

Design Excellence Strategy





Sydney Metro West

Design Excellence Strategy

September 2022

Contents

 Introduction	5 6 8 8
	8 8
2.1 Sydney Metro vision2.2 Sydney Metro design objectives	
 Design excellence approach	10 10 11
 4. Design review panels	16 17 17 18
 5. Design excellence phases	20 21
 6. Application to over station development	24 า

Glossary and abbreviations

Term	Definition
adjacent station development (ASD)	development that is adjacent to but not substantially integrated with critical State significant infrastructure
CBD	central business district
Concept SSDA	A concept SSD application as defined in s4.22 of the EP&A Act is a development application that sets out concept proposals for the development of a site, and for which detailed proposals for the site or for separate parts of the site are to be the subject of a subsequent development application or applications
CSSI	critical State significant infrastructure
DA	development application
DAP	Design Advisory Panel
DEEP	Design Excellence Evaluation Panel
Detailed SSDA	A detailed SSD application based on an approved Concept SSDA, which seeks consent for the design of a proposal and to physically carry out the proposal
DEX Strategy	Sydney Metro West Design Excellence Strategy
DRP	Design Review Panel
DPE	Department of Planning and Environment
EP&A Act	Environmental Planning and Assessment Act 1979
EIS	environmental impact statement
Eol	Expression of interest
EPI	environmental planning instrument
GANSW	Government Architect NSW
LEP	local environmental plan
LGA	local government area
over station development (OSD)	development that is substantially integrated with critical State significant infrastructure and procured either at the same time as the station or separately and built either at the same time as the station or later
SOPA	Sydney Olympic Park Authority
SSD	State significant development as defined by s4.36 of the EP&A Act
SDRP	State Design Review Panel
SSI	State significant infrastructure
SMW project	Sydney Metro West project – construction and operation of a metro rail line and associated stations between Westmead and Hunter Street (Sydney CBD)
ΤΑΟ	Technically Assured Organisation
TDRP	Tender Design Review Panel
TfNSW	Transport for NSW

Document history

As this document may be revised over time, the following table indicates the latest release.

Version	Date of approval	Reason for update
Final	19 August 2022	GANSW Endorsed
Reissued	September 2022	Figures 2-8 standardised

1. Introduction

1.1 Overview of strategy

Sydney Metro has a long-standing commitment to design excellence as an outcome and has led the way in setting new benchmarks for delivery of excellence in design for major infrastructure projects.

Consistent with best practice, Sydney Metro engages highly experienced, multidisciplinary design practices to inform reference documents and has been at the forefront of using design review panels to guide design outcomes.

Sydney Metro's specialised approach to achieve design excellence is driven by:

- the benefits of a consistent corridor-wide approach to deliver the Sydney Metro West project
- the need to integrate critical State significant infrastructure with over station development recognising the complexity of designing and constructing underground stations with development above
- the nature and associated complexity of the design and design assurance processes required to deliver railway infrastructure, acknowledged through Technically Assured Organisation (TAO) accreditation
- the interdependent nature of multiple procurement packages which drive the need for certainty in tender outcomes and define interface requirements for other packages
- the accelerated construction period of both the infrastructure and development
- the need to integrate all elements of the design and construction of the project through the various concurrent stages of development.

This Sydney Metro West Design Excellence Strategy (DEX Strategy) outlines Sydney Metro's approach to deliver design excellence across the Sydney Metro West project. It applies to stations, precincts, over station development substantially integrated with critical State significant infrastructure (OSD) (refer Figure 9) and selected ancillary infrastructure facilities. It will also apply where there are statutory requirements for design excellence and competitive design processes.

Some station precincts also include adjacent station development (ASD), which while not integrated, may have key interfaces with the station and related structures that need to be considered in design development. While the DEX Strategy applies to the initial stages of ASD design, final ASD proposals will undergo separate approval processes to which other relevant design excellence requirements apply.

Under Sydney Metro's delivery strategy, contracts for the design and construction of stations and the rights to develop above them are tightly integrated and may occur simultaneously. This requires design excellence measures to be embedded throughout the initial design and procurement processes to ensure stations and any OSD/ASD delivers a holistic design composition.

The Sydney Metro Design Quality Statement sets the vision and design quality objectives across all projects. The statement instructs the preparation of an agency-wide framework outlining the commitment to design quality processes, requirements and outcomes throughout the project lifecycle. It includes the development of design excellence strategies for each Metro project. This DEX Strategy was endorsed by the NSW Government Architect on 19 August 2022.

1.2 **Project overview**

Sydney Metro West will double rail capacity between Greater Parramatta and the Sydney CBD, transforming Sydney for generations to come. The once-in-a-century infrastructure investment will have a target travel time of about 20 minutes between Parramatta and the Sydney CBD, link new communities to rail services and support employment growth and housing supply. Stations have been confirmed at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays, Pyrmont, and Hunter Street in the Sydney Central Business District. A stabling and maintenance facility will also be located at Clyde (refer **Figure 1**).



Figure 1 – Sydney Metro West alignment

Sydney Metro West is being assessed as a staged, critical State significant infrastructure (CSSI) application under section 5.20 of the *Environmental Planning and Assessment Act* 1979 (EP&A Act). The concept and major civil construction work for Sydney Metro West between Westmead and The Bays was approved on 11 March 2021. Applications for stages of the CSSI project currently underway include:

- All major civil construction works including station excavation and tunnelling between The Bays and Sydney CBD
- Tunnel fit-out, construction of stations, ancillary facilities and station precincts, and operation and maintenance of the Sydney Metro West line.

In accordance with State Environmental Planning Policy (Planning Systems) 2021 Schedule 1, Sydney Metro will also seek approval of concept State significant development applications (Concept SSDAs) for OSD/ASD, parts of which will be subject to this DEX Strategy.

1.3 Document structure

This DEX Strategy is structured in six chapters.

1. Introduction (this chapter)

Explains the purpose of the strategy, where it applies and the scope of the project.

2. Vision

Reiterates the Sydney Metro vision and overall design objectives.

3. Design excellence approach

Outlines Sydney Metro's approach to design excellence for the Sydney Metro West project: the design review panels, the three phases, how it will be applied to the various stages of the design process and additional Sydney Metro design excellence initiatives.

4. Design review panels

Identifies the roles of the various design review panels that will guide the project.

5. Design excellence phases

Describes the three phases of design excellence and how they will evolve with the project.

6. Application to over station development

Justifies the need for a bespoke corridor-wide approach to competitive selection for the four stations with over station development that is substantially integrated with critical State significant infrastructure (Hunter Street (Sydney CBD), Pyrmont, Sydney Olympic Park and Parramatta) and provides an overview of how the design excellence process will be applied.

2. Vision and objectives

2.1 Sydney Metro vision

"Transforming Sydney with a new world class metro".

Sydney Metro's mission is to deliver a world class, connected metro, which will provide more choice to customers and opportunities now and in the future.

Sydney Metro presents a unique opportunity to demonstrate an exemplary approach to integrated transport and land use planning.

Quality architecture, good urban design and a user friendly and inter-connected transport system are critical to ensuring that Sydney Metro meets customer needs and expectations and maximises its city-shaping potential and broader urban benefits.

Sydney is Australia's global city and international gateway. Sydney Metro is seeking to deliver a positive, enduring and sustainable legacy for Sydney across all station precincts and ancillary facilities. Sydney Metro West will set new standards of excellence in design and create station precincts that contribute to the character and quality of places. This is consistent with Sydney Metro's commitment to setting new benchmarks for delivery of design excellence for major infrastructure projects.

2.2 Sydney Metro design objectives

To meet Sydney Metro's vision to transform Sydney with a world-class metro and deliver design excellence across Sydney Metro West, five design objectives guide decision making and the design process. Design principles are prescribed to each design objective, explaining the intention of the objective for the design of stations, station precincts and the wider metro corridor.

The DEX Strategy draws from the Government Architect NSW *Better Placed – an integrated design policy for New South Wales* and is consistent with the underlying principles of their *Draft Design Excellence Competition Guidelines, 2018.* It has also been informed by the design excellence provisions, competitive design policies and practices applied by councils along the Sydney Metro West corridor.

Each Sydney Metro design objective aligns with objectives from *Better Placed* as shown in **Table 1**.

Design Objective	Design Principles	Relevant <i>Better Placed</i> objectives
Objective 1: Ensuring an easy customer experience	 Design with customer focus Respond to diverse range of customer needs Provide welcoming and intuitive spaces Ensure a comfortable, enjoyable and safe experience 	Objective 4: Better for people – safe, comfortable and liveable Objective 5: Better working – functional, efficient and fit for purpose

Table 1: Sydney Metro Design Objectives and Design Principles

Design Objective	Design Principles	Relevant <i>Better Placed</i> objectives
Objective 2: Being part of a fully integrated transport system	 Provide clear, legible connections Ensure efficient, integrated public and active transport modes Maximise catchment Ensure modal hierarchy is met 	Objective 5: Better working – functional, efficient and fit for purpose
Objective 3: Being a catalyst for positive change	 Improve the amenity of existing places and the places we create Regenerate precincts Raise urban quality and enhance overall experience of the city 	Objective 7: Better look and feel – engaging, inviting and attractive Objective 6: Better value – creating and adding value
Objective 4: Being responsive to distinct contexts and communities	 Design with Country Integrate with urban fabric Design high quality architecture Respond to local character, if appropriate, or be a catalyst for future character Respond directly to the existing and future communities Recognise and protect the existing natural and cultural environments Consider context beyond the station precinct 	Objective 1: Better fit – contextual, local and of its place Objective 3: Better for community – inclusive, diverse and connected
Objective 5: Delivering an enduring and sustainable legacy for Sydney	 Create resilient places and infrastructure Promote a positive legacy Set high design standards across the corridor, stations and precincts Constantly reset Metro's benchmarks higher 	Objective 2: Better performance – sustainable, adaptable and durable Objective 6: Better value – creating and adding value

3. Design excellence approach

3.1 Defining design excellence

Design excellence refers to the design quality of a building or project that achieves a level of quality that is above and beyond the usual, and is often summarised as the highest standard of architectural, urban and landscape design. It also describes a variety of requirements and processes that support this outcome. Design excellence descriptions include references to context, accessibility, public domain, streetscape, massing and sustainability. For Sydney Metro, the achievement of design excellence for stations, precincts and development also means addressing technical engineering and rail safety requirements.

Design excellence in the context of statutory development approval processes in NSW often involves a competitive stage where an independent jury assesses and selects a winning design based on an agreed set of design-related selection criteria. The design competition is undertaken at a single point in time in the development approval process.

The integrated nature of the stations, precincts and development calls for embedding design excellence throughout the lifecycle of the SMW project from inception of ideas and concepts that define expectations, through design development and procurement to delivery.

A key objective of the DEX Strategy involves consideration of design excellence through infrastructure and development procurement processes, driving competition between tenderers to enable the best designs, commercial outcomes and technical requirements to be delivered. Where proposals include over station development, tenderers' designs are scrutinised, evaluated and refined throughout the procurement process to ensure that all proposals are able to demonstrate design excellence for stations, precincts and development.

3.2 Design excellence overview

The Sydney Metro West DEX Strategy is structured around the establishment and operation of two independent design review panels that support the design development process for the architectural, urban design, landscape and infrastructure elements of each precinct throughout three phases of the project (refer **Figure 2**):

- Phase 1: Defining expectations
- Phase 2: Reference design and competitive selection
- Phase 3: Design integrity.

The two design review panels are chaired by the NSW Government Architect:

- Design Advisory Panel (DAP) covers Phase 1 and applies to all station precincts to guide concept design of stations, precincts and development. It is during Phase 1 that CSSI applications and Concept SSDAs are developed, and approvals sought.
- Design Review Panel (DRP) covers Phases 2 and 3 and applies as follows.



Figure 2 – Design excellence overview

Phase 2:

- guides reference designs for stations, precincts and development
- facilitates a competitive process for Sydney Metro's procurement strategies for detailed design of stations, precincts and development
- responds to statutory requirements for design excellence in environmental planning instruments
- implements a rigorous design evaluation process.

During this phase designs for over station development progress to Detailed SSDAs.

Phase 2 also includes the establishment of separate Sydney Metro managed panels that may comprise select DRP members to review and provide advice on the design evaluation of tender submissions. The Design Excellence Evaluation Panel (DEEP) will facilitate the achievement of design excellence as part of the competitive selection process for over station development applications while the Tender Design Review Panel (TDRP) will provide guidance on aspects of the CSSI including stations and ancillary infrastructure facilities as required.

Phase 3 ensures design integrity is achieved and demonstrated in the design and delivery of stations, precincts and development following contract award.

The structure and composition of the design review panels is outlined in **Section 4** while the way each phase will operate is described in more detail in **Section 5**.

3.3 How the strategy is applied

To achieve design excellence and consistency along the Sydney Metro West corridor, which extends across seven local government areas (see **Figure 3**), the DEX Strategy employs a corridor-wide approach that applies to all nine station precincts and the ancillary service facilities at Clyde-Rosehill.



Figure 3 – Sydney Metro West corridor, proposed stations, and location within LGAs

The extent to which the DEX Strategy applies to each station precinct varies depending on the size and scale of development above ground and the manner in which it is tailored to its local context. Accordingly, the DEX Strategy approach at each location is as follows (see also **Table 2**):

- Station, ground plane and public domain: The concept design of the station, ground plane and public domain for each station precinct and the ancillary facilities at Clyde-Rosehill is reviewed by the relevant panel who provide guidance to achieve desirable place making, urban design, and transport integration outcomes.
- **Precinct masterplans**: For all precincts the panels provide guidance on the development of precinct masterplans including desired place making and urban design outcomes that inform OSD/ASD as required.
- **Competitive design process**: At sites with statutory planning controls for design competitions for over station development, the DEEP will facilitate a competitive selection process to meet those requirements, as explained below. This would not apply to adjacent station development.

Some environmental planning instruments (EPIs) contain design excellence provisions that are required to be satisfied for development consent to be granted. These provisions include definitions, criteria for the achievement of design excellence and the requirement for a competitive design process, the rules of which are set out in the relevant EPIs themselves or in adopted design excellence policies.

The DEX Strategy will apply to over station development at Parramatta, Sydney Olympic Park, Pyrmont and Hunter Street (Sydney CBD) where development is substantially integrated with CSSI and is required to satisfy obligations with respect to a competitive design process. **Section 6** outlines the rationale for using this DEX Strategy as an alternative competitive design process and provides an overview of how the strategy will be applied to those over station developments.

For adjacent station development the design excellence provisions under the relevant EPI, including the competitive design process would continue to apply.

Station	Station, ground plane & public domain	Precinct masterplan	Statutory requirement for competitive design process	
Westmead	\checkmark	✓		
Parramatta	✓	✓	\checkmark	
Clyde MSF	MSF ✓ ✓			
Sydney Olympic Park	√	√	√	
North Strathfield	✓	✓		
Burwood North	✓ ✓			
Five Dock	✓	\checkmark		
The Bays	✓	✓		
Pyrmont	√	\checkmark	✓	
Hunter Street (Sydney CBD)	1	\checkmark	~	

3.4 Additional design excellence initiatives

In addition to establishment of the design review panels, Sydney Metro has implemented other initiatives to further extend the delivery of design excellence as outlined below. These are prepared by Sydney Metro's experienced multi-disciplinary team including engineers, architects, landscape architects, planners, heritage, sustainability and commercial development specialists.

3.4.1 Design guidelines

Station and Precinct Design Guidelines

Station and Precinct Design Guidelines that establish design standards for Sydney Metro West are included in the State significant infrastructure application for Sydney *Metro West Environmental Impact Statement – Rail infrastructure, stations, precincts and operations (Westmead to Sydney CBD)* dated March 2022.

The vision for the station and precinct design guidelines includes design objectives, understanding customer needs, commitments to safety and sustainability and Connecting with Country.

The guidelines have considered the strategic aspirations and/or urban design strategies of councils and State agencies, including *Better Placed*. The guidelines build on the placemaking approach outlined in *Sydney Metro West Environmental Impact Statement – Westmead to The Bays and Sydney CBD* (2020) and will be used by Sydney Metro to guide design development of:

- the interface between stations and their immediate surrounds (referred to as station precincts), including:
 - station entries

- transport interchange facilities (bicycle facilities, bus stops, kiss and ride, taxis and transfers to metro, rail, bus and existing and future light rail services)
- landscaping and other elements of the public domain
 - heritage interpretation and connecting with Country
- stations, services facilities and the stabling and maintenance facility
- rail corridor works including tunnel portals, bridges and underpasses.

These guidelines will be referenced in tender documents for the procurement of stations, precincts and development.

Site-Specific Design Guidelines

Site-specific design guidelines to be included in SSDAs for over station development will complement project objectives and the station and precinct design guidelines and will be referenced in tender documents. For each site they will address matters including:

- vision and site context
- land use and function, including station elements
- places and spaces, including open space and public domain
- podium elements including, street wall heights, views, vehicle access, heritage response
- tower elements including, massing and envelopes, sun planes and setbacks
- access and connectivity
- environment and sustainability.

3.4.2 Benchmarks

Sydney Metro's success as a transformative world class metro will be the outcome of a combination of engineering, architecture, urban and landscape design and the customer experience. One of the ways this is achieved is by comparing design outcomes against agreed benchmarks to measure success.

Sydney Metro will establish benchmarks for Phase 2 – reference design and competitive selection – to be applied to stations and where over station development applies. This will involve selecting high quality international and local (Australian) examples appropriate to context and that demonstrate aspirations for each site including:

- integrated station and tower design outcomes
- tower / skyline responses
- response to place
- public domain
- materials and finishes.

Sydney Metro will work with the DAP to determine appropriate benchmark projects for each site with over station development. The rationale for the selection of each benchmark example will be documented in the site-specific design guidelines.

The benchmarks will be used to ensure that designs submitted meet minimum performance requirements of comparable quality.

3.4.3 Diversity of design

Sydney Metro's procurement process will also include requirements to maximise the diversity of design inputs to aid in the achievement of exemplary design and global city making and foster architectural diversity both from a line wide perspective and within precincts by drawing on sources that are as diverse as possible. This includes:

- membership of Design Review Panels
- criteria for tender submissions to support diversity of design teams and city making opportunities by encouraging:
 - design teams with demonstrated capability in design excellence (e.g. award winning, industry recognition)
 - o different architects for different buildings
 - a breadth of local, international, small scale, medium scale and emerging firms
- commitments to designing for Country, sustainability targets, public art, sensitive heritage responses
- extended consultation with stakeholders
- enabling councils and State agencies to contribute to relevant design review panels.

Sydney Metro acknowledges the limitations that Technically Assured Organisation (TAO) requirements place on the range of design firms able to participate in tenders for over station development projects by restricting the diversity of firms available. Consequently, Sydney Metro will encourage partnering of non-TAO firms with TAO teams as a means to overcome this limitation to enable participation of a wide range of design firms with diverse design approaches, representing design excellence in fields outside rail development. The Expression of interest (EoI) process for shortlisting teams will foreground diversity and innovation for design teams to ensure the best value for government and the public is achieved through this process.

4. Design review panels

Independent design review panels, integral to the DEX Strategy, will be utilised throughout each phase of the design excellence process (refer **Figure 4**). Additional initiatives to achieve design excellence are set out in Section 3.4.



Figure 4: Sydney Metro West design excellence focus

4.1 Design Advisory Panel (DAP)

Sydney Metro has established a Design Advisory Panel (DAP) to support the early precinct planning and concept design across the SMW project. This is a Sydney Metro initiative that precedes the operation of the formal Design Review Panel and enables expert guidance on design and precinct outcomes. The DAP provides strategic design guidance, based on sketches and options presented at the early stages of design in an informal format.

The DAP is chaired by the NSW Government Architect and includes suitably qualified, experienced professionals from the fields of architecture, urban design and landscape architecture. Relevant councils and State agencies are invited to participate in DAP meetings to advise on local issues and design outcomes as they relate to matters of interest.

The DAP regularly critiques initial station and precinct designs and provides guidance to place making and design teams on refinements and principles to be considered to achieve place and design principles. The DAP supports the Sydney Metro design objectives and guides strategic planning and urban design outcomes.

The responsibilities of the DAP include advising on key design elements such as place making, activation, heritage, urban design, streetscape, public domain, architecture and landscape architecture.

DAP advice is recorded by GANSW and informs ongoing design development.

4.2 Design Review Panel (DRP)

As design work progresses, Sydney Metro will establish the Sydney Metro West Design Review Panel (DRP) to formalise the operation of the design review process and to fulfil anticipated conditions of consent for the CSSI. The panel will:

- provide independent expert advice and recommendations for consideration in the design development of stations and interchange areas, ancillary facilities and associated integrated station and precinct development
- support the implementation of the Sydney Metro design objectives and ensure quality design processes and outcomes
- review and endorse updates to relevant project specific design guidelines
- satisfy design excellence objectives and requirements of planning approval conditions
- ensure that design excellence qualities of approved or awarded schemes are maintained.

The DRP will be chaired by the NSW Government Architect and supported by suitably qualified experienced professionals from the fields of architecture, urban design and landscape design. The DRP will also be supported by specialist advisors in the fields of community integration, active transport, sustainability and cultural heritage, as required. Relevant councils and State agencies will be invited to participate in DRP meetings to advise on local issues and design outcomes as they relate to matters of interest.

The constitution of the DRP, including panel size and membership will be determined in consultation with GANSW. Panel members will be sourced from the State Design Review Panel unless otherwise agreed with the GANSW. Sydney Metro will maintain a register of actions and outcomes to enable transparency and accountability.

This approach ensures a consistent and holistic design response across multiple planning approval processes. Concept SSDAs will reference the DEX strategy and set out how design excellence will be assured through Phases 2 and 3 of the process for over station development.

The DRP will also ensure design integrity is achieved through ongoing review and guidance until the approval of any Detailed SSDA for over station development and to the final designs for the stations.

4.3 Design Excellence Evaluation Panel (DEEP)

For over station development that requires a competitive design process under an EPI (refer **Section 3.3**), the DRP will delegate the responsibility of design review/ evaluation during tender and procurement to a Design Excellence Evaluation Panel (DEEP). Multiple DEEPs may be required across the SMW project to support the procurement process to focus on specific contract packages.

Sydney Metro will seek expressions of interest from the market for the design and construction of stations and over station development. This process is aimed at ensuring that the procurement method attracts innovative design-led proposals that demonstrate station performance outcomes, deliverability and value for money.

The evaluation and review of over station development designs by the DEEP is important to achieving Sydney Metro's design excellence objectives. The DEEP will be informed by detailed reference designs developed by Sydney Metro as part of station design and statutory planning requirements in advance of the commencement of the tender process.

DEEP members will comprise design experts who are recognised as advocates for design excellence and may be drawn from members of the DRP. The DEEP will be chaired by GANSW or their nominee and include a member nominated by the relevant council.

The DEEP process conceptually aligns Sydney Metro with the role of competitive design processes in EPIs and ensures that Sydney Metro's competitive tender selection benefits from expert, independent and objective design expertise and advice. The key difference is that there would be no winner of a design competition. Instead, the DEEP process ensures that each of the shortlisted design schemes is capable of achieving design excellence. This means that the successful tenderer is able to demonstrate the achievement of commercial and technical acumen and ensure that design excellence can be delivered by adopting the recommendations of the DEEP members.

In addition to the DEEP, Sydney Metro's tender evaluation is informed by multidisciplinary technical and commercial assessments undertaken by Sydney Metro experts. The focus of the DEEP will be to ensure that all tender proposals either demonstrate the achievement of design excellence or demonstrate the capability to achieve it. Design guides and benchmarks will be instrumental to inform the DEEP's assessment. A series of interactive sessions will be held between short-listed tenderers and the panel to interrogate, review and refine designs for the over station developments with the aim of confirming that submitted designs are capable of achieving excellence in design.

The DEEP will provide a Design Excellence Report on the evaluation process and outcomes to the Sydney Metro Tender Review Panel that includes design expertise. This assures a line of sight in the communication between the DEEP and Sydney Metro's consideration of design excellence in the overall decision-making process. The report will identify those aspects of each design proposal that contribute to the achievement of design excellence or where this is not achieved, specific recommendations for further design refinement. These items will be incorporated into contract documentation to ensure they are delivered.

The DEEP report, prepared at the completion of the competitive selection phase, would be made available for the Sydney Metro Design Review Panel for the purposes of the design integrity measures.

4.4 Tender Design Review Panel (TDRP)

To provide design guidance and advice during the procurement of stations without over station development and other ancillary services infrastructure, Sydney Metro will establish a Tender Design Review Panel (TDRP). Also delegated by the DRP, the TDRP will provide independent design quality advice to inform the preparation of tenders, tender design and tender evaluation of procurement for major contract packages as relevant to support the achievement of the Sydney Metro design objectives and design review.

Meetings will be scheduled in response to procurement and/or competitive selection milestones. The TDRP will be chaired by GANSW or their nominee.

The role of the TDRP will be to:

• provide independent advice and recommendations to Sydney Metro regarding design quality and potential design refinements and improvements of proposals where appropriate during the procurement stage of major contracts

- participate in briefings and interactive workshops as required with each shortlisted tenderer prior to lodgement of formal tender submissions, to provide constructive feedback and direction to assist each team to submit a tender that meets or exceeds design quality expectations while balancing other considerations such as engineering, buildability and cost
- review and evaluate design quality aspects of tenders.

4.5 Other Design Review Panels

Where there is limited to no substantial integration in the design process between the development and the stations or rail infrastructure such as adjacent station development, then the prevailing statutory design excellence requirements as set out in relevant EPIs would continue to apply.

5. Design excellence phases

As noted in **Section 3.2**, the DEX Strategy is built around the three phases of the project:

- Phase 1: Defining expectations
- Phase 2: Reference design and competitive selection
- Phase 3: Design integrity.

These phases reflect the way in which the design for Sydney Metro West will evolve from definition design prepared for the Business Case through concept and reference designs prepared by Sydney Metro, detailed designs prepared by tenderers to the final detailed design prepared by the contractor or successful tenderer (refer **Figure 5**). These design stages correspond to the staged approval process required for a project of this scale and complexity.



Figure 5: Sydney Metro West design stages

5.1 Phase 1: Defining expectations

The first phase of the design excellence process applies to the whole SMW project, ensuring that each station and precinct is subject to the design excellence process guided by the DAP. The DAP assists with developing good design outcomes, refining place and design principles, reviewing and advising on potential design refinements and guiding precinct development outcomes.

Sydney Metro captures the project's expectations and requirements in a suite of statements, guidelines and contract requirements. Sydney Metro's vision statement and design guidelines, including the project's endorsed design objectives and principles, inform the development of the project.

Sydney Metro will engage with councils and State agencies during this phase to enable information sharing, inform design development and confirm planning pathways.

The planning application documents set parameters for scope and design. The project approval for the *Sydney Metro West Environmental Impact Statement – Rail infrastructure, stations, precincts and operations (Westmead to Sydney CBD)* is expected to give effect to the Sydney Metro West Station and Precinct Design Guidelines that include the endorsed design objectives, principles and site-specific urban design strategies (refer **Figure 6** and **Section 3.4.1**).

The DAP will also review concept designs, building envelopes and site-specific design guidelines relevant to each Concept SSDA for over station development.

Benchmark projects determined in collaboration with the DAP and the relevant authority will be used to set the minimum design quality standards for specific design elements of the over station developments, as set out in **Section 3.4.2**.



Figure 6: Sydney Metro West design and planning stages corresponding to Phase 1

5.2 Phase 2: Reference design and competitive selection

In Phase 2 of the design excellence process the DAP and/or DRP (depending on timing) will review reference designs for each station precinct which will inform deliverables for the tender process. This will include the parameters for the design and construction of stations and in some cases over station development.

Subsequently Sydney Metro's competitive selection process that applies to the procurement of stations with over station development will commence as part of tender assessment. This will involve a rigorous evaluation process based on design, technical capability and commercial return, as part of a comprehensive procurement strategy (refer **Figure 7**).

The Sydney Metro approach typically utilises a two-stage procurement process:

- 1. Expressions of interest (EoI) undertaken as an open registration invitation that seeks to maximise interest from industry and attract a range of design practices within multi-disciplinary teams.
- 2. Request for proposals (RfP) from a short-listed group of registrants.

The competitive selection process is tailored to encourage participation from the broadest range of design practices (refer Section **3.4.3**) in a competitive tender environment.

The DEEPs would be established during this phase to review over station development (refer to **Section 4.3**). Sydney Metro will draw on the expertise of these specialised panels to work with tender teams to provide positive guidance to:

- help the teams to submit schemes that meet or exceed the benchmarked quality level
- improve the design quality of final submissions without adversely affecting other aspects of the proposal
- achieve an outcome where the other aspects of each solution have been balanced within engineering, buildability and cost constraints.

This ensures the proposal demonstrating the highest design merit can be selected within the framework of the NSW Government Procurement Guidelines and obligation to obtain value for money.

During this phase designs undergo critical assessment, evaluation and design development through tender interactive sessions to enable Sydney Metro to be satisfied that all design proposals are capable of demonstrating design excellence. Where deemed necessary additional interactive sessions are held to shape and refine designs through an iterative process.

Design quality is one of the criteria in this phase and will be assessed by the relevant subject matter experts and the DEEP. The intention is to ensure that each scheme is capable of demonstrating design excellence through guidance from the independent panel.

The DEEP will prepare a Design Excellence Report outlining how the submissions perform in relation to the suite of documents that define the design quality expectations and the quality benchmarks for submission to the Sydney Metro Tender Review Panel (refer **Section 4.3**). The report will provide a summary of each tenderers design including an overview of the assessment and design merits. The report will document the DEEP's recommendations, including the rationale for their views, noting the key design elements and justification for how design excellence has been achieved. The report will also identify those elements of each design which require further review and design refinement. In the case that none of the entries can be supported, the report will justify and provide reasons.

Any TDRP established during this phase will report findings from any CSSI tender evaluation process to Sydney Metro as set out in **Section 4.4**.





5.3 Phase 3: Design integrity

Design integrity is essential to ensure that the positive aspects of design that underpin the attainment of design excellence are not compromised through post contract award, including through the development of Detailed SSDAs and into construction.

Sydney Metro will manage design integrity by binding key elements of the successful tenderer's submitted design into the contract documents. Successful tenderers will

typically be required to retain their design team through to delivery. In addition, Sydney Metro will work with the successful tenderer to improve elements of the contracted design identified in the Design Excellence Report or TDRP Report as needing further design development.

The design review task of this third phase reverts to the DRP who would continue to be responsible for design integrity until any Detailed SSDA determinations for over station development and until final designs for the stations (refer **Figure 8**) are completed.

The DRP would also be responsible for reviewing any significant changes to the planning approvals that would:

- require a modification
- materially affect the station or customer experience.

Business case	DAP			DRP		
Definition	Concept	Reference	Detai			nal
	Sydney Metro		Tende	rers	Cont	ractor
	Phase 1 Defining expecta	ations	Phase 2 Reference desi competitive se		Phas Desig	e 3 gn integrity
	SSI Stages 1+2	SSI Stage 3	Eol + RfP	Tenders	Contract Award	Construction
		Concept	SSDA	Detaile	ed SSDA	Construction
				1		

Figure 8: Sydney Metro West design and planning stages and corresponding to Phase 3

6. Application to over station development

Sydney Metro West is a unique and complex city-shaping project that requires a bespoke, clear and consistent corridor-wide approach to deliver design excellence. Consequently, it is difficult to strictly apply *competitive design processes* as prescribed in relevant EPIs for over station development components. Therefore, Sydney Metro has established this DEX strategy approved by GANSW and tailored to accommodate the achievement of design excellence for over station development substantially integrated with critical State significant infrastructure.

This DEX Strategy builds on the approved and successfully implemented City & Southwest Design Excellence Strategy and demonstrates the effectiveness of the Sydney Metro approach.

This section describes the rationale for the adoption of this DEX Strategy for over station development, offering a consistent competitive selection process as an alternative to the design excellence provisions in relevant EPIs. It also outlines how the design excellence process would be applied in those instances.

6.1 Rationale for a bespoke approach

6.1.1 Requirement for an integrated design process

The substantial integration of stations, precincts and development leads to particular challenges from a design perspective (refer **Figure 9**). In particular:

- station elements extend into above ground podiums which form an integral component of the tower over and need careful attention to ensure the building 'reads as a whole' from early design stages through to resolution of reference and final designs
- the location and integration of station elements with core structural requirements for the development above constrains design freedom and requires design teams for stations, precincts and development to work closely to ensure metro operations are not compromised
- designs for the station and development need to take into consideration and make provision for delivery strategies where stations, precincts and development are built separately.

carefully co-ordinated





distribution networks need

to be carefully co-ordinated

2

This approach allows for the evolution of designs through a process that requires station and development teams to work closely for years from early concepts to reference designs through the tender phase.

The iterative design evaluation process through the DEEP embeds competitive tension and introduces an approach whereby designs for development can benefit from guidance provided by the independent expert panel to ensure that excellence can be achieved.

6.1.2 Role of design at tender stage

The procurement process for the delivery and construction of stations and development needs to be managed in a timely manner to ensure integrated design outcomes are achieved and project delivery milestones are met. This means that requests for proposals must be able to respond to approved concept designs. The approval process for the station and Concept SSDAs is designed to provide tenderers with approved station and development concepts upon which bids can be based. Designs submitted for the development are then subject to assessment and evaluation by the DEEP to ensure excellence can be achieved.

Under regular competitive processes in place through councils and State agencies, competitions are held between the Concept SSDA approval and Detailed SSDA approval. This presents a significant risk for Sydney Metro West station developments as:

- it would extend the duration of design work for the over station development as a design competition cannot commence until the Concept SSDA is approved, which would risk compromising Sydney Metro's delivery as each package of works is interconnected with other works packages associated with the broader metro program
- it is not feasible for each tenderer to run a competition (meeting TAO requirements, with only a few accredited firms) prior to submitting their tenders
- such a process risks compromising the benefits of the integrated design and development approach through disjointed and disconnected design responses to stations and over station development components.

6.1.3 Extended duration of construction and completion

Requiring a design competition to be held for over station developments separate to the station process has potential to delay the approval of the detailed design and introduce uncertainty to the process. It would also risk the opportunity to utilise a consolidated construction window for the concurrent delivery of the station infrastructure and over station development. It would mean that the station and development designs would be reviewed separately, compromising a holistic response to the design outcome.

Opportunities to support the concurrent delivery of the station and over station development and the achievement of delivery milestones is advantageous to government and the community, as it reduces the overall construction timeframe for the surrounding precinct and thereby the duration of construction impacts to surrounding properties and public spaces.

6.1.4 Robust design review and development process throughout the project lifecycle

The DEX strategy involves a robust design review and development process from an early stage and throughout the project lifecycle. This includes rigorous testing of

options for land use, building heights, envelopes and form, articulation and integration, with regard to the specific and complex parameters for each site to complement local character.

6.1.5 Independent review

Design review panels are a tried and tested method for achieving excellent design outcomes and are widely adopted on numerous SSD projects. The design review panel approach has been previously implemented for technically complex State significant projects.

Sydney Metro's DRPs have demonstrated that they materially lift the design quality of the metro product through a series of independent design reviews of the urban design for each station precinct and the emerging reference designs for stations and associated development.

DEEPs have been successfully used on over station developments along the city stations of the Sydney Metro City & Southwest line and will contribute to the competitive selection process for the SMW project.

The planning approval authorities and the community can have confidence in the enduring nature of the Sydney Metro design review panels, chaired by the NSW Government Architect, and their ability to continue to support design excellence consistent with the objective of local planning provisions.

6.1.6 Consistency with the GANSW's Design Excellence Initiatives

The DEX Strategy directly responds to and is consistent with the adopted *Better Placed* design policy for NSW prepared by GANSW and their design excellence competition guidelines. It is noted that GANSW design excellence guidelines support the use of specialised design review panels for complex State significant projects.

6.1.7 Consistency with precedent projects

The adoption of DEX Strategy and its competitive selection process is consistent with precedents established for other major infrastructure projects including Sydney Metro City & Southwest and has been accepted by GANSW on behalf of the Secretary of the Department of Planning and Environment as an appropriate mechanism to achieve design excellence for Sydney Metro.

6.2 Response to statutory design excellence requirements for over station development

As noted in **Section 3.3** there are four sites with over station development which are required to address statutory planning controls for design competitions.

Sydney Metro is making provision for over station development at Hunter Street (Sydney CBD), Pyrmont, Sydney Olympic Park and Parramatta. While the over station development components are not declared as SSI or CSSI and are classified as State Significant Development (SSD) under State Environmental Planning Policy (Planning Systems) 2021 they are inextricably linked to the station design as outlined above in Section 6.1.

Sydney Metro will prepare and lodge Concept SSDAs for these sites that will include site-specific design guidelines. The site-specific design guidelines will form part of the planning approval. Together with the DEEP report, they will guide design integrity for the Detailed SSDAs.