

Submission No. 01

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Australian War Memorial

Proposed Redevelopment of the First World War Galleries

**Statement of Evidence to the Parliamentary
Standing Committee on Public Works**

SUBMISSION 1

26 November 2012



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1.0 Summary of proposal

In 2011 the Australian War Memorial (Memorial) submitted a New Policy Proposal (NPP) seeking funding to redevelop the First World War galleries in time for the Anzac centenary (2014-2018). Seed funding of \$1.7 million was provided by Government to develop a detailed Business Case and NPP for full funding. The detailed Business Case and NPP were completed in 2011 and in April 2012, the Prime Minister announced funding of \$27 million towards the redevelopment of the First World War galleries.

The proposed redevelopment is a key part of the package of commemorative events and initiatives that comprise the Australian Government's Anzac Centenary Program 2014-2018. The Government has committed \$83.5 million over seven years to implement this program. The Memorial's purpose is to commemorate the sacrifice of those Australians who have died in war. Its mission is to assist Australians to remember, interpret and understand the Australian experience of war and its enduring impact on Australian society. It houses one of Australia's most important museum collections: the First World War collection is significant in both size and quality. The Memorial is best placed to assist the Australian Government in achieving the objectives of the Anzac Centenary Program 2014-2018. The redevelopment of the First World War galleries will make a significant contribution to this initiative.

The objectives of the redevelopment of the First World War galleries are to:

- express the Memorial's purpose of commemorating the sacrifice of Australians who have died in war;
- use the Memorial's collection as an integral part of communicating this commemoration; and
- understand and address modern audience needs, both in terms of exhibition interpretation and physical aspects of the gallery space.

The Memorial is established as a corporation by the *Australian War Memorial Act 1980*. The Minister for Veterans' Affairs has portfolio responsibility for the Memorial, which is a statutory authority within the portfolio. The Memorial proposes to undertake the redevelopment of the First World War galleries on behalf of the Commonwealth. The project value is estimated at \$32.52 million (GST exclusive). The Memorial has previously referred the following similar projects for inquiry by the Parliamentary Standing Committee on Public Works:

- Redevelopment of the Hall of Valour (Medium Works);
- Redevelopment of the Post 1945 Conflict Galleries and Discovery Room (Report No. 5/2006); and
- Anzac Hall extension (Report No. 13/1999).

The proposal to redevelop the First World War galleries is referred for inquiry by the Parliamentary Standing Committee on Public Works.



2.0 Need for works

2.1.0 Identified need for the work

The Australian War Memorial combines a shrine, a world-class museum, and an extensive archive. The Memorial's purpose is to commemorate the sacrifice of those Australians who have died in war. Its mission is to assist Australians to remember, interpret and understand the Australian experience of war and its enduring impact on Australian society. It is a unique and special place that provides a deeply emotional and personal link to those who have served.

The Memorial is established as a corporation by the *Australian War Memorial Act 1980* (the Act). The functions of the Memorial and the powers of the Memorial, the Minister, the Council, the Chairman and the Director are outlined in the Act. The Minister for Veterans' Affairs has portfolio responsibility for the Memorial, which is a statutory authority within the portfolio. The Council is responsible for the conduct and control of the affairs of the Memorial and the policy of the Memorial with respect to any matters determined by the Council.

The function of the Memorial is defined in Section 5 of the Act as:

1) The functions of the Memorial are:

(a) to maintain and develop the national memorial referred to in subsection 6(1) of the Australian War Memorial Act 1962 as a national memorial of Australians who have died:

(i) on or as a result of active service; or

(ii) as a result of any war or warlike operations in which Australians have been on active service;

(b) to develop and maintain, as an integral part of the national memorial referred to in paragraph (a), a national collection of historical material;

(c) to exhibit, or to make available for exhibition by others, historical material from the memorial collection or historical material that is otherwise in the possession of the Memorial;

(d) to conduct, arrange for and assist in research into matters pertaining to Australian military history; and

(e) to disseminate information relating to:

(i) Australian military history;

(ii) the national memorial referred to in paragraph (a);

(iii) the memorial collection; and



(iv) the Memorial and its functions.

(2) The Memorial shall use every endeavour to make the most advantageous use of the memorial collection in the national interest.

The Memorial's proposal to redevelop the First World War galleries responds primarily to the *Australian War Memorial Act 1980*. It also responds to the Australian Government's Anzac Centenary Program 2014-2018. The Government has committed \$83.5 million over seven years to implement the Anzac Centenary Program 2014-2018. The redevelopment of the First World War galleries is a key part of the package of commemorative events and initiatives that comprise this program.

2.2.0 Deficiencies in current facilities

From the time of its inception, the Memorial was conceived as a shrine, a museum that supports commemoration through understanding, and an archive holding the key records of war. Its development down through the years has remained consistent with this concept. In recent years it has undergone a major renewal. It is an outstanding museum, housing engaging exhibitions and a diverse collection of material relating to the Australian experience of war; a centre of historical research and dissemination of knowledge relating to Australian military history; and an archive, holding extensive official and unofficial documents, diaries and papers. The Memorial is a cultural institution of international standing. It is also one of Australia's leading major tourist attractions. It is imperative that the Memorial maintains this position.

The Memorial's ability to meet its legislative responsibilities, in particular to support commemoration through understanding is dependent on the quality and standard of its galleries and exhibitions. The Memorial houses one of Australia's most important museum collections: the First World War collection is significant in both size and quality. The First World War remains the costliest conflict in which Australia has been involved. From a population of fewer than five million, 417,000 men enlisted and 332,000 served overseas, of whom 60,000 were killed and 156,000 were wounded, gassed, or taken prisoner. This represents the greatest number of Australian casualties in any conflict and was a period in the country's history that changed the Australian way of life forever. The Memorial's existing First World War galleries are inadequate in their presentation and interpretation of this.

The First World War galleries have not undergone any significant redevelopment since the 1970s. They represent one of the last remaining areas to be redeveloped as part of a process of major gallery renewal which began in 1995 with the establishment of the Memorial's Gallery Master Plan. The exhibitions within the First World War galleries have been retained long beyond their useful lifespan and a full redevelopment is the most sensible option in order to bring them up to current museum standards and to the same world-class standard of the Memorial's other galleries.

Due to the age of the First World War galleries, there are a number of specific deficiencies to be addressed as part of this project. These are:



- non-compliance with aspects of building code;
- plant equipment occupying potential exhibition space;
- aged building services;
- aged exhibition infrastructure (including low quality and inefficient lighting);
- confusing visitor circulation throughout the galleries;
- confusing narrative(lacking geographical and chronological order) within the exhibitions presented;
- considerable conservation and cleaning work required to the historic dioramas (an integral element to the First World War galleries);
- inadequate and below-standard display of First World War collection material and interpretative material; and
- un-sympathetic treatment of original building fabric (i.e. circa 1940s ceilings).

2.3.0 Options considered to fulfil the identified need

The Memorial first considered the need for works to enhance and improve First World War exhibitions in 2010. At that time, a NPP seeking funding for the development of a new building in the south east corner of the Campbell site was submitted. The building, proposed to house an exhibition related to the Gallipoli campaign was estimated to cost \$48.5 million (GST exclusive). In addition to this NPP, a further NPP was submitted seeking funding to redevelop the First World War galleries located in the Memorial's main building. The NPP for the new building was not supported by Government on the basis that a redevelopment of the existing First World War galleries presented a more cost effective way of addressing deficiencies in the Memorial's First World War exhibitions. Seed funding of \$1.7 million (GST exclusive) was provided by Government to develop a detailed Business Case and NPP for full funding for the redevelopment of the First World War galleries.

The full range of design options were considered during the development of the detailed Business Case to ensure the scope of the redevelopment presented the most efficient, cost effective, and appropriate response to the project requirements. These options are addressed in detail in the detailed Business Case.

The detailed Business Case and NPP were completed in 2011 and in April 2012, the Prime Minister announced funding of \$27 million (GST exclusive) towards the project.



2.4.0 Reasons for adopting the proposed course of action

The proposal to redevelop the First World War galleries is fully funded. The current estimated cost for this project, including the seed funding of \$1.7 million (GST exclusive) provided by Government to develop a detailed Business Case and NPP for full funding, is \$32.52 million (GST exclusive). \$27 million (GST exclusive) has been provided by Government and an amount of \$3.82 million (GST exclusive) has been allocated from the Memorial's existing capital reserves. It is planned to fund the conservation of the Memorial's significant diorama collection in-situ from this \$3.82 million (GST exclusive). This approach offers significant benefits to the process of conserving the dioramas and minimises risk and unnecessary damage if conserved off-site. Funding from the \$3.82 million (GST exclusive) will also contribute to building infrastructure and exhibition works.

The Memorial intends to seek non-Government sponsorship for the project. Sponsorship funds would be in addition to the estimated project budget of \$32.52 million (GST exclusive) and would be used to enhance the exhibitions, particularly through the use of emerging technologies.

The proposal to redevelop the First World War galleries is a key part of the package of commemorative events and initiatives that comprise the Australian Government's Anzac Centenary Program 2014-2018. This is the most relevant period since the opening of the Australian War Memorial in 1941, in which to deliver a high quality, contemporary exhibition on the First World War for the Australian people. It is imperative that the proposed redevelopment be completed for the centenary of Anzac period.

2.5.0 Historical background

The Memorial was established by the *Australian War Memorial Act 1925* as a national memorial to those Australian men and women who died while on active service. In 1980, the Memorial's functions were redefined to reflect the Memorial's role in commemoration, as a museum and as a research centre housing a rich and diverse collection of seminal events in Australian history. Since opening in 1941, the Memorial has been modified and extended on several occasions to accommodate a growing collection and to provide space for new exhibitions.

In 1995, the Memorial established a Gallery Master Plan and an extensive program to revitalise the galleries followed. The work commenced in 1997 and included the refurbishment of two thirds of the main building and the installation of new exhibitions in the Orientation gallery, Second World War galleries as well as a new Research Centre entrance, Special Exhibition Gallery and back-of-house areas. A new Aircraft Hall exhibition, *Air Power in the Pacific*, was completed in August 2000.

The construction of Anzac Hall, a 3000 square metre large technology exhibition space, was completed in June 2001. The first stage of Anzac Hall comprised detailed exhibitions and intense object theatre experiences around the Japanese midget submarine and the HMAS *Sydney*/SMS *Emden* guns. The remaining two thirds of the space comprised simple object layouts with some interpretive lighting and simple labelling and graphic treatments. In December 2003 the *Striking by night* object theatre exhibition featuring the Memorial's Lancaster bomber, "*G for George*", was completed.

In 2004, a second stage of gallery redevelopment commenced. A new administration building, the CEW Bean Building, was constructed on the eastern side of the Memorial's main building. This



building was completed in early 2006. With the relocation of the majority of staff from the main building to the CEW Bean Building, extensive redevelopment took place on the lower ground floor of the main building to create the *Conflicts 1945 to today* galleries. These galleries were completed in December 2007.

The exhibition, *Over the Front: the Great War in the air* was completed in November 2008. This exhibition displays five First World War bi-planes and a Peter Jackson film depicting a scenario of examples of these aircraft in action; it is located in the eastern side of Anzac Hall.

A half-life refurbishment of the Second World War galleries was completed in 2010 and addressed the need to upgrade the lighting, multimedia, lateral display system and the replacement of several Large Technology Objects.

The Hall of Valour was redeveloped, and opened in 2011. The gallery uses noble materials and represents all of the Australian Victoria Cross recipients, irrespective of whether the Memorial holds their medals in the collection.

The majority of the Memorial's galleries have now been renewed. The First World War galleries are one of the last galleries to be redeveloped and represent the next important step in the development of the Memorial and the renewal of its galleries.

In 2011 the Memorial submitted a New Policy Proposal (NPP) seeking funding to redevelop the First World War galleries in time for the centenary of Anzac in 2015. Seed funding of \$1.7 million (GST exclusive) was provided by Government to develop a detailed Business Case and NPP for full funding. The detailed Business Case and NPP were completed in 2011 and in April 2012, the Prime Minister announced funding of \$27 million (GST exclusive) towards the redevelopment of the First World War galleries.

2.6.0 Consultation with relevant stakeholders and key issues of concern

The following authorities, Departments and boards have been contacted and/or consulted by the Memorial and its consultants during the preparation of this submission:

- Department of Finance and Deregulation;
- Department of Veterans' Affairs;
- Anzac Centenary Advisory Board;
- National Capital Authority;
- Public Works Committee Secretariat;
- ACT Planning and Land Authority;
- ACTEW AGL; and
- ACT Fire Brigade.



Key issues of concern raised by the above parties are detailed in relevant areas of this submission.

The Memorial has an established stakeholder management framework for the redevelopment of galleries and exhibitions. In previous gallery redevelopment projects, this framework has focussed on specific and detailed stakeholder engagement through veteran community forums and focus groups. As no veterans of the First World War survive, the stakeholder consultation process for this project will consist of awareness raising, briefing with key stakeholders, and one-on-one consultation where appropriate.

The provision of information to the community and stakeholders will be ongoing for the period of the project. A project website will be the primary mechanism for the provision of information.

The Memorial has developed a Stakeholder Management Plan for the project. Key stakeholders identified in this plan include, but are not limited to:

- Prime Minister;
- Minister for Veterans' Affairs;
- The Council of the Australian War Memorial;
- The Memorial Corporate Management Group (CMG);
- Department of Finance and Deregulation;
- Anzac Centenary Advisory Board;
- Department of Sustainability, Environment, Water, Population and Communities;
- National Capital Authority;
- State Governments;
- Australian Defence Force;
- Returned and Services League of Australia;
- Ex-service organisations;
- Descendants of First World War veterans;
- Specialist and enthusiast groups;
- Foreign Governments/Ambassadors;
- Office of Australian War Graves;
- Other museums and memorials;
- Sponsors;



- Donors;
- Army History Unit; Navy History Unit; and Office of Air Force History;
- Media;
- Visitors;
- Schools groups;
- Internal Memorial staff; and
- Memorial volunteers/guides.

The Stakeholder Management Plan will continue to be updated to reflect project developments and the inclusion of additional stakeholders as they are identified.

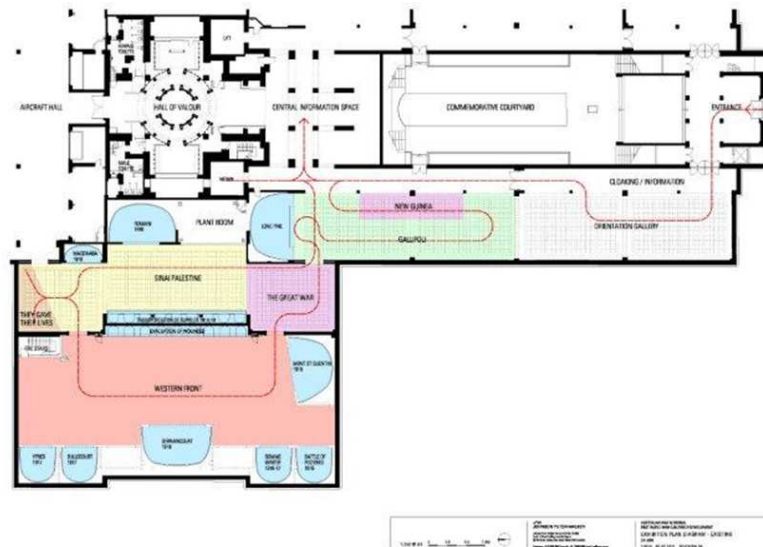
2.7.0 Description of the site

2.7.0a Location

The Memorial is located on Block 1, Section 39, in the Australian Capital Territory suburb of Campbell, on a site bounded by Limestone Avenue, Fairburn Avenue and Treloar Crescent.

It is in a crucial symbolic location at the terminus of the land axis of Walter Burley Griffin's plan for Canberra. The Memorial's precinct has an area of approximately 14 hectares, including the whole of Section 39, Campbell, and is located at the foot of Mount Ainslie. The Memorial and Anzac Parade form part of the Parliament House Vista (PHV) visually linked to the Reid Conservation Area.

The location of the proposed redevelopment is the ground floor of the Memorial's main building. The redevelopment will encompass the existing footprint of the First World War galleries which is indicated in colour in the diagram below.



2.7.0b Local road and traffic concerns

There are no local road and traffic concerns identified for the period of the project. A site compound will be established during the project period. It will be located to the west of the site between the Memorial's Main Building and the Administration Building. Traffic to and from the area will be managed via the Building Contractor's Project Management Plan which will include a Temporary Traffic Management Plan.

At the conclusion of the project, and during the Anzac centenary period (2014-2018), visitation to the Memorial site may increase. A substantial amount of free parking is provided by the Memorial. This includes:

- An underground car park conveniently located near the main entrance. This car park also provides disabled car parking facilities. Entry is from Fairbairn Avenue.
- Another car park is located on the west side of the Memorial site. Walk to the main entrance via the Sculpture Garden.
- Coach parking is also available. Entry is from Treloar Crescent.
- Bicycle racks are available adjacent to the Memorial's west and east administration buildings.

2.8.0 Applicable legislation, required approvals

Legislation applicable to the proposed redevelopment of the First World War galleries is:

- *Australian War Memorial Act 1980;*
- *Environment Protection and Biodiversity Conservation Act 1999;*
- *Australian Capital Territory (Planning and Land Management) Act 1988;*



- *Building Code of Australia (BCA) 2012; and*
- *Disability Discrimination Act 1992.*

The project requires the following approval:

- *Australian Capital Territory (Planning and Land Management) Act 1988*: In accordance with this Act, the Memorial must seek approval for construction, alteration, extension or demolition of structures which are not purely internal. The project includes the proposed relocation of a plant room from the First World War galleries to the rooftop above. The work is considered by the authority with respect to the statutory requirements of the National Capital Plan. The Memorial has undertaken consultation with the NCA (August 2012) prior to this application and received the authority's provisional support. A formal referral of the works is planned to occur in January 2013.

The project may require the following referral:

- *Environment Protection and Biodiversity Conservation Act 1999*: In accordance with this Act, the Memorial must refer the project to the Department of Sustainability, Environment, Water, Population and Communities if the project is considered to have any significant adverse impact on the Memorial's heritage values. The Memorial commissioned heritage consultant, Godden Mackay Logan (GML) to provide independent advice in relation to heritage considerations for the proposed redevelopment of the First World War galleries. GML have completed a draft Heritage Impact Assessment on the final concept design (Stage 3). This assessment confirms that the concept is developing sympathetically towards the heritage values of the Memorial and provides opportunities to enhance and recover some aspects of heritage value. No significant adverse impacts are currently identified.

2.9.0 Applicable legislation, building regulations

The design and construction of the First World War galleries will be informed by and must comply with, the requirements of a range of applicable codes and authorities.

The consultant and contractors engaged to provide design and construction services will be responsible for achieving compliance with all relevant codes and standards.

The general technical standards required to be met as part of the project are outlined below.

2.9.0a The Building Code of Australia (BCA) 2012 and cross referenced Australian Standards.

The Building Code of Australia (BCA) 2012 defines the statutory technical requirements for all new works as well as alterations to existing buildings. The Memorial's main building is considered a Class 9b structure incorporating Class 5, 6, and 7 elements with respect to offices used for professional purposes, a shop and café, and storage facilities. The proposed redevelopment involves modifications to the Class 9b portion of the building. The following sections of the BCA, Volume 1 are particularly pertinent.



2.9.0a (i) Section C, Fire Resistance

The Memorial commissioned a fire safety engineering assessment to determine whether the proposed redevelopment of the First World War galleries complied with relevant BCA performance requirements. The assessment was undertaken in accordance with International Fire Engineering Guidelines (IFEG). In accordance with this assessment, the following is proposed for implementation as part of the project:

- glazing protected by wall-wetting sprinklers in lieu of fire rated construction for parts of the new fire walls of the First World War Galleries fire compartment that bound the Central Information Space on the ground floor;
- an extended distance of travel up to 50 metres to the nearest alternative exit in the First World War galleries in lieu of 40 metres;
- extended hydrant coverage via two lengths of fire fighting hose from internal hydrants to the First World War galleries;
- no requirement for a smoke exhaust system from the First World War galleries fire compartment; and
- reduction in the fire rating requirements of the existing concrete slab from 120 minutes to 90 minutes to the First World War galleries fire compartments.

The fire safety engineering assessment confirms that the fire resistance works proposed for this project achieve compliance with the relevant performance requirements of the BCA. The Memorial and the collection will be adequately protected in the event of a fire.

2.9.0a (ii) Section D, Access & Egress

The BCA cross references the *Disability Discrimination Act 1992* to eliminate discrimination against persons based on their ability to access different premises. The proposed project must, as a statutory obligation of the Act, meet particular requirements of AS 1428. The Memorial has engaged access consultant Eric Martin and Associates to review the design and documentation related to the project and provide advice on code requirements.

It is proposed to install a new timber flooring system throughout the First World War galleries which will provide a common floor finish and level throughout. There are a total of 4 transition ramps to facilitate this raised flooring system (approx. 50mm high) at the gallery entry and exit points - the gradients of which are BCA compliant for all access requirements. All display infrastructure and labelling will be at heights that are legible by visitors with limited mobility. Table and trench style showcases will be at suitable heights for clear visibility from a wheelchair position. There is also a focus on general lighting levels to aid navigation with particular attention to higher levels in circulation spaces for optimum visibility.



2.9.0a (iii) Section E, Services & Equipment

This section identifies the fire safety equipment that must be installed in a building. This equipment includes fire fighting equipment, smoke hazard management and emergency lighting and signs.

As a building from the early 1940s, the Memorial was constructed to the requirements of its era. New works can achieve compliance to current standards with an engineered solution that minimises disruption to both museum spaces and heritage fabric.

The principle objective for an engineered solution has been to work toward a consistent whole-of-building approach that maximises flexibility of spaces. The base building works design has been developed in accordance with a draft alternative solution report provided by the Memorial's fire engineering consultant Defire (ACT) Pty Ltd. This solution includes extended escape travel distances, extended fire hydrant coverage, central stair glazing with drenchers, and no requirements for smoke exhaust. This solution will reduce the number of First World War Galleries fire zones from three compartments to one single compartment. This will result in improved flexibility for the exhibition fit out and reduced services maintenance.

As part of the fire engineering brief (FEB) process Defire has consulted and received in principle support from key stakeholders including ACT Fire & Rescue and certifying authority Certified Building Solutions. Defire will submit a final alternative solution report for formal approval, and base building works tender documentation will proceed in accordance with the final report

2.9.0a (iv) Section G, Ancillary Provisions

This section contains requirements that affect structures that are ancillary to the main use of the building including minor structures such as the relocation of a plant room from the First World War galleries to the rooftop above.

The modified roof structure will be constructed in steel and be clad with pre-weathered copper roof sheeting to match existing to house the new plant room. The new parapet walls and capping will be designed to visually match existing, supported by structural steel and be clad in pre-weathered Wondabyne Sandstone. There will be repairs to roof, gutters and drainage, new access walkways, and removal of redundant unsightly roof plant equipment.

2.9.0a (v) Section J, Energy Provisions

The Memorial has commissioned a consultant to determine the extent of the application of this section of the BCA. The alterations and additions to the primary building fabric are relatively minor (less than 50% of the existing floor area). Section J performance requirements may only sensibly be applied to the relocation of the plant room from the First World War galleries to the rooftop above. In this case, the Memorial will ensure this work meets the performance requirements of Section J. The reinstatement of the skylights (circa 1940's) above the Palestine Gallery is



considered building maintenance and accordingly does not necessitate application of Section J performance requirements.

2.10.0 Heritage considerations

The Memorial precinct is a place entered in the Commonwealth and National Heritage Lists, the Register of the National Estate and the Royal Australian Institute of Architects (ACT Chapter) Register of Significant Twentieth Century Architecture. As required by the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) the Memorial, with the assistance of heritage consultants GML, developed a Heritage Strategy and undertook a program to identify and assess heritage values and prepare a Heritage (Asset) Register for the Memorial. GML also assisted with the preparation of the Memorial's Heritage Management Plan. The Heritage Management Plan provides management guidance to protect and enhance the heritage values of the Memorial.

The elements of significance to the Commonwealth Heritage List and the National Heritage List are recorded in the Memorial's Heritage Register. The Memorial, as a whole, is included for its rarity, research, aesthetic, social and associative values. The Memorial's galleries are included for their historic, rarity, social and associative values. The dioramas (primarily the First World War dioramas) are individually listed on the Memorial's Heritage Register for their historic, rarity, research, aesthetic, creative / technical, social and associative values.

The Memorial commissioned GML to provide three stages of independent advice in relation to heritage considerations for the proposed redevelopment of the First World War galleries. These are:

- Stage 1: Heritage Issues Paper;
- Stage 2: Heritage Impact Assessment on the concept design; and
- Stage 3: Heritage Impact Assessment on the final concept design.

GML prepared their advice with reference to the following:

- Australia ICOMOS Burra Charter for the Conservation of Significant Places;
- National Environmental Matters and Commonwealth Agency Guidelines for Assessing Significant Impacts;
- Australian War Memorial Heritage Management Plan 2010;
- Australian War Memorial Heritage Strategy 2008; and
- Australian War Memorial Heritage Register 2008.

GML have completed a draft Heritage Impact Assessment on the final concept design (Stage 3). This assessment confirms that the concept is developing sympathetically towards the heritage values of the Memorial and provides opportunities to enhance and recover some aspects of heritage value. No significant adverse impacts are currently identified.



2.11.0 Project objectives

The objectives of the redevelopment of the First World War galleries are to:

- express the Memorial's purpose of commemorating the sacrifice of Australians who have died in war;
- use the Memorial's collection as an integral part of communicating this commemoration; and
- understand and address modern audience needs, both in terms of exhibition interpretation; and physical aspects of the gallery space.

The principles guiding the achievement of these objectives are:

- the use of original collection material to show what it was like to serve during the First World War and allow visitors to learn about and understand the breadth of experiences of Australians during that period;
- illustrating the immediate and enduring effect of the First World War on individuals, families and communities; and enable visitors to develop a strong connection with the events and people involved in the war;
- creating a place that respects Australians who died during the First World War and makes visitors to the exhibition proud and appreciative of those who served; and
- providing an enduring, world-class exhibition on Australian involvement in the First World War, which is accessible to all Australians during the centenary period and beyond.



3.0 Planning and design concepts

3.1.0 Master and site planning

The redevelopment of the First World War galleries is informed by the following planning documents:

- Australian War Memorial Gallery Master Plan (1995); and
- Australian War Memorial Heritage Management Plan (2010).

3.2.0 Detailed description of the proposed scope: building work

The Memorial has appointed Johnson Pilton Walker (JPW) as the architect for the proposed project. The detail of the proposed scope of the building work contained in this submission is based on the design development work completed to-date by JPW. It incorporates design and technical contributions from structural engineering sub-consultant, Taylor Thomson Whitting (NSW) Pty Ltd; mechanical and electrical building services engineering sub-consultant Steensen Varming (Australia Pty Ltd); and hydraulic and fire services sub-consultant Warren Smith and Partners Pty Ltd. Design Development drawings are provided at Appendix A.

This project provides the opportunity to address the longer term planning and life cycle strategies of the Memorial's main building infrastructure and the ability to meet contemporary public expectations and building standards.

Base building works are defined to comprise permanent construction works which are required for the long term operation of the Memorial. They are generally not specific to a particular exhibition but provide infrastructure for all exhibitions and define floor spaces. Base building works enables the new exhibition design to be implemented, whilst also incorporating building-wide considerations and meeting the requirements of an expected design life which is longer than the exhibition.

The extent of the base building works includes a new roof plant room to remove major services equipment from the gallery level, a fire safety upgrade to improve circulation and gallery space, and restoration of heritage building fabric including original skylights.

3.2.0a Background: building works

The First World War galleries currently comprise three distinct exhibition spaces: the Gallipoli gallery; the Sinai Palestine gallery; and the Western Front gallery. The Gallipoli and Sinai Palestine galleries are located in the original circa 1940s building. The Western Front gallery is located in the circa 1970s building extension.

The existing Gallipoli gallery and adjacent Orientation gallery occupy the original circa 1940s building's western entrance wing. This wing was formerly a continuous enfilade of gallery spaces with axial circulation and views, reinforcing the formal commemorative and museum



functions of the Memorial. The current Orientation gallery includes a display of the Ascot Boat, an original landing boat from the Gallipoli campaign.

The proposed project will connect the Gallipoli gallery and the Orientation gallery spaces. This re-establishes the original unified space, and allows the Ascot Boat to be incorporated into the First World War exhibition narrative.

The Sinai Palestine Gallery is considered to have the highest heritage significance of the three gallery spaces. Important features include the original plan and volume of space, the original building fabric, and the remaining instance of a diorama series in the original built location. The design approach conserves the cohesiveness of the original plan; unified space; heritage fabric; and diorama location. The original architectural skylight lanterns are to be reinstated to provide natural lighting that reinforces the form of the building and enriches visitor experience. Close controls of sunlight access will be provided to ensure contemporary artefact conservation requirements are met and maintain flexibility for future exhibitions. A mechanical services plant room currently occupies the original location of a diorama exhibition adjacent the Romani diorama. The project design will enable consolidation of the plant room to the roof space above, thereby returning this space to a public exhibition as originally intended.

3.2.0b Base building works strategy

The base building works design strategy support the following principles:

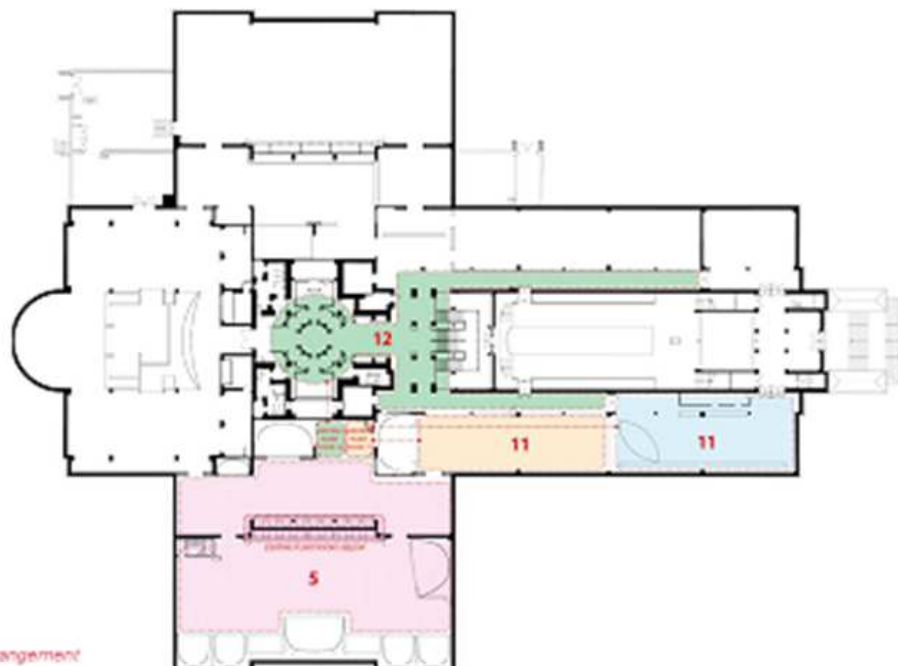
- **Unified building and exhibition experience:** The design reinforces a synergy between the building fabric and exhibition design. Adjustments to fire compartments allow the Gallipoli gallery to connect with the Ascot Boat located in the Orientation gallery. Upgrades to building services will provide infrastructure to implement contemporary exhibition technologies, and provide flexibility for future exhibition upgrades.
- **Reinforce clarity of circulation:** The axial planning and symmetry of the original building will be reinforced by the architectural and lighting design to assist clear navigation and way finding. Axial circulation and views within the western entrance wing will be reinstated to a unified space. The overall lighting design will emphasise a relative sense of brightness and openness of the First World War galleries, thereby enriching the total visitor experience.
- **Simplicity of materials and finishes:** The Gallipoli gallery and Sinai Palestine gallery include a significant heritage fabric. Original materials and finishes will be retained and conserved, and new fixtures, fitting and colours will be complementary.
- **Expression of structure:** The existing fit out includes partition and exhibition walls that obscure the visual clarity of the original structure. These will be removed to re-establish the expression of building structure. Architectural design detailing will clearly define junctions between floors, walls, and ceilings.

3.20b (i) Sustainable initiatives

The building services strategy incorporates a number of initiatives to improve environmental sustainability. These include:

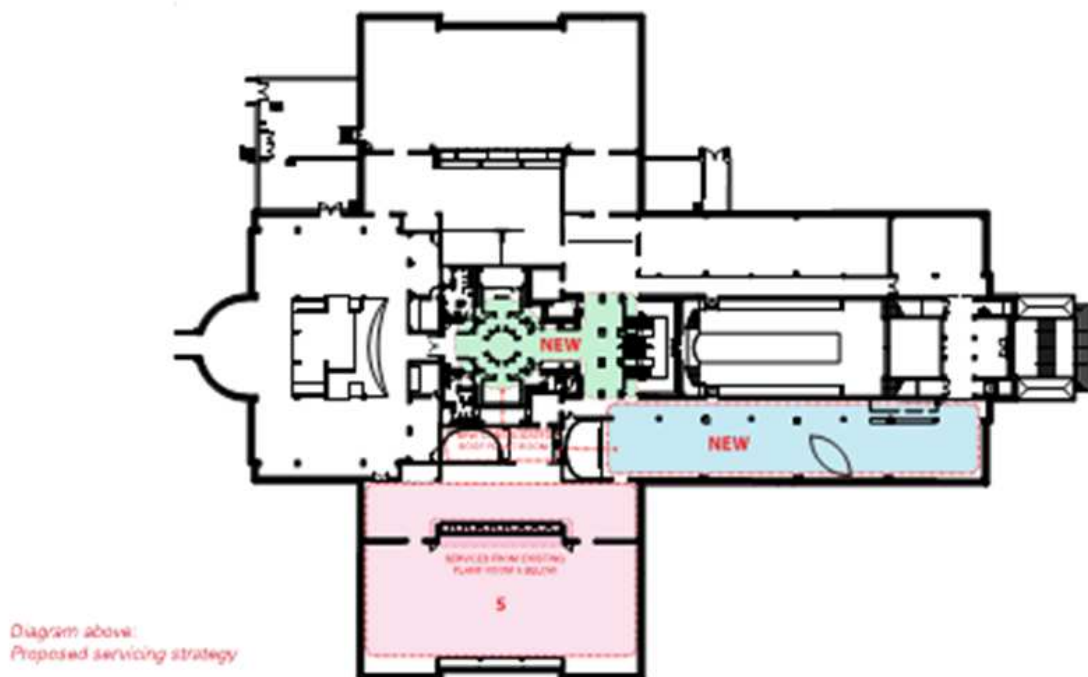
- separation of engineering systems to serve building zones with similar thermal and occupancy characteristics to allow differing requirements to be controlled separately and to maximise turn down;
- energy management systems integrated with a digitally controlled BMS system to allow monitoring, targeting and load shedding capability;
- control facilities via local and remote stations enabling plant usage to match occupancy patterns;
- the installation of ultrasonic humidification systems to provide extremely high efficiency humidification control, and offering a more energy efficient solution in comparison to electric steam humidifiers that necessitates boiling of water;
- use of energy efficient motors for plant equipment, with variable speed drives for fans;
- efficient insulation of distribution pipework and ductwork to minimise unwanted heat gains/losses; and
- improved energy efficiency of lighting system will include the opportunity to incorporate.

3.20b (ii) Diagrams of base building strategy



The above diagram details the existing services arrangement in the project location.

The below diagram details the proposed services arrangement in the project location.



3.2.0c Plant room and mechanical services

The master planning approach to mechanical services is to reorganise plant distribution and reticulation in order to increase exhibition space, improve access for maintenance, and ensure consistency among the distribution systems.

Plant Room 12 on the gallery level currently services Hall of Valour, Research Centre and circulation areas on the ground floor and lower ground floor. Plant Room 11 is located in a mezzanine above, and services Gallipoli gallery and Orientation gallery as separate fire compartments.

Plant Room 5 on the lower ground floor services Western Front Gallery from below. In the proposed redevelopment, a new consolidated roof plant room replaces Plant Room 11 & 12. New services zones are coordinated with the fire upgrade strategy to provide a more efficient arrangement that minimises cross over between zones and associated fire wall penetrations.

3.2.0d Electrical services

The proposed strategy for electrical systems considers the following:

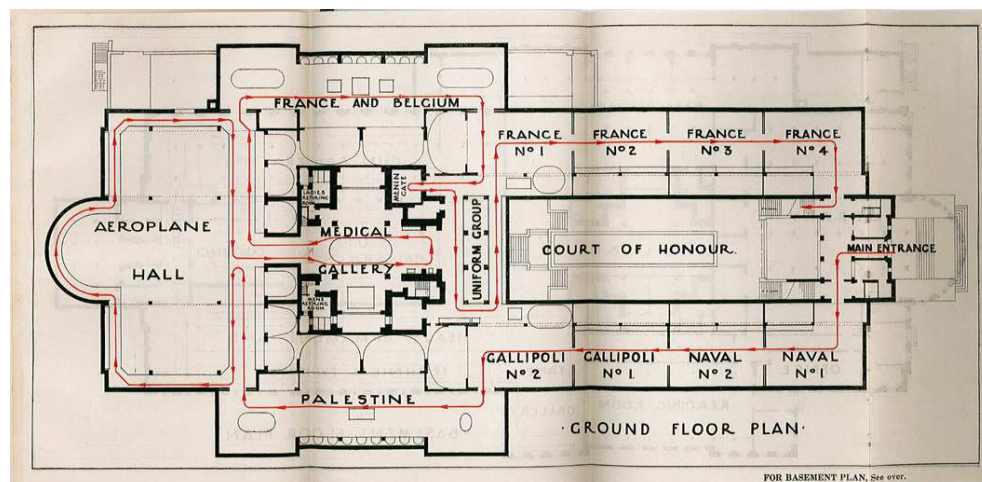
- electrical provision for light, power and mechanical;
- telecommunications;
- exit and emergency lighting;
- security monitoring and detection;
- base building lighting and control; and
- essential services including fire detection and EWIS.

The planned exhibition space has been modified to allow for a new electrical and communications room. In addition a space is provided for a UPS. The existing electrical distribution boards (DB) are retained. The switchboards shall be replaced and housing modified. Proposed solutions will be developed to ensure that downtime is kept to a minimum. Staged installation, off site prefabrication and temporary arrangements will all be considered to aid in this regard. While energy consumptions for lighting may reduce based on LED technology, it is possible that there may be an increase in the multimedia loads depending on the final exhibition design. A full review of the existing and future power capacities including normal and any special critical loads such as UPS units will be undertaken during the next design phase. At this stage no increase in the overall energy use for the gallery is expected.

3.2.0e Improving circulation

Existing circulation

The original circulation path on the ground floor was a single loop with stairs near the entrance to link with the lower ground floor. A diagram of the original circulation path is below (source: Guide to Australian War Memorial, 1946).



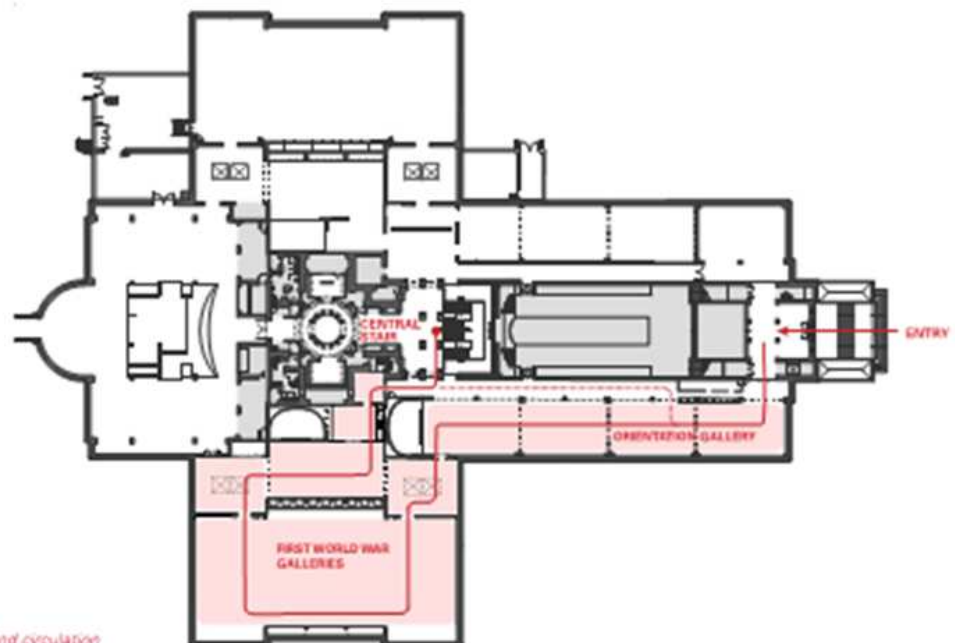
The circa 1970s extensions which added additional exhibition spaces increased the complexity of circulation. Visitors needed to “double back” in some areas to experience all exhibitions within the Memorial’s main building.

As part of the implementation of the Memorial’s Gallery Master Plan, central stairs were introduced as the key circulation hub linking the two gallery levels of the Memorial’s main building. The stairs provided visitors with a central orientation and decision making point.

Proposed circulation

The current location of Plant Room 12 originally housed the Lone Pine diorama before it was relocated to the Gallipoli gallery in the 1970s. By relocating the plant room to the roof, this space can once again be used for exhibitions, and to provide an exit through the existing "Menin Gate" space. This would avoid the need for visitors to "double back" on their journey through the First World War galleries. The nominated path of travel follows a simple route in a clockwise direction which can be easily understood. This allows for ease of visitor navigation and echoes the circulation path of the original building. The central stairs hub implemented as part of the Memorial’s Gallery Master Plan is maintained as the main circulation hub. Relocating the plant room is essential to allow the proposed circulation to work.

A diagram of the proposed entry and circulation is below.



3.2.0f Plant room location

Several alternative locations for the new plant room and plant equipment configuration were investigated in detail with a structural engineering consultant. Two main options were further developed to confirm feasibility:

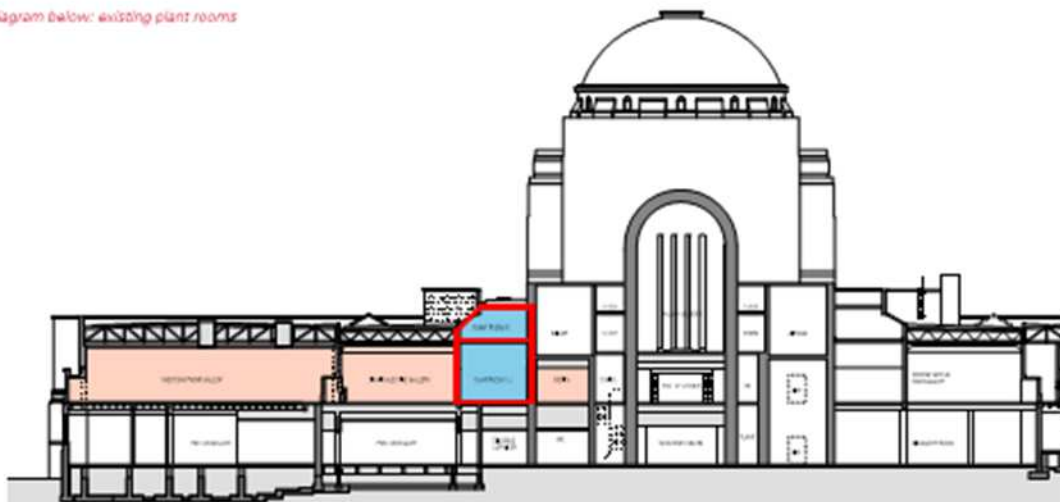
- roof plant room addition; and
- plant room within ceiling above Lone Pine diorama.

The roof location has been selected on the basis of the following considerations:

- Constructability: The roof plant room location provides for external construction access with less disruption to gallery areas. The new structure will be steel with a plywood floor for constructability and minimal impact on the original building fabric.
- Risk of damage to dioramas in-situ: The alternative location above Lone Pine diorama carries significant risk of damage to the diorama if it is to remain in-situ. AWM has ruled out moving the diorama for conservation.
- Cost: The roof location has a higher construction cost but is offset by lower operational/disruption cost compared to the Lone Pine ceiling location.
- Maintenance and future flexibility: Equipment access for major replacement and maintenance can be provided externally for the roof plant room.
- Program and staging: Both options will require significant temporary staging and careful programming during construction.

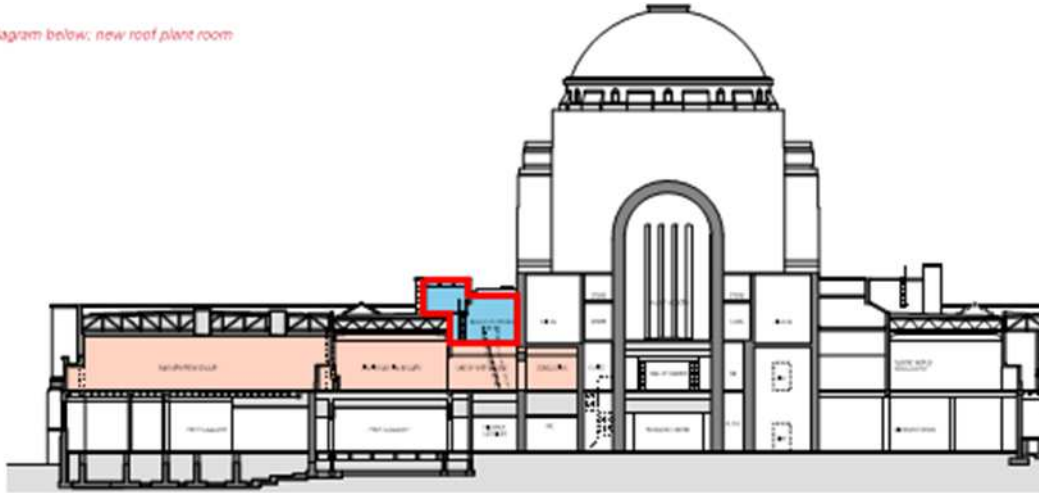
A diagram of the existing plant room locations is below.

Diagram below: existing plant rooms



A diagram of the proposed roof plant room location is below.

Diagram below: new roof plant room



Plant room location: heritage implications

The project heritage consultant, GML has undertaken an initial review of the design for the plant room and has made the following comment:

“The removal of original fabric to project the plant room through the roof may have a physical impact on the fabric of the Sinai Palestine Gallery and the AWM building itself. However, that noted, the positive outcomes of regaining a previously removed display space in the gallery appropriately mitigate the negative impacts.

JPW have also examined the potential for significant views to the AWM from surrounding vantage points such as Mt Ainslie to be impacted by this construction. These investigations indicate minor change to the appearance, as well as almost seamless integration into the current roofline, which will therefore not adversely impact the heritage values of the AWM.”

The Memorial and JPW have engaged in initial consultations with the National Capital Authority (NCA). Advice was provided by NCA recommending that the new plant room sandstone wall should be set back as much as possible to emphasised the rebate/recess. This recommendation has been incorporated in design development, and location of the wall is now optimised to be as recessed as possible while providing sufficient space for the equipment contained in the plant room.

3.2.0g Fire compartment strategy

As a building from the early 1940s, the Memorial was constructed to the requirements of its era.

New works can achieve compliance to current standards with an engineered solution that minimises disruption to both museum spaces and heritage fabric.



Engineered solution

The principle objective for an engineered solution has been to work toward a consistent whole of building approach that maximises flexibility of museum spaces. The base building works design has been developed in accordance with a draft alternative solution report provided by the Memorial's fire engineering consultant Defire (ACT) Pty Ltd. This solution includes extended escape travel distances, extended fire hydrant coverage, central stair glazing with drenchers, and no requirements for smoke exhaust. This solution will reduce the number of First World War Galleries fire zones from three compartments to one single compartment. This will result in improved flexibility for the exhibition fit out and reduced services maintenance.

Fire engineering brief process

As part of the fire engineering brief (FEB) process Defire has consulted and received in principle support from key stakeholders including ACT Fire & Rescue and certifying authority Certified Building Solutions. Defire will submit a final alternative solution report for formal approval, and base building works tender documentation will proceed in accordance with the final report.

Hydraulic services

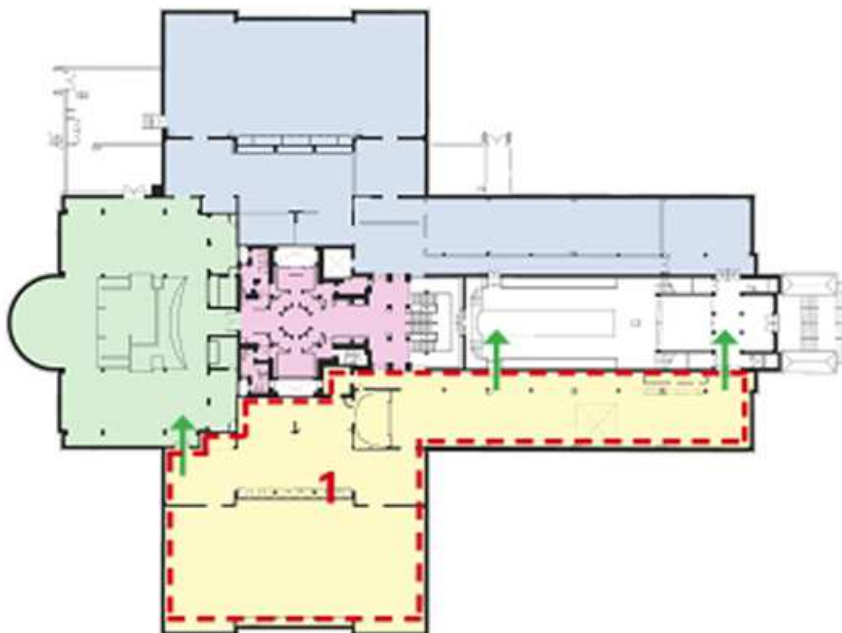
The hydraulic engineering consultant has reviewed flow rates for supply of water for the proposed new drenchers. An upgrade to test facility was carried out to the sprinkler mains and results demonstrated existing flow is adequate. This approach enables simple drenching to the glazing, instead of fire rated glass. Further tests will be carried out to confirm water pressure.

New fire sprinkler works are designed in accordance with AS2188-1999, the fire engineering alternative solution, and NCC 2012.

A diagram of the existing fire engineered solution for the First World War galleries spans three separate compartments.



A diagram of the proposed fire engineered solution for the First World War galleries within one single compartment.



3.2.0h Internal building works

An outline of the scope of internal base building works is below.

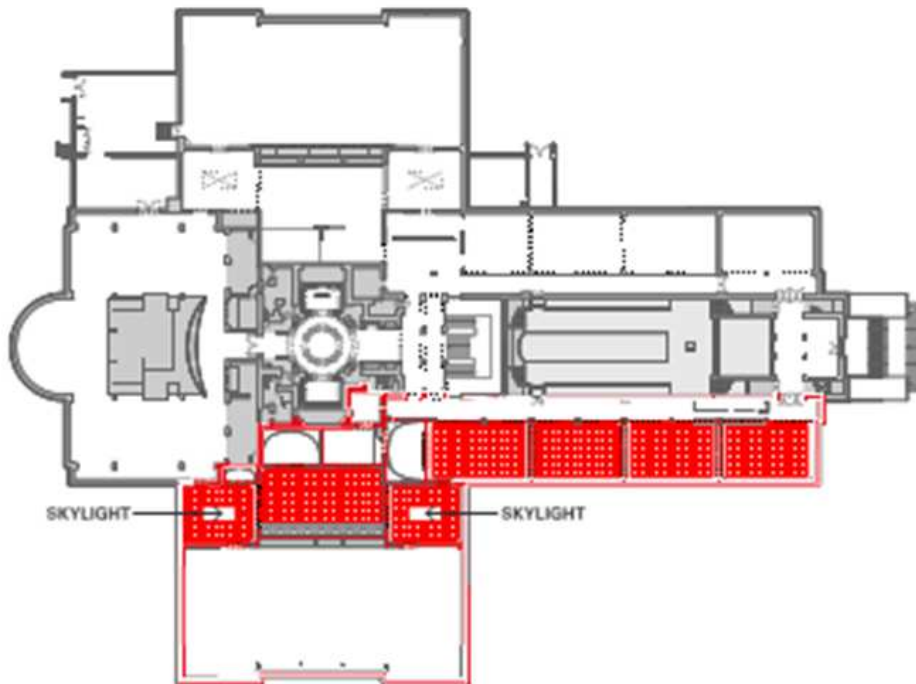
- **Demolition:** Demolish existing plant rooms 11 & 12 and redundant services reticulation. Demolish existing fire wall & hold open doors between the Orientation



and Gallipoli galleries. Demolish existing corridor and Orientation gallery partition walls. Demolish redundant fire egress stairs.

- Floors: Remove carpet floor covering in Western Front gallery. Make floors level and good.
- Walls: Existing rendered walls in all spaces to be repaired and recoated with paint system developed with heritage advice.
- Ceilings: Restore original steel coffered ceilings in Gallipoli gallery and Sinai Palestine gallery and replace recent ceiling panels in these areas with painted plasterboard. Install new panellised acoustic ceiling with integrated services in the Western Front gallery. Install new flush plasterboard ceiling in concluding galleries.
- Services: New mechanical plant room and services. New electrical including: house lighting; building security; communications; and dry fire services. An allowance for primary reticulation of exhibition services will be made.
- Structure: Steel structure and plywood floor for new plant room. New openings in existing masonry walls. Set down in steel floor structure beneath Ascot Boat. The existing floor slabs have been assessed for loading of the new exhibition design and they appear to be satisfactory. Once the final exhibition and the weights are known a final structural check will be conducted. The existing floor slabs will not take major heavy objects.
- ESD initiatives: The building interior is to be conserved and restored with sustainable solutions which allow flexibility of future exhibition design without major rebuilding works. Materials are selected to minimise maintenance and replacement costs. Finishes are selected with low VOC (Volatile Organic Compounds) emissions for improved internal environmental conditions.

A diagram of the building structure and heritage ceiling is below.

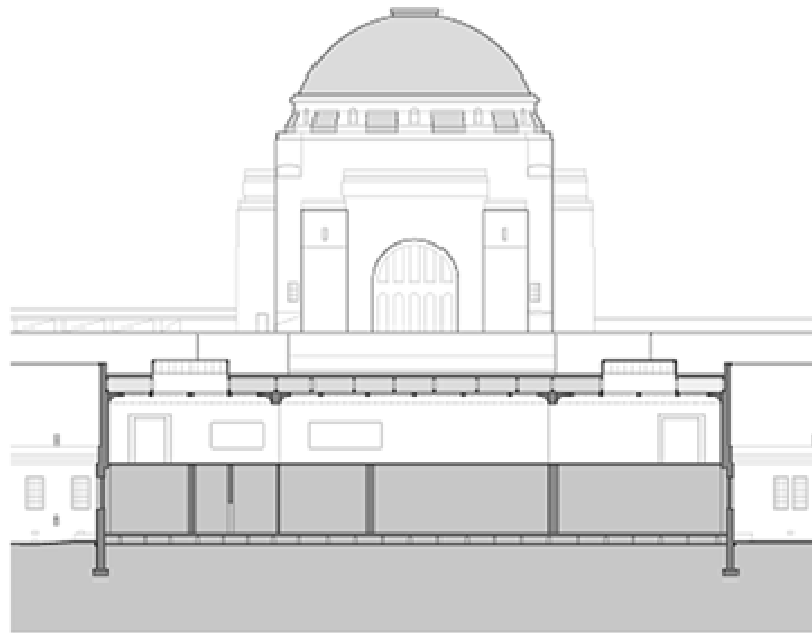


3.2.0i External building works

An outline of the scope of external base building works is below.

- **Roof:** The circa 1940s roof of the Memorial's main building will be modified to house the plant room. The plant room will be constructed in steel and clad with pre-weathered copper roof-sheeting to match the existing Memorial roof. The new parapet walls and capping will be designed to visually match existing, and will be supported by structural steel and clad in pre-weathered Wondabyne sandstone (to match existing sandstone). Repairs will be undertaken to the roof, gutters and drainage; and redundant and unsightly roof plant equipment will be removed. New access walkways will be created in the vicinity.
- **Skylights:** The original circa 1940s skylights will be restored with very high performance UV protected glazing to meet the Memorial's environmental and conservation requirements. Automated screen blinds including blackout and BMS control will be installed. The reinstatement of the skylights will enable the Memorial to use controlled natural light to supplement artificial light, if required.
- **ESD initiatives:** The efficient structural design approach minimises need for heavy construction on site. Materials selected are manufactured locally with low embodied energy. Reinstatement of the original circa 1940s skylights will enable natural lighting to be provided.

A diagram of the building section and skylight lanterns is below.



3.3.0 Detailed description of the proposed scope: exhibition work

The Memorial has appointed Cunningham Martyn Design (CMD) as the exhibition designer for the proposed project. The detail of the proposed scope of the exhibition work contained in this submission is based on the concept design work completed to-date by CMD. It incorporates design and technical contributions from multimedia sub-consultant Mental Media Pty Ltd, and exhibition lighting sub-consultant Ben Cisterne Design.

Exhibition works are defined to comprise infrastructure works installed within the base building structure which are required for the medium-term operation of the Memorial. They are specific to a particular exhibition and have an expected design life of 20 years. They are generally undertaken by specialist contractors and can include elements such as showcases, furniture, exhibition specific services, object supports, graphics, and multimedia/information communication technology (ICT) hardware and software.

3.3.0a Background: exhibition works

The objectives of the redevelopment of the First World War galleries are to:

- express the Memorial's purpose of commemorating the sacrifice of Australians who have died in war;
- use the Memorial's collection as an integral part of communicating this commemoration; and



- understand and address modern audience needs, both in terms of exhibition interpretation; and physical aspects of the gallery space.

The principles guiding the achievement of these objectives are:

- the use of original collection material to show what it was like to serve during the First World War and allow visitors to learn about and understand the breadth of experiences of Australians during that period;
- illustrating the immediate and enduring effect of the First World War on individuals, families and communities; and enable visitors to develop a strong connection with the events and people involved in the war;
- creating a place that respects Australians who died during the First World War and makes visitors to the exhibition proud and appreciative of those who served; and
- providing an enduring, world-class exhibition on Australian involvement in the First World War, which is accessible to all Australians during the centenary period and beyond.

Exhibition storyline

The key stories to be addressed in the proposed redeveloped First World War galleries are:

- The situation of Australia in 1914 and the causes/reasons for Australia to join the war, the early assembly of troops, training and successes;
- Gallipoli in 1915 focusing on the landing, offensives, aspects of trench life, evacuation and return to Egypt;
- The Somme in 1916/17 specifically describing the geography and climate of the Western Front, the Battles of Fromelle, Poziere, Bullecourt and the new technology used in this stage of the First World War;
- Third Battle of Ypres in 1917 with particular emphasis on Messines and Hill 60, medical services, modern platoon, Battle at Ypres, the reinforcement crisis and the situation at home;
- The Somme in 1918 with the Defence of Amiens, Monash taking control of the Australian Corps, fire power utilised, the battles at Mont St Quentin and Peronne, the state of the Corps and breaking the Hindenburg line;
- Sinai/Palestine and Syria in 1916 – 1918 showing the desert fighting, relationship between the horses and troops and the Palestine campaign.
- Legacies relating to the First World War.

3.3.0b Exhibition works design strategy

The principle considerations underpinning the exhibition works design strategy are outlined below.



3.3.0b (i) Exhibition spatial planning

Exhibition spatial planning seeks to achieve a sense of openness and ease of navigation throughout the new First World War galleries. A clear main circulation path will be provided. This path will commence at the Orientation gallery and conclude in the final gallery space. The final gallery space enables visitors to immediately access the Memorial's Central Information Space (CIS). Access to the CIS from galleries adjoining it is a key principle of the Memorial's Gallery Master Plan.

The exhibition will achieve long sight lines to ensure navigation is clear. Some major exhibition items are obstructions to this continuity (namely the dioramas); however, this has been minimised by placing these objects around the perimeter of the galleries. All centralised showcases will have transparent sides to ensure visibility is maintained.

3.3.0b (ii) Exhibition fit out considerations (including use of materials)

New fixtures, fitting and colours will be carefully selected and composed to evoke intended mood and tone of each gallery while complimenting the materiality of the period and the collections.

3.3.0b (iii) Exhibition multimedia and ICT considerations

Traditional multimedia and information communication technologies (ICT) will play a pivotal role in the First World War galleries. Three main components are envisaged:

- Traditional multimedia hardware consisting of display, source, transmission and control devices. This may include projectors, screens, touchscreens and digital labels to access and communicate digital programs and content.
- Animated exhibition lighting for programmed sequencing of particular scenes or points in the exhibition.
- App-based experiences that enable visitors to enhance their visit by utilising spatial positioning and data download during their gallery experience.

These components are conceptual and further planning is required to determine feasibility.

3.3.0b (iv) Exhibition graphic considerations

Built graphics will be developed for major gallery labelling and way finding elements. Such devices communicate where visitors are in relation to the geography and timing of the exhibition storyline.

A suite of repetitive graphics will be developed to convey the overall narrative and written exhibition content. It is intended to deliver object labelling through digital tablets.

A typography convention will be applied to graphic elements.



3.3.0b (v) Exhibition lighting considerations

Exhibition lighting will be used to set the mood and tone throughout the galleries. Levels, temperature and focus will be adjustable and dependant on the particular point in the exhibition storyline and/or collection item on display.

A full suite of LED fixtures will be specified for the galleries. These fixtures will greatly reduce power and maintenance requirements.

3.3.0b (vi) Exhibition acoustic considerations

The development of multimedia and ICT is at a conceptual stage. While the extent of sound attenuation is not yet known, some pre-emptive measures are being considered to mitigate the typically hard and reflective surfaces and finishes of exhibition infrastructure (i.e. showcase glazing). Materials and finishes with acoustic dampening properties may be utilised in the ceilings. A material underlay will be installed under the timber exhibition floor to dampen noise created by visitor foot fall.

3.3.0b (vii) Exhibition security considerations

The principles that underpin security of the proposed redeveloped First World War galleries are:

- protection of collection from theft or wilful and inadvertent damage by visitors; and
- protection of collection from damage due to environmental conditions.

Based on evaluation of the Memorial's existing exhibitions, physical barriers present the most successful means of protecting collection.

The majority of collection intended for display will be showcased. Proprietary and custom showcases will have a unique keying system to limit access to cabinets and surrounding joinery. Showcase glazing will be 10.38mm low-iron laminated glass.

A motion sensor system to detect and deter visitors from touching exposed collection (i.e. dioramas) may be used to deter inadvertent damage through visitor contact.

The Memorial has specified environmental parameters for the exhibition. Control measures for temperature, relative humidity, light and environmental pollutants will be implemented as they relate to exhibition works.

3.3.0c Exhibition works elements

The exhibition works for the proposed redevelopment of the First World War galleries comprise the following:

- cabinets, plinths and other exhibition-specific joinery;



- showcases;
- exhibition specific services;
- seating;
- graphic structures;
- public program infrastructure and defined spaces;
- object barriers;
- exhibition lighting (fixtures and track);
- exhibition security systems;
- exhibition graphics, signage and text;
- object display and support elements;
- mannequin displays;
- hanging systems;
- guidelines for materials used in showcases;
- specified showcase systems; and
- multimedia/Information communication technology (ICT) infrastructure (hardware and software).

3.4.0 Work Health and Safety

The Memorial has a Manager, Work Health and Safety (WHS) on staff. The role of the Manager, WHS, in relation to the proposed redevelopment of the First World War galleries is to:

- familiarise contractors and subcontractors with the Memorial's Contractor WHS Induction Program. The purpose of the program is to provide guidance to participants on WHS and environmental responsibilities while working within the Memorial precinct;
- familiarise Memorial staff with the Memorial's Work Health and Safety Policy Arrangements; and
- assist with the development of project-specific Work Method Statements to ensure specialised tasks are carried out in a safe manner.

The Memorial has an Environmental Management System (EMS) in place. The system includes implementation of strategies that produce a safe environment for users of the Memorial's main building.



The Memorial commissioned a survey of asbestos and hazardous materials in the areas proposed for work as part of the project. The survey involved inspection of accessible, representative construction; and the collection and analysis of potentially unsafe materials including: asbestos containing materials (ACM); Lead Paint; Polychlorinated Biphenyls (PCB); Synthetic Mineral Fibre (SMF); and Refrigerants and Fuel Storage Facilities (e.g. underground storage tanks). The following areas were examined as part of this survey:

- interior of the building;
- roof, amenities and immediate surrounding land; and
- underground storage tank filler points and breather vents.

The survey did not include the inspection of the following areas:

- subterranean areas (e.g. infill/soil);
- concealed cavities; and
- form work and subterranean electrical cable ducts and water pipe ducts.

The findings of the survey will inform the procurement and delivery of building and exhibition works for the proposed project.

3.5.0 Details of the project delivery system

The proposed redevelopment of the First World War galleries will occur during normal operation of the Memorial. Therefore, careful planning will be undertaken to ensure construction works are carried out with minimal impact on visitors and staff. The Memorial has developed a specific delivery strategy that outlines the procurement and staging of works.

The works will be undertaken in accordance with the Memorial's specific delivery strategy of primary, secondary and tertiary works. This entails the following:

- **Primary works:** defined as permanent construction works within the base building which are required for the long term operation of the First World War galleries. Primary works are generally of a more permanent nature and are able to be constructed by common building trades. The works do not require any environment control.
- **Secondary works:** defined to comprise infrastructure works undertaken by specialist contractors and are installed within the base building structure. They are required for the medium-term operation of the Memorial. They are specific to a particular exhibition and have an expected design life of 20 years. The elements are less permanent and can be demounted relatively easily and will be generally fabricated offsite and installed onsite by specialist trades. Secondary works can only commence once primary works are concluded and require a secure, but not necessarily air conditioned, environment.



- Tertiary works: defined as the final stage of exhibition installation coinciding with object installation. Tertiary works include object supports, installation of multimedia hardware and software, graphics, object installation, and commissioning. It is the final stage of fit-out prior to opening and requires full environmental and security controls.

The works defined above will be delivered as distinct packages of work, however will overlap in their programming to ensure the galleries are completed, commissioned and relevant training of staff undertaken in time for the proposed opening.

3.6.0 Project schedule

The following is a summary of the primary project milestones. These dates are provided as a guideline and may be adjusted as the project progresses.

Activity	Commence	Complete
<i>New Policy Proposal</i>	July 2011	October 2011
<i>NPP Review</i>	November 2011	April 2012
<i>Availability of Funding</i>	July 2012	July 2012
<i>Building Works Design</i>	June 2012	March 2013
<i>Exhibition Works Design</i>	June 2012	August 2014
<i>Construction of Primary Works</i>	June 2013	February 2014
<i>Construction and installation of Secondary and Tertiary Works including Dioramas</i>	February 2014	October 2014
<i>Commissioning and training</i>	June 2014	November 2014
<i>Soft opening to public</i>	-	November 2014
<i>Official opening</i>	-	February 2015



4.0 Cost-effectiveness and public value

4.1.0 Importance to community and/or community benefit

Department of Finance and Deregulation Project Inception Branch have advised the Memorial that a socio political economic analysis is not required to be undertaken for the proposed project as the overall function of the First World War galleries remains the same.

4.2.0 Overall project budget

A cost estimate for the project is \$32,520,000.00 a breakdown of the cost estimate has been prepared by a consultant Quantity Surveyor and is included in Submission 1.1, Section 6.1.

4.3.0 Depreciable value of works

The forecast annual depreciable value of the works is \$1,864,000 (GST exclusive) over 20 years. The net increase in annual depreciable value of the First World War galleries is \$1,258,600 (GST exclusive) over 20 years.

A half-life refurbishment of the galleries after a 10 year period is expected to cost \$6,320,000 (GST exclusive).

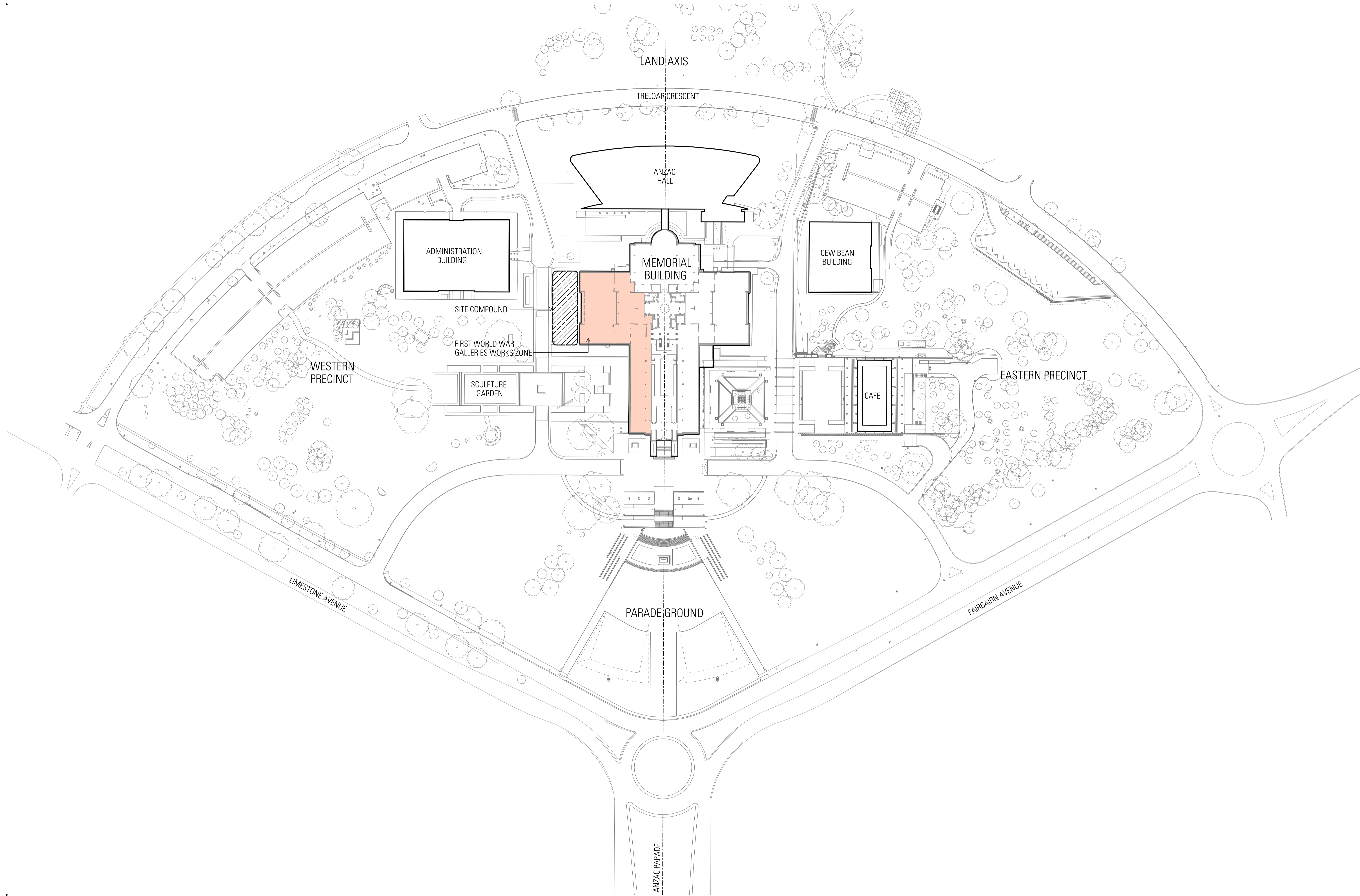
4.4.0 Revenue

The Australian War Memorial is a not-for-profit organisation. No revenue will be generated as a result of the redevelopment of the First World War galleries.

The Memorial will deliver fee-based education programs to school students in the redeveloped First World War galleries. The revenue generated from this funds Memorial administration of the education program including salaries.



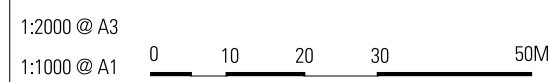
5.0 Appendix A: Design Development Drawings



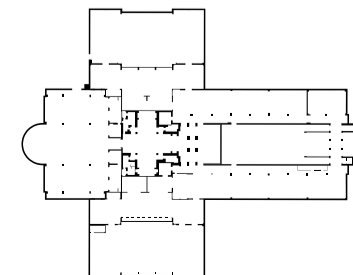
General Notes
 1) Do not scale from drawing, use marked dimensions and levels.
 2) Builder / contractor to verify all dimensions and coordinate services and components prior to commencement of site work or off-site fabrication and installation.
 3) To be read in conjunction with all consultants' documentation.
 4) The superintendent is to be immediately notified of any discrepancies.
 5) Copyright on this drawing retained by the architect.

Rev	App	Ctd	Revision or reason for issue	Date
-00	KL	MR	Issued for Co-ordination	17-10-12
-01	KL	MR	Draft Design Development	31-10-12
-02	KL	MR	Design Development	16-11-12

Scale / North Point



Key Plan



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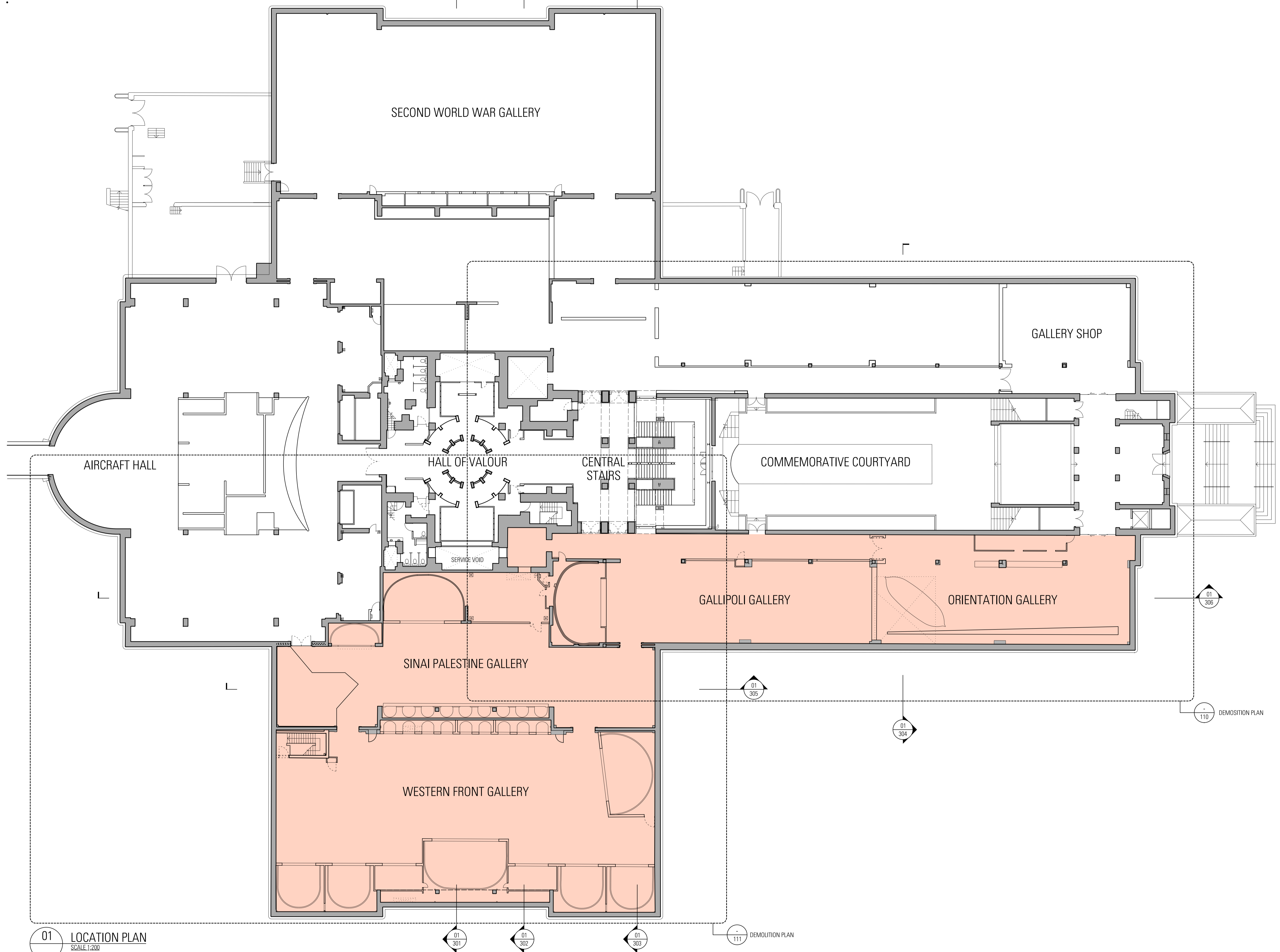
**FIRST WORLD WAR
 GALLERIES REDEVELOPMENT**



SITE PLAN

Project Number
 11033
 Drawing Number
 WA-A-100

Documentation Stage
WORKS APPROVAL
 Revision
 02



01 LOCATION PLAN
SCALE 1:200

General Notes
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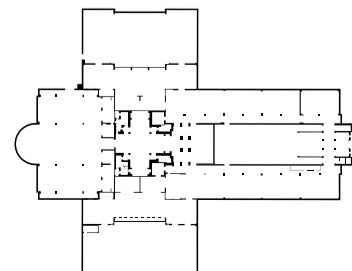
Rev	App	Ctd	Revision or reason for issue
-00	KL	MR	Issued for Co-ordination
-01	KL	MR	Draft Design Development
-02	KL	MR	Design Development

Date	Scale / North Point
17-10-12	
31-10-12	
16-11-12	

1:400 @ A3
1:200 @ A1



Key Plan



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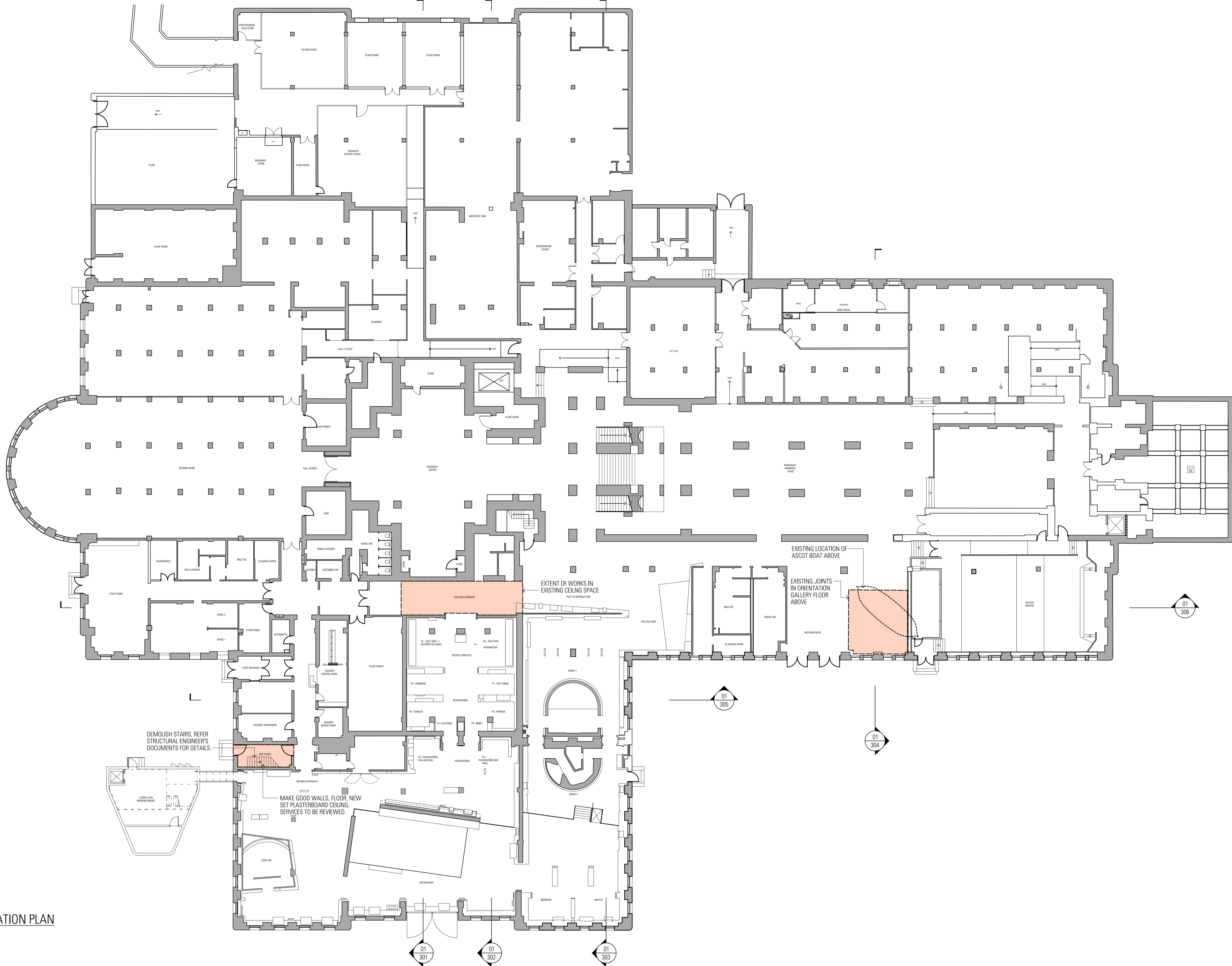
FIRST WORLD WAR
GALLERIES REDEVELOPMENT



LOCATION PLAN
GALLERY LEVEL 2

Project Number
11033
Drawing Number
WA-A-101

Documentation Stage
WORKS APPROVAL
Revision
02



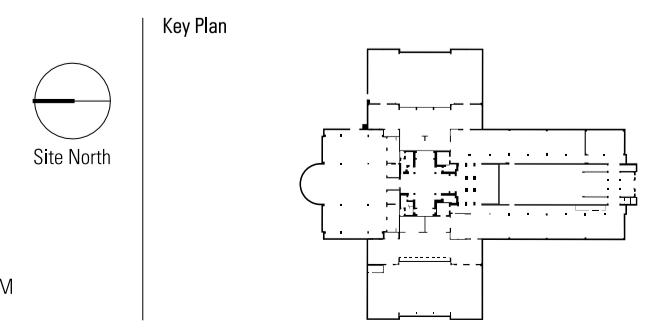
01 LOCATION PLAN
1:200

General Notes
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Rev	App	Cl	Revision or reason for issue
- 00	KL	N/R	Issued for Co-ordination
- 01	KL	N/R	Draft Design Development
- 02	KL	N/R	Design Development

Date
 17-10-12
 31-10-12
 16-11-12

Scale / North Point
 1:400 @ A3
 1:200 @ A1



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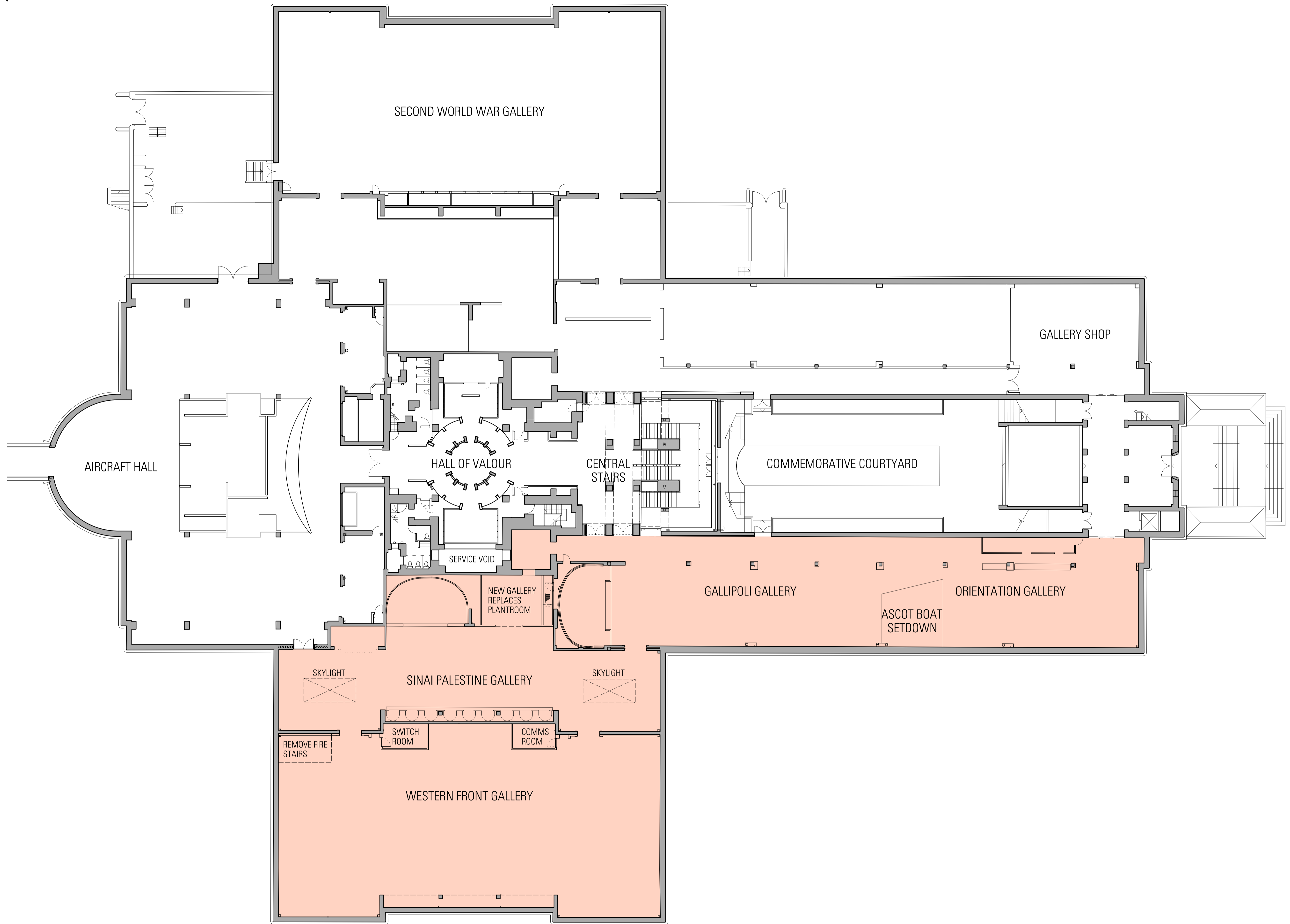
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LOCATION PLAN
SUB-GALLERY LEVEL 1

Project Number
 11033
 Drawing Number
 WA-A-102

Documentation Stage
WORKS APPROVAL
 Revision
 02



01 Lv 2 GENERAL ARRANGEMENT PLAN
SCALE: 1:200

General Notes
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Rev	App	Clk	Revision or reason for issue
00	KL	MR	Design Development

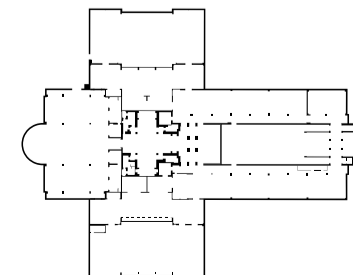
Date
22-10-12

Scale / North Point

1:400 @ A3
1:200 @ A1



Key Plan



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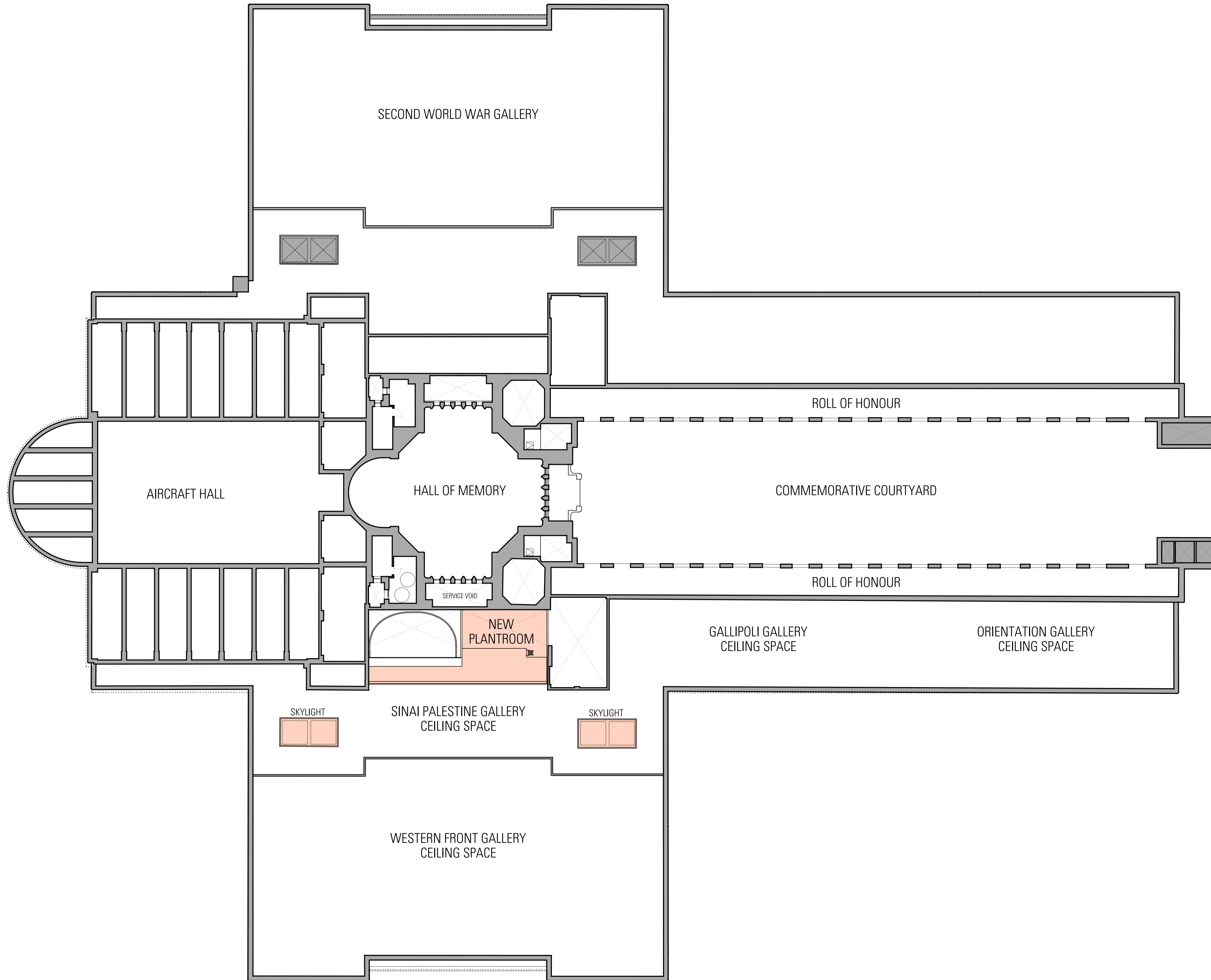
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GENERAL ARRANGEMENT PLAN
GALLERY LEVEL 2

Project Number
11033
Drawing Number
WA-A-103

Documentation Stage
WORKS APPROVAL
Revision
02

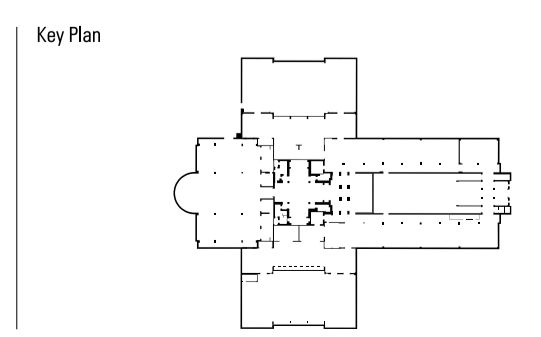
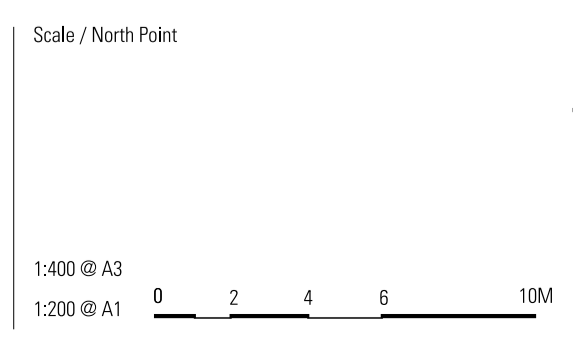


01 Lv4 GENERAL ARRANGEMENT PLAN
SCALE 1:200

General Notes
 1) Do not scale from drawing, use marked dimensions and levels.
 2) Builder / contractor to verify all dimensions and coordinate services and components prior to commencement of site work or off-site fabrication and installation.
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Rev	App	Chd	Revision or reason for issue
00	KL	MR	Design Development

Date
22-10-12



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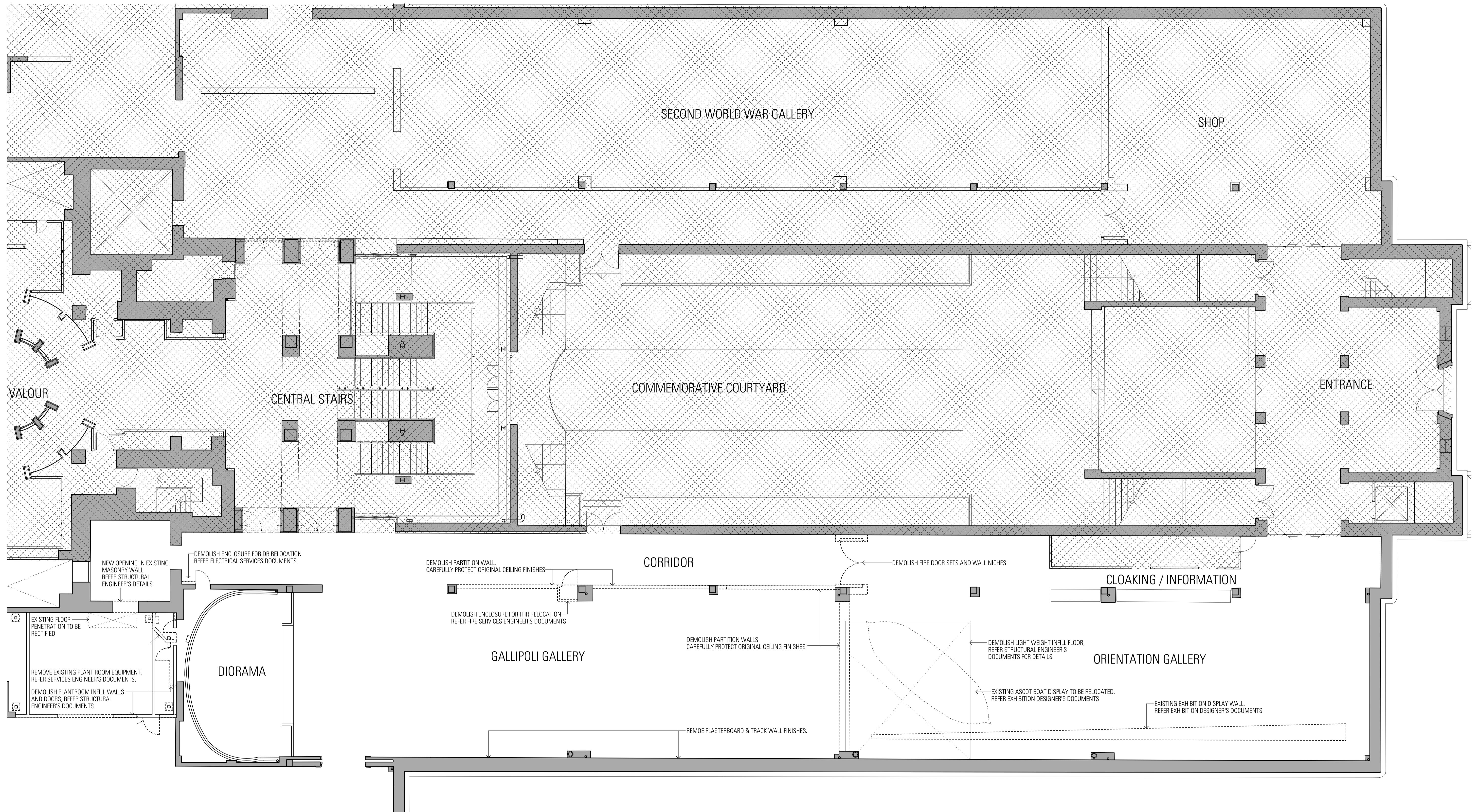
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**GENERAL ARRANGEMENT PLAN
GALLERY LEVEL 4**

Project Number
11033
Drawing Number
WA-A-104

Documentation Stage
WORKS APPROVAL
Revision
00



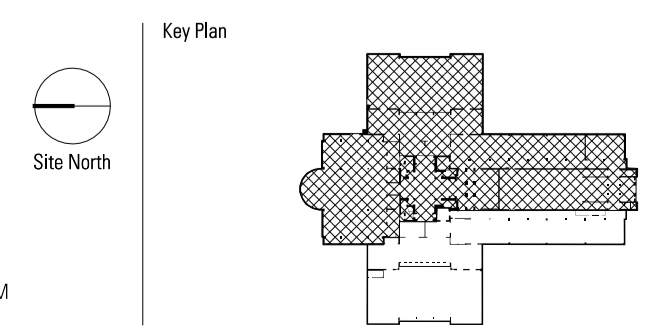
REFER SHEET WA-A-111 FOR CONTINUATION

General Notes
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-00	KL	MR	Issued for Co-ordination
-01	KL	MR	Draft Design Development
-02	KL	MR	Design Development

Date
 17-10-12
 31-10-12
 16-11-12

Scale / North Point
 1:200 @ A3
 1:100 @ A1



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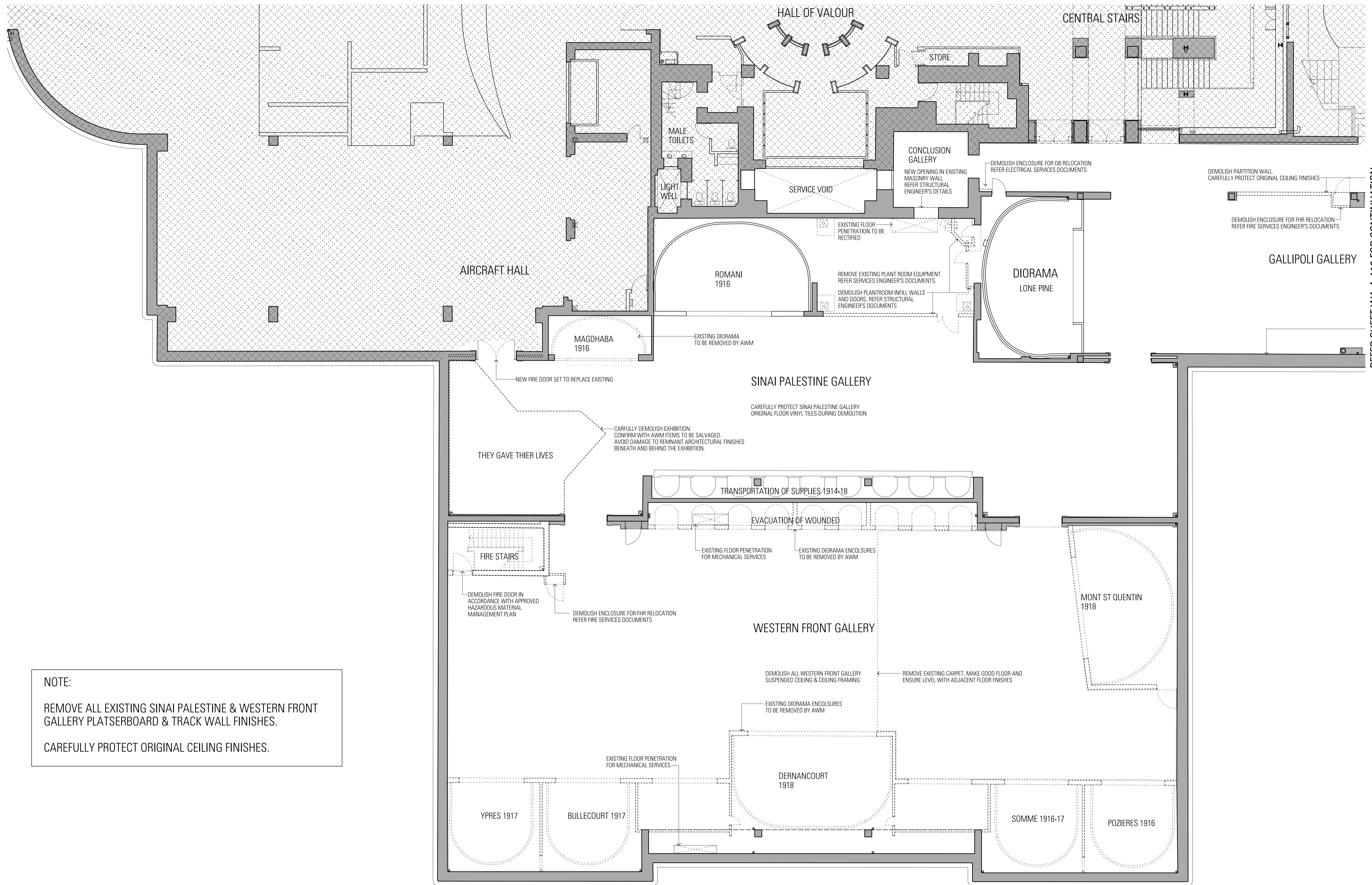


FIRST WORLD WAR GALLERIES REDEVELOPMENT

LEVEL 2 DEMOLITION PLAN GALLERY LEVEL - SOUTH

Project Number
 11033
 Drawing Number
 WA-A-110

Documentation Stage
WORKS APPROVAL
 Revision
 02

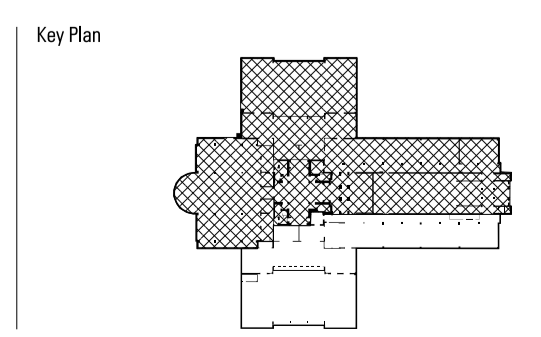
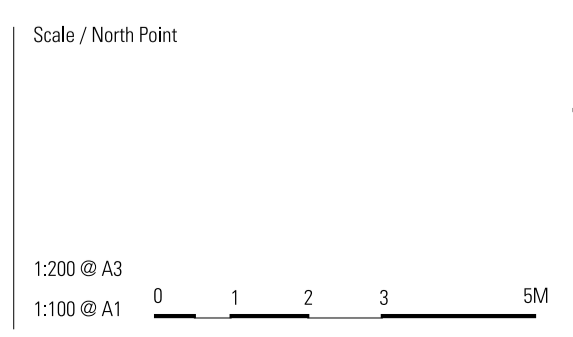


REFER SHEET WA-A-110 FOR CONTINUATION

NOTE:
 REMOVE ALL EXISTING SINAI PALESTINE & WESTERN FRONT GALLERY PLASTERBOARD & TRACK WALL FINISHES.
 CAREFULLY PROTECT ORIGINAL CEILING FINISHES.

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-00	KL	MR	Issued for Co-ordination	17-10-12
-01	KL	MR	Draft Design Development	31-10-12
-02	KL	MR	Design Development	16-11-12



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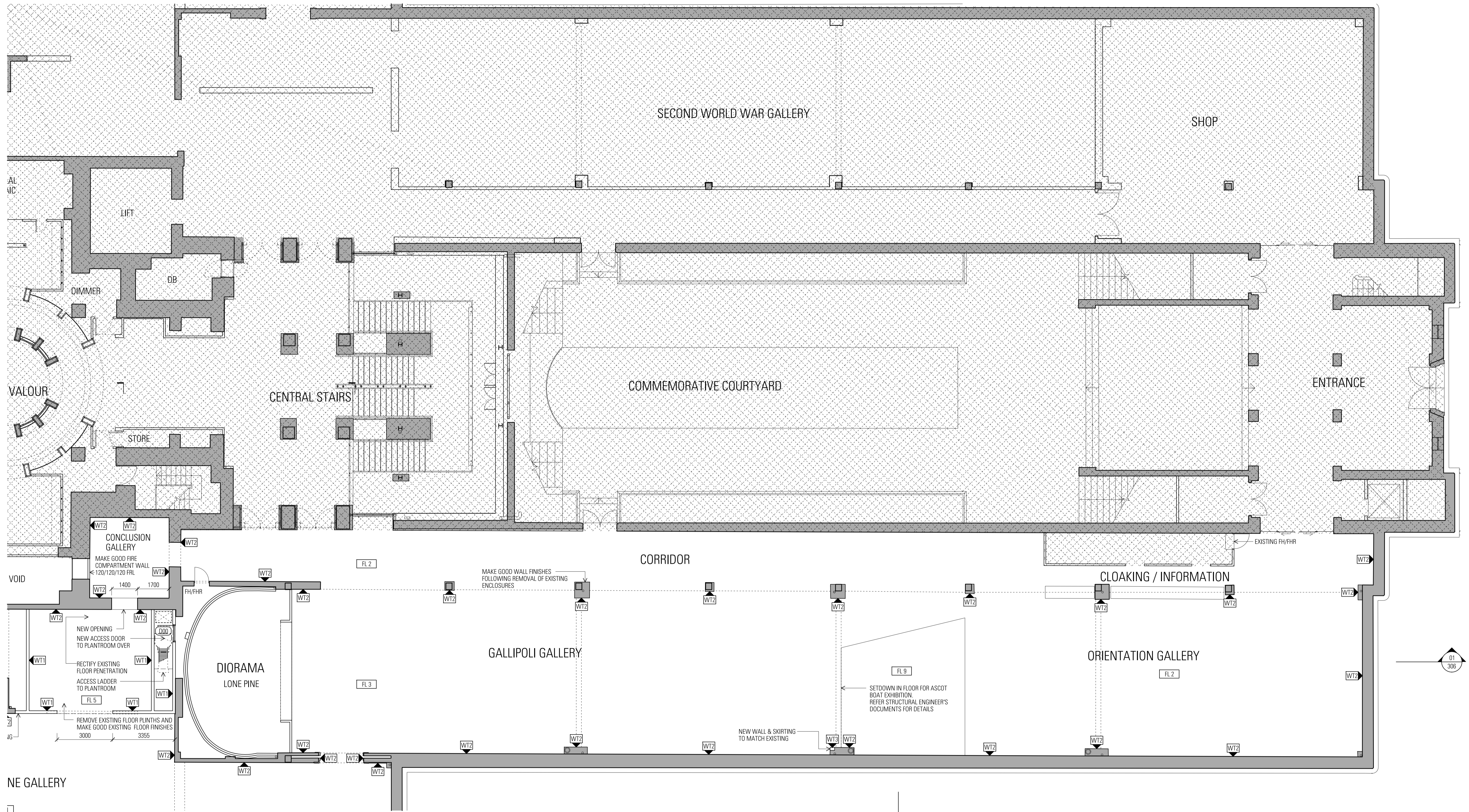
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LEVEL 2 DEMOLITION PLAN
GALLERY LEVEL - NORTH

Project Number
 11033
 Drawing Number
 WA-A-111

Documentation Stage
WORKS APPROVAL
 Revision
 02



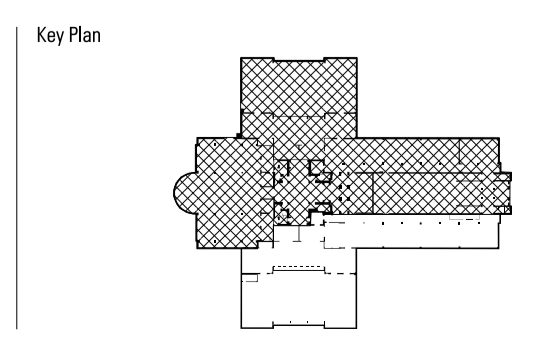
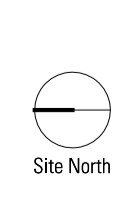
REFER SHEET WA-A-121 FOR CONTINUATION

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Rev	App	Ctd	Revision or reason for issue
-00	KL	MR	Issued for Co-ordination
-01	KL	MR	Draft Design Development
-02	KL	MR	Design Development

Date
 17-10-12
 31-10-12
 16-11-12

Scale / North Point
 1:200 @ A3
 1:100 @ A1



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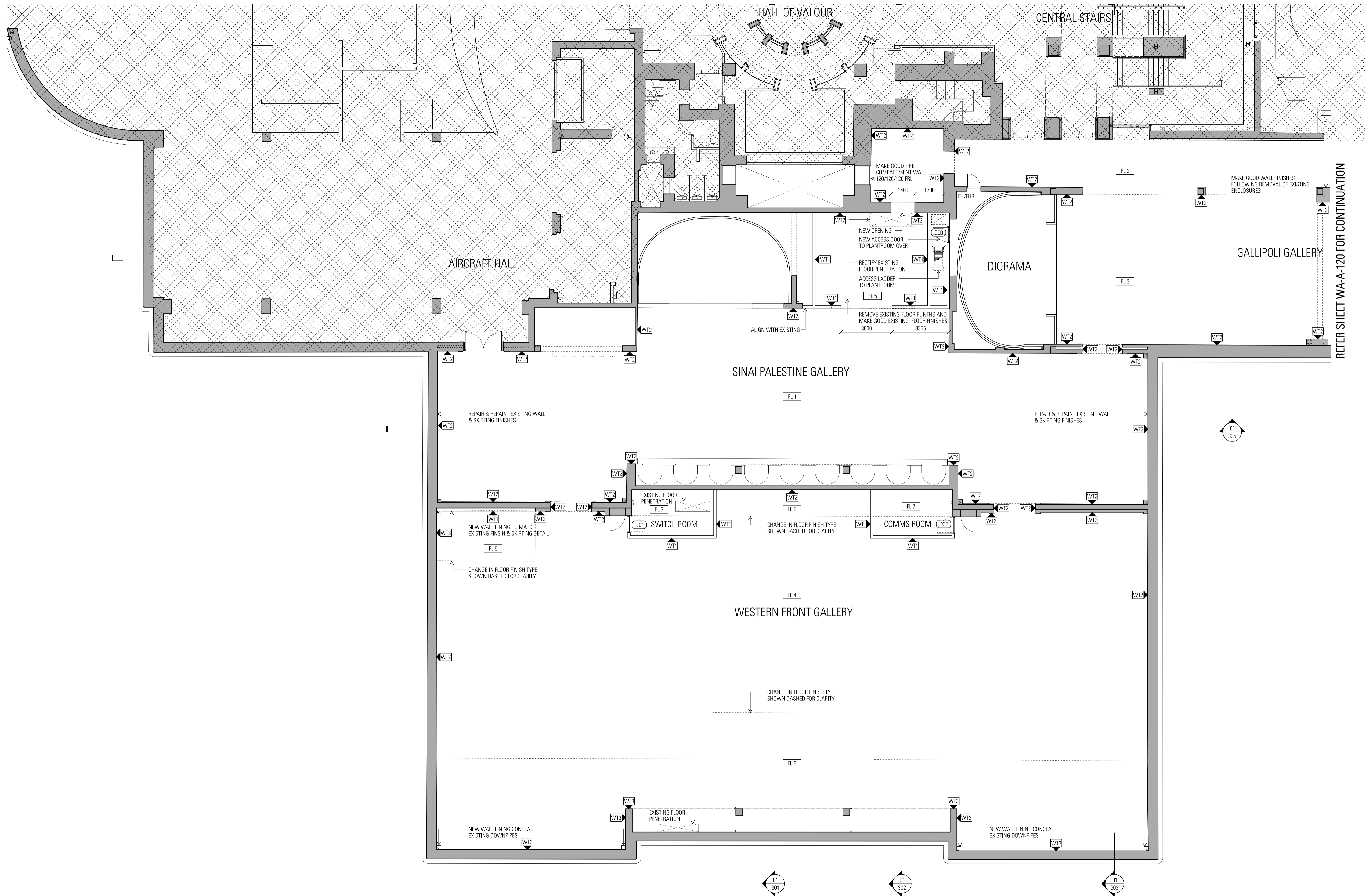
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LEVEL 2 PLAN GALLERY LEVEL - SOUTH

Project Number
 11033
 Drawing Number
 WA-A-120

Documentation Stage
WORKS APPROVAL
 Revision
 02

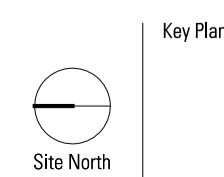


REFER SHEET WA-A-120 FOR CONTINUATION

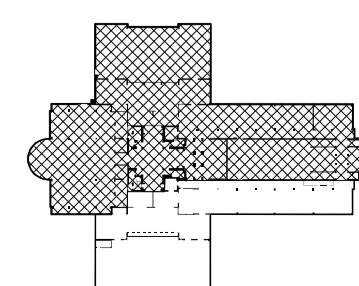
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-00	KL	MR	Issued for Co-ordination	17-10-12
-01	KL	MR	Draft Design Development	31-10-12
-02	KL	MR	Design Development	16-11-12

Scale / North Point
 1:200 @ A3
 1:100 @ A1
 0 1 2 3 5M



Key Plan



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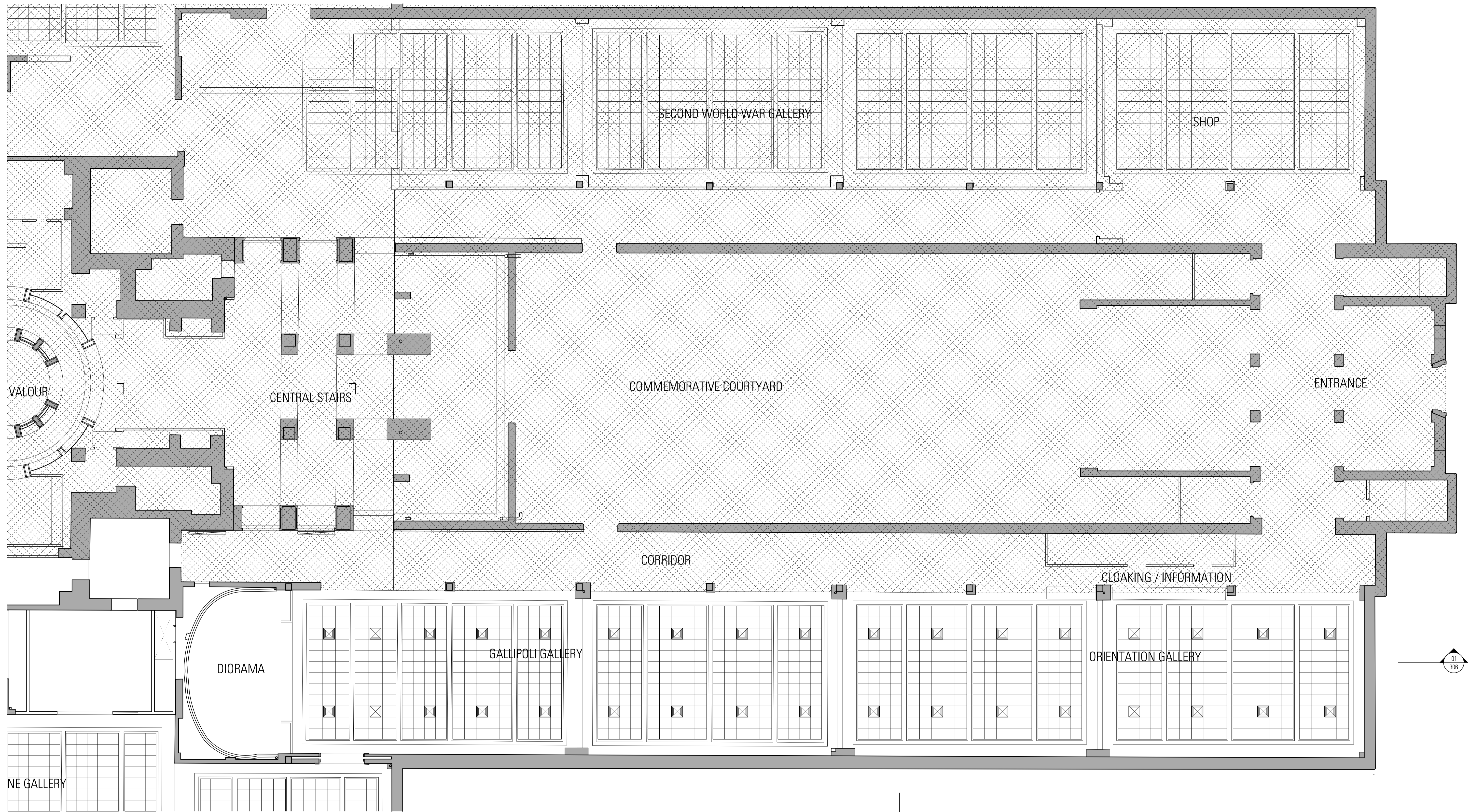
FIRST WORLD WAR
 GALLERIES REDEVELOPMENT



LEVEL 2 PLAN
 GALLERY LEVEL - NORTH

Project Number
 11033
 Drawing Number
 WA-A-121

Documentation Stage
 WORKS APPROVAL
 Revision
 02



01
306

01
304

General Notes
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Rev	App	Ctd	Revision or reason for issue
-00	KL	MR	Issued for Information
-01	KL	MR	Design Development

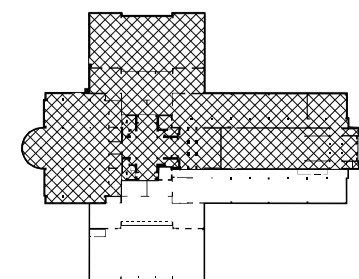
Date
13-11-12
16-11-12

Scale / North Point

1:200 @ A3
1:100 @ A1



Key Plan



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**FIRST WORLD WAR
 GALLERIES REDEVELOPMENT**

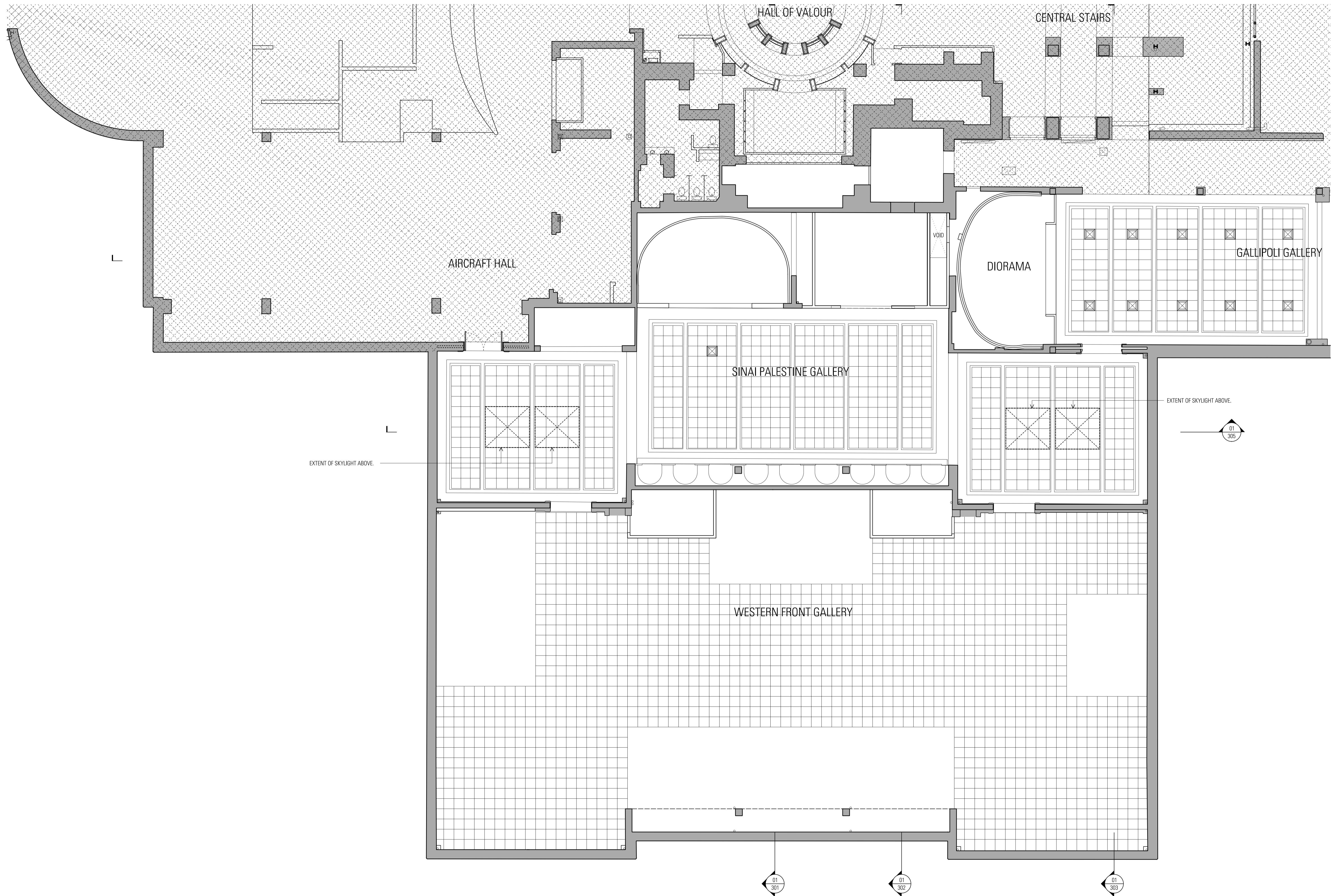


**LEVEL 2 RCP
 GALLERY LEVEL - SOUTH**

Project Number
11033
 Drawing Number
WA-A-130

Documentation Stage
WORKS APPROVAL
 Revision
01

01 WA 1303 Rev
16/11/12

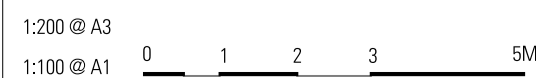


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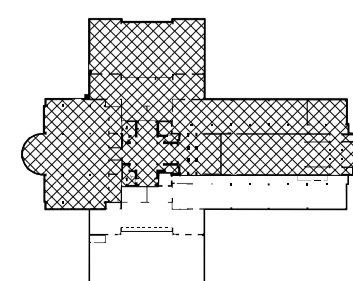
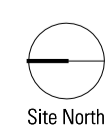
Rev	App	Ctd	Revision or reason for issue
-00	KL	MR	Issued for information
-01	KL	MR	Design Development

Date
 13-11-12
 16-11-12

Scale / North Point
 1:200 @ A3
 1:100 @ A1



Key Plan



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**FIRST WORLD WAR
 GALLERIES REDEVELOPMENT**

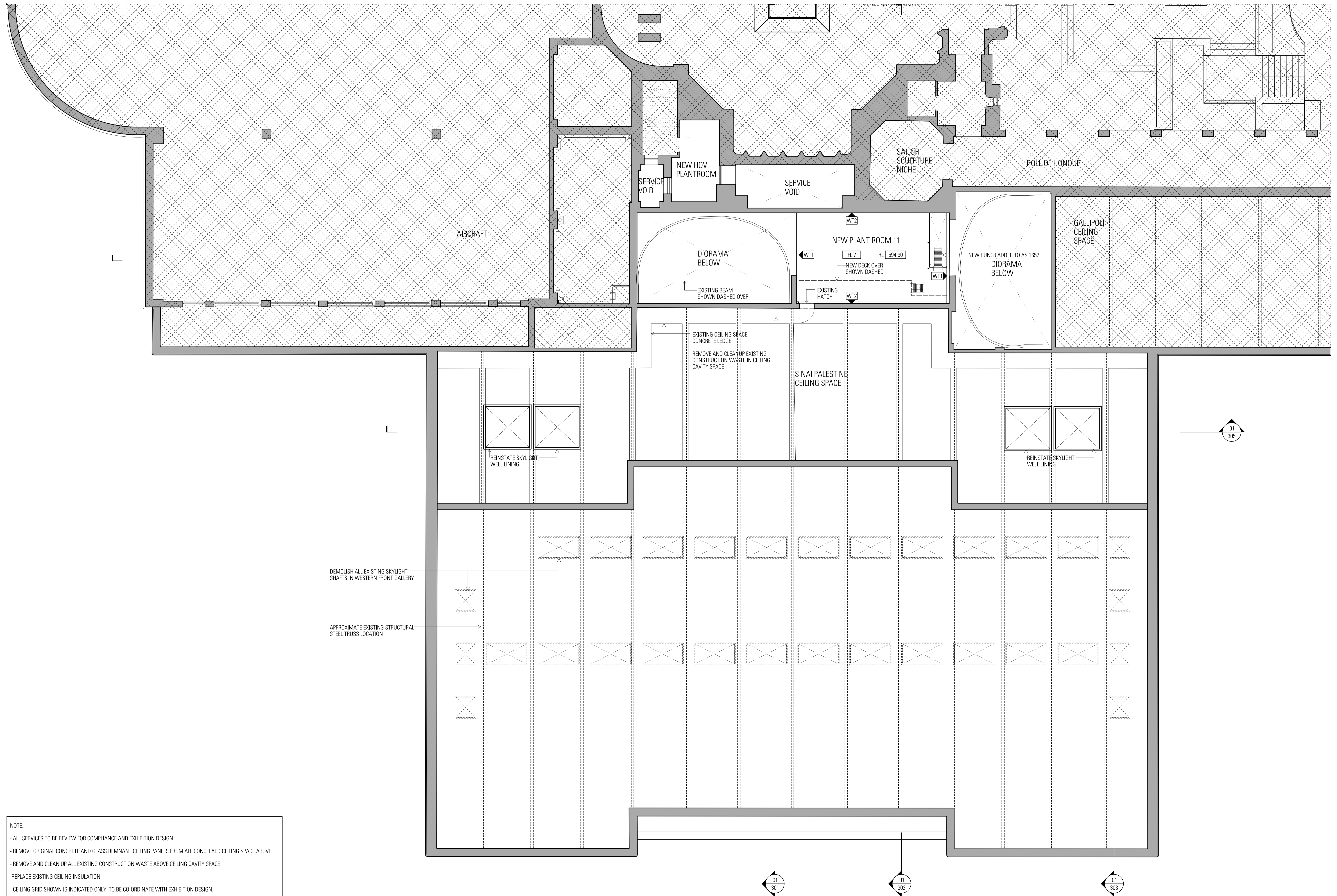


Australian War Memorial

**LEVEL 2 RCP
 GALLERY LEVEL - NORTH**

Project Number
 11033
 Drawing Number
 WA-A-131

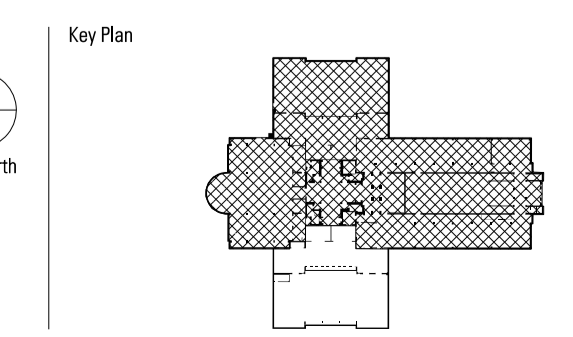
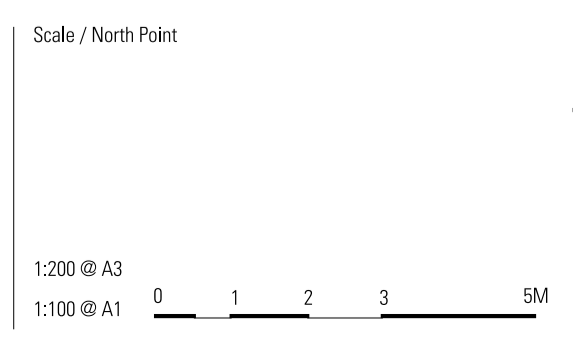
Documentation Stage
WORKS APPROVAL
 Revision
 01



NOTE:

- ALL SERVICES TO BE REVIEW FOR COMPLIANCE AND EXHIBITION DESIGN
- REMOVE ORIGINAL CONCRETE AND GLASS REMNANT CEILING PANELS FROM ALL CONCEALED CEILING SPACE ABOVE.
- REMOVE AND CLEAN UP ALL EXISTING CONSTRUCTION WASTE ABOVE CEILING CAVITY SPACE.
- REPLACE EXISTING CEILING INSULATION
- CEILING GRID SHOWN IS INDICATED ONLY. TO BE CO-ORDINATE WITH EXHIBITION DESIGN.

Rev	App	Ctd	Revision or reason for issue	Date	Scale / North Point
-00	KL	MR	Issued for Co-ordination	17-10-12	1:200 @ A3
-01	KL	MR	Issued for Co-ordination	24-10-12	1:100 @ A1
-02	KL	MR	Draft Design Development	31-10-12	
-03	KL	MR	Design Development	16-11-12	



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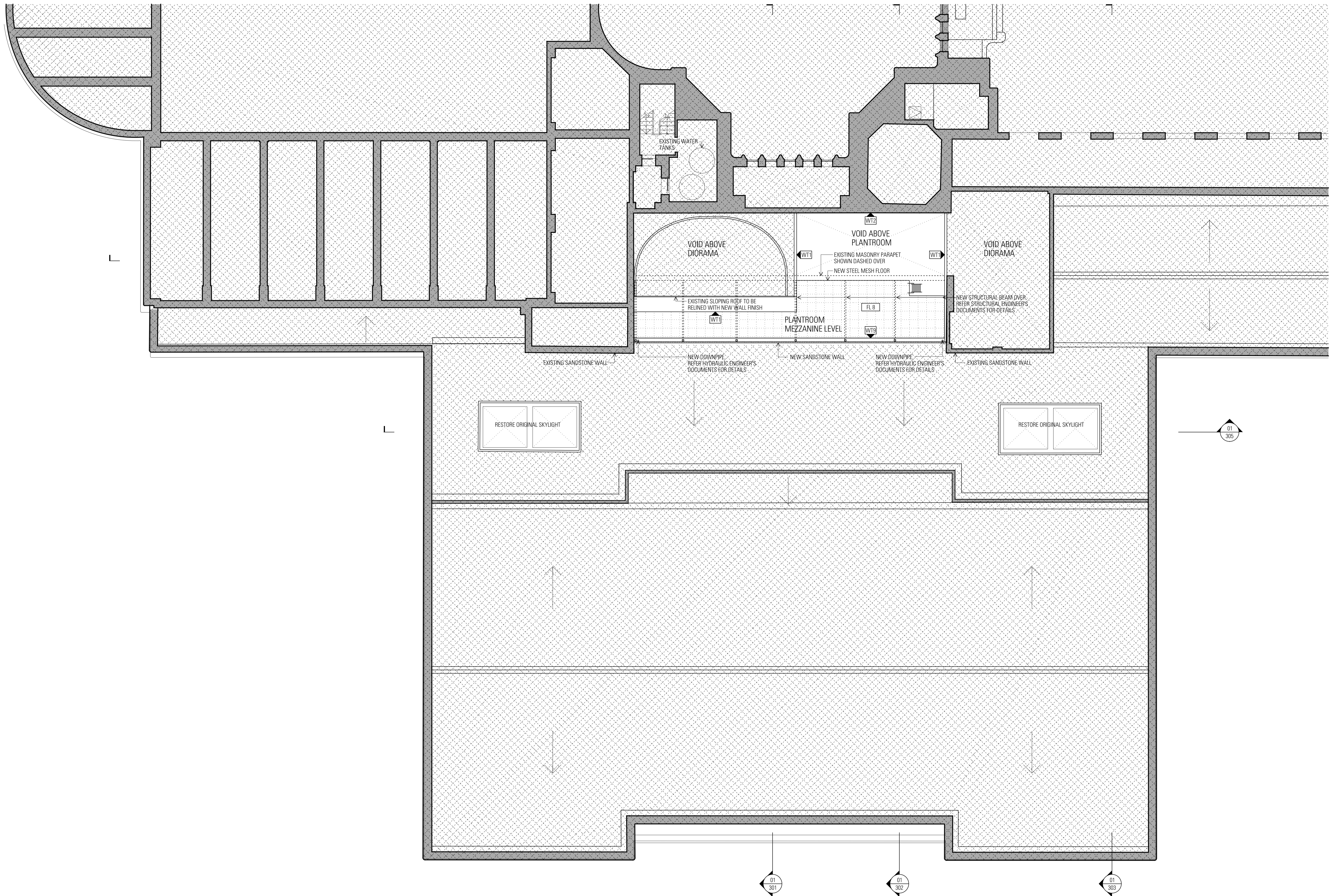
LEVEL 3 PLAN PLANTROOM MEZZANINE LEVEL - NORTH

Project Number
11033

Drawing Number
WA-A-140

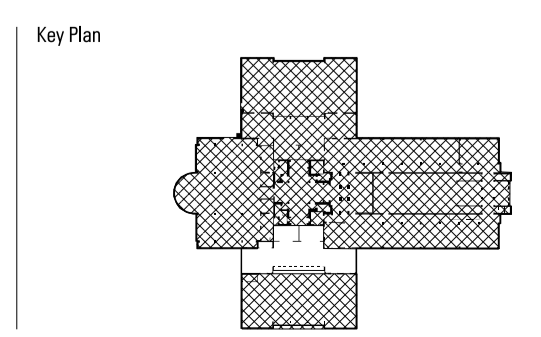
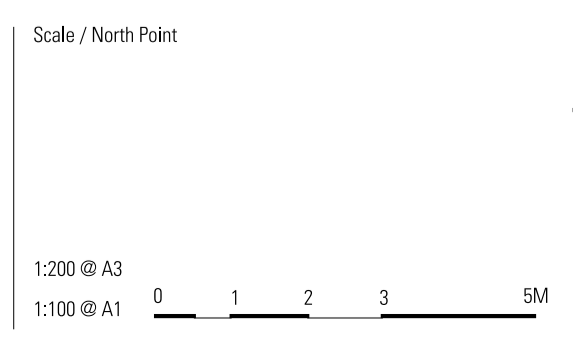
Documentation Stage
WORKS APPROVAL

Revision
03



General Notes
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Rev	App	Ctd	Revision or reason for issue	Date
-00	KL	MR	Issued for Co-ordination	17-10-12
-01	KL	MR	Draft Design Development	31-10-12
-02	KL	MR	Design Development	16-11-12



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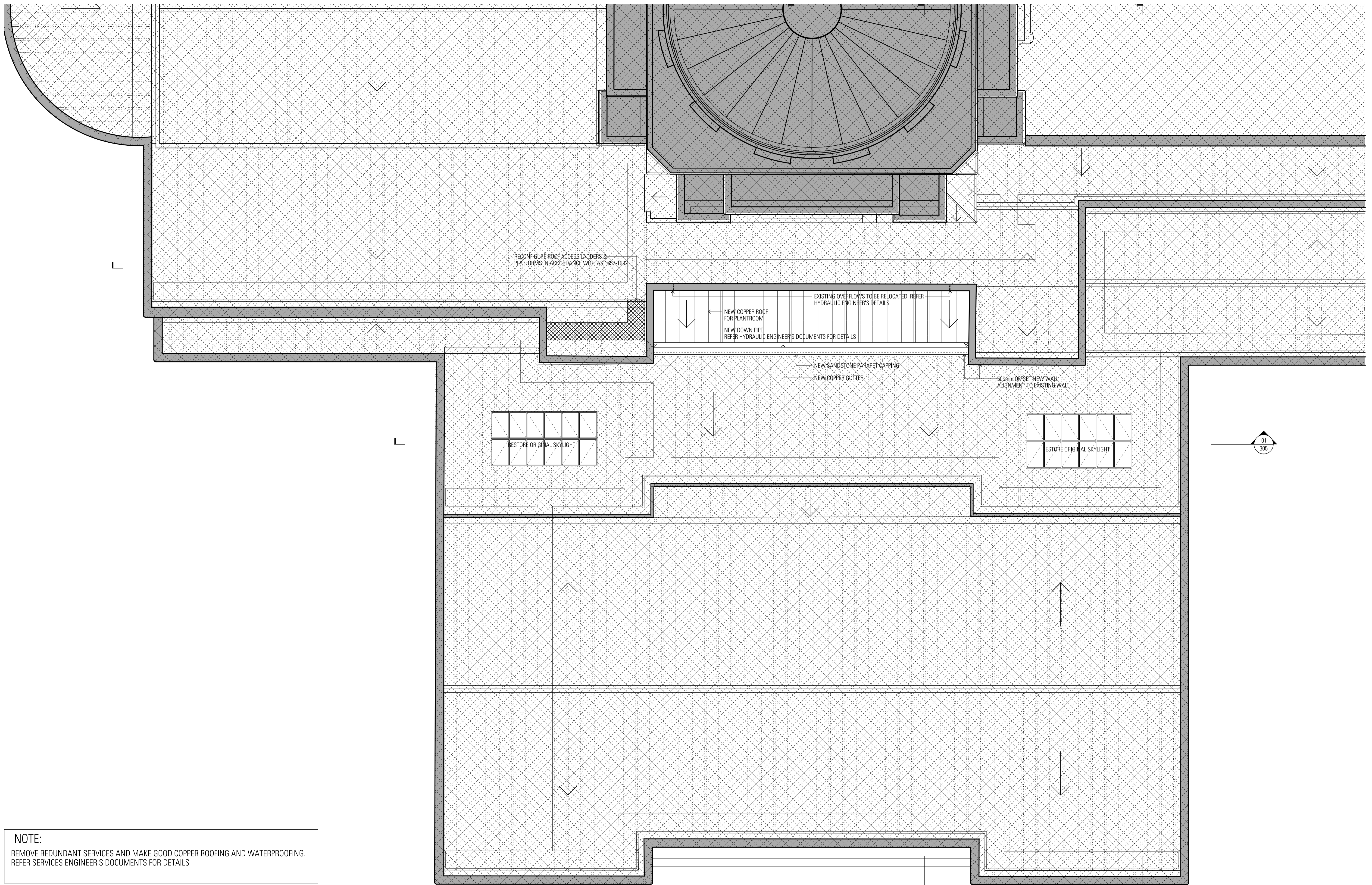
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LEVEL 4 PLAN ROOF PLANTROOM LEVEL - NORTH

Project Number
 11033
 Drawing Number
 WA-A-150

Documentation Stage
WORKS APPROVAL
 Revision
 02

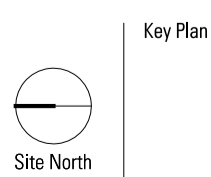
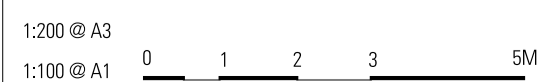


NOTE:
 REMOVE REDUNDANT SERVICES AND MAKE GOOD COPPER ROOFING AND WATERPROOFING. REFER SERVICES ENGINEER'S DOCUMENTS FOR DETAILS

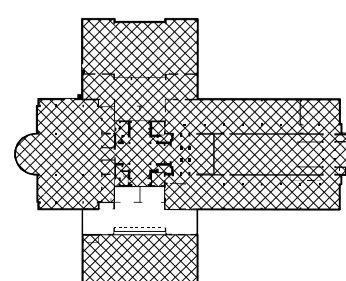
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Scale / North Point



Key Plan



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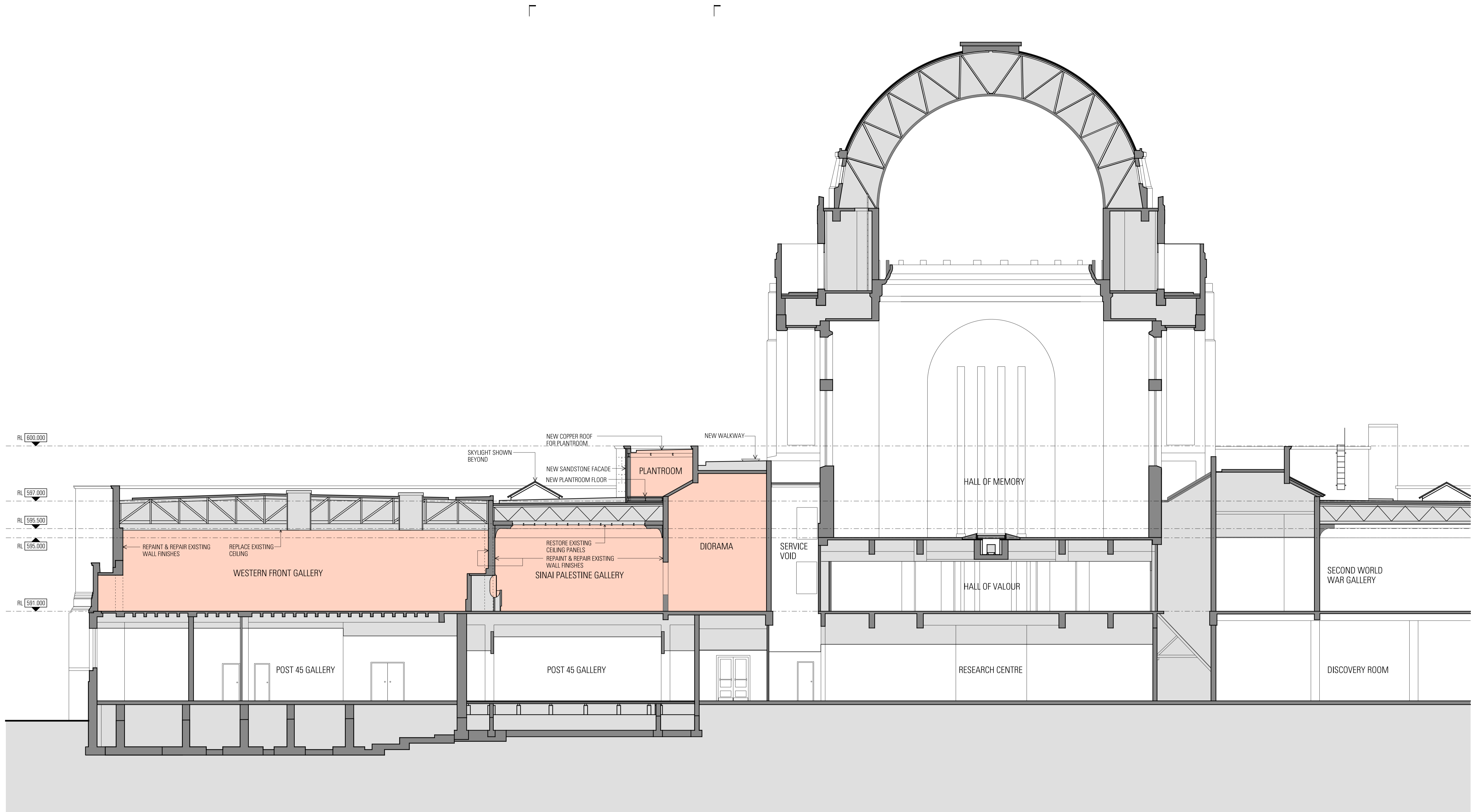
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ROOF PLAN NORTH
 Project Number 11033
 Drawing Number WA-A-160

Documentation Stage
WORKS APPROVAL
 Revision 02



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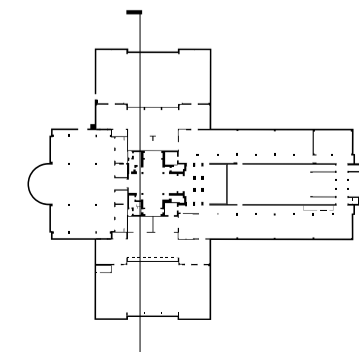
Rev	App	Cl	Revision or reason for issue	Date
-00	KL	MR	Issued for Co-ordination	17-10-12
-01	KL	MR	Draft Design Development	31-10-12
-02	KL	MR	Design Development	16-11-12

Scale / North Point

1:200 @ A3
 1:100 @ A1
 0 1 2 3 5M

Key Plan

Site North



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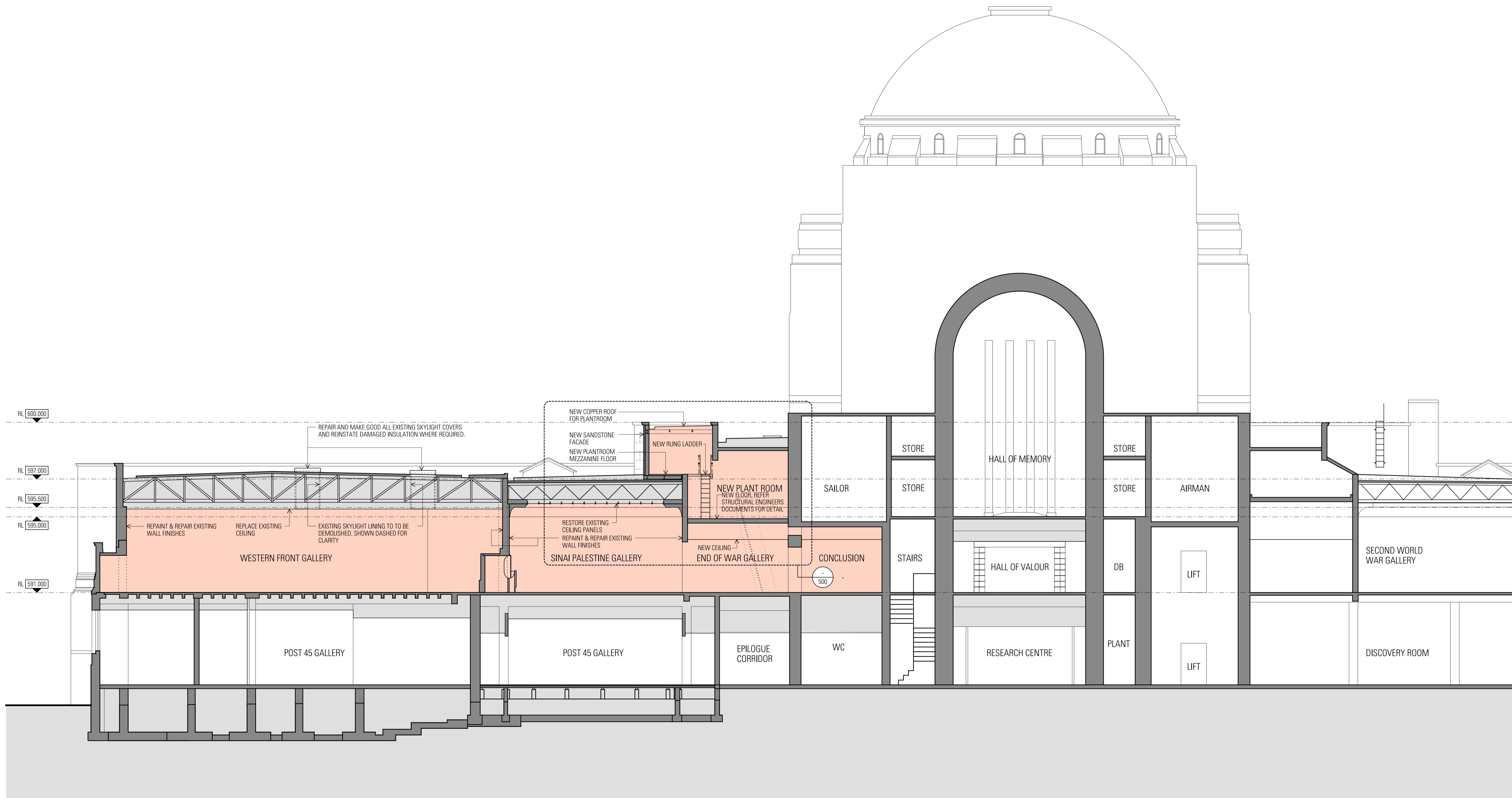
FIRST WORLD WAR
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SECTION 01

Project Number
 11033
 Drawing Number
 WA-A-301

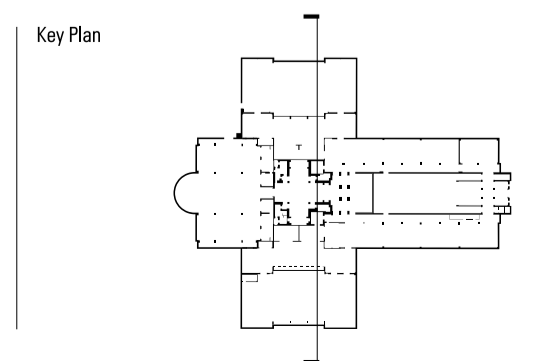
Documentation Stage
WORKS APPROVAL
 Revision
 02



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Scale / North Point
 1:200 @ A3
 1:100 @ A1
 0 1 2 3 5M



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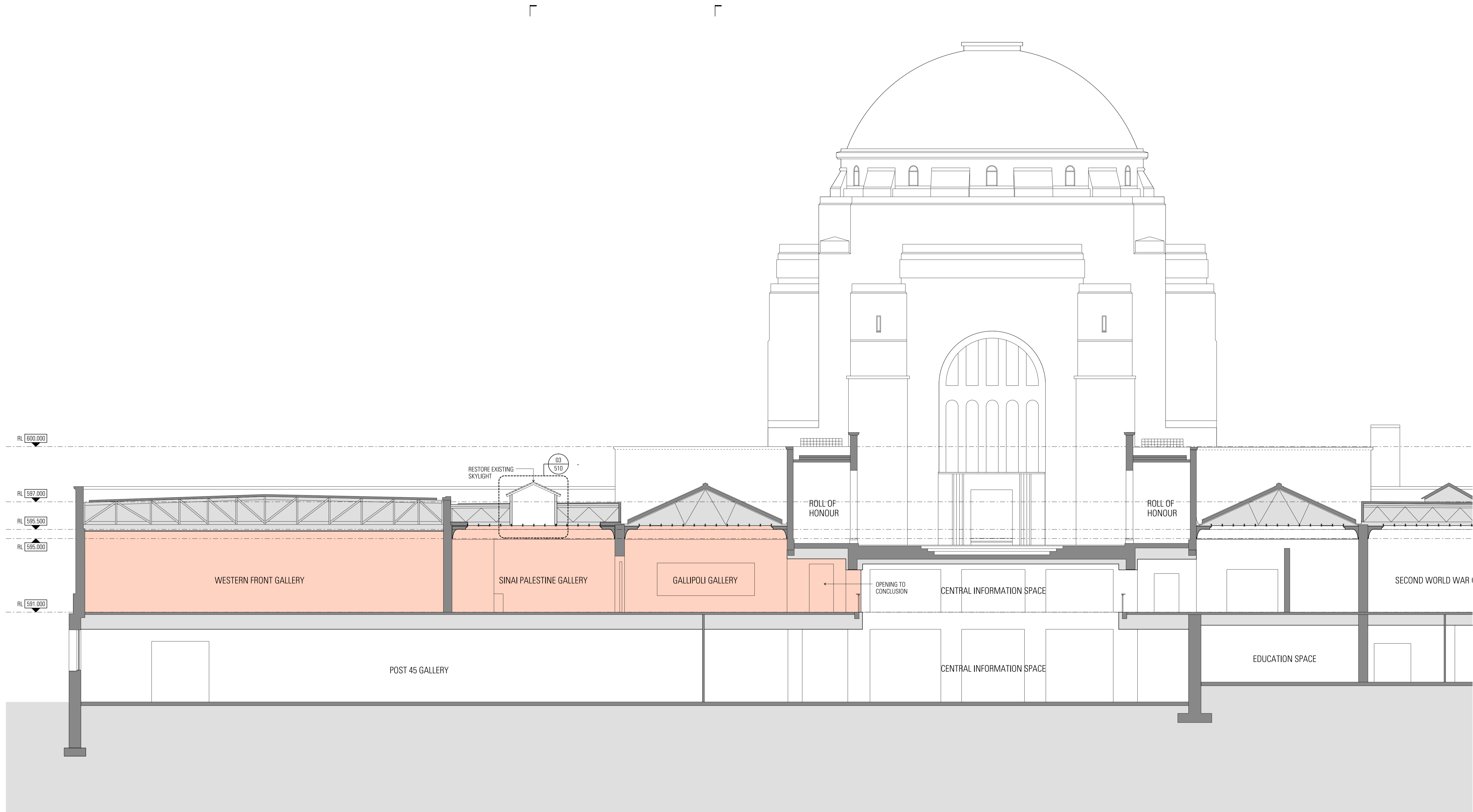
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SECTION 02
 Project Number
 11033
 Drawing Number
 WA-A-302

Documentation Stage
WORKS APPROVAL
 Revision
 02



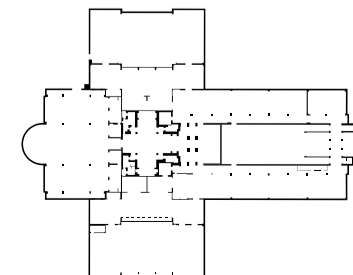
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Scale / North Point
 1:200 @ A3
 1:100 @ A1
 0 1 2 3 5M

Key Plan

Site North



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SECTION 03

Project Number
 11033
 Drawing Number
 DD-A-303

Documentation Stage
PRELIMINARY
 Revision
 02