents considered most relevant to this project have been made available as Attachments to this Brief. Hard copies will be provided to the successful tenderer if required. Other documents that may be identified as useful, during the course of the project, will be made available or accessible to the successful consultants for the purposes of researching and undertaking this project.

11 PROJECT MANAGEMENT

11.1 Project Control Group

A Project Control Group (PCG), comprising representatives from the City of Ballarat, Her Majesty's Theatre, and Heritage Victoria, will oversee this project and provide comment and guidance. The PCG will be also responsible for agreeing on the best options to be developed to sketch design stage, costed and prioritised by the consultants.

The Director of Her Majesty's Theatre, Janice Haynes, will act as Project Co-ordinator assisted by Vicki Johnson, Heritage and Urban Design Officer for the City of Ballarat. All day-to day enquiries are to be made to Janice Haynes in the first instance.

11.2 Stakeholders

The consultants are required to meet with major stakeholders, which include, but are not necessarily limited to the following:

(a) Theatre staff
(b) Board of Management
(c) Hirers (current and potential)
(d) Arts Community
(e) Royal South Street Society
(f)Ballaarat Mechanics' Institute

and analyse the outcomes of the discussions for reporting to the PCG and for inclusion in the final report.

In order that proper and thorough consultation occurs the consultants will also be required to run and facilitate at least one (1) public discussion forum. The Consultant is required to report on the outcomes of the discussions with the stakeholders.

11.3 Meetings

The consultants will be expected to meet with the full Project Control Group on a minimum of five occasions during the course of this project, at staged intervals to be agreed with the Project Co-ordinator and assistant, and specifically for:

- presentation of the Draft Conservation Management Plan (Stage One)
- presentation of recommendations on feasible development options (Stage Two)
- presentation of the Draft sketch designs, costings and prioritised list of those proposals agreed by the Project Control Group to be functionally and statutorily possible (Stage Three)
- presentation of the Draft Management Strategy (Stage Four)
- presentation of the Final Documents

Further meetings with the Project Co-ordinator and assistant will be arranged on an 'as needs' basis.

12 CONFIDENTIALITY OF INFORMATION

In the process of collecting and using information the Contractor may have access to Council Information and to business and private information. All information accessed or collected by the Contractor must at all times be kept confidential and not disclosed to any party without prior written approval of the Council. In addition it must not be used for any personal gain by the Contractor or the Contractor's business. Council and by default any of councils contractors are bound by the Privacy Act 2003.

13 OWNERSHIP AND COPYRIGHT OF DATA

Ownership and copyright of data created and collected during the term of the contract, will remain with the Ballarat City Council including original information provided by the Council and the collated and generated information of the Contractor.

14 LODGMENT OF DOCUMENTS

Tenders close at 12 Noon on Wednesday 7 December 2005 and must be deposited in the Tender Box which is located in the Customer Service area on the ground floor at The Phoenix Building, 25 Armstrong Street South, Ballarat or posted to the Manager, Contract Procurement, PO Box 655, Ballarat Victoria 3353 to enable the Tender to be deposited in the Tender Box by the time and date specified. Tenders must be enclosed in a plain sealed envelope (exclusive of any company logo or similar identification) which is clearly marked **"Tender No 05129".**

The opening of tenders and submissions is a public process and therefore tenderers are able to attend the opening, which will occur immediately after the closing time in the customer service area of the Town Hall. The information released at this point in time will only be the names of those organisations and/or individuals that submitted a tender response.