



Sydney Metro Northwest:

Bella Vista Station Precinct Concept State Significant Development Application (SSD 10344)

Response to Submissions Report

Applicable to:	Bella Vista Station Precinct, Sydney Metro Northwest
Author:	GLN Planning
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Project Team

Project element	Consultant
Applicant	Landcom on behalf of Sydney Metro
Aboriginal cultural heritage	Kelleher Nightingale Consulting Pty Ltd
Air quality	GHD
Biodiversity	WSP
Bushfire	Bushfire Code & Bushfire Hazard Solutions Pty Ltd
Car parking	SCT Consulting
Civil	Wood and Grieve Engineers
Contamination	JBS&G
Ecologically sustainable development	AECOM
Economic impact assessment	Ethos Urban
Geotechnical	PSM Consult Pty Limited
Integrated water cycle management	Wood and Grieve Engineers
Noise and vibration	GHD
Non-indigenous heritage	Advisian
Project management	APP
Public domain and landscape	Clouston Associates
Quantity surveyor	Rider Levett Bucknall
Riparian Assessment	WSP
Social Infrastructure and open space	Elton Consulting
Transport and traffic	Jacobs
Urban design	Hassell Studio
Urban planning	GLN Planning
Utility services infrastructure	Wood and Grieve Engineers



Executive Summary

This Response to Submissions (RtS) report is submitted by Landcom (the Applicant), on behalf of Sydney Metro (the landowner), to the Secretary, Department of Planning, Industry and Environment in accordance with section 4.39 of the *Environmental Planning and Assessment Act 1979* (EP&A Act) and clause 85A of the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation) in support of a concept State Significant Development Application (concept SSDA) for the Bella Vista Station Precinct (SSD 10344), Bella Vista in The Hills Shire Local Government Area (LGA).

This RtS report has been prepared by GLN Planning on behalf of Landcom and addresses submissions received in response to the exhibition of the Environmental Impact Statement (**EIS**) for the concept SSDA and outlines amendments proposed to address those submissions.

Context and Background

The Sydney Metro program of works includes:

- 1. **Metro North West Line:** Passenger services started in May 2019 between Tallawong and Chatswood, with a driverless metro train every four minutes in the peak.
- 2. Sydney Metro City & Southwest: A new 30km line extending metro rail from Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney. Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.
- 3. Sydney Metro West: Sydney Metro West is a new underground railway between Greater Parramatta and Sydney. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and unlocking housing supply and employment growth between the two CBDs. Sydney Metro West will service key precincts, with stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays and the Sydney CBD. A potential station at Pyrmont is being investigated.
- 4. **Sydney Metro Western Sydney Airport:** Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Australian and NSW governments are jointly delivering this new railway, to open at the same time as the airport.

The Metro North West Line (MNWL), with 13 stations is a catalyst for urban renewal, providing connections to areas that will be transformed through both NSW Government and private investment.

NSW Government owned land surrounding the MNWL stations is no longer required to support metro construction and operations. These sites will be made available for development that supports NSW Government priorities of housing affordability, local infrastructure delivery and economic development.



As part of the Sydney Metro Northwest Places (SMNWP) Program, Landcom will act as the master developer for government land around the new MNWL stations, including Bella Vista Station. Landcom will appoint private sector development partners to deliver projects across the program.

The Bella Vista Station Precinct Project

The Bella Vista Station Precinct envisages a new urban space that is vibrant, liveable and green, and convenient in terms of its access to public transport and amenities that is connected by a network of open spaces. This vision will be achieved through the establishment of a strong character and identity for the station precinct by celebrating the natural Elizabeth Macarthur Creek attributes and by promoting the creation of a highly accessible transit oriented development (**TOD**) precinct.

The exhibited concept SSDA sought approval for the following:

- Land use strategy that identifies the allocation, quantum and location of land uses across the site and 20 development blocks with a maximum height of 68 metres (m) in accordance with The Hills Local Environmental Plan 2019 (THLEP 2019), comprising:
 - a minimum 232,375m² and maximum 305,770m² of residential gross floor area (**GFA**) accommodating between 2,905 and 3,822 dwellings within future residential apartment and terrace built form (including a minimum 5% allocated as Affordable Housing)
 - o a minimum 164,900m² and maximum 167,080m² of retail and commercial GFA within the station precinct
 - o open space and public domain areas, including:
 - 2.74ha of district active open space
 - 1.11ha of local open space
 - 1.3ha of contributory open space land
 - up to 0.12ha of private public domain area in the form of a town centre within the station precinct.
- Design Guidelines to govern future development across the precinct, that include built form design principles and controls.
- Adoption of GFA transfer provisions pursuant to clause 8.3 of THLEP 2019 for the transfer of road and open space site area to identified development lots.
- Street hierarchy and layout, including the identification of pedestrian and vehicular movement and access arrangements, and the indicative location and configuration of new streets and intersection connections to the existing road network.
- Identification of criteria or thresholds for subsequent development stages to be assessed as State Significant Development pursuant to section 4.37 of the EP&A Act.
- The principal subdivision of public domain as the first stage of development pursuant to section 4.22(2) of the EP&A Act.



Stage 1 will involve principal subdivision to create lots for the proposed areas of public open space. No consent is sought for any physical works within the site. All future works identified as part of this concept SSDA would be subject to future Development Applications (**DA**).

As detailed further in this RtS, the application has been amended in response to the issues raised in the submissions received.

Project Aims

The aims of this concept SSDA are to:

- Support the NSW Government's planning strategies and objectives, including the Greater Sydney Region Plan - A Metropolis of Three Cities (2018) and the Central City District Plan (2018) and The Hills Shire Council's (THSC) now endorsed Local Strategic Planning Statement - Hills Future 2036.
- Create an urban environment built upon TOD principles that fosters high patronage of the Sydney Metro network.
- Establish an urban design framework to guide the future urban renewal of the precinct to create
 a vibrant and activated mixed use precinct that delivers up to 3,804 new residential dwellings
 and supporting retail land uses within a highly accessible TOD precinct.
- Provide for a range of new open space infrastructure to support the social needs of the future Bella Vista Station Precinct residents and worker community, including a new town centre, linear open space network along the western fringe of Elizabeth Macarthur Creek and central open space.
- Enhance pedestrian and cyclist connections between the station precinct and surrounding urban environments to maximise patronage of the Sydney Metro and associated amenities.
- Enhance customer experience and urban amenity through the development of an integrated design concept that ensures delivery of a quality public domain with strong connections to the site's surroundings.
- Maximise planning certainty for the future divestment and urban renewal of land within the station precinct.
- Create a framework that ensures future development achieves design excellence.

EIS Consultation and Submissions Overview

The EIS was placed on public exhibition by the Department of Planning, Industry and Environment (**DPIE**) for 28 days between 29 October 2019 and 26 November 2019.

During this time, members of the community and stakeholders were able to:

 view the EIS digitally on the DPIE's Major Projects Planning Portal or at any Service NSW location



- view the EIS in person at the DPIE's Information Centre at Pitt Street, Sydney
- make a written submission on the concept SSD proposal to the DPIE.

DPIE received a total of 24 submissions during the EIS exhibition period. This comprised of 12 submissions from government agencies and 12 submissions from the local community, including nearby landowners. Out of the 12 local submissions:

- · four supported the proposal
- six objected to the proposal
- two submissions provided comments.

Chapter 2.0 provides supplementary assessment on key issues and amendments to the concept SSDA, drawing on additional technical and supporting reports provided as appendices. **Chapter 3.0** provides an overview of the submissions received during the public exhibition period.

Response to Submissions

This concept SSDA has been amended to address the issues and concerns raised in the submissions received during the exhibition period and has resulted in changes to the Illustrative Masterplan (Figure 1). Proposed amendments in response to those issues include:

- updates to the legal description of the site to capture recent subdivision works
- a revision to the proposed delivery of Affordable Housing across the site
- an amended land use strategy with revised potential dwelling yields and areas of:
 - o a minimum residential GFA of 204,675m² (compared to 151,000m² in the EIS)
 - o a potential maximum residential GFA of 304,770m² (compared to 305,770m² in the EIS)
 - o revised potential residential dwelling yields of:
 - a minimum of 2,559 dwellings (compared to 2,662 under the EIS)
 - a maximum of 3,804 dwellings (compared to 3,822 under the EIS)
 - providing a minimum of 5% of Affordable Housing between the Kellyville and Bella Vista
 Station Precincts
 - revised commercial GFA within the station precinct of:
 - a minimum of 116,815m² (compared to 163,900m² in the EIS)
 - a maximum of 151,000m² (compared to 167,080m² in the EIS)
 - revised retail GFA within the station precinct of:



- a minimum of 13,115m² (compared to 3,667m² under the EIS)
- a maximum of 15,000m² (compared to 14,000m² in the EIS) of retail GFA within the station precinct.
- o revised community GFA of 15,000m² consisting of 4,000m² for the proposed community facility (compared to 3,250m² in the EIS) and 11,000m² associated with the Bella Vista school site
- revised and updated Design Guidelines that:
 - o provide revised ground level setbacks of:
 - 2m ground level setbacks for all uses excluding commercial buildings across the site
 - zero metres for non-residential ground floor uses along commercial streets and public plazas.
 - amend the concept masterplan to clarify potential future connections from the Bella Vista Station Precinct to existing local roads, adjacent private lands and across Elizabeth Macarthur Creek.
 - o revise the car parking rates that would apply to future development within the station precinct SSDA site to encourage public transport use as recommended by TfNSW.
 - o amend street hierarchy, road typologies and access points surrounding future development blocks and potential future connections to the existing road network.
 - expand public and communal open space, landscaping and bicycle controls
 - include a minimum requirement for terraces in development blocks A2.0, A2.1 and A2.2 in the Local Hub character area.
 - provide retail uses in Lot A1.0 next to the proposed primary school site with a corresponding reduction in residential yield to accommodate this use.
 - o amend Lots A2.0, A2.1, B1.0, B1.1 and B3.3 to increase the depth of each building envelope to accommodate a greater proportion of taller building elements.
- a revised street tree planting strategy with deep soil specifications
- revised ESD measures to seek Green Star Communities certification or equivalent for the Kellyville and Bella Vista Precincts, and target of a minimum five-star rating for the development areas outside the existing infrastructure and roads.





Source: Hassell Studio

Figure 1: Revised Illustrative Masterplan



Chapter 2.0 of this report provides a detailed description of these changes.

Conclusion and Justification

The Bella Vista Station Precinct concept SSDA represents a considered response to the existing land use planning framework and is supported by robust design Guidelines and controls to guide the future urban renewal of the Bella Vista Station Precinct.

The proposal is considered appropriate and is recommended to be supported by the Minister as it will:

- facilitate the urban renewal of government owned land to deliver a diverse transit orientated precinct that integrates land use, transport and infrastructure, consistent with the vision arising from the site's rezoning.
- result in the delivery of high-quality urban design outcomes throughout the station precinct that support the use and operation of MNWL via the adoption and implementation of the proposed Design Guidelines that:
 - o are broadly consistent with the land use controls under THLEP 2019
 - seek a revised building setback scheme to provide active street frontages that align with the intent and principles of a new TOD community.
- create a vibrant, healthy and active community that leverages off MNWL and Bella Vista Station and is supported by the necessary infrastructure to meet the needs of a growing population.
- deliver a greater supply and range of housing co-located with highly accessible public transport to support the creation of the Greater Sydney Commissions' 30-minute city vision as outlined in the Greater Sydney Region Plan – A Metropolis for Three Cities (2018).
- support the protection and enhancement of Elizabeth Macarthur Creek and associated natural attributes.

The RtS report and accompanying technical reports are considered to have satisfactorily responded to, and addressed, the comments received from government agencies and the public. The concept SSDA is therefore considered to be in the public interest. Accordingly, it is recommended that the concept SSDA be approved by the consent authority.

Next Steps

Following the lodgement of this RtS, the following steps are anticipated to occur:

- DPIE's review of amended proposal and consideration of responses provided, in consultation with key stakeholders and government agencies. Any further submissions received would be placed on DPIE's website.
- The Applicant may then be required to prepare written responses to any additional issues raised as considered necessary by Secretary, Department of Planning, Industry and Environment.



 Determination of the concept SSDA under the Minister for Planning and Public Spaces delegated authority (if approved, the determination may include modifications to the proposal and/or conditions of approval).



1.0 Introduction

1.1. Background

In accordance with the request pursuant to section 4.39 of the *Environmental Planning and Assessment Act 1979* (**EP&A Act**) and clause 85A of the *Environmental Planning and Assessment Regulation 2000* (**EP&A Regulation**), this Response to Submissions (**RtS**) report has been prepared to address issues and concerns raised by government agencies, the community and stakeholders during the exhibition of the Environmental Impact Statement (**EIS**) for the proposed Bella Vista Station Precinct concept SSDA (SSD-10344).

The concept SSDA was exhibited for 28 days between 29 October 2019 and 26 November 2019, during which time a total of 24 submissions were received by the Department of Planning, Industry and Environment (**DPIE**). This comprised of 12 submissions from government agencies and 12 submissions from the local community.

Out of the 12 local community submissions:

- four supported the proposal
- six objected to the proposal
- two submissions provided comments.

Submissions were received from the following government agencies:

- The Hills Shire Council (THSC)
- Blacktown City Council (BCC)
- Sydney Metro
- Transport for NSW (including the former Roads and Maritime Services) (TfNSW (RMS))
- Environment, Energy and Science Group (ESSG)
- Environment Protection Authority (EPA)
- DPIE Water and Natural Resource Access Regulator (NRAR)
- NSW Heritage Council
- NSW Government Architect State Design Review Panel (SDRP)
- Endeavor Energy
- Sydney Water.

DPIE also identified several issues that were required to be addressed as part of this RtS, including the requirement to:

- Undertake further consultation with the SDRP to refine the Design Guidelines.
- Undertake further overshadowing analysis to demonstrate appropriate solar access provisions can be achieved.



- Provide further justification for the proposed clause 4.6 variation to the building setbacks.
- Develop and refine the Design Guidelines to provide sufficient detail to reflect and secure the desired future outcomes.
- Provide additional shadow analysis for the Bella Vista Station Precinct.
- Address the built form issues identified by THSC.
- Provide further consideration of the location and connectivity of roads, cycleways and pedestrian routes to the creek corridor, school and open space areas to provide legible and direct access.
- Further investigate the site constraints imposed by Sydney Metro Infrastructure, including the viaduct, station car park ramp and the bus T-Way.
- Investigate the provision of additional connections to and from the existing and proposed pedestrian and cycle network along the viaduct and Windsor Road.
- Clarify the road network and connections to be established and the integration of these roads with the future road network outside the Bella Vista precinct.
- Revise the Traffic and Transport Assessment in response to advice from TfNSW.
- Respond to the biodiversity assessment requirements/issues identified in government agency comments.
- Provide a comprehensive flood impact assessment to address floodplain risk management issues.
- Identify the mechanism to secure the funding and delivery of infrastructure required to support the proposal.

The comments and issues raised by DPIE and in submissions have been addressed through the provision of further information contained in this RtS and accompanying technical reports, which relates to Design Guidelines, traffic and transport, infrastructure provisions, residential density, biodiversity, Ecologically Sustainable Design and variation to the setback development standard. This RtS report should be read in conjunction with the revised and updated technical reports, associated RtS covering letters and documentation outlined below in Table 1.

Table 1: Supporting Technical Report and Documentation

Technical Report/Documentation	Consultant	Appendix
RtS Cover Letter	Hassell	Α
Updated Urban Design Report Updated Design Guidelines	Hassell	В
RtS Cover Letter	Clouston	С
Updated Landscape Masterplan and Open Space Strategy		
RtS Cover Letter Updated Traffic and Transport Assessment	Jacobs	D
Car Parking Technical Memorandum	SCT	E



Technical Report/Documentation	Consultant	Appendix
Cover Letter Updated Utilities & Servicing Report	Wood & Grieve (now Stantec)	F
Updated Stormwater Management Report	Wood & Grieve (now Stantec)	G
RtS Cover Letter - BDAR Updated Biodiversity Development Assessment Report	WSP	Н
RtS Cover Letter Updated Ecologically Sustainable Development Response	AECOM	I
RtS Cover Letter Updated Bella Vista Economic Impact Assessment and Benefits Statement	Ethos Urban	J
Amended Clause 4.6 Variation Request	GLN	К
SRDP Correspondence	N/A	L
Final Aboriginal Heritage Impact Statement	Kelleher Nightingale Consulting Pty Ltd	М
Updated Design Excellence Strategy	Landcom	N
Draft Sydney Metro Northwest Places (SMNWP) Public Art Guidelines*	N/A	0
*Final SMNWP Public Art Guidelines to be issued to DPIE following finalisation.		

A response matrix to all council and government agency submissions is provided in **Section 3.1**.

Responses to the submissions received from the public are provided in **Section 3.2**.

In some instances, issues raised in the submissions have been summarised for brevity.

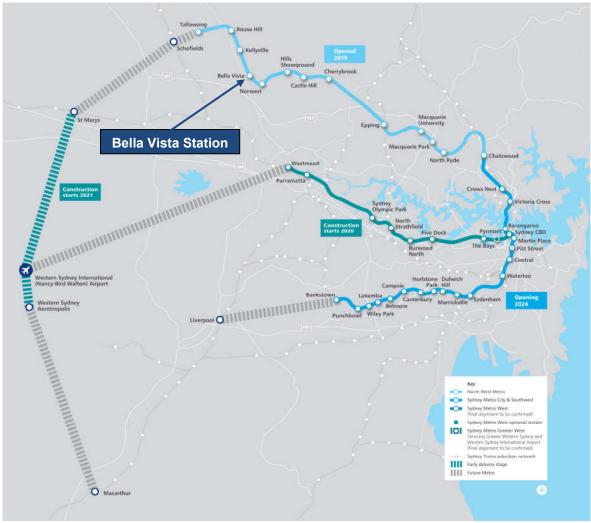
1.2. Project Overview

The Sydney Metro program (Figure 2) of works includes:

- 1. **Metro North West Line:** Passenger services started in May 2019 between Tallawong and Chatswood, with a driverless metro train every four minutes in the peak.
- 2. Sydney Metro City & Southwest: A new 30km line extending metro rail from Chatswood, under Sydney Harbour, through new CBD stations and southwest to Bankstown. It is due to open in 2024 with the ultimate capacity to run a metro train every two minutes each way through the centre of Sydney. Sydney Metro City & Southwest will deliver new metro stations at Crows Nest, Victoria Cross, Barangaroo, Martin Place, Pitt Street, Waterloo and new underground metro platforms at Central Station. In addition, it will upgrade and convert all 11 stations between Sydenham and Bankstown to metro standards.



- 3. Sydney Metro West: Sydney Metro West is a new underground railway between Greater Parramatta and Sydney. This once-in-a-century infrastructure investment will transform Sydney for generations to come, doubling rail capacity between these two areas, linking new communities to rail services and unlocking housing supply and employment growth between the two CBDs. Sydney Metro West will service key precincts, with stations at Westmead, Parramatta, Sydney Olympic Park, North Strathfield, Burwood North, Five Dock, The Bays and the Sydney CBD. A potential station at Pyrmont is being investigated.
- 4. Sydney Metro Western Sydney Airport: Metro rail will also service Greater Western Sydney and the new Western Sydney International (Nancy Bird Walton) Airport. The new railway line will become the transport spine for the Western Parkland City's growth for generations to come, connecting communities and travellers with the rest of Sydney's public transport system with a fast, safe and easy metro service. The Australian and NSW governments are jointly delivering this new railway, to open at the same time as the airport.



Source: Landcom

Figure 2: Sydney Metro Network

The Metro North West Line (MNWL), with 13 stations is a catalyst for urban renewal, providing connections to areas that will be transformed through both NSW Government and private investment.



NSW Government land surrounding the MNWL stations will be made available for development that supports NSW Government priorities of housing affordability, local infrastructure delivery and economic development.

Sydney Metro Northwest Places (SMNWP) Program, Landcom will act as the master developer for Government land around the new MNWL stations, including Bella Vista Station. Landcom will appoint private sector development partners to deliver projects across the program.

1.3. Overview of Exhibited SSD Application

The concept SSDA as exhibited sought concept approval for the Bella Vista Station Precinct and concurrent stage 1 approval for principal subdivision pursuant to section 4.22 of the *Environmental Planning and Assessment Act 1979* (EP&A Act). Specifically, the concept SSDA sought approval for the following:

- Land use strategy that identifies the allocation, quantum and location of land uses across the site
 and 20 development blocks with a maximum height of 68m in accordance with *The Hills Local*Environmental Plan 2012 (THLEP 2019), comprising:
 - a minimum of 232,375m² and a maximum of 305,770m² of residential gross floor area (**GFA**) accommodating between 2,905 and 3,822 dwellings within future residential apartment and terrace built form (including a minimum 5% allocated as Affordable Housing)
 - o a minimum 164,900m² and maximum 167,080m² of retail and commercial GFA within the station precinct
 - open space and public domain areas, including: 2.74ha of district open space, 1.11ha of local open space, 1.3ha of contributory open space land; and up to 0.12ha of private public domain area in the form of a town centre within the station precinct.
- Design Guidelines to govern future development across the site, that include built form design
 principles and controls, including maximum building heights, building and street wall setbacks
 and heights and car parking rates.
- Adoption of GFA transfer provisions pursuant to clause 8.3 of THLEP 2019 for the transfer of road and open space site area to identified development lots.
- Street hierarchy and layout, including the identification of pedestrian and vehicular movement and
 access arrangements, and the indicative location and configuration of new streets and
 intersection connections to the existing road network.
- Identification of criteria or thresholds for subsequent development stages to be assessed as State Significant Development pursuant to section 4.37 of the EP&A Act.
- The principal subdivision of land for public domain areas as the first stage of development pursuant to section 4.22(2) of the EP&A Act.

Stage 1 will involve principal subdivision to create lots for the proposed areas of public open space.



No consent is sought for any physical works within the site, including areas that would be subdivided to create the proposed public open space. All future works identified as part of this concept SSDA would be subject to future Development Applications (**DA**).

1.4. Planning Background

The importance of the Bella Vista Station Precinct was identified in the NSW Government's *North West Rail Link Corridor Strategy* (September 2013). The strategy identified the station precinct and surrounding locality as becoming predominantly a residential precinct that was supported by retail offerings around the new metro station. The Bella Vista Station Precinct and surrounding locality was subsequently endorsed by the NSW Government as a Planned Precinct in August 2014.

On 1 December 2017, the then Minister for Planning approved State Environmental Planning Policy Amendment (Bella Vista and Kellyville Station Precincts) 2017, effecting amendments to State Environmental Planning Policy (State and Regional Development) 2011 (SRD SEPP) and THLEP 2019, which:

- amended Schedule 2 of the SRD SEPP to identify Bella Vista and Kellyville Station Precincts as sites for which specified development was declared to be SSD
- amended THLEP 2019 by rezoning the station precinct and inserting new statutory controls, including an 8,400 cap on the maximum number of residential dwellings on land identified within both the Bella Vista and Kellyville Station Precincts.

Landcom and Sydney Metro are working together on the long-term planning and development of government owned land surrounding the new MNWL. The Program, called Sydney Metro Northwest Places (SMNWP) Program, focuses on creating diverse, well-designed places for current and future communities. Landcom and Sydney Metro are collaborating with DPIE, local councils, other government departments and key stakeholders to guide the transformation of approximately 65 hectares of government owned or controlled land around the new MNWL station precincts.

This delivery program will be undertaken over the next 10 to 15 years and will facilitate:

- early activation around new metro stations to provide safe and vibrant spaces for metro customers and local communities to use
- mixed use areas that are active and walkable, and that capitalise on the fast and frequent connections provided by the new metro
- attractive and well-designed public spaces and buildings
- creative, affordable and diverse housing solutions
- infrastructure to support the long-term growth of the corridor
- strong local economies by attracting long-term investment and a diverse range of jobs.

The SMNWP Program will deliver a vibrant and integrated precinct around the new metro stations, including Bella Vista Station.



This concept SSDA forms the first phase of the development assessment process for the station precinct, setting out the concept proposal for the station precinct's urban renewal and is supported by design Guidelines to guide future development. Development consent for the first stage of development is also sought for the principal subdivision of proposed public domain areas.

Consent is sought for the concept proposal across the site and principal Stage 1 subdivision to create public open space areas. No consent is sought for any construction or other physical work under this concept SSDA.

In accordance with subsection 4.22(1) of the EP&A Act, separate future DAs will be lodged for detailed proposals within the precinct. These DAs may seek consent for further subdivision, detailed built form, associated civil and infrastructure works, or a combination of these.



2.0 Proposed Amendments

The concept SSDA has been amended to address the issues and concerns raised during the public exhibition period. This section describes the proposed amendments sought in the RtS.

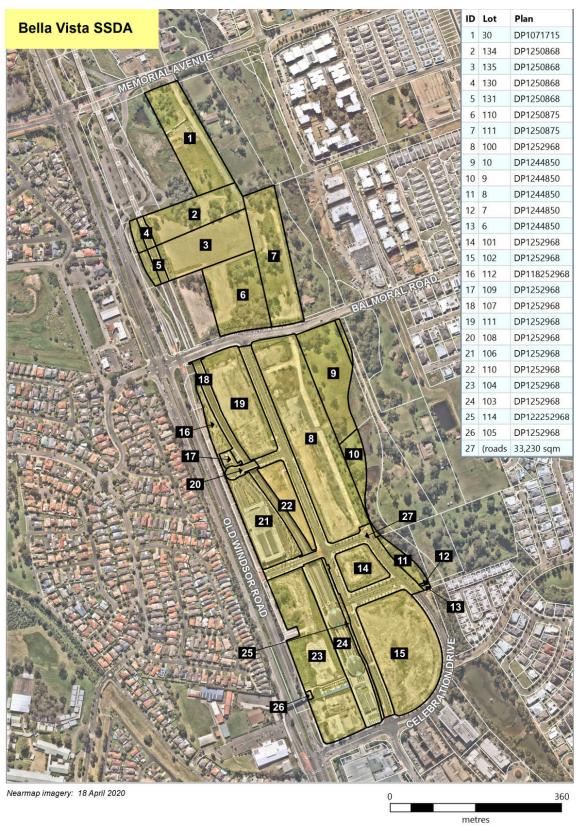
2.1. Site Legal Description

Due to recent subdivisions by Sydney Metro, the Lot and Deposited Plan numbers for Bella Vista Station Precinct have been amended. The site is made up of 26 allotments and has a total area of approximately 33.79ha. The legal description of the site is outlined below in **Table 2** and shown in Figure 3.

Table 2: Revised Land Description of the SSDA Site

No.	Lot No.	Plan No.	DGL/LMA/OSL	Owner	Ownership
1	104	DP1252968	DGL	Sydney Metro	Government
2	102	DP1252968	DGL	Sydney Metro	Government
3	101	DP1252968	DGL	Sydney Metro	Government
4	110	DP1252968	DGL	Sydney Metro	Government
5	111	DP1252968	DGL	Sydney Metro	Government
6	100	DP1252968	DGL	Sydney Metro	Government
7	110	DP1250875	DGL	Sydney Metro	Government
8	111	DP1250875	DGL	Sydney Metro	Government
9	135	DP1250868	DGL/LMA	Sydney Metro	Government
10	134	DP1250868	DGL/LMA	Sydney Metro	Government
11	30	DP1071715	DGL	Sydney Metro	Government
12	6	DP1244850	OSL	Planning Ministerial Corporation	Government
13	7	DP1244850	OSL	Planning Ministerial Corporation	Government
14	8	DP1244850	OSL	Planning Ministerial Corporation	Government
15	9	DP1244850	OSL	Planning Ministerial Corporation	Government
16	10	DP1244850	OSL	Planning Ministerial Corporation	Government
17	106	DP1252968	LMA	Sydney Metro	Government
18	114	DP1252968	LMA	Sydney Metro	Government
19	103	DP1252968	LMA	Sydney Metro	Government
20	107	DP1252968	LMA	Sydney Metro	Government
21	109	DP1252968	LMA	Sydney Metro	Government
22	108	DP1252968	LMA	Sydney Metro	Government
23	131	DP1252968	LMA	Sydney Metro	Government
24	130	DP1252968	LMA	Sydney Metro	Government
25	112	DP1252968	Other	Sydney Metro	Government
26	105	DP1252968	Other	Sydney Metro	Government





Source: Nearmap & Landcom

Figure 3: Revised Lots and Deposited Plans



2.2. Affordable Housing Amendment

Landcom seeks to clarify the role and involvement of a Community Housing Provider (**CHP**) as part of delivering and managing a minimum of 5% of the dwellings across the Kellyville and Bella Vista precincts as Affordable Housing. Specifically, Landcom intends for a CHP to manage the Affordable Housing stock across the site for a minimum of 10 years from the date of practical completion/certification/occupancy.

The location(s) and configuration of Affordable Housing within the Kellyville and Bella Vista precincts is flexible as long as the 5% minimum target over both station precincts is met, and Affordable Housing may occur on any or all of the associated development lots.

2.3. Design Guidelines

The Design Guidelines are site specific and seek to ensure that future development is consistent with the development vision set out in this concept SSDA. The Design Guidelines will be the key document which outlines objectives, parameters and controls for the assessment of future DAs for built form, open space, roads, pedestrian connections and landscaping. The Design Guidelines, in conjunction with the concept SSDA, will act as the deemed Development Control Plan (**DCP**) for the site pursuant to clause 4.23 of the EP&A Act and therefore also satisfy the requirements under clause 8.5 of THLEP 2019 for the Bella Vista Station Precinct.

The Design Guidelines have been informed by a detailed site analysis, as set out in the Urban Design Report, and the strategic planning, vision and principles established for the Bella Vista Station Precinct. An amended Urban Design Report is provided at **Appendix A**.

The Design Guidelines have been revised in response to the concerns raised during the exhibition of the EIS, particularly those identified by DPIE, THSC and the SDRP and are provided at **Appendix B**. Further changes to the Design Guidelines have also been made in response to formal advice received from the SDRP dated 5 May 2020, following the design review session held on 8 April 2020 for the Bella Vista Station Precinct.

Key changes to the Design Guidelines include:

- A revised structure for consistency with the Design Guidelines for the Kellyville Station Precinct.
- · Revised ground floor setback controls of:
 - o 2m ground level setbacks for all uses excluding commercial buildings across the site
 - o zero metres for non-residential ground floor uses along commercial streets and public plazas.
- Additional strategic context against the now endorsed THSC Local Strategic Planning Statement (LSPS).
- A revised concept masterplan clarifying potential future connections from the Bella Vista Station
 Precinct to existing local roads, adjacent private lands and across Elizabeth Macarthur Creek.
- Inclusion of character area statements at section 3.2 from the Urban Design Report.



- A minor reduction in the maximum residential GFA on Lot A1.0 and a new yield range between 500m² to 1,000m² of non-residential GFA.
- An increase in the residential GFA on Lot A2.0 to 15,140m² to account for this land use change on Lot A1.0.
- Revised car parking rates that would apply to future development within concept SSDA site to encourage public transport use.
- Amended street hierarchy, road typologies and access points surrounding future development blocks and potential future connections to the existing road network.
- Expanded public and communal open space, landscaping and bicycle parking and design controls.
- Inclusion of minimum requirement for terraces on development blocks A1.0, A2.0, A2.1 and A2.2 in the Local Hub character area.
- Updates to reflect a revised Landscape Masterplan and Open Space Strategy.
- Revised building envelopes in the Residential Core and Local Hub including increased building envelope depth on lots A2.0, A2.1, B1.0, B1.1 and B3.3.
- Provision of a site wide solar access study.
- Removal of the delivery and on-going management strategy for the Elizabeth Macarthur Creek riparian corridor as it is not relevant within Design Guidelines
- Inclusion of indigenous language for place naming through consultation with the appropriate Local Aboriginal Land Councils.
- Additional controls for building material, communal open space, solar access, deep soil areas, roof gardens, building orientation, car and bicycle parking and aboriginal and non-aboriginal heritage and sustainability.

Future detailed applications would be required to demonstrate they are not inconsistent with these controls when responding to these Design Guidelines.

Additional changes that have been incorporated in response to the SDRP correspondence dated 5 May 2020 include:

- A revised 'purpose' section to outline the relationship of the Design Guidelines with THLEP 2019
- Additional controls linking to the recommendations made by Kelleher Nightingale Consulting regarding Aboriginal Cultural Heritage.
- Additional controls linking to the recommendations made by Advisian regarding European heritage.



- A Revised Design Excellence Strategy and measures for architectural diversity.
- Additional controls requiring 25% deep soil areas for residential superlots and co-location of this landscaping with communal open space.
- Updated landscaping strategy for street trees to develop and mature over time as the site is developed.

2.3.1. Revised Masterplan Framework and Revised GFAs

Minor changes to the design framework for the Bella Vista Station Precinct have been made as a result of changes to the reference scheme and the land use strategy in the site. Table 3 shows the framework proposed under the EIS. Table 4 shows the amended framework. The requested minimum and maximum values are also provided on the Plans for Approval at **Appendix A**.

It should be noted that the GFA for community uses has been increased as this figure now includes the GFA of the primary school site.



Table 3: Minimum and Maximum GFAs Sought Under the EIS

				Maximum I	EIS Yield					Minimum E	EIS Yield		
Lot Number	Lot Area (sqm)	Max FSR	Retail	Community	Commercial	Residential	Dwellings	Min FSR	Retail	Community	Commercial	Residential	Dwellings
						Memorial	to Balmoral						
A1.0	3,425	5.3				18,000	225	1.6				5,470	68
A1.1	10,300	1.1		11,000				1.1		11,000			
A2.0	5,520	2.7				14,850	186	1.6				8,850	111
A2.1	6,300	3.6				22,525	282	1.6				10,100	126
A2.2	9,375	2.8				25,800	323	1.6				15,000	188
Sub-total	34,920			11,000		81,175	1,016			11,000		39,420	493
				•		Balmoral to	Town Centre	e					
B1.0	6,780	3.1				21,100	264	2.5				16,950	212
B1.1	7,840	2.5				19,800	248	2.5				19,600	245
B2.0	4,100	4	500		15,750			4	500		15,750		
B3.0	7,730	2				15,150	189	2				15,150	189
B3.1	6,415	2.4				15,150	189	2.4				15,150	189
B3.2	6,670	5				33,600	420	2.5				16,700	209
B3.3	5,045	6.1				30,590	382	4				20,200	253
B3.4	1,340	4				5,375	67	2.5				3,350	42
B3.5	2,040	3.3				6,775	85	2.5				5,100	64
Sub-total	47,960		500		15,750	147,540	1,844		500		15,750	112,200	1,403
						Town	Centre						
B4.0	7,750	5.1				39,395	492	3.5				27,150	339
C1.0	7,450	3.5	600		25,600			3.5	600		25,600		
C1.1	9,000	3.6	600		31,600			3.6	600		31,600		



				Maximum I	EIS Yield			Minimum EIS Yield					
Lot Number	Lot Area (sqm)	Max FSR	Retail	Community	Commercial	Residential	Dwellings	Min FSR	Retail	Community	Commercial	Residential	Dwellings
C1.2	7,350	5.1	600		36,700			5.1	600		36,700		
C2.0	8,155	3.1	11,000		14,500			3.1	11,000		14,500		
C2.1	3,575	0.6	100	2,080				0.6	100	2,080			
C2.2	7,375	3.7	600		26,850			3.7	600		26,850		
C2.3	7,740	4.9				37,660	471	4				30,950	387
Sub-total	58,395		13,500	2,080	135,250	77,055	963		13,500	2,080	135,250	58,100	726
Total	141,275		14,000	13,080	151,000	305,770	3,823		14,000	13,080	151,000	209,720	2,622



Table 4: Revised Minimum and Maximum GFAs Sought under the RtS

				Maximum F	RtS Yield					Minimum F	RtS Yield		
Lot Number	Lot Area (sqm)	Max FSR	Retail GFA	Community	Commercial	Residential	Dwellings	Min FSR	Retail GFA	Community	Commercial	Residential	Dwellings
		•				Memorial	to Balmoral	•	-				
A1.0	3,425	5.18	1,000			16,740	205	1.6	500			4,970	62
A1.1	10,300	1.07		11,000				1.1		11,000			
A2.0	5,520	2.74				15,140	189	1.6				8,850	111
A2.1	6,300	3.62				22,820	285	1.6				10,100	126
A2.2	9,375	2.72				25,475	318	1.6				15,000	188
Sub-total	34,920		1,000	11,000		80,175	997		500	11,000		38,920	487
						Balmoral to	Town Centre	е	•				
B1.0	6,780	3.1				21,100	264	2.5				16,950	212
B1.1	7,840	2.5				19,800	248	2.5				19,600	245
B2.0	4,100	4	500		15,750			3	250		12,050		
B3.0	7,730	2				15,150	189	1.7				12,878	161
B3.1	6,415	2.4				15,150	189	2				12,878	161
B3.2	6,670	5				33,600	420	2.5				16,700	209
B3.3	5,045	6.1				30,590	382	4				20,200	259
B3.4	1,340	4				5,375	67	2.5				3,350	42
B3.5	2,040	3.3				6,775	85	2.5				5,100	64
Sub-total	47,960		500		15,750	147,540	1,844		250		12,050	107,656	1,346
Town Centre													
B4.0	7,750	5.1				39,395	492	3.5				27,150	339
C1.0	7,450	3.5	600		25,600			3.2	450		23,550		
C1.1	9,000	3.6	600		31,600			2.9	450		25,320		



				Maximum F	RtS Yield			Minimum RtS Yield					
Lot Number	Lot Area (sqm)	Max FSR	Retail GFA	Community	Commercial	Residential	Dwellings	Min FSR	Retail GFA	Community	Commercial	Residential	Dwellings
C1.2	7,350	5.1	600		36,700			3	450		21,495		
C2.0	8,155	3.1	11,000		14,500			3	10,465		14,000		
C2.1	3,575	1.1	100	4,000				1.1	100	4,000			
C2.2	7,375	3.7	600		26,850			2.8	450		20,400		
C2.3	7,740	4.9				37,660	471	4				30,950	387
Sub-total	58,395		13,500	4,000	135,250	77,055	963		12,365	4,000	104,765	58,100	726
Total	141,275		15,000	15,000	151,000	304,770	3,804		13,115	15,000	116,815	204,675	2,559



The road hierarchy and the range of footpaths and shared cycle and pedestrian paths have also been refined as part of the updated Design Guidelines. A summary of the path, road, street parking and verge widths across the precinct are provided in Table 5 and justification for these formations is provided within **Section 3** of this report. Full details of these road sections are provided in the Design Guidelines at **Appendix B** and Landscape Masterplan and Open Space Strategy at **Appendix C**.

Table 5: Proposed Road and Path Formation under the Revised Design Guidelines

Road type	Verge	Footpath	Share path	Parking	Carriageway	Parking	Share path	Footpath	Verge
Main Street (Residential) 20 m	1.5m	2.5m	Nil	2.5m	7m	2.5m	Nil	2.5m	1.5m
Main Street (Open Space and Riparian) 20m	1.5m (turf)	3.5m	Nil	2.5m	7m	Nil	3.5m	Nil	Varies
Main Street (Residential and Riparian corridor) 20m	1.5m	3.5m	Nil	2.5m	7m	Nil	3.5m	Nil	Varies
Local Street (Viaduct and School) 18m	2.5m	Nil	Nil	2.5m	7m	2.5m	Nil	3.5m	Nil
Local Street (Residential and School) 18m	Nil	3.5m	2.5m	2.5m	6m	2.5m	Nil	2m	0.5m
Local Streets (Residential and Park) 18m	1.5m	2m	Nil	2.5m	7m	2.5m	Nil	1.5	1m (varies)
Local Street (Residential) 18m	1.5m	2m	Nil	2.5m	6m	2.5m	Nil	2m	1.5m
Local Streets (Commercial) 22m	Ę	5.5m	Nil	2.5m	6m	2.5m	Nil	5.5m	Nil
One Way Local Streets (Park and Residential) 9m	Nil	Nil (Path in park)	Nil	Nil	3m	2.5m	Nil	2m	1.5m
Private Laneways 8m		n tree and trian zone	Nil	Nil	4.5m	Nil	Nil	Nil	0.5m boundary offset



2.3.2. Built Form Setbacks

DPIE, THSC, the SDRP and several submissions from the public raised the proposed setback controls and the clause 4.6 variation request provided with the EIS. While Endeavour Energy commented on the reduced setbacks with respect to pad mount substations, it was noted design alternatives can be considered as part of the detailed design for future applications.

The clause 4.6 request to vary the setback development standard for Bella Vista has been revised to provide further justification for the reduced setbacks and is attached at **Appendix K**.

The proposed setbacks that would apply to future applications have been reviewed and updated in the Urban Design Report (**Appendix A**) and Design Guidelines (**Appendix B**). The key change relates to northern and southern frontages for development blocks along Elizabeth Macarthur Creek. The amended setback scheme is detailed in Table 6 below. The setback scheme sought as part of the EIS is shown in the shaded grey column.

The original and revised ground floor setbacks are provided side by side in Figure 4. The original and revised upper floor setbacks are provided side by side in Figure 5.

Figure 6 and Figure 7 show sections of the proposed setback scheme for ground and upper floors for the commercial core and residential hub areas.

Table 6: Bella Vista Station Precinct Setbacks Proposed Under the RTS

Development Block	Setbacks proposed under the EIS	Ground Setbacks under the RTS	Upper Level Setbacks under the RTS
Commercial Core C1.0, C.1.1 and C1.2 C2.0, C2.1 and C2.2 B2.0	Nil Old Windsor Road	Nil Old Windsor Road	
	Zero	Zero metres from commercial uses	Minimum 3m setback above 1-2 storeys to town plazas and public domain areas
			Minimum 3m setback above 5-7 storeys in town centre and along Mawson Avenue
Residential and Retail Core C2.3 B3.2 and B3.3 B4.0	Zero to 2m	2m for all non- commercial uses	Minimum 5m above 1-2 storeys (without frontage to Mawson Avenue and north of Unaipon Avenue)
			Minimum 3m setback above 4-6 storeys on Mawson Avenue Minimum 5m above 1-2 storeys on all other street frontages
Other areas (i.e. north of Byles Place) B1.0 and B1.1 B3.0 and B3.1 A1.0, A1.1, A2.0, A2.1 and A2.2	2m-5m	2m for all uses	Minimum 5m setback above 1-2 storeys Minimum 5m setback above 4-6 storeys along Memorial Avenue (A2.0)



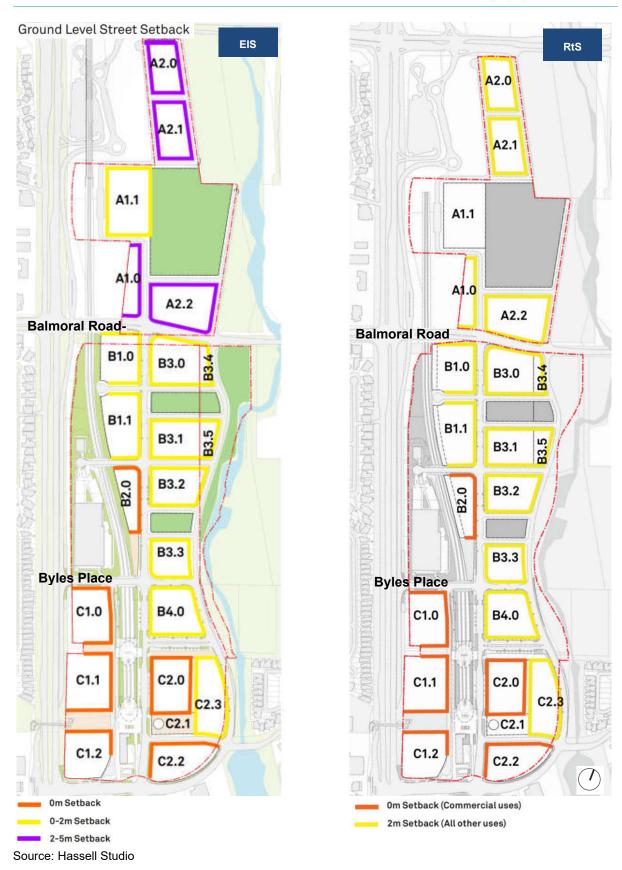


Figure 4: EIS Ground Floor Setbacks (left) and as amended by the RtS (right)



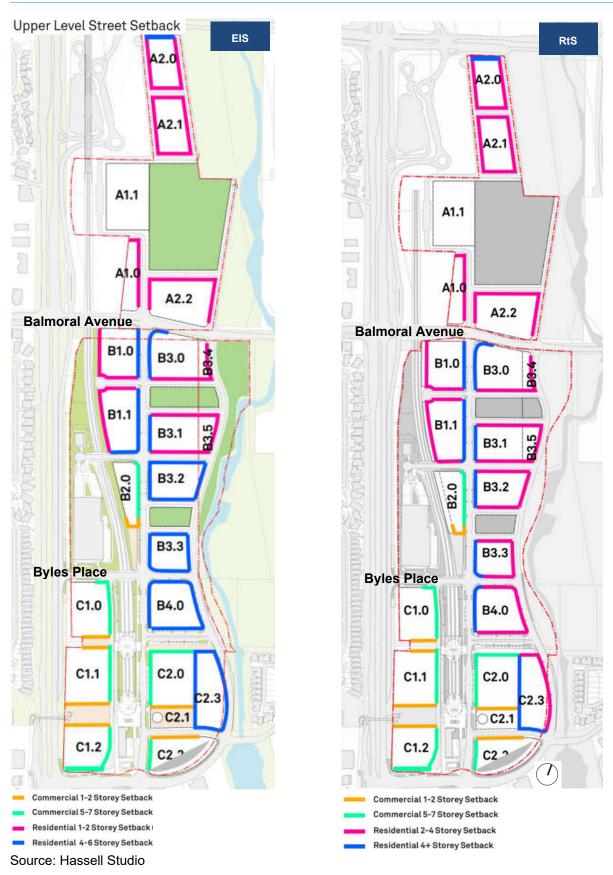
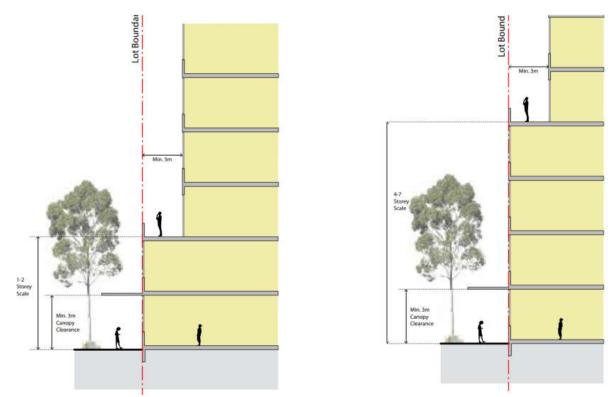


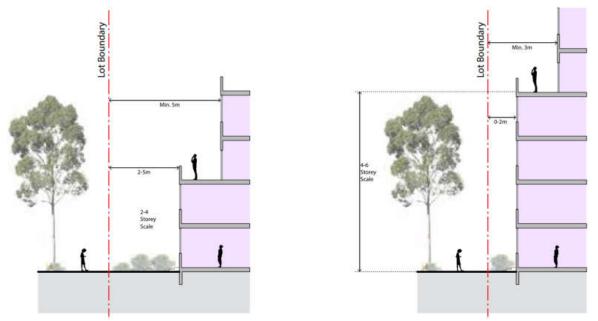
Figure 5: EIS Upper Floor Setbacks (left) and as amended by the RtS (right)





Source: Hassell Studio

Figure 6: 1-2 Storey (left) and 4-7 Storey (right) Commercial Setback Scheme



Source: Hassell Studio

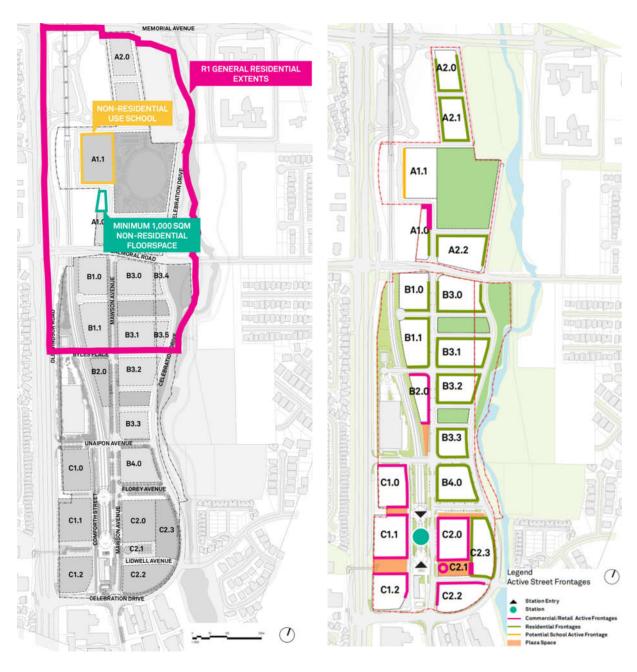
Figure 7: Revised Residential Lower and Upper Storey Setback Scheme

Note: 4-6 storey (right) setbacks are proposed along Mawson Avenue south of Balmoral road, and on part of lot C2.3 south of Byles Place, where it fronts on to non-residential development within the town centre. All other roads within the Bella Vista concept SSDA site are proposed to have 1-2 storey (left) lower level setbacks.



2.3.3. Revision to Lot A1.0

The Design Guidelines and Active Street Frontage Plan have been updated to introduce non-residential GFA in Lot A1.0 next to the primary school site and fronting the district open space (see Figure 8) in response to comments from the SDRP to provide opportunities for local shops in residential areas. A site-specific control for this lot will require a future application to provide a maximum of 1,000m² of non-residential floor space. A revision to active street frontages for Lot A1.0 has also been made (see Figure 9). This requirement is also shown on the plans for approval accompanying the Urban Design Report at **Appendix A**.



Source: Hassell Studio Source: Hassell Studio

Figure 8: Active Street Frontage for Lot A1.0 Figure 9: Non-Residential GFA on Lot A1.0

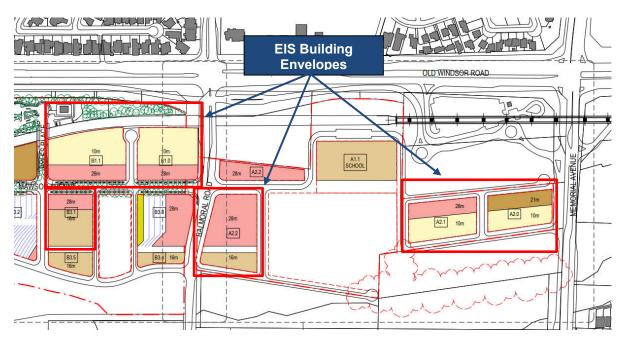


2.3.4. Building Envelope Amendments

In response to further consultation with Landcom's Design Advisory Panel, the State Design Review Panel with the NSW Government Architects Office and THSC, building envelopes that front Mawson Avenue and the district open space have been amended to reflect areas where additional building height under future applications is desired.

Figure 10 shows the building envelopes north of Byles Place proposed under the EIS. Figure 11 shows the revised building envelopes sought under this RtS. The key changes to the scheme and the Plans for Approval include:

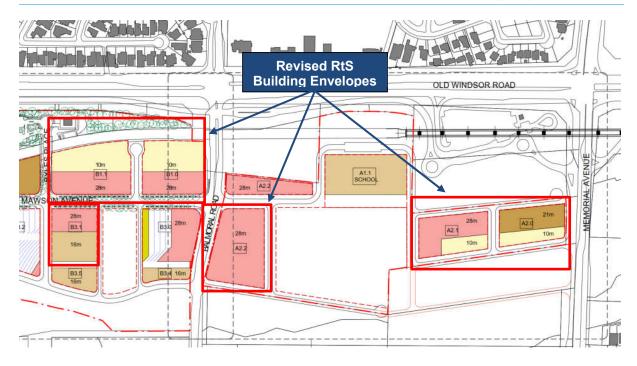
- Increased depth of the 21m height zone on Lot A2.0 from 24m to 35m to focus future built form toward the local road.
- Increased depth of the 28m height zone on Lots A2.1, B1.0, B1.1 and B3.3 from 24m to 35m and extending this zone to facilitate a consistent height frontage towards the district open space and promote built form along Mawson Avenue.
- Consolidation of Lot A2.2 to provide 28m over the entire lot with north to south laneway.



Source: Hassell Studio

Figure 10: EIS Building Envelopes in Residential Core and Local Hub (red outlines)





Source: Hassell Studio

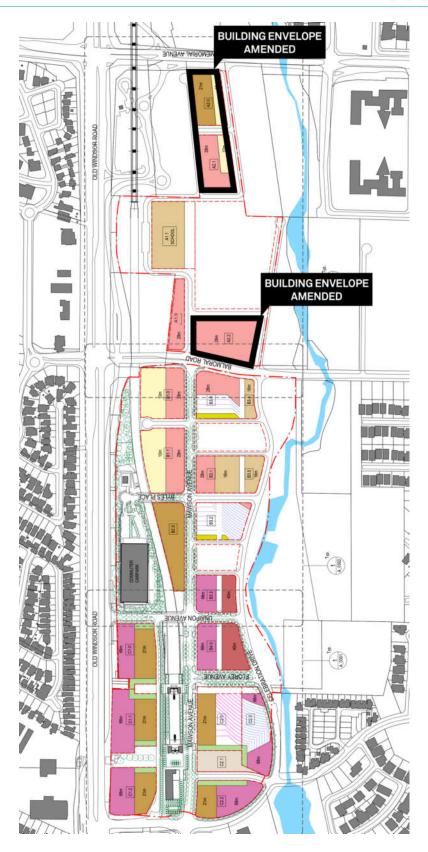
Figure 11: RtS Building Envelopes in Residential Core and Local Hub (red outlines)

2.3.5. Housing Typology Mixture

Options to deliver a diverse mixture of housing typologies were investigated and incorporated into the Design Guidelines in response to issues raised by THSC. This included consideration of medium density housing forms such as terraces. Development blocks A2.0, A2.1 and A2.2 have been selected as sites where terrace typologies can be located and are encouraged (Figure 12). A requirement has been included in the Design Guidelines on these lots to provide a minimum of 5% of dwellings terraces on each block.

As a result, the reference scheme for these sites has been updated to indicatively show what a terrace typology could provide in the northern precinct of the Bella Vista concept SSDA site (Figure 13 and Figure 14). This amendment also responds to the revised building envelopes for these sites described in **Section 2.3.4** above to facilitate a consistent building frontage to the district open space.

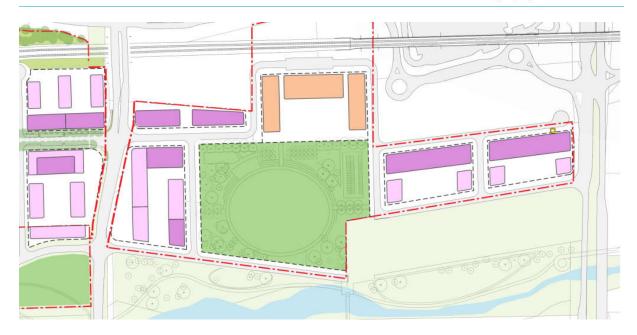




Source: Hassell Studio

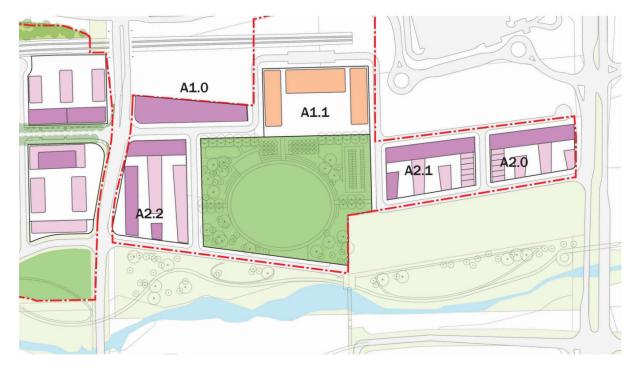
Figure 12: Development Blocks Identified for Terrace Typologies





Source: Hassell Studio

Figure 13: Building Envelope Forms Proposed in the EIS



Source: Hassell Studio

Figure 14: Building Envelope Forms Proposed for Terrace Housing Typologies

2.3.6. Amenity

The Design Guidelines have been revised to now include detailed shadow analysis in one hour increments for the building envelopes under the revised reference scheme during the equinox and



summer and winter solstices. It should be emphasised that the reference scheme aims to provide a broad envelope across all future development blocks to provide flexibility while establishing solar access and amenity principles detailed in the Design Guidelines. Shadow analysis studies as part of future applications are likely to differ because of architectural features in detailed designs, however these applications would be required to demonstrate the solar access principles under the Design Guidelines can be achieved. These figures detail the expected number of hours that plazas and public domain areas may receive under the reference scheme.

The shadow analysis has also been prepared for each proposed open space area within the Bella Vista Station Precinct to demonstrate shadow impacts from future buildings on public open spaces. Full copies of overshadowing analysis are provided at **Appendix A**.

Figure 15 shows the shadow impacts at 9AM during the winter solstice. As shown, the greatest off-site impacts are associated with development blocks C1.0, C1.1 and C1.2 in the commercial core. The majority of additional shadows fall within the Old Windsor Road road reserve and would avoid any private open space associated with residential dwellings in the suburb of Glenwood to the west.



Source: Hassell Studio

Figure 15: Shadow Diagram during the Winter Solstice - 9AM

Figure 16 shows the shadow impacts at 3PM during the winter solstice. The largest off-site overshadowing is associated with development blocks C1.2, C2.2 and C2.3 in the commercial core. Additional shadows associated with these sites have the potential to fall onto existing office buildings in the Norwest Business Park. Small areas of additional shadow are also predicted to occur from development blocks B3.2 and A2.2.

Additional shadows from these sites would fall into Elizabeth Macarthur Creek and would not impact the amenity of any nearby residential dwelling. Predicted shadows from development block A2.1 would fall onto the district open space.



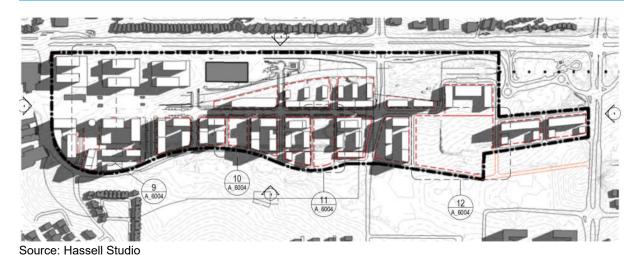


Figure 16: Shadow Diagram during the Winter Solstice – 3PM

2.4. Traffic, Transport and Parking

The EIS provided a Traffic and Transport Assessment (**TTA**) to assess the traffic impacts and possible road upgrades to support the development of the Bella Vista Station Precinct over time.

2.4.1. Traffic Impacts

Jacobs has prepared an updated TTA (**Appendix D**) to address the revised residential yield numbers from the amended Design Guidelines, including revised SIDRA modelling. Electronic copies of the modelling files are included with this RtS for TfNSW. The TTA also provides responses to the traffic modelling, intersection performance, active transport, travel mode shift and infrastructure upgrade matters raised in the submissions received during exhibition.

The revised model indicates the revised development yields do not have a discernible impact on the future performance of the assessed intersections. This is consistent with the aim of the Bella Vista Station Precinct concept SSDA, to mitigate direct traffic impacts and not to worsen the traffic conditions in the surrounding area through the implementation of identified road upgrades. The assessment concludes the proposed road upgrades would improve the performance and average vehicle delay at most key intersections compared to the growth of background traffic volumes by 2026. These improvements are detailed at Appendix A of the TTA and in relation to Bella Vista include:

- additional through lanes and turning lanes at the Old Windsor Road/Balmoral Road/Miami Street intersection.
- lane widening and new through lanes at the Old Windsor Road and Celebration Drive intersection.
- an extension to the right turn lane at the Old Windsor Road and Norwest Boulevard intersection.

For example, these road upgrades are anticipated to result in an AM and PM peak average vehicle delay at the Old Windsor Road/Celebration Drive intersection less than the current average delay, being:



- 258 seconds in the AM peak without the project and 180 seconds in the AM peak with the project and road improvements in 2026
- 87 seconds in the PM peak without the project and 29 seconds in the PM peak with the project and road improvements in 2026.

Full details of the anticipated changes to traffic conditions as a result of the project and proposed road upgrades are detailed in the TTA at **Appendix D**.

2.4.2. Car Parking Rates

SCT has prepared an additional memorandum responding to concerns raised about the proposed car parking rates that would apply within the Bella Vista Station Precinct. Landcom has revised the concept SSDA to adopt the car parking rates recommended by TfNSW in response to concerns that the previously adopted rates were generous. The parking rates for residential development have been aligned more closely with the RMS *Traffic Generating Developments (2002)* as amended by Technical Directions policy and are detailed in Table 7. The RMS parking values have been adopted as the new minimum parking rate. Parking rates for car share services and retail space remain unchanged.

The car parking concerns raised by THSC and public submissions are noted. These issues are specifically addressed in the government agency and public submission response tables in **Section 3** of this RtS.

It is noted THSC requested car parking rates that are consistent with the housing diversity provision at clause 7.11 of THLEP 2019, being:

- One car parking space for each dwelling
- One car parking space for every five dwellings in addition to the single car parking space required for the individual dwelling.

THSC also recommended the commercial parking rate be revised to one space per 40m².

As the concept SSDA seeks to facilitate development that supports a new TOD community, encouraging public and active transport use is key to encouraging sustainable travel options. The rates provided below are considered to support a future TOD outcome for the Bella Vista Station Precinct.

Table 7: Revised Car Parking Rates

Land Use		Car Parking Rate			
		Min. RtS Value Spaces Per Unit	Min. EIS Value	Max. RtS Value Spaces Per Unit	Max. EIS Value
Residential Apartment	Studio/1 bedroom	0.4 spaces per unit	0.6 spaces per unit	0.6 spaces per unit	1 spaces per unit
Building	2 bedroom	0.7 spaces per unit	0.9 spaces per unit	0.9 spaces per unit	1 spaces per unit
	3 bedroom	1.2 spaces per unit	1.4 spaces per unit	1.4 spaces per unit	1.5 spaces per unit
	Visitor	0.1 space per unit	0.1 space per unit	0.1 spaces per unit	0.1 spaces per unit



Land Use Car Par		king Rate		
	Min. RtS Value Spaces Per Unit	Min. EIS Value	Max. RtS Value Spaces Per Unit	Max. EIS Value
Retail	1 space per 130m ²	1 space per 130m ²	1 space per 60m ²	1 space per 60m ²
Commercial	1 space per 145m²	1 space per 145m ²	1 space per 100m ²	1 space per 100m ²
Car share	1 space per 150 parking spaces For every 1 car share parking space provided, total parking provisions are to deduct 3 spaces.		Unchanged	

2.4.3. Bicycle Parking Rates

The TTA has also been updated with revised bicycle parking rates. These rates have also been included in the Design Guidelines to apply to future applications. The bicycle parking rates across residential commercial and retail uses are provided in Table 8 below. The TTA anticipates the application of these bicycle parking rates will provide up to 1,518 residential bicycle parking spaces, 47 retail bicycle spaces, 1,000 commercial spaces for residents or employees and 200 spaces for shoppers or visitors.

Table 8: Bicycle Parking Rates

Land Use	Rate
	Maximum
Residential	1 resident space per 3 units
	1 visitor space per 12 units
Commercial	1 space per 150m ² for staff
	1 space per 1,000m ² for visitors
Retail – Supermarket	1 space per 450m ² for staff
Retail – Specialty	1 space per 300m ² for staff
Retail – Neighbourhood Shops	8 spaces minimum
Open space/parks	16 spaces
Community Facilities	6 spaces

2.4.4. Amended Road Hierarchy and Connectivity

Additional plans are included in the response report prepared by Hassell at **Appendix A** in response to comments from DPIE:

Potential interfaces to land owned by TfNSW associated with the T-Way to the south and north of the primary school site and to privately owned land to the east of development blocks A2.0 and A2 (see Figure 17 – left). Indicative laneway areas where waste vehicles would access basement areas of future development and cul-de-sac turning heads for waste services (see Figure 17 – right). Future pedestrian connections between the T-Way stop and the primary school site would be subject to further consultation with TfNSW as the land required to provide this connection is located outside of the concept SSDA site.



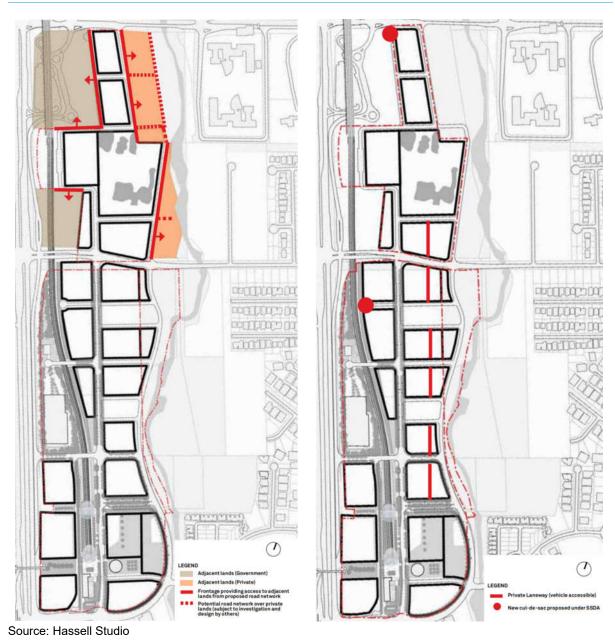


Figure 17: Indicative Off-Site Connections and Waste Management Roads



2.5. Biodiversity

2.5.1. Revised Biodiversity Development Assessment Report

A revised Biodiversity Development Assessment Report (**BDAR**) assessment is provided at **Appendix H**, following the comments raised by THSC. This includes further information regarding assessment of direct impact, mitigation measures, additional mapping where required, as well as the preparation of a Riparian Assessment, and is discussed in further detail in **Section 3.0**.

The BDAR also details the steps taken to minimise and avoid biodiversity impacts. These include:

- prioritising the use of the site with limited or no biodiversity value due to previous disturbance where practicable.
- identifying the district park to be retained and incorporating open space areas into the conceptual masterplan layout to align with areas with the highest biodiversity risk weighting. This step avoided impacts to 1.01ha of Cumberland Plain Woodland (**CPW**).
- avoiding riparian areas during detailed design to reduce the area of River-flat Eucalypt forest community by 0.06ha, mostly along the banks of Elizabeth Macarthur Creek.
- designing the structure plan to integrated into existing residential areas and to avoid further fragmentation of existing corridors.

A range of management and mitigation measures are now included at section 10 of the revised BDAR, to reduce direct impacts on existing vegetation throughout the phases of future applications including during detailed design, prior to, during and post construction, and prior to and during operation.

2.5.2. Riparian Assessment

In response to THSC's request in their submission, WSP has prepared a riparian assessment for the Bella Vista Station Precinct. The assessment is provided at Appendix F of the updated BDAR contained at Appendix H. The assessment identified the concept SSDA site would encroach the vegetated riparian zone (**VRZ**) of Elizabeth Macarthur Creek in three locations, up to a total area of 0.17ha. The locations of the encroachment include:

- The proposed turning circle at the north eastern corner of the district open space.
- The corner of Celebration Drive and Florey Avenue associated with the existing road reserve constructed under SSD-5414.
- The south eastern corner of Lot B4.0 at the interface of the extension of Celebration Drive.

The identified encroachments occur within the outer 50% riparian corridor and are detailed in Figure 18.

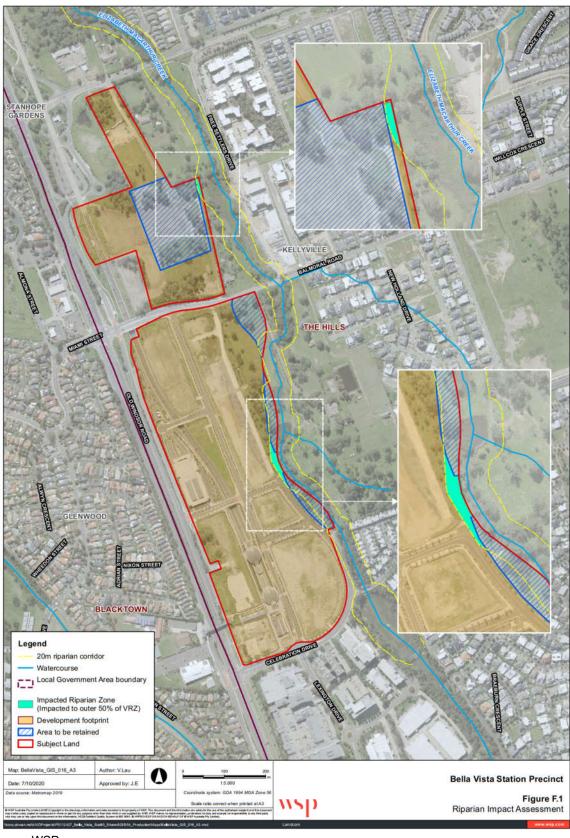
The minor extent of these encroachments and the existing conceptual site layout would allow the impact of these three locations to be offset by applying the averaging rule and therefore, a land-based offset is not considered necessary. A range of mitigation measures are recommended within the assessment report for the precinct including:

 A Sediment and Erosion Control Plan, prepared in accordance with The Blue Book – Managing Urban Stormwater: Soils and Construction as part of a Construction Environment Management Plan (Landcom, 2004) and implemented prior to works for future applications.



- Locating higher-disturbance activities (such as noisy machinery, flood lights, generators and compounds) as far from the riparian buffer as practically possible.
- Installing sediment fences to slow overland flow and trap sediments created from surface erosion during the construction of future stages under future applications.
- Identify opportunities for re-use of water from any dewatering activities on-site such as dust suppression.
- Use constructed storage ponds where excess water from the construction site or during operation of the project is to be released into Elizabeth Macarthur Creek, to allow sediment to settle before discharge.
- Rehabilitate and revegetate the riparian corridor within the project boundary.
- Undertake water quality monitoring to comply with requirements of the *Protection of the Environment Operations Act 1997*.





Source: WSP

Figure 18: Development Footprint Overlay with Riparian Corridor Encroachments



3.0 Overview of Submissions Received

The EIS was placed on public exhibition for 28 days between 29 October 2019 and 26 November 2019. During this time, government agencies, THSC, BCC, members of the community and stakeholders were able to:

- view the EIS digitally on the DPIE's Major Projects Planning Portal or at any Service NSW location
- view the EIS in person at the DPIE's Information Centre at Pitt Street, Sydney
- make a written submission on the concept SSD proposal to DPIE.

DPIE received 24 submissions. This comprised of 12 submissions from government agencies and 12 submissions from the local community. Of the 12 community submissions, four were in support of the proposal.

3.1. Government Agency Submissions

The following government agencies provided submissions on the proposal during the exhibition period:

- The Hills Shire Council (THSC)
- Blacktown City Council (BCC)
- Sydney Metro
- Transport for NSW (including the former Roads and Maritime Services) (TfNSW)
- Environment, Energy and Science Group (EES)
- Environment Protection Authority (EPA)
- DPIE Water and Natural Resource Access Regulator (NRAR)
- NSW Heritage Council
- NSW Government Architect State Design Review Panel (SDRP)
- Endeavor Energy
- Sydney Water.

A response to the matters raised in the Government agency submissions is provided in **Table 9** below. As some agencies provided joint submissions for SSD-10343 for the Kellyville Station Precinct and SSD-10344 for the Bella Vista Station Precinct, only the issues relating to the Bella Vista Station Precinct are detailed.



Table 9: Responses to Government Agency Submissions

Agency/Comment	Response	Reference
1.DPIE		
Built Form • Address the issues raised by the State Design Review Panel to refine the Precincts and Design Guidelines.	Further consultation has occurred with the SDRP and a second presentation was held on 8 April 2020. A copy of the formal comments received from the SDRP are provided at Appendix L. Detailed responses to the SDRP issues raised from the EIS submission are provided further in this matrix. In response to the additional correspondence dated 5 May 2020, the Design Guidelines and Urban Design Report have been revised further. Key changes or additional information include: Controls to encourage engagement with Local Aboriginal Land Councils in the design process Revised ground and upper floor setbacks A solar access and overshadowing study linked back to the proposed solar access controls for plazas and public spaces Revised road typology sections (see Section 2.3.1) Re-iteration of the broad, indicative staging for the concept SSDA site Providing a revised landscape strategy, confirming the strategy meets and exceeds State Government Targets and placing these targets in the Design Guidelines (Appendix C) Clarifying the relationship between the Design Guidelines and the standards under THLEP 2019 Additional guidelines at Section 4.1 of the Design Guidelines to promote architectural diversity and the submission of a revised Design Excellence Strategy at Appendix N.	Refer to Appendix A, B and N.
Provide additional shadow analysis for the Bella Vista Station Precinct to demonstrate that appropriate solar	A revised shadow analysis and solar access study has been prepared for the revised reference scheme and is included in the relevant plans for approval at Appendix B of the	Refer Appendix A and B



Agency/Comment	Response	Reference
access can be achieved for the public domain and residential uses.	accompanying Urban Design Report and the Design Guidelines. Extracts from this overshadowing analysis are provided at Section 2.3.6 of this report. Solar access principles are also included in the Design Guidelines requiring future built	Refer Appendix A and B
	forms to:	
	 Allow buildings around the Town Centre to receive direct sunlight to a minimum 75% of its area from 10AM to 2PM on the winter solstice 	
	 Allow buildings around local parks to receive direct sunlight to a minimum 75% of its area from 10AM to 2PM on the winter solstice. 	
	The analysis demonstrates that the baseline building envelopes will achieve the solar access targets for the town centre and public open space to the north of Byles Place and one to three hours of direct sunlight to Mawson Avenue and to the southern side of all proposed east/west streets.	
	When the reference scheme is applied to the site, the solar access to public open space and local streets improves with Mawson Avenue receiving two to four hours of direct sunlight with local east/west streets and the town centre receiving upwards of three and four hours of direct sunlight. Refer to item 2.8 of the Hassell Response Report for future detail.	
	Confirmation of the overshadowing impacts for specific buildings would form part of future applications. With respect to residential flat buildings and apartments, applications would be required to support the solar access principles under the Design Guidelines in addition to the amenity requirements under the Apartment Design Guide (ADG).	
Provide further justification/assessment for the proposed clause 4.6 variation to the building setbacks	A revised clause 4.6 variation to the amended building setback regime is provided at Appendix K .	Refer Appendix A, B and K
in relation to built form outcomes including delineation of the public/private interface, residential amenity,	As noted above, the setback scheme has been revised to require deeper setbacks along the northern and southern block frontages to the east of Mawson Avenue. Context	



Agency/Comment	Response	Reference
improved solar access to the public domain, and provision of street planting and services.	of the proposed setback scheme is provided at section 5.4 of the Urban Design Report and sections 4.4.8 and 4.4.9 of the Design Guidelines.	
Develop and refine the Design Guidelines to provide sufficient detail to reflect and secure the desired future outcomes for the Precincts including public domain, building typologies and connectivity. The Design Guidelines must include clear objectives, design criteria or controls to deliver high-quality place, landscape and built form outcomes for each block within the Precincts.	Landcom has worked with THSC in increasing the granularity in the Design Guidelines for the Bella Vista Station Precinct. Hassell has prepared a response cover report accompanying the updated Urban Design Report and Design Guidelines that elaborates on the design changes made in response to the comments raised in the submissions received. The changes to the Design Guidelines are listed in Section 2.3. These have been amended to: Provide a consistent structure with the Bella Vista Station Precinct. Revise the Structure Plan and description and clarify on and off-site connections Provide revised street and upper floor setbacks for future development. Revise the objectives and controls for open space, landscaping, setbacks and street walls. Detail communal open space controls. Introduce revised car parking and bicycle parking rates and associated locational controls. Detail deep soil areas within front setbacks, structural soil systems and roof garden and landscaping requirements. Specify 25% of the area of each development lot is to be provided as common open space. Specify street tree spacings for laneways, local roads and main streets. Detail preferred species plantings.	Refer Appendix A B and C
Address the built form issues identified in The Hills Shire Council's submission.	Responses to THSC's comments on built form are provided below in this table and detailed in the revised Urban Design Report and Design Guidelines.	Refer Appendix A and B



Agency/Comment	Response	Reference
Open Space, Landscaping and Connectivity Provide further consideration of the location and connectivity of roads, cycleways and pedestrian routes	Item 4.3 of Appendix A provides an illustrative plan showing the potential pedestrian and vehicle connections to ensure the Bella Vista site is well connected to the Kellyville Station Precinct and across Elizabeth Macarthur Creek. These include:	Refer Appendix A
to the creek corridor, primary school, and open space areas to provide legible and direct access.	 Clear routes to exiting signalised intersections. New signalised intersections at the intersections of Balmoral Road and Elizabeth Macarthur Creek 	
	 A potential future pedestrian and cycle bridge over Memorial Avenue. A new pedestrian crossing at the T-Way stop Aligning the future internal road network and open space areas with avenues for future crossings over Elizabeth Mogarithus Crossk 	
	 future crossings over Elizabeth Macarthur Creek Detailing road typologies along the western frontages of the site that provide footpaths between 2 to 2.5m wide A proposed 3.5m pathway along Elizabeth Macarthur Creek 	
	Minimum public open space size requirements and design considerations at net interface areas such as to Elizabeth Macarthur Creek and to the primary school site.	
	The Design Guidelines have also been amended at Section 4.3 to provide an overview of existing and future connections. These connections would be subject to future applications depending on arrangements between Landcom, future landowners and others.	
 Investigate the provision of additional connections to and from the existing and proposed pedestrian and cycle network along the viaduct and [Old] Windsor 	Old Windsor Road runs along the western edge of the site and provides an existing cycle path delivered under SSI-5414.	Refer Appendix A and B
Road.	The MNWL creates a physical barrier along the western side of the Bella Vista Station Precinct due to its transition from a tunnel to grade separated rail line and eventual viaduct to the south of the T-Way stop and car park. Therefore, to provide strong connections to the exiting shared cycle path, the Urban Design report and Design Guidelines proposed development blocks and a reference scheme that: 1. Provide a development block layout that provides five east/west connections within the concept SSSDA site to promote cross site movement	



Agency/Comment	Response	Reference
	 Provide a reference scheme that would allow these five east/west connections to reach the western cycle path Provide secondary north/south bicycle movement in the Residential Hub between public open space and the Primary School Site as shown in Figure 4.3.1 of the Design Guidelines to compensate for the physical barrier to Old Windsor Road provided by the MNWL. A revised connections plan is provided at Figure 4.3.1 of as part of the response report at Appendix A. This plan demonstrates that future development blocks have been aligned to facilitate up to four potential future pedestrian connections across Elizabeth Macarthur Creek. Furthermore, the concept SSDA will deliver a robust road hierarchy that will provide several east to west connections between the existing and proposed cycleways. No potential future road bridge crossings are proposed within the Bella Vista Station Precinct. 	Refer Appendix A and B
Clarify the road network and connections to be established as part of the concept proposal and integration of these roads with the future road network connections outside the Precincts.	The Design Guidelines have been revised to reinforce how the proposed road hierarchy and development blocks within the Bella Vista Station Precinct will integrate into the existing road network constructed under SSI-5414. The Hassell response report provides a composite image detailing the full road hierarchy and road reserve widths across the Bella Vista Station Precinct. The road hierarchy has been orientated to align the Precincts future east/west roads with existing local roads on the eastern side of Elizabeth Macarthur Creek such as Hovell Way and Sandstock Way to provide a future opportunity to deliver future pedestrian connections. Possible connection to Free Settlers Drive and Waddelll Road are limited by the presence of intervening privately owned land. Road connections from the Bella Vista Precinct to the surrounding road network are confined to the existing alignments of Celebration Drive, Unaipon Avenue, Balmoral	Refer Appendix A B and C



Agency/Comment	Response	Reference
	 Mawson Avenue across Balmoral Road to connect to the northern part of the site Celebration Drive across Balmoral Road to complete a road link along Elizabeth Macarthur Creek An extension to Brighton Drive to be named Lidwell Avenue to provide a two-way, low traffic environment in the community plaza. 	Refer Appendix A B and C
	Apart from Lidwell Avenue, which is located within the concept SSDA site, the other connections listed above have been shown as future possible connections within the Design Guidelines as:	
	 they are located outside of the concept SSDA site and are not owned by Landcom future intersection works over Balmoral Road and Memorial Avenue would be subject to detailed design and negotiation with TfNSW and private landowners. no physical works are proposed under this concept SSDA. 	
Revise the Traffic and Transport Assessment in response to advice from TfNSW (RMS)	A revised TTA has been included with the RtS in response to comments from TfNSW. Responses to the matters raised by TfNSW are provided further on in this matrix.	Refer Appendix D and E
Other Matters Request to respond to the biodiversity, flooding and funding arrangements.	Specific responses to matters raised by EES and THSC are provided further in this matrix and in appendices submitted as part of this RtS that include: • a revised Stormwater Management Plan (SMP) addressing comments on flooding at Appendix G • a revised BDAR at Appendix H Details of funding arrangements for infrastructure upgrades will form part of a Letter of Offer that is being prepared by Landcom and will be provided to DPIE and THSC in due	Refer Appendix G , H and this matrix
2.DPIE – Open Space	course.	
The proposed precinct should align with and support the following Premier's priorities;	A key objective of the Bella Vista Station Precinct is to deliver a vibrant Transit Oriented Development (TOD) community with a maximum of 3,804 new residential dwellings that fosters high patronage of the Sydney Metro network alongside new open space infrastructure. The number of new dwellings and area of open space that will be	Refer Appendix A , B and C



Agency/Comment	Response	Reference
 Increase the proportion of homes in urban areas within 10 minutes' walk of quality green, open and public space by 10 per cent by 2023. 	delivered in the Precinct will contribute towards the 10% target set by the Premiers Priorities as each development block is progressively developed. The site has been designed to locate all residential areas within 200m and all low/medium density residential areas within 400m of formal open space ranging from riparian breakaway spaces, the Station Plaza, two local parks and a district park. Figure 3.1.7 of the Urban Design Report illustrates that the majority of residential sites are within 400m from an open space area. Section 4.2.2 and 4.2.3 of the Design Guidelines provide detailed controls regarding the placement and minimum sizes of open space areas to ensure they are highly accessible	Refer Appendix A, B and C
Increase the tree canopy and green cover across	to all future residents in the Bella Vista Station Precinct. Clouston has prepared a revised street tree planting scheme as part of this RtS. Based	Refer Appendix C
Greater Sydney by planting one million trees by 2022.	on the revised spacing and street typologies, the strategy is anticipated to provide an increased tree canopy from 42.4% to 49.8%. This percentage satisfies the Greater Sydney Commission's urban tree canopy coverage of 40% and would also contribute to the target of planting one million trees by 2022. The Design Guidelines have also been updated to require a minimum 40% canopy coverage across the Bella Vista Station Precinct.	
Design Guidelines	Future applications for towers will be required to demonstrate consistency with the solar access objectives and controls proposed under this concept SSDA at which time it could	Refer Appendix A and B
 It is recommended that the proponent provides scale models of the precinct to demonstrate that the proposed heights and scale of the building will not create excessive overshadowing that would affect the comfortable use of the open spaces proposed. 	be more appropriate to provide scale models. It should be noted the reference scheme provided in the design documentation is only one possible outcome of future building forms. Specific approval of the reference scheme is not sought under this concept SSDA.	und D
	The Design Guidelines provide a reference scheme and solar access controls. These include:	



Agency/Comment	Response	Reference
	 Built form to be orientated to allow at least 75% of the town square to receive direct sunlight from 10AM to 2PM in the winter solstice Built form to be orientated to allow at least 75% of local parks receive direct sunlight from 10AM to 2PM in the winter solstice Consider taller buildings on C1.0, C1.1 and C1.2 to the west to maximise solar access on station plazas during lunchtime. 	Refer Appendix A and B
	The Design Guidelines provide indicative building envelopes that apply these solar access controls in addition to the requirements of SEPP 65 and the ADG to demonstrate future buildings can be delivered within each development block. Future applications for the detailed design of towers will be required to demonstrate consistency with the solar access objectives and controls proposed under this concept SSDA at which time it could be more appropriate to provide scale models.	
The principle of colocation of school grounds and public open space is acknowledged however this should not result in a reduction in area available for public access nor impinge public use of the facility at all times.	The site for the future primary school has been selected to ensure future residents are provided with high levels of access to the site, while also ensuring the future school is within walking distance (approximately 800m) of the Bella Vista Station and T-Way bus services. Use of the district open space would be subject to an operational management plan under a future application to dictate its use for public and school use.	N/A
The Urban Design Guidelines should specify minimum dimensions and road frontages for all open spaces to ensure accessibility and usability.	Stage 1 of this concept SSDA seeks approval for principal subdivision to create lots for these areas of open space. This plan details the edge lengths of all proposed open spaces as part of proposed allotments.	Refer Appendix A and B
	The Design Guidelines have been updated at section 4.2.3 specifying minimum open space areas. Minimum open space areas consist of: A local park between development blocks P3.3 and P3.3 of at locat 3.915m ²	
	 A local park between development blocks B3.3 and B3.2 of at least 3,815m² A local park between development blocks B3.1 and B3.0 of at least 6,650m² A district park between development blocks A1.0, A1.1, A2.1 and A2.2 of at least 2.74ha A town square on Lot C2.1 of at least 3,200m² 	



Agency/Comment	Response	Reference
	 A commercial plaza between development blocks C1.1 and C1.2 of at least 2,780m² connecting to the Old Windsor Road pedestrian bridge A commercial plaza between development blocks C1.0 and C1.1 of at least 750m² A commercial plaza on development block B2.0 of at least 650m² A green link of at least 1,500m² to the south of Florey Avenue. These areas are dictated by the aim to provide key areas of open space in highly accessible locations that are connected by the proposed road hierarchy. Specifying a minimum area for these open space areas is considered more appropriate compared to requiring specific road frontages as it would allow greater flexibility in future embellishment works. The length of open space frontages to roads would be confirmed as part of the detailed design for crossover locations and ground floor uses under future applications. Access points to open space would favour pedestrian and cycle access. Details of links 	Refer Appendix A and B
	from roads to open space would be progressed as part of future applications.	
 Proposed size of open space should consider the required area for tree planting to ensure an adequate usable area for passive and active recreation. This recommendation is based on the Design Guidelines principle for open space to take precedence over street tree planting, potentially creating competing use of open space for urban amenity and community 	Street tree planting will play a key role in providing urban tree coverage across the Bella Vista Station Precinct. Detailed embellishment of the Town Square, district open space and local open spaces will form part of future applications and therefore, specifics on the area of landscaping are not currently available. Each space is located in a defined character area which would influence its use between urban amenity, community recreation and education use. While local landscaping will be undertaken in future public open spaces, the core aim is to provide recreation space for future residents.	Refer Appendix B and C
recreation.	The total area of open space proposed under the concept SSDA is significantly greater than the area considered by DPIE as part of the Bella Vista Finalisation Report, which consisted of a 6,500m² parcel of RE1 land on the opposite side of Elizabeth Macarthur Creek. The increased provision means significant open space areas will be available for landscaping and future embellishment under future applications.	



Agency/Comment	Response	Reference
It is recommended that either the Urban Design Guidelines or the Landscape Masterplan and Open Space Strategy model how the urban canopy coverage can be achieved using the proposed tree centres.	Clouston has prepared revised street tree canopy calculations as part of an updated Landscape Masterplan, based on revised street tree spacings. This includes spacings of: • 6m in laneways • 8.5m on one-way streets • 8.5m on local streets • 15m along the 'Main Street' typology. Street tree plantings have been integrated with carparking across all proposed road typologies under the Design Guidelines and Landscape Masterplan. Furthermore, tree plantings have also been incorporated into the verges along the 'Main Street' typology. Updated tree cover calculations at these spacings indicate the urban canopy coverage in the concept SSDA site for the Bella Vista Station Precinct would increase from 42.4% to 49.8%. Future landscaping and plantings on private lots would for part of future applications. With respect to landscaping on private lots, section 4.4.10 of the Design Guidelines includes controls for landscaping and green roofs that would be addressed under future DAs: These controls require: • at least 25% of the lot area for future applications to be provided as a combination of public and communal open space • shared communal spaces along Celebration Drive to be orientated towards Elizabeth Macarthur Creek • deep soil zones to be provided in accordance with THSC controls • deep soul zones along the western boundary of Lots B1.0 and B1.1 to assist in mitigating rail noise, subject to compliance with Sydney Metros requirements.	Refer Appendix B and C
Tree species selection will need to consider impacts of the changing climate on species viability. It is	The updated Landscape Masterplan and Design Guidelines now provide a range of preferred species plantings based on performance criteria including mature height,	Refer Appendix C



Agency/Comment	Response	Reference
recommended that a diverse palette is implemented to ensure urban canopy health and longevity.	canopy spread and their ability to provide a diverse range of foliage for an improved streetscape.	Refer Appendix C
	Proposed trees along main streets include:	
	Eucalyptus crebra (Narrow-leaved Ironbark)	
	Eucalyptus tereticornis (Forest Red Gum)	
	Melaleuca styphelioides (Prickly-leaved Paperbark)	
	Tristaniopsis laurina 'Luscious' (Kanooka Gum)	
	Proposed plantings for local and one-way streets include:	
	Fraxinus griffithii (Evergreen Ash)	
	Fraxinus oxycarpa 'Raywoodii' (Claret Ash)	
	Pyrus calleryana (Callery Pear)	
	Sapium Sebiferum (Chinese Tallowood)	
	Pistacia chinensis (Chinese Pistachio)	
	Proposed plantings for laneways include:	
	Gordonia axillaris (Fried Egg Plant)	
	Lagerstroemia indica (Crepe Myrtle)	
	The proposed spacing of street trees in Bella Vista has also been revised in the Landscape Masterplan to 6m apart in laneways, 8.5m apart for one way streets and local streets and 15m apart along the 'Main Street' typology.	
	Specific species selection will be confirmed as part of future applications.	



Agency/Comment	Response	Reference
 It is recommended that the proponent review and amend the proposed setback dimensions to allow for appropriate tree planting to be established. For an urban canopy coverage to meet State Government targets, trees will need to be established in both the public and private domain. 	The road typologies proposed within the Design Guidelines include generous verges to provide space for street tree plantings to develop a full canopy. Street tree plantings are also proposed within the road sections for all road types in the Bella Vista Station Precinct. Detailed street planting along each typology is provided in the revised Landscape Masterplan by Clouston. Updated canopy cover calculations demonstrate the Greater Sydney Commission's 40% canopy cover target can be achieved via street plantings.	Refer Appendices A, B and C.
3. DPIE – Water and NRAR		
Did not object and raised no comments on the concept SSDA.	No response required.	N/A
4. DPIE Technical Review		
There has been limited identification of measures to encourage sustainable travel including walking, cycling (bicycle parking and end-of-trip facilities), public transport, car-sharing and rail / bus integration.	The concept SSDA seeks to build upon sustainable travel infrastructure along Old Windsor Road to encourage residents and workers to use other modes of transport and decrease the reliance on private car ownership and use. The majority of the concept SSDA site is within 800m of Bella Vista Station (with the exception of parts of Lots A2.0 and A2.1), feeder buses and T-Way services and would be readily accessible to residents and workers across the Bella Vista Station Precinct. The Masterplan also ensures all future residents and workers are within a 10-minute walk from an item of public open space ranging from the Town Square, two local parks, the district open space or Elizabeth Macarthur Creek. Furthermore, the Masterplan and Design Guidelines would establish a design framework that promotes active transport and would encourage a travel mode shift away from private car use by providing: • the expansion of active transport infrastructure with a walking/cycling path along Elizabeth Macarthur Creek.	Refer Appendices A, B, D and E



Agency/Comment	Response	Reference
	 an active frontage between the T-Way and future primary school site. potential pedestrian links across Elizabeth Macarthur Creek to Hodges Road/Free Settlers Drive, extending from Unaipon Avenue to the east, extending from Florey Avenue to the east or extending from the interface of block 3.1 to the east (see Figure 4.3.2 and 4.3.3 in the Hassell Response at Appendix A). wide footpaths that integrate with existing roads to promote walking. regular east/west streets and open space with requirement for pedestrian crossings at regular intervals. car parking rates for residential, retail and commercial uses that encourage public transport use along with car share spaces in the Design Guidelines. laneways to promote secondary movement. bicycle parking rates and controls for retail, commercial and residential uses. 	Refer Appendices A, B, D and E
	Future applications for built form will also detail end of trip facilities as a means of encouraging sustainable travel. The Design Guidelines require all future non-residential development to provide end of trip facilities.	
The residential development yield (number of units) for Bella Vista described in Section 2.3.2 of the TTA (3,822 units) is inconsistent with the yield shown in Section 13 (Conclusion) of the TTA (5,474 units). Clarification and/or amendment is required	The typographical error between the TTA sections has been corrected. The maximum residential yield in the Bella Vista Precinct has been revised to provide for a maximum of 3,804 residential dwellings. The amendments indicate that these minor variations do not alter the predicted traffic impacts of the proposal.	Refer Appendix D
The development of a Travel Plan is considered to be prudent as part of downstream development applications to encourage sustainable travel behaviour. Clarification would be needed as to who would be responsible for preparing the Travel Plan and subsequently delivering the Travel Plan measures.	The TTA has been updated at section 10.6 to detail potential green travel management measures for the Bella Vista Station Precinct. This includes specified targets such as a target car mode share of 47.5% (compared to the existing car mode share of 70% in The Hills LGA).	Refer Appendix B and D



Agency/Comment	Response	Reference
	Other proposed actions that could be implemented by other applicants under future applications include:	Refer Appendix B and D
	 Potential provision of a community shuttle bus Promoting walking by providing high-quality pedestrian amenities and links Car share schemes. 	
	As sustainable travel measures are encouraged in the Design Guidelines, future applications will need to demonstrate consistency with the development controls proposed under this concept SSDA. Future applications will also be accompanied by additional traffic and transport assessments to confirm the impacts of future built form and associated traffic generation is consistent with the concept SSDA.	
 Some trip generation information requires clarification / amendment: the trip generation for retail land use in 2026 (refer to Table 9.4 of the TTA) is incorrectly low based on the trip generation rates and development staging: Bella Vista Station Precinct should be 89 vph in AM peak hour and 178 vph in PM peak hour. Moreover, the trip generation for retail land use in 2036 (refer to Table 9.5 of the TTA) is also incorrectly low: Bella Vista Station Precinct should be 295 vph in AM peak hour and 592 vph in PM peak hour. 	The retail floor area shown in the staging plan accompanying the concept SSDA is a GFA metric. Trip rates are based off a gross lettable floor area (GLFA), which excludes back of house areas and spaces normally included in the definition of GFA to calculate the FSR for a development. To derive trip generation rates for assessment, a GFA area is converted to GLFA using a factor of 0.85. The TTA has been updated to include a note at Table 9.4 to advise of this conversion. The staging plan provided with the concept SSDA is indicative in nature. Future applications will be required to demonstrate consistency with the anticipated traffic performance as part of DAs.	Refer Appendix D
 It is also noted that the trip generation for commercial land use at Bella Vista in 2036 does not reflect the staging plan (refer to Table 2.5 of the TTA), which indicates that only 66,950 sqm of commercial space will be developed by 2036 out of the ultimate total 150,000 sqm, i.e. the trip generation for commercial 		



Agency/Comment	Response	Reference
land use at Bella Vista in 2036 is based on the ultimate total 150,000 sqm to be developed by 2045.		
• Future 2026 and 2036 road network / intersection operations deteriorate significantly in comparison with current 2019 conditions during both the 'background' traffic growth only scenario and the 'with station precinct developments' scenario, even with the planned / proposed infrastructure upgrades. This deterioration needs to be addressed by either increasing / improving the road infrastructure upgrades and/or reducing trip generation by increasing nonprivate vehicle travel to / from the two station precincts.	Addressing the background traffic growth is a matter for TfNSW to progress as part of government led road upgrade projects. The TTA recognises the currently planned road network improvements are insufficient to accommodate the future growth in population and employment in the region. The network improvements proposed by the TTA and this concept SSDA are intended to mitigate the impact of traffic from the Kellyville and Bella Vista Station Precincts only and do not seek to address background traffic. The trip generation rates used in the TTA already include reductions to account for a lower provision of parking supply proposed particularly the commercial land use in order to minimise the trip generation of the in both the Kellyville and Bella Vista Station Precincts. Further reductions in residential car parking supply also has been recommended by TfNSW with the same objective of reducing the traffic impacts and shifting trips to alternative modes.	Refer Appendix D and E
 For the proposed / planned road infrastructure upgrades, it is unclear when they would occur and in particular, whether they would be staged to reflect the staging of the proposed station precinct developments for both Kellyville and Bella Vista. 	Landcom will engage with THSC on local infrastructure provisions and appropriate staging as part of the Letter of Offer currently being prepared. No physical construction works are proposed under this concept SSDA. Necessary infrastructure upgrades are likely to be provided in a staged manner with details to be agreed with THSC.	N/A
The intersection of Windsor Road / Old Windsor Road is forecast to deteriorate significantly in level of service during the AM peak period (LoS C to LoS F in 2026 and LoS D to LoS F in 2036) yet it is unclear why no improvements are proposed.	The TTA identified that the existing utilisation of the right turn lane into Windsor Road is very low based on traffic surveys undertaken by Sydney Metro on weekdays and Saturdays. The volumes forecast by the traffic model appear to be based on an overestimation of the attractiveness of Windsor Road as a viable alternative. The alternative route is 1.2km longer and has two extra sets of traffic signals. Based on current utilisation there would be minimal need to add more capacity via a second right turn lane when existing right turn bay is so under-utilised.	Refer Appendix D
Parking and Access	A revised TTA is provided with this RtS that provides a note to this rate. This concept SSDA would still seek to apply a variable parking rate ranging from:	Refer Appendix B D and E



Agency/Comment	Response	Reference
There is inconsistency between the retail parking rate shown in Table 10.3 of the TTA (50 sqm per space) and the commentary in Section 10.3 and Table 10.4 of the TTA (60 sqm per space)	 a minimum of 1 space per 130m² a maximum of 1 space per 60m². This car parking rate range is also reflected in the additional car parking memorandum prepared by SCT to align the proposed car parking rates with those recommended by TfNSW and derived from the <i>Guide to Traffic Generating Development</i>. These rates are also reflected in the Design Guidelines. 	Refer Appendix B , D and E
 Visitor parking spaces show in Table 10.5 of the TTA do not align with the residential development yield (number of units). The figures in Table 10.5 would indicate 2,170 units for [the] Kellyville Station Precinct, which is inconsistent with the residential development yield indicated in Section 2.3 of the TTA (1,804 units for Kellyville). 	The parking calculations provided in Table 10.5 of the TTA are for the entire Bella Vista Station Precinct Site as identified in the DPIE finalisation report, which is broader than the concept SSDA site, and includes other land holdings in addition to government owned land. The total number of residential units is 2,277 for Kellyville and 4,554 for Bella Vista when other land holdings are included The TTA has also been updated to provide consistent visitor parking rates with the Design Guidelines.	Refer Appendix D and E
There is limited assessment of service vehicle / loading facilities and access locations especially for the retail / commercial land uses. This includes delivery route movements, refuse collection access, etc	The TTA has been updated to address service vehicle access at sections 9.5.2.2 to 9.5.2.4. Celebration Drive would be the main corridor for commercial traffic and access to and from the commuter car park and to residential areas up to Balmoral Road. Access to development blocks from Mawson Avenue will be discouraged. Commercial loading for blocks C1.0, C1.1 and C1.2 is encouraged from Comforth Street. Figure 4.3.2.1 in the Design Guidelines identifies road frontages where vehicular and	Refer Appendix B and D
	pedestrian access is preferred. These controls seek to reduce the potential conflict between pedestrians and road users by:	
	 Discouraging direct access off Celebration Drive and Mawson Avenue except for lot C2.2 Encourage vehicular access to residential development blocks via a mid-block laneway to maximise the pedestrian interface Using loading docks for waste collection and goods servicing and encourage their location within basements. 	



Agency/Comment	Response	Reference
	Detailed assessment of access points would be undertaken as part of future detailed applications and would confirm access locations, waste collection points, swept paths and loading areas in accordance with THSC's engineering specifications and Australian Standard 2890.	Refer Appendix B and D
Public Transport	Jacobs has advised this information can only be provided using the strategic transport	Refer Appendix D
 There is no provision of forecast trips for public transport use including for bus services, rail (metro) services and taxi / ride-share services 	model which is not part of the scope of the TTA provided with the RtS. Future Applicants are required to assess the impacts with forecasts to be obtained from the relevant public agencies. Notwithstanding, the trip generate rates used in the TTA are benchmarked against rates at similar TOD developments.	
	Bus routes and frequencies have been updated in section 7.2 of the TTA to reflect current services.	
 No assessment of point-to-point services (e.g. taxis, ride-share) including current conditions / activities or forecast trips to be generated 	These details will be covered for individual development blocks at the time each future DA is prepared and lodged. The current study is at site wide master-planning level.	Refer Appendices D and E
Torecast trips to be generated	Car share spaces have been included in the Design Guidelines and a general assumption that one share car space would reduce car parking demand by three normal spaces has been included. Kiss and ride points were delivered as part of SSI-5414 and are located on both sides of Mawson Avenue near the northern station entrance. A taxi rank was also delivered on the southern side of Florey Avenue.	
Bus services in the area should be updated to reflect service changes.	References to bus services have been updated in the TTA to reflect current operations.	Refer Appendix D
Active Transport	Jacobs has advised this information can only be provided using the strategic transport	Refer Appendix D
 There is no provision of forecast trips for pedestrians and cyclists using the subject Station Precincts including for the residential, retail and commercial development components. 	model which is not part of the scope of the revised TTA provided with the RtS. Future applicants will be required to assess the impacts with forecasts to be obtained from the relevant public agencies. The trip generated rates used in the TTA are benchmarked against rates at similar TOD development.	



Agency/Comment	Response	Reference
	Notwithstanding, the location and size of footpaths, cycle paths and the orientation of open space and plaza areas have been designed based on expected pedestrian flows to and from destinations in the Bella Vista Station Precinct. The layout of this future infrastructure aims to allow high volumes of pedestrian traffic to freely move throughout the site to reach dwellings, retail, office areas, open space areas, transport nodes and education uses.	Refer Appendix
Identify where bicycle parking is to be located, especially for residential and commercial land uses within the subject Station Precincts and how these locations would interact with the surrounding cycle path facilities.	Specific locations for bicycle parking would be confirmed as future applications are progressed. However, section 4.3 of the Urban Design and the Design Guidelines include an Active Mobility plan showing the existing public cycle facility at Bella Vista Station, future residential and worker cycle facilities and visitor cycle facilities. Resident and worker facilities are located centrally in each development lot for easy access. Visitor spaces are either located alongside resident areas to simplify future delivery or on the periphery of a development block and the public road network.	Refer Appendix A and B
	The Design Guidelines has been updated requiring private bicycle parking to be located either within the first basement level, next to lift lobbies or integrated with private parking and storage. Locations for visitor bicycle parking are preferred next to building lobbies and within communal open space at the ground floor. Detailed design would need to demonstrate compliance with Australian Standard AS 2890.3	
Notes no cumulative assessment was undertaken, but that future development was factored into the assessment.	Cumulative impacts have been covered throughout the TTA. Cumulative traffic including park and ride traffic, background growth and new development on adjacent, unrelated land holdings have been included in the latest trip matrices that were used in the assessment.	Refer Appendix D
5. The Hills Shire Council		
 Approval Pathway for Future Applications It is recommended that the criteria for State Significant Development continue to be limited to principal subdivision and the creation of roads, excluding development of individual sites regardless of the 	This application constitutes a concept DA under 4.22 of the EP&A Act, and future DAs may include further subdivision or the construction of roads. Clause 12 of the SRD SEPP would potentially declare those future applications as SSD. DPIE, under the Minister's delegation, would be the consent authority in this event. However, this	N/A



Agency/Comment	Response	Reference
capital investment value. This approach will also ensure that future applications are able to be assessed through the established local assessment and approval process, including consideration by the Sydney Central City Planning Panel and Council's Design Review Panel which comprise of members with suitable local knowledge and expertise.	 decision would be made at the discretion of the DPIE upon determination of this SSDA pursuant to clause 4.37 of the EP&A Act. Future applications will consider the relevant thresholds to be declared SSD under the SRD SEPP as needed. The two relevant thresholds currently in force are: Schedule 1, Clause 19(2)(a) for development within a rail corridor or associated railway infrastructure with a capital investment value of over \$30 million for commercial or residential accommodation purposes Schedule 2, clause 13 for principal subdivision for major lots or public domain areas or the creation of new roadways and associated works. In the event DPIE declare future stages to not constitute SSD, Landcom requests a determination maintains the existing SSD declaration thresholds under clause 19, Schedule 1 and clause 13, Schedule 2 of the SRD SEPP. 	N/A
Infrastructure Delivery Mechanism • Confirm status of VPA letter of offer.	Details of the Landcom's Letter of Offer is still being confirmed and will be provided to THSC and DPIE in due course.	N/A
Clarification is required regarding the proposed location and size of the Bella Vista Community Facility and Landcom's offer with respect to delivery.	The community facility would be located in the proposed Bella Vista Town Centre in the vicinity of the corner between Mawson Avenue and future Lidwell Avenue. The site area of the facility is proposed to be 1,600m² with a total GFA of 4,000m². The Design Guidelines includes a control requiring the station plaza to be 1,600m² and a community facility 1,600m² in area. The total town square and community facility would be up to 3,600m² in area. The Proposed Precinct Layout and Proposed Yield Table has been updated in the Urban Design Report. As discussed above, the Letter of Offer will include the Bella Vista Community Facility in the schedule of works.	Refer Appendix B
Embellishment of Caddies Creek It is expected that the full cost of embellishment of this facility will be funded by Landcom and secured through	A Letter of Offer is being prepared by Landcom and will be submitted to THSC in due course. The offer will detail the delivery mechanisms for local infrastructure demands.	N/A



Agency/Comment	Response	Reference
a mechanism which addresses local infrastructure as part of the current concept SSDAs.		
Creek Crossings Clarification is required regarding which creek crossings are proposed to be funded and/or delivered as part of the subject concept SSDAs.	No creek crossings are proposed under this concept SSDA, however the concept masterplan for the Bella Vista Station Precinct has been prepared to demonstrate where potential future footbridge crossings can be provided to enhance connectivity over Elizabeth Macarthur Creek.	Refer Appendix A and B
Clarification is required regarding the responsibility for embellishment of the proposed plaza and ongoing maintenance obligations and arrangements where these remain in private ownership.	Specific controls for the Town Centre are provided at section 5.1 of the Design Guidelines. Embellishment details of the Town Centre at C2.1 would be detailed as part of future applications. The Design Guidelines have been updated to specify this asset must provide 4,000m² of GFA as agreed with THSC. The Town square (station plaza) will be co-located with the proposed community facility and is proposed to be transferred to THSC as one item and maintained by THSC in perpetuity. The commercial plaza between development blocks C1.1 and C1.2 would be required to be publicly accessible but would be delivered as part of a future application. This arrangement would ensure a clear pedestrian dominant east to west connection is provided across the southern entrance to Bella Vista Station.	Refer Appendix A and B
Provision of a school site in the Bella Vista Station Precinct.	The Urban Design Report and Design Guidelines specify a primary school site with a 1,000 student capacity would be provided north of Balmoral Road. The school site would be 11,000m² in area. The current site meets the Department of Education's (DoE) requirements for a new primary school. Other site specific controls have been set out in the Design Guidelines to ensure the school has adequate future connections to the local road network, however detailed design for the school would form part of a separate SSD application. The Department of Education has advised a site for a new high school is not required as existing high schools in the vicinity have capacity to absorb additional students, and therefore, one has not been provided in this concept SSDA.	Refer Appendix A and B



Agency/Comment	Response	Reference
 Masterplans and Urban Design Guidelines The Guidelines need to have a level of detail equivalent to a DCP and should be expanded to provide guidance on additional matters such as: Unit mix and apartment size - future apartment development should comply with Council's housing mix and diversity criteria, as specified within Clause 7.12 of THLEP 2019; Common and private open space; and Character objectives and controls. 	Hassell has revised the Design Guidelines in response to THSC's submission. It is noted clause 7.12 of THLEP provides housing diversity targets for specified sites on the FSR maps identified as 'Area A'. The Bella Vista Station Precinct is not mapped as 'Area A' and therefore, clause 7.12 does not apply and these housing diversity provisions have not been included in the Design Guidelines. However, the Design Guidelines prescribe a minimum 5% provision of terraces for Lots A2.0, A2.1 and A2.2 in the Local Hub. Private and communal open space requirements for apartments and medium density dwellings would be dictated by the Apartment Design Guide (ADG). An additional open space control requiring 25% of a site to be provided as open space is stated at section 4.4.10 of the Design Guidelines.	Refer Appendix A and B
	Character area statements for the Town Centre, Residential Core and Local Hub have been included in the Design Guidelines at section 3.2.	
 GFA and yield ranges for each lot should be included on the plans that form part of the concept SSDA. 	Noted. GFA and yields values have been included on the plans seeking approval under this concept SSDA. These plans are included at Appendix B of the Urban Design Report.	Refer Appendix A and B
Council does not support the setback variations.	While the concept SSDA does not involve the construction of any built form, a clause 4.6 variation request has been prepared for abundant caution as the application seeks approval for Design Guidelines that will inform future development across the Bella Vista Station Precinct to provide a consistent design framework that reflects TOD principles. A revised clause 4.6 variation addressing the revised building setback scheme is provided at Appendix K . The proposed setbacks scheme has been revised in response to further consultation with THSC, to prescribe specific setback distances rather than setback ranges for specified development lots and uses. The setbacks in the Design Guidelines have been revised to provide revised ground level setbacks of:	Refer Appendix K



Agency/Comment	Response	Reference
Agency/Comment	2m ground level setbacks for all uses excluding commercial buildings across the site zero metres for non-residential ground floor uses along commercial streets and public plazas. Strict compliance with the 5m setback under THLEP 2019 is considered unreasonable in this case as: the underlying objectives of the setback development standard are achieved notwithstanding the proposed variation pre-existing environmental and site constraints restrict the concept SSDA's ability to achieve the project vision for the Bella Vista Station Precinct the proposed flexible application of the development standard to identified development block frontages will a planning outcome consistent with the vision for Bella Vista as a 21st Century Living and Business Precinct than that which would be achieved by ensuring strict compliance with the 5m minimum building setback it is in the public interest as the concept SSDA is consistent, or would not prevent future development achieving the objectives of the R1 General Residential and B2	Refer Appendix K
	 Local Centre land use zones under THLEP 2019 the concept SSDA proposes robust Design Guidelines that will satisfactorily guide future development within the station precinct to ensure a vibrant and active community with access to high levels of amenity is achieved the non-compliance with the 5m minimum building setback development standard is site specific and does not raise any matters of State and regional planning significance there is no public benefit that could otherwise be satisfied by ensuring compliance with the development standard outlined in subclause 8.4(a) and (b) of THLEP 2019. Additional comments from the SDRP support the reduction in setbacks to zero metres in the commercial core, 2m in residential areas where the benefit to the public domain and/or increased private communal open space can be demonstrated. 	



Agency/Comment	Response	Reference
 An approach could be applied within the Bella Vista and Kellyville Precincts consistent with Council's adopted DCP controls for other station precincts (Showground and Castle Hill North) where a setback of 3 metres can be applied where apartment developments proposed a 'terrace edge'. 	Development blocks A2.0, A2.1 and A2.2 have been revised to incorporate terrace specific housing typologies in the Hassell Response Report at Appendix A and the plans for approval. Extracts from this report are also provided at Section 2.3.5 of this report. For consistency with other residential setbacks proposed under the Design Guidelines in the Local Hub character area, a 2m setback is proposed for these three lots and their proposed terrace housing typology. This reduced setback will ensure a consistent street interface between future dwellings and the public domain. Further justification of the 2m setback is provided in the revised clause 4.6 variation request at Appendix K.	Refer Appendix A, B and K
All street profiles should include a 2.5m shared path and the design of new streets should present a uniform and logical profile with the existing streets already constructed by NRT.	Specific street typologies have been developed across the Bella Vista Station Precinct to ensure each block is permeable and provides efficient access to pedestrians, cyclists and vehicle users. These typologies also respond to the interface between public open space, Elizabeth Macarthur Creek, the proposed primary school site, existing internal roads and future internal laneways for service access and seek to reinforce the place-based themes of each character area. The Urban Design Report and Design Guidelines seek to provide a 3.5m wide pedestrian and cycle route along Elizabeth Macarthur Creek through the Residential Core from Balmoral Road to Celebration Drive. A 2.5m wide footpath is provided along Celebration Drive between Balmoral Road and Memorial Avenue in the Local Hub. The future needs of pedestrians and cyclists would be sufficiently serviced by this new pathway. These minimum widths are included as controls in the Urban Design Report and the Design Guidelines. Full details of the road sections are provided in the Urban Design Report, Design Guidelines and Landscape Masterplan. Local one and two-way local roads that provide east to west connections between Mawson Avenue and Celebration Drive provide footpaths 2m wide. Laneways running from north to south in the Residential Core character area would provide a combined tree and pedestrian zone at least 3m wide.	Refer Appendix A, B and C



Agency/Comment	Response	Reference
	Paths between 1.5m to 3.5m for typical local roads and 3m (shared with a planting zoned) for laneways are considered an appropriate design response for the lots fronting Elizabeth Macarthur Creek in a residential context as these roads are not intended to perform as the main pedestrian and cycle route across the Bella Vista Station Precinct.	Refer Appendix A , B and C
Specifying a minimum percentage of terrace style housing for certain sites would support the outcome of medium and high-density dwellings.	The Urban Design Report and Design Guidelines seek to provide a high degree of flexibility of built form typologies across the Bella Vista Station Precinct. The Design Guidelines have been revised to encourage terrace style dwellings and specify minimum terrace provisions. Candidate sites for terrace development include development blocks A2.0, A2.1 and A2.2 as part of the Local Hub character area. Section 4.4.3 of the Design Guideline has been updated to specifically reference these lots with a minimum level of terrace development as reflected in plan A0303 accompanying the Urban Design Report.	Refer Appendix A and B
 Clarification should be provided of whether the proposed building envelopes are inclusive of plant and lift overruns. These features should not protrude about the maximum permissible building height unless fully integrated into the design of an architectural roof feature in accordance with Clause 5.6 of The Hills LEP 2012. 	The proposed height of buildings accommodates the total height of the building, including lift over runs. Proposals at the next stage of planning will need to comply with the provisions of the LEP. The SSDA is not seeking additional height.	Refer Appendix A
Concern is raised with respect to the visual bulk of buildings which in some cases exceed 65 metres in length. It is recommended that a control be applied within both Precincts which is consistent with the adopted DCP controls for other station precincts (Showground and Castle Hill North) and imposes a maximum building length of 65 metres.	No building envelopes are proposed in the Bella Vista Station Precinct with a length greater than 65m. Therefore, a control regulating this built form element is considered unwarranted.	Refer Appendix A, B
Laneways should be appropriately activated to avoid these becoming dormant / unsafe spaces.	Laneways are proposed to provide mid-block connections through development blocks A2.2, B3.0, B3.1, B3.2, B3.3 and B4.0. It should be noted that the location of the mid-block connections is subject to the detailed design as part of future applications. They	Refer Appendix A , B and C



Agency/Comment	Response	Reference
	would provide for one-way traffic with no car parking and a minimum 3m wide tree and pedestrian zone. The main intent of the laneways under this concept SSDA application is to provide servicing arrangements for deeper development blocks fronting Elizabeth Macarthur Creek away from local road frontages. However, they would also provide secondary circulation paths for pedestrians and local traffic.	Refer Appendix A B and C
	Future detailed applications would be required to apply the laneway typology consistently and to also include swept path analysis to confirm waste servicing vehicles can manoeuvre without conflicting with buildings or the road network. CPTED assessments may accompany future applications to respond to principles of natural surveillance, access control, territorial reinforcement and space management.	
Wind testing criteria provided in the Showground DCP should be included in the Urban Design Guidelines.	Wind testing for buildings over eight storeys has been included as a control in the Design Guidelines.	Refer Appendix B
Provide shadow analysis for the Bella Vista Precinct.	Shadow analysis has been undertaken for the building envelopes and reference scheme at the Equinox, Summer Solstice and Winter Solstice and is provided within the Urban Design Report and Design Guidelines. The analysis demonstrates most overshadowing falls over the Norwest Business Park and the Old Windsor Road Corridor. Future applications would be required to provide further shadow analysis to assess detailed built form proposals, and to demonstrate consistency with the anticipated overshadowing under this concept SSDA.	Refer Appendix A and B
The street tree planting strategy should be revised for a maximum spacing of 10m.	A revised street tree planning strategy is included with the RtS that provides a range of tree spacing from 6m to 15m.	Refer Appendix C
	Main Streets (such as Mawson Avenue) will provide 15m tree spacing separated by two car parking spaces. Local and one-way streets will provide 8.5m tree spacing separated by one car space. Laneways will provide a 6m tree spacing with no car parking. While the request for a narrower spacing of 10m is noted, Landcom considers the wider spacing along the Main Street, together with a structural soil system will allow the preferred tree species to develop a full canopy spread.	



Agency/Comment	Response	Reference
	The proposed tree spacing provides an improved canopy cover from 42.4% under the EIS up to 49.8% under this RtS. The Design Guidelines now include a control requiring an overall tree canopy of 40% across the Bella Vista Station Precinct.	Refer Appendix C
It is recommended that parking rates for residential flat buildings be included within the Urban Design Guidelines which are consistent with Council's housing diversity provision	Following additional discussions with DPIE, and a review of the submission from TfNSW, the car parking rates have been revised to align with the rates recommended by TfNSW from the Guide to Traffic Generating Development as the new minimum parking rates. These car parking rates have also been included in the Design Guidelines and are detailed in Table 7.	Refer Appendix A , B and E
	The reduced car parking rates aim to deliver on best practices TOD principles by providing greater residential and employment density near the Bella Vista Station, T-Way and feeder bus services. Providing higher car parking rates would undermine the objective to achieve a TOD community and the travel mode shifts for new residents.	
	The decision to specify these parking rates is consistent with THSC's LSPS which identifies that: "Opportunities exist for reconsideration of existing car parking rates for residential and commercial developments in close proximity to public transport, where car ownership levels are typically lower. Reducing parking opportunities at both origin and destination will influence travel choices."	
 Parking rates be considered for commercial uses which are more in line with current requirements within the Shire of 1 space per 40m². 	A core aim of the Bella Vista and Kellyville Station Precincts is to promote TOD principles and public transport use. To encourage TOD principles in the Bella Vista Station Precinct a minimum commercial car parking rate of 1 per 130m² and a maximum rate of 1 per 60m² of retail GFA is proposed.	Refer Appendix D
	The proposed rates are consistent with the approved concept SSDA at Tallawong (SSD-9063) (residential) and supported by advice from SCT consulting. Further the ADG states that for sites that are within 800m of a railway station in the Sydney Metro Area, the minimum parking requirement for residents and visitors is set out in the <i>Guide to Traffic Generating Development</i> or as prescribed by the relevant Council (whichever is less). The Design Guidelines propose car parking rates for residential uses that are	



Agency/Comment	Response	Reference	
	consistent with the <i>Guide to Traffic Generating Development</i> for Metro Sub-Regional centres.	Refer Appendix D	
Embellishment of [public domain] spaces which are being created needs to be clarified as part of this process, especially as it is the development itself which drives the need for these public domain areas.	This concept SSDA seeks to create the super lots to establish open space areas only. This subdivision forms the first stage of development under this application. The embellishment of public domain and landscaped areas would occur as part of future detailed applications. The staging of the development would be coordinated in a manner that would ensure commensurate open space is delivered in tandem with new residential and commercial development. Landcom intends to provide THSC with a Letter of Offer which will identify embellishment values for public open spaces.	N/A	
 The subdivision plan should be prepared by a registered surveyor. If plans created by an architect are relied upon it should be more clearly dimensioned with respect to the areas/boundaries proposed. 	Landcom requests a condition of consent is imposed requiring a subdivision plan for open spaces to be prepared by a registered surveyor. The mechanism for embellishment of these spaces is to be further discussed with THSC.	Refer Appendix A	
Water Management	Indicative staging is provided at 5.10 of the Urban Design Report. While no physical	Refer Appendix F	
Orderly Development	works are proposed under the concept SSDA, future DAs would need to consider and be designed to a flood planning level 500mm above the 100 year ARI level and consider		
 The SSDAs need to consider orderly development in relation to the required stormwater drainage network 	overland flow paths.		
and flood levels. It is acknowledged that staged development is proposed, however further progression of the SSDAs and future Development Applications need to consider the management of stormwater and	In the event future applications are declared SSD, the requirement for those applications to demonstrate consistency with the earthworks over the site would likely form part of any accompanying SEARs.		
flooding with consideration to proposed filling of the land. The staging arrangements should consider the earthworks impacts to stormwater and flood	Temporary stormwater infrastructure may be required (e.g. pit and pipework and/or GPTs) if a developer wishes to proceed out of sequence.		
management for future DAs.	Management of flooding/filling		
	Sydney Water's flood modelling allows for the entirety of areas zoned for development (i.e. everything other than SP2 zoned land) to be filled above the flood planning level (100 year ARI plus 500mm). On this basis, consideration of staging versus flooding is not required. Stages containing flood-affected land can be developed in any sequence		



Agency/Comment	Response	Reference	
	without further consideration of the effect on flooding due to the minimal flooding affectation over the site.	Refer Appendix F	
Due to potential soil contamination, future development applications must include conditions that all soil is to be tested to determine suitability for re-use.	The EIS included a Stage 1 Preliminary Site Investigation Report prepared by JBS&G in accordance with <i>State Environmental Planning Policy No 55 – Remediation of Land.</i> The report concluded no significant indications of widespread contamination were identified on-site. It is acknowledged future applications would be required to include appropriate contamination and salinity assessments to confirm the suitability of the land, with or without remediation measures, as part of the assessment process.	N/A	
Both SSDAs consider a flood planning level of 500mm above the 100 year Average Recurrence Interval (ARI) overland flow levels. A flood planning level against the 100 year ARI levels in Elizabeth Macarthur Creek was not specified. The justification given was that the developable land can be filled up to, or above the 100 year ARI level. Nevertheless, a freeboard of 500mm from the 100 year ARI in Elizabeth Macarthur Creek should be adhered to.	A flood planning level against the 100 year ARI levels in Elizabeth Macarthur Creek is defined and detailed in the AAJV report and drawings included in Appendix C and D of the SMP. Sydney Water's report and drawings include a suite of information for future developers to have regard to in the detailed design of future applications. A flood planning level of the 100 year ARI flood level plus 500mm freeboard is proposed and would be factored into the detailed design of future DAs.	Refer Appendix G	
 On-site Detention The SSDAs propose that on-site detention is not required due to the minimal change in flood levels expected as a result of the proposed development with predicted 90%-100% imperviousness. The minimal impact was stated to be approximately 20mm at the most impacted location. Further submission should be made which details and/or models how the determination of 20mm was calculated. Without review of this information Council is unable to support this claim. Regardless of flood impact, to reduce erosive 	It is maintained that on-site detention is not required for the proposed development. The reference to a 20mm impact in the previous reports was in error and has been removed from the amended SMP. The revised SMP contains: the Sydney Water AAJV Report for Elizabeth Macarthur Creek at Appendix C trunk drainage drawings for Elizabeth Macarthur Creek based off this report at Appendix D Sydney Water's Feasibility Letter at Appendix E concept stormwater plans for Bella Vista at Appendix F.	Refer Appendix G	



Agency/Comment	Response	Reference
impact and instability within the waterway corridor as a result of the proposed developments increased imperviousness, on-site detention ought to be considered.	The AAJV Report adopted the flood modelling done for the Rouse Hill Flood Study and narrowed its scope to focus on Elizabeth Macarthur Creek. The underlying flood modelling adopted an impervious percentage of 66% (based off a significantly larger study area) for future development which includes the concept SSDA site. On this basis, the AAJV Report considers post-development flooding. In respect to the design of future flood mitigation works as part of future urban development, neither the AAJV Report or the Rouse Hill Flood Study reference the need to provide additional on-site detention. The concept SSDA builds on works constructed under SSI-5414. SSI-5414 included stormwater catchment plans that made allowance for development lots to be 90 to 100% impervious. On this basis, allowance has been made for stormwater runoff from future private development to discharge to the public stormwater network un-detained. This further reinforces the view that no on-site detention is considered necessary. Copies of	Refer Appendix G
	these catchment plans are included with the revised SMP. As no detention is required to facilitate future development of proposed lots, the proposed public stormwater network that would be constructed under future DAs will be sized to convey the unattenuated minor design storm runoff flows from proposed lots on the assumption that the proposed lots will be fully developed in the future (90% - 100% imperviousness). It is noted that the existing stormwater installed by NRT is sized for this percentage of impervious area for future development lots within the Site.	
	Finally, Sydney Water have advised the stormwater specifications associated with the Rouse Hill Development Area would apply to the development. These specifications do not include a requirement for on-site detention prior to discharge to Elizabeth Macarthur Creek. Details of stormwater connections would be submitted with future DAs and associated Section 73 applications.	
Gross Pollutant Traps The likely number and locations needs to be demonstrated. Additionally, confirmation with respect	No physical works are proposed under this concept SSDA, however, the civil report and plans have been updated to confirm to provide an indicative number and location GPTs that would need to be delivered as part of future applications as the Station Precinct is developed.	Refer Appendix G



Agency/Comment	Response	Reference
to the asset owner of the GPTs and responsibility for the ongoing management and maintenance is required.	 Number and location of GPTs Please refer to the drawings included Appendix F of the SMP showing potential discharge locations. GPTs would be potentially located: at the north eastern corner of Celebration Drive near the district open space BV1 in the Local Hub between the district open space BV1 and development block A2.2 in the Local Hub on the eastern boundary of the local park BV 3. The actual number of discharge locations will be dependent upon the geometric road design as part of future DAs for civil works, though the number of discharges will be minimised to the extent possible. A GPT will be required at each discharge point. 	Refer Appendix C
	Ownership and maintenance of GPTs GPTs will be located in THSC owned land and ownership and maintenance will be the responsibility of THSC. This is typical for any asset owner who discharges stormwater into another asset owner's infrastructure.	
Tree Pits Both SSDAs proposed tree pits. Consideration should be given to their design, location and number permitted with conditions likely to be recommended as part of future development applications. Additionally, review of the submitted documentation in support of the SSDAs found that there is inconsistency across the documentation in regard to spacing of tree pits.	It is acknowledged conditions would be imposed on future applications regarding street tree planting. Street tree plantings are proposed to be spaced 6m apart along laneways and 8.5m along local streets and one way streets. Plantings along the Main Street are proposed at up to 15m apart. Details of the proposed structural soil system are provided in the Design Guidelines. The advantages of this system are provided in the revised Landscape Masterplan and Open Space Strategy. Design of tree pits The Design Guidelines have been updated at section 4.2.5 to illustrate a possible structure soil design to implement in the street and verge plantings across the Bella Vista Station Precinct. This includes a calculation to determine minimum soil volumes. A proposed specification for tree pits is provided in the revised SMP for THSC's consideration. Tree pits would provide stormwater treatment via infiltration.	Refer Appendix A B, C and G



Agency/Comment	Response	Reference
	Location and number of tree pits The location and number or tree pits will be significantly affected by detailed design of road geometry and on-street carparking. It has been assumed a percentage of the road area will bypass the tree pits. An average tree pit spacing was also assumed for the MUSIC model, however this is a more conservative level than would be provided by implementing the recommended planting distances under the Landscape Masterplan. The precise number and location will be determined at DA stage for individual stages. Inconsistency across documentation An estimate of the spacing/number of tree pits at the rate of 1 tree pit every 25m of proposed road on both sides of the road has been made for MUSIC modelling purposes. This assumption has been clarified and set at a conservative level. Electronic copies of the MUSIC modelling files are provided with this RtS for THSC. The Urban Design Report and Landscape Masterplan specify more regular tree spacing. A more conservative (wider) spacing has been adopted for MUSIC modelling purposes to prove the landscape design in concept. At DA stage it is envisaged that more trees will be provided in accordance with urban design goals.	Refer Appendix A , B , C and G
The Stormwater Management Plans submitted in support of the SSDAs nominate the modelling details of the proposed tree pits. The details presented indicate a filter area greater than the surface area which cannot be the case. All numbers used in the modelling of Water Sensitive Urban Design measures need to be reviewed and amended as necessary.	The SMP at Appendix G has been updated to rectify the filter area and surface area values. Both values have been set at 1,235.	Refer Appendix G
Stormwater Re-Use Further iterations of the proposals will need to provide a water balance for the proposed stormwater re-use for the irrigation of district open space. It is acknowledged that a 1,300L tank is proposed and	The rainwater re-use system in the district open space has been maintained in the concept SSDA design as it has several advantages including: providing a sustainable method for irrigating open space areas throughout the year by reducing the amount of mains water required. It is noted that a recycled water	Refer Appendix G



Agency/Comment	Response	Reference
modelled for the Bella Vista precinct. For Bella Vista more specifically, the Stormwater Management Plan needs to address potential groundwater influences and constraints in relation to the proposed WSUD measures.	 network is also proposed for the development and this will be utilised to top-up the rainwater tank when necessary reducing the cost to THSC for irrigating the parks reducing the volume of water discharging into the Elizabeth Macarthur Creek reducing erosion issues along the creek assisting in achieving a better water quality for stormwater discharging from the precinct to the Elizabeth Macarthur Creek mitigating the urban heat island effect providing increased viability of future park vegetation and tree plantings. The underground tanks for this system have been sized to provide 45-50% of the non-potable water demand for irrigating the district open space. A rainwater and re-use system is also consistent with the range of ESD measures proposed as part of future built form across the concept SSDA site.	Refer Appendix G
A riparian assessment for the Bella Vista Station Precinct should be submitted, similar to that provided for Kellyville.	WSP has prepared a riparian assessment, which forms part of the revised BDAR at Appendix H of this RtS. Mitigation measures have been revised to reflect those specified in the Riparian Assessment accompanying SSD-10343 for the Kellyville Station Precinct prepared by WSP. Figure F1 of the riparian assessment provides an overlay of the 0.17ha encroachment of the Bella Vista concept SSDA site within the outer 50% of the Elizabeth Macarthur Creek Riparian Corridor (refer to Section 2.5.2). These encroachments are located at: The proposed turning circle at the north eastern corner of the district open space The corner of Celebration Drive and Florey Avenue associated with the existing road reserve constructed under SSD-5414 The south eastern corner of Lot B4.0 at the interface of the extension of Celebration Drive. It is considered these minor enhancements can be offset through the averaging rule along the riparian corridor and a land based offset is not necessary.	Refer Appendix H



Agency/Comment	Response	Reference
Stormwater Harvesting Council will not accept ownership or management responsibility of any assets associated with Sydney Water's (conceptual) regional stormwater harvesting pipeline or related drainage infrastructure.	Sydney Water are yet to formally release a policy or state their intention regarding the stormwater harvesting pipeline. As noted in the SMP the pipeline is not currently proposed, however flexibility is sought for its inclusion in future designs. If it is ultimately proposed, an engagement process would be required and mutual agreement between affected parties would be required. Sydney Water would be responsible for the ownership of this planned asset when it is delivered.	Refer Appendix G
 Traffic and Transport Connectivity with Private / Other Government Owned Land The SSDAs should outline how the proposed road network/layout could integrate with any future road network on the land not included as part of the current proposals. These could be shown as 'potential future connections'. Additionally, clarification is needed of which roads are proposed to be provided as part of the current SSDAs. The 'Plans for Approval' and various figures throughout the documentation show certain roads on land outside of the red SSDA boundary which is not within Landcom's control. 	Due to surrounding private and non-government owned land located between Memorial Avenue and Balmoral Road, demonstrating future road connections is limited as the concept SSDA site does not extend over adjacent TfNSW and privately owned land. However, the response report accompanying the Urban Design Report provides potential road connections into land owned by TfNSW (RMS) associated with the T-Way and Privately owned land along Elizabeth Macarthur Creek. Full road integration cannot be determined for the T-Way stop and car park due to existing road infrastructure and any future connection would require further consultation with TfNSW(RMS). However, for privately owned land, future road construction could provide a street and block layout consistent with sites A2.0 and A2.1. The 'Plans for Approval' attached to the Urban Design Report have been amended to clarify area the document applies to and the location of potential future off-site connections. Future applications would need to be generally consistent with the indicative road layout and street sections proposed under the concept SSDA.	Refer Appendix A
Road Hierarchy It is unclear what road types are being proposed, as such a clear road hierarchy needs to be developed. Any public road should comprise of a verge width of 3.5m, except where a wider verge is necessary for a bike path. Narrower 1m verge may be appropriate next	The Design Guidelines seek to establish a road hierarchy with specific road formations across the Bella Vista Station Precinct (refer Table 5) to support the future land uses and future local character. Future applications would detail the construction of: • Extensions to Mawson Avenue and Celebration Drive • Lidwell Avenue • All internal east west roads and laneways within development lots.	Refer Appendix A , B and C



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to Elizabeth Macarthur Creek dependent on stormwater elements installed along this road edge.

Each road typology provides a combination of footpaths, street tree planting and landscaped verge that responds to the interface between development blocks, open space areas, the primary school site, Elizabeth Macarthur Creek and possible future connections between character areas. As a result, most verge widths (including footpaths) meet or exceed THSC's requested width of 3.5m on at least one side of the road reserve. The only typologies less than 3.5m in the Design Guidelines are:

- 'Local Street Section 03' with footpaths that are 2m and 1.5m wide along the northern and southern edges of the district open space
- 'Local Street Section 04' with footpaths 2m wide along development blocks A2.0, A2.1, the norther edge of block B1.0 and the southern edge of block B3.0.
- 'Local Street Section 06' with footpaths 2m wide located on the development side of roads along the northern and southern edges of the two local parks
- 'Laneway Section 01' with a minimum 3m shared tree and pedestrian zone.

All 'Local Street' road sections below 3.5m are located in the Residential Core and Local Hub Character areas. The narrower paths in these locations are considered acceptable as they aim to reinforce a residential character and are offset by wider pathways what are integrated with the future district and local parks.

The reduced verge widths to 3m in the proposed laneways is warranted as these roads aim to provide secondary connections through the residential lots fronting Elizabeth Macarthur Creek and provide streets for vehicular access away from local roads and Celebration Drive. The combination of a minimum 3m tree and pedestrian zone and a 4.5m carriageway for road traffic supports a shared zone that would help reduce the number of crossovers from more prominent roads while providing improved access for locals and service vehicles.

Future applications would involve the construction of all additional roads to create future development blocks and would need to be generally consistent with the indicative road layout and street sections proposed under the concept SSDA.

Refer Appendix A,

B and C



Agency/Comment	Response	Reference
 Median strips along Mawson Avenue and Celebration Drive should be considered. Both roads are 20m wide punctuated by many east-west local roads which have the potential to affect access through the precinct. 	Mawson Avenue and the extension of Celebration Drive were constructed as part of the SSI-5414 approval. While Mawson Avenue has a 20m wide road reserve, this includes generous 3-5m footpaths with integrated street tree planting. Celebration Drive also allows two-way traffic, car parking on its western side, a landscape verge and footpath. The 20m wide road reserve only provides a 7m carriageway for two way car and bus traffic. The concept SSDA seeks to continue the existing formation of Mawson Avenue to the north across Balmoral Road, ending at the south eastern corner of the proposed school site. Therefore, retrofitting median strips to these local roads does not form part of the road hierarchy proposed in the Design Guidelines.	N/A
 Intersections The amount of additional land which may be required to facilitate identified intersection upgrades has not been specified. Land-take in association with upgrades at the intersections of Old Windsor Road and Celebration Drive [sic] should be accounted for in plans. 	Some of the road works identified in the TTA have already been delivered. However, additional road works have been identified. The identified but not completed road upgrades in the revised TTA do not require land take to be delivered. The concept SSDA site reflects the current property boundaries. No physical road works are proposed. Broadly, the upgrades identified in the TTA do not require any land take and are accommodated within existing road reserves	Refer Appendix D
Biodiversity Clearing of [existing] woodland may result in serious and irreversible impact.	WSP has prepared revised BDAR and Riparian Assessments. The Bella Vista Station Precinct has been designed to minimise the level of vegetation as far as practicable. The development includes offset areas within the concept SSDA boundary. The BDAR concludes 1.85 ha of existing native vegetation would be impacted by the future proposed development consisting of: • 0.06ha of poor condition Forest Red Gum (PCT 835) • 0.75ha of moderate condition Grey Box – Forest Red Gum (PCT 849) • 1.04ha of poor condition Grey Box – Forest Red Gum (PCT 849) This will require 53 ecosystem credits to be purchased and retired to offset the direct impacts.	Refer Appendix H



Agency/Comment	Response	Reference
	While 0.75ha of moderate condition and 1.04ha of poor condition CPW as a Serious and Irreversible Impact (SAII) candidate entity will be impacted, due to the small patch sizes and highly modified and fragmented nature of this vegetation, serious and irreversible impacts are considered unlikely.	Refer Appendix H
	An additional 38 fauna species credits for <i>Myotis Macropus</i> (Southern Myotis) will also need to be purchased and retired arising from the removal of 1.60ha of habitat.	
 Consideration should be given to exploring options to retain additional Cumberland Plain Woodland (CPW) or if the proposal does not change, mitigating the loss of CPW via offsets in the Blacktown or Hills Shire LGA. 	A revised BDAR has been prepared. The site has been carefully designed to avoid impacts to existing vegetation. Section 8.1 of the BDAR addresses the steps taken to avoid and minimise impacts to biodiversity values as required by section 8.1 of the Biodiversity Assessment Method (BAM).	Refer Appendix H
Additional offsets may be required to address indirect	Items considered and steps taken to minimise and avoid biodiversity impacts include:	
impacts such as increases in sedimentation or change in surface flow of water and evidence of this should be demonstrated in the BDAR.	Prioritising the use of the site with limited or no biodiversity value due to previous disturbance where practicable.	
	Open space areas have been incorporated into the conceptual masterplan layout to align with areas with the highest biodiversity risk weighting. This step avoided impacts to 1.01ha of CPW.	
	Riparian areas will be avoided during detailed design would reduce the area of River-flat Eucalypt forest community by 0.06ha, mostly along the banks of Elizabeth Macarthur Creek.	
	The structure plan has been designed to integrated into existing residential areas and to avoid further fragmentation of existing corridors.	
	The BDAR also recommends a range of management and mitigation measures at section 10 to reduce direct impacts on existing vegetation throughout the phases of future applications including during detailed design, prior to construction, during construction, post construction and prior to and during operation.	
Waste Servicing	Detailed compliance with THSC's 12.5m rigid waste vehicle would be assessed and	Refer Appendix B
 All future roads must be able to accommodate Council's standard 12.5m long Heavy Rigid Vehicle 	confirmed as part of future applications when the location of crossovers from local roads and laneways are proposed alongside future built form. At grade waste collection is not	



Agency/Comment	Response	Reference
(AS2890.2) to circulate the road network. Waste collection is unlikely to be supported in narrow laneways (less than 10 metres total reservation width). This requirement should be included as a control within the Urban Design Guidelines	proposed for laneways. Instead, waste collection would be encouraged to occur from within basement areas. The Design Guidelines have been amended to include a control requiring waste areas for future development that allow waste vehicles to enter and exit sites in a forward direction. This control would be addressed as part of future applications, including specific waste collection points and swept path analysis.	Refer Appendix B
 A control should also be included within the Urban Design Guidelines that where roads terminate, a cul- de-sac turning head with a minimum diameter of 19 metres must be provided to enable efficient waste collection with no reversing. 	 The Response Report and Plans for Approval show the locations of four proposed culde-sac locations. These are: in the north western corner of development block A2.0 to the south of Memorial Avenue. between development blocks B1.0 and B1.1 at the end of a new local road on the south western corner of development block C2.1 that would also be accessed from the slip lane off Celebration Drive. On the far western corner of the district open space. A control has been included in the Design Guidelines requiring cul-de-sacs to have a 19m radius. Construction of these turning heads would form part of future applications and would be required to comply with THSC's engineering standards. 	Refer Appendix A , and B
 A further control should be included that all developments should provide for on-site waste collection either at grade or via a basement and waste collection vehicles must be able to enter and exit the site in a forward direction. 	The preferred waste serving arrangement for future development blocks is for waste to be collected within basement loading areas however this is a matter that would be confirmed as part of future DAs. Access to these basement waste areas for deeper development blocks is proposed from private laneways to reduce the number of crossovers in pedestrian zones. This arrangement has been detailed in the revised Design Guidelines.	Refer Appendix B
6. Transport for New South Wales		
Parking Rates The parking rates are considered generous and will subsequently work against the purposes of	An amended TTA has been prepared and adopts the car parking rate provided by the RMS Guide to Traffic Generating Development as a minimum. A maximum rate is also proposed to provide upward flexibility for future states of the Bella Vista Station Precinct. Car share rates and retail parking have also been included within the same table and	Refer Appendix D



Response			Reference
greater public and active transport usage are provided below. The revised car parking ranges are considered to reflect the rates recommended by TfNSW while also providing upward flexibility for units.			
Residential	Min. Rate	Max. Rate	
1 bed	0.4 per unit	0.6 per unit	
2 bed	0.7 per unit	0.9 per unit	
3 bed	1.2 per unit	1.4 per unit	
Visitor	0.1 per unit	0.1 per unit	
Car share spaces	1 pe	150 car parks	
Retail	1 per 130m ²	1 per 60m ²	
		·	
The TTA has been amended	The TTA has been amended to reflect current bus services and frequencies.		
 the town centre. Lidwell Avenue heading south to Celebration Drive to function as a bus lane only, enabling traffic for buses, taxis and cyclists. The RtS does not seek to change the road treatment of Mawson Avenue as proposed under the EIS. Lidwell Avenue will provide vehicular access between Mawson Avenue 			Refer Appendix A B and D
		-	
	are provided below. The revise recommended by TfNSW while Residential 1 bed 2 bed 3 bed Visitor Car share spaces Retail The TTA has been amended to following: Lidwell Avenue to Florey the town centre. Lidwell Avenue heading senabling traffic for buses, The RtS does not seek to chaunder the EIS. Lidwell Avenue and Celebration Drive, however.	are provided below. The revised car parking ranges recommended by TfNSW while also providing upware recommended by TfNSW while also provided upware	are provided below. The revised car parking ranges are considered to reflect the rates recommended by TfNSW while also providing upward flexibility for units. Residential Min. Rate Max. Rate



Agency/Comment	Response	Reference
	Avenue street section proposed under the EIS. The Urban Design Report and Design Guidelines have been updated to include this measure.	
Active Transport Indicate measures to encourage customers to make sustainable travel choices, including walking, cycling, public transport and car sharing, such as the integration with rail and bus infrastructure and provision of adequate bicycle parking and end of trip facilities.	The TTA provides a range of Travel Demand Management measures at section 10.6 of the assessment that include: Community or workplace shuttle services Providing a quality walking environment Providing bicycle network improvements Car share schemes End of trip facilities to promote bicycle use Development of the Bella Vista Station Precinct as a whole, seeks to leverage off the Bella Vista Station, existing T-way services and existing feeder bus services to encourage public transport use. The above measures will be further considered as part of future detailed DAs. An existing 3.5m wide shared cycleway runs along the western site interface along Old Windsor Road. This path provides an existing active transport link that will be complimented by the proposed shared pathway along Elizabeth Macarthur Creek on the eastern edge of the site. Both of these shared paths will join with new east/west site paths which have been designed to provide excellent levels of access and movement. End of trip facilities in commercial, mixed use and residential buildings would be confirmed as part of future applications. The design guidelines have been amended to require end of trip facilities to be provided for all non-residential development. The proposal involves sustainable car parking rates to reduce the dependence on cars and encourage active and public transport use.	Refer Appendix D
 Indicate the provision of bicycle parking including consideration of the availability of public transport and the requirements of the relevant parking codes and Australian Standards. 	The Design Guidelines have been updated to provide specific objectives and controls for bicycle parking. Bicycle parking for visitors would be located next to lobby areas and within communal open space at the ground floor. Proposed bicycle parking rates have also been included and include:	Refer Appendix B and D



Agency/Comment	Response	Reference
	Land Use Residents/Employees S	Refer Appendix E and D
	Residential 1 space per	3 units
	Land Use Residents/Employees S	Shoppers/visitors
The TTAR should further demonstrate the integration of the proposed active transport with the current network and proposed land use. Demonstrate ways to align local bike network planning with the proposed Principal Bicycle Network (Old Windsor Road), so that local routes are integrated and well connected with the wider network. Illustrate ways future pedestrian and cycle routes connect with land use activities i.e. transport, commercial, educational, residential, retail and medical services. Cater for and prioritise walking and cycling to Bella Vista School. Demonstrate the provision of safe walking and cycling routes to schools, including by designing local streets to be safe, low-speed, low-traffic and law streets any improve to the prioritise use.	Supermarket	space per 1,000m² space per 300m² Is Refer Appendix A B, C and D Refer Appendix A B, C and D Refer Appendix A B, C and D Refer Appendix A B, C and D
traffic and low-stress environments that prioritise use by pedestrians and bicycle riders, including children.	Laneways are also proposed through residential blocks A2.2, and B4.0 to provide secondary through site links from the nort	



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- Create through site links through larger blocks, where new cycling and walking routes provide connectivity and permeability within the local neighbourhood.
- Ensure footpaths are wide enough to allow a range of user needs, such as wheelchairs, prams, and family groups.
- Consider wider shared paths that can also safely accommodate bicycle riders, particularly children and inexperienced riders, to get to key local destinations such as public transport, schools, parks and shops.

School connections
The primary school site has been centrally located in the Local Hub and near the Residential Core character areas to maximise the number of students that can reach the school by foot. The pedestrian and cycle network detailed in the Urban Design Report, details that future cycle paths will be provided along the northern and eastern school frontages. This will provide effective cycle connections from the existing cycle path infrastructure, a future north/south cycle link to Mawson Avenue and a cross site cycle link to Elizabeth Macarthur Creek, complementing the local street character of the Local

Bicycle network

Hub.

The core function of the proposed shared pedestrian and cycleway along Elizabeth Macarthur Creek is to cater for recreational use and provide access to the Bella Vista Station. Future crossings would also allow residents to the east of Elizabeth Macarthur Creek to access Bella Vista Station.

The additional cycleway would also complement the existing cycleway along Old Windsor Road. The Masterplan has been updated to show how potential future connections for the movement network could be extended over Elizabeth Macarthur Creek and integrate with residential development to the east.

Footpath design

The street typologies illustrated in the Design Guidelines and Landscape Masterplan provide footpaths for all road types between 2m to 5.5m which would allow a range of pedestrian groups to use these spaces without conflict.

Local roads that also require an active frontage under THLEP 2019 will provide a combined footpath and active frontage area that is 5.5m wide to allow casual dining while pedestrian movement is not hindered. This footpath type will be provided along Lidwell Avenue and along blocks eastern frontages of C1.0, C1.1 and C1.2.

Refer **Appendix A**, **B**, **C** and **D**



Agency/Comment	Response	Reference
	Some extents of minor local roads have footpaths that are 1.5m wide on one side to allow parking, street tree planting and two way traffic. A dedicated 3.5m wide shared pedestrian and cycle path is provided along the future extents of Celebration Drive fronting Elizabeth Macarthur Creek and will complement the existing cycleway along the western boundary of the Bella Vista Station Precinct.	Refer Appendix A, B, C and D
Provide further details on the traffic modelling undertaken, including the AIMSUN modelling files, SIDRA modelling files, a Base Model Calibration and Validation Report and an explanation for using SIDRA 7 instead of the latest version SIDRA 8 which was released on the 24 April 2018.	The TTA includes revised traffic modelling now using SIDRA 8. The modelling files are provided in electronic format. With regard to base AIMSUN model calibration and validation report, section 8.4 of the TTA details how AIMSUN has been used. For this project, it was calibrated to match the observed turning volumes at intersections only. It was not possible to concurrently match the travel times from the model to observed due to the high level of demand creating long queues that were causing modelled flows to drop below observed when attempting to match travel times. For this reason, a base year AIMSUN calibration report has not been prepared.	Refer Appendix D
The model is not consistent with the Roads and Maritime Improvements proposed as part of the Memorial Avenue Upgrade for the intersection of Old Windsor Road/Memorial Avenue/Sunnyholt Road. Furthermore, some of the Jacobs recommended improvements for this intersection (i.e. additional northbound and southbound approach and departure lanes along Old Windsor Road) are already part of the Memorial Avenue Upgrade Project. The proponent is to update the model in accordance with the latest design for this intersection.	An updated TTA is provided with this RtS that factors in the latest design for the upgrade of the Old Windsor Road/Memorial Avenue and Sunnyholt Road intersection.	See Appendix D
Investigate the potential for improvements within the existing road reservation at the intersection of Windsor/Old Windsor Roads with the aim to reduce the	The potential to widen the intersection is constrained due to the location of the rail viaduct pylons located next to the Windsor Road footpaths (see Figure 19 below). Major upgrades to key roads are outside the scope of this concept SSDA.	See Appendix D



Agency/Comment Response Reference See Appendix D increased average delay which is a result of the The increase in the number of right turns into Windsor Road is believed to be due to the proposed development AIMSUN model over sensitiveness to travel delays and less on the additional travel distance (1.2km) plus 2 sets of traffic lights that are not explicitly modelled. It should be noted that existing traffic surveys show very low utilisation of the right turn bay during peak periods and on Saturdays. Adding more capacity to this intersection would serve little purpose as drivers are unlikely to take the longer route to cause a capacity issue at this intersection. Source: Google Figure 19: Street View of Windsor Road Footpaths New traffic survey counts were undertaken for the intersections of Celebration Drive and See Appendix D Celebration Drive and Lexington Drive is operating at Lexington Drive (intersection 14) and Old Windsor Road and Celebration Drive. Both LOS B and LOS C, this statement does not reflect the intersections have been included and remodelled in the updated TTA. true conditions on site as this intersection and the intersection of Old Windsor Road and Celebration Under the revised modelling, the Celebration Drive/Lexington Drive/Mawson Avenue Drive are operating at capacity due to the short intersection is anticipated to function at the following levels of service (LoS) during each distance between the two intersections. The impact of scenario: any additional traffic that will be using these two Without the SSDA projects



Agency/Comment	Response	Reference
intersections should be assessed carefully. The intersection of Celebration Drive and Lexington Drive should be included in the network modelling.	 LoS C in the AM peak and a LoS D in the PM peak in 2026 (compared to a LoS C in the AM peak and a LoS C in the PM peak under the TTA provided with the EIS) LoS C in the AM peak and a LoS D in the PM peak in 2036 compared to a LoS B in the AM peak and a LoS C in the PM peak under the TTA provided with the EIS) With the SSDA projects and road improvements LoS C in the AM peak and a LoS D in the PM peak in 2026 (see Table 9.7 and 9.8 in the TTA) LoS D in the AM peak and a LoS D in the PM peak in 2036 (see Tables 9.9 and 9.10 in the TTA). The change in intersection performance for the AM peak in 2036 with the project improvements, is a result of upgrades at the Old Windsor Road and Celebration Drive intersection and the potential increase in traffic queues due to background and additional traffic volumes. 	See Appendix D
The future boundary of the development must be set back at a sufficient distance from the current boundary along Celebration Drive, Balmoral Road and Memorial Avenue particularly (on approach to Old Windsor Road and access into the Metro Precinct) to any required future road widening for bus priority and capacity improvements at these locations.	If part of the site is required for priority bus infrastructure, this would be subject to discussions and negotiations regarding the acquisition of that land. Consultation with TfNSW requesting further details on land acquisition required in Bella Vista as detailed in their submission is ongoing.	N/A
The lands required for this future road widening along Celebration Drive, Balmoral Road, Memorial Avenue particularly (on approach to Old Windsor Road) should be dedicated for transport / road widening purposes.	If part of the site is required for priority bus infrastructure, this would be subject to discussions and negotiations regarding the acquisition of that land- Consultation with TfNSW requesting further details on land acquisition required in Bella Vista as detailed in their submission is ongoing.	Refer Appendix A



Agency/Comment	Response	Reference
 The developer is to determine an appropriate contribution mechanism for the delivery of the required future road widening for bus priority and capacity improvements along Celebration Drive, Balmoral Road, Memorial Avenue particularly (on approach to Old Windsor Road and access into the Metro Precinct). 	No physical construction works are proposed under this concept SSDA. Any necessary road upgrades would form part of future applications.	N/A
 General Comments All information/requests for changes on Classified Roads or traffic signals should be provided to the Roads and Maritime for review. Sighting of this 	No roads within the Design Guidelines road hierarchy are proposed as Classified Roads. Indicative locations for signalised intersections are proposed at the intersection of Brighton Drive and Celebration Drive and at the intersection of Mawson Avenue and Balmoral Road.	N/A
document is not a Roads and Maritime concurrence to such changes. Any changes to each site will be considered on its merits.		
Further detail is to be provided identifying the stages the associated upgrades is to be undertaken.	An anticipated staging plan has been incorporated into the Urban Design Report. This is subject to changes with Landcom's divestment strategy.	Refer Appendix A
	The staging of the development has been informed by existing infrastructure and the triggers for additional new infrastructure and road connections required to support the future potential of the Bella Vista Station Precinct.	
Clarification is required to understand the current layout. All information/requests for changes on Classified Roads or traffic signals should be provided to the Roads and Maritime for review. Sighting of this document is not a Roads and Maritime concurrence to such changes. Any changes to each site will be considered on its merits.	The error on page 101 of the revised TTA has been corrected.	Refer Appendix D



Agency/Comment	Response	Reference
7.SDRP - Government Architect NSW		
Place and Context Articulate a clear and meaningful approach to Indigenous and European cultural heritage, including an understanding and acknowledgement of Country, for example though local stories which could help inform the character and design of key aspects of the precinct.	The Urban Design Report references the significance of both the natural landscape and water courses for Indigenous communities which has been central to the design concept for the precinct. As noted in the Aboriginal Heritage Impact Statement (AHIS), most Aboriginal archaeological sites within the Bella Vista concept SSDA have been destroyed. The Design Guidelines have been updated at section 4.1.2 to require future applications to consider the reports made by technical consultants Advisian (Non-Indigenous Heritage) and Kelleher Nightingale (Indigenous Heritage) where appropriate. However, with respect to Indigenous Heritage, these recommendations are mainly limited to fencing to ensure Aboriginal archaeological sites beyond the SSDA site are not inadvertently impacted by future construction. Sydney Metro as part of the station designs along the MNWL has incorporated various aspects of European heritage into the station designs. Orchards once covered much of the land surrounding the station precincts and corridor. The characteristic grid of the area's historical orchard groves has been used as the organising framework for all the engineering, architectural, landscape and art elements, that form the public domain. This includes the beams that support the station landscapes, the skylights/lanterns that punctuate and perforate their ceilings, the groves set out within all the station plazas and the sculptural play elements arranged within these groves. Additionally, the vibrant colours of the region's varied orchard produce are given expression in the line-wide colour spectrum and station specific colour palettes. The Design Guidelines have also been updated to require Landcom's SMNWP Public Art Guidelines (draft guidelines attached) to be considered in the embellishment of public spaces.	Refer Appendix A, B, M and O



Agency/Comment	Response	Reference
Improve the relationship of the southern end of the precinct to Norwest by providing a stronger physical connection between the two.	The response report prepared by Hassell at Appendix A, illustrates the key connections between the Bella Vista site and Norwest via Old Windsor Road and Celebration Drive and key intersections.	Refer Appendix A
	The southern boundary of the Bella Vista Station Precinct adjoins the Norwest Business Park and is divided by Celebration Drive. The width of the Bella Vista concept SSDA site at this location is approximately 320m with intersections located at:	
	Old Windsor Road	
	Mawson Avenue and Lexington Drive	
	Brighton Drive and Elizabeth Macarthur Creek.	
	The three intersections are equally spaced resulting in relatively short travel distances from any point within the proposed lot structure for pedestrians travelling between the precincts.	
	The existing desire lines are strongly aligned to these existing intersections with the active transport corridor located at Old Windsor Road, primary access to Norwest Business Park to and from the station via Mawson Avenue and Lexington Drive and the riparian corridor with pedestrian cycle routes connected to the Lidwell Avenue and Elizabeth Macarthur Creek bridge crossing.	
	The proposed design creates strong physical connections through reinforcing these desire lines and providing four-way crossings at signalised intersections at Mawson Avenue and Lidwell Avenue to enable safe and convenient access across Celebration Drive.	
	Additional formalised crossings are not deemed necessary as they do not relate to the street and block structure or desire lines.	
Look for opportunities to strengthen the response to Elizabeth Macarthur Creek as a key natural asset. The	DPIE has advised that Design Guidelines requiring the need for third party agreement and/or works outside the Bella Vista concept SSDA boundary should not be included in the Design Guidelines. DPIE has directed that controls related to Elizabeth Macarthur	Refer Appendix A , B and C



Agency/Comment	Response	Reference
between two neighbourhoods (east and west) rather	Creek should focus on the interface with the creek, including edge landscaping and built form relationship within the concept SSDA boundary only.	Refer Appendix A , B and C
than an edge.	The Urban Design Report has been revised to recognise Elizabeth Macarthur Creek as a key integrating element between the precincts and other land holdings and several guidelines are proposed to improve its ability to link ecologies and communities. Controls related to the embellishment and character of Elizabeth Macarthur Creek have been included in the Design Guidelines which focus on the interface with the creek, including edge landscaping and built form relationship for land within the Bella Vista precinct.	
	Clouston has prepared a plan which demonstrates the relationship between the creek with adjacent public domain and the built form interface clearly identifying proposed land ownership by Landcom and/or Sydney Metro, Sydney Water, THSC and private landowners.	
	Opportunities to further improve the creeks ability to perform this function will be investigated through the development of a Plan of Management for the Creek Corridor to be developed in consultation with THSC, Landcom, Sydney Water and other stakeholders.	
 Look at opportunities to ensure the proposed regional open space to the north of the site is well connected, including its relationship to adjacent existing neighbourhoods and to the Kellyville precinct. 	DPIE has advised that Design Guidelines requiring the need for third party agreement and/or works outside the Bella Vista concept SSDA boundary should not be included as recommended by the SDRP. DPIE has directed that controls related to Elizabeth Macarthur Creek are to focus on the interface with the creek, including edge landscaping and built form relationship within the concept SSDA boundary only.	Refer Appendix A and B
	The district open space proposed between Memorial and Balmoral Avenue has been strategically located to enable equitable access for the existing and future communities of Bella Vista and Kellyville.	



Agency/Comment	Response	Reference
	Despite its central location, it has varying conditions and constraints to the north, south, east and west, which result in different levels of access. To maximise connectivity to the central park within the concept SSDA boundary, the Urban Design Report and Design Guidelines have been revised to prescribe the following:	Refer Appendix A and B
	Clear direct routes to existing signalised pedestrian and cycleway crossings at Old Windsor Road and Memorial Avenue.	
	 Potential future connection of a pedestrian and cycle bridge across Memorial Avenue at Elizabeth Macarthur Creek integrated with a north to south pedestrian and cycle path that runs along the creek. 	
	 Provision of signalised crossings over Balmoral Road at Old Windsor Road and Elizabeth Macarthur Creek integrated with the north to south pedestrian and cycle paths along Old Windsor Road and Elizabeth Macarthur Creek. 	
	 Alignment of the open space and street network within Bella Vista to interface with the existing and proposed street network to the East of Elizabeth Macarthur Creek and provision within the connectivity network for potential future footbridges aligned to existing and future streets. 	
	Requirement for regular pedestrian crossings over Celebration Drive to enable access to north to south pedestrian and cycle corridor along Elizabeth Macarthur Creek.	
Provide greater response to the Hills and its character, with a link to the Council's draft Local Strategic Planning Statement LSPS. Provide greater communication of the type of place we are trying to create.	The project aims to establish a design and Masterplan framework to deliver a vibrant TOD precinct with a range of residential, retail and supporting uses for future residents.	Refer Appendix A
	THSC's LSPS (October 2019) was endorsed by the Greater Sydney Commission on 4 March 2020 and formally made on 6 March 2020. It sets out several planning priorities. Relevant Planning Priorities to this application are:	
	 Planning Priority 1 – Plan for sufficient jobs. Delivery of future mixed use, retail and commercial areas adjacent to Norwest Business Park will provide local employment opportunities as the precinct is constructed in addition to construction jobs during delivery. 	
	 Planning Priority 2 – Build strategic centres. Providing additional commercial and residential development along the MNWL corridor will provide an extension to the Norwest strategic centre and provide additional residential dwellings and supporting services. 	



Agency/Comment	Response	Reference
	Planning Priority 6 – Plan for new housing to support Greater Sydney's growing population. This concept SSDA directly responds to the need for additional medium and high-density housing near public transport. The Design Guidelines promote a diverse range of housing typologies that would be developed as part of future applications to contribute to achieving THSC's local housing targets in the medium to long-term, consistent with the Local Housing Strategy.	Refer Appendix A
	 Planning Priority 7 – Plan for new housing in the right locations. Delivery of future medium and high-density housing in the Precinct is directly aligned with THSC's Local Housing Strategy, which identifies the site as a Transport Centre and supports the objectives of establishing the MNWL Station Precincts. 	
	 Planning Priority 8 – Plan for a diversity of housing. The Design Guidelines provide a direct response to a range of diverse medium and high-density housing typologies that are encouraged across the character areas in the Bella Vista Station Precinct. 	
	 Planning Priority 9 – Renew and create great places. The delivery of the Bella Vista Station Precinct will create a new, vibrant TOD community with co-located employment, residential, service, open space and education facilities. 	
	 Planning Priority 10 – Provide social infrastructure and retail services to meet resident needs. A range of public open spaces including a new 2.74ha district open space area, two new local parks each being 0.665ha and 0.3815ha and a future community facility co-located in the Town Square seek to meet the passive and active recreational needs of future residents. 	
	 Planning Priority 11 – Plan for convenient, connected and accessible public transport. The integration of a robust road hierarchy with existing land uses will ensure future development is highly accessible to public transport services and routes to reach these services are accessible and efficient. 	
	 Planning Priority 12 – Influence travel behaviour. Providing a connected street network, bicycle parking and local services together with sustainable car parking rates will encourage residents to use alternative forms of transport that are not reliant on private car ownership. 	
	Planning Priority 13 – Expand and improve the active transport network. The proposed shared cycleway along Elizabeth Macarthur Creek complements existing cycle infrastructure along Old Windsor Road. The proposed road hierarchy will	



Agency/Comment	Response	Reference
	ensure a connected pedestrian network to existing transport services will be delivered alongside a road network.	Refer Appendix A
	Planning Priority 14 – Plan for a safe and efficient regional road network. The proposed road hierarchy will provide an efficient and self-contained network that builds on the existing local roads. Narrower streets along Elizabeth Macarthur Creek provide traffic calming to reinforce safe spaces for residents and park users while the main roads will provide road capacity for cars, buses and taxis within the site and to off-site locations.	
	Planning Priority 15 – Provide new and upgraded passive and active open spaces. This concept SSDA seeks to approval for Stage 1 principal subdivision to establish superlots for new open local, district, commercial and community open spaces that will cater for a mixture of passive and active recreational use.	
	Planning Priority 17 – Protect areas of high environmental value and significance. The Urban Design Report and Design Guidelines aim to expand and enhance the interface of the site with Elizabeth Macarthur Creek and proposed open space areas.	
	Planning Priority 18 – Increase urban tree canopy cover. The proposed Landscape Masterplan will ensure street tree planting delivers on the 40% target for urban tree coverage.	
	Additional details with respect to the Planning Priorities under the LSPS are provided at section 4.4 of the Response Report at Appendix A.	
 Ensure that the Design Guidelines provide strong and clear guidance and sufficient detail to achieve these aspirations. 	The Design Guidelines for both Kellyville and Bella Vista have been restructured, creating a consistent and readable structure. Landcom has worked closely with THSC and DPIE to strengthen the level of detail within the Design Guidelines to help achieve the desired place aspirations.	Refer Appendix A and B
Public Domain	Plans demonstrating both the open space hierarchy and anticipated pedestrian	Refer Appendix A,
 Further clarification is required on the hierarchy of spaces and anticipated movement of people from the station to the surrounding areas to ensure an 	movements are provided within the section 4.5 of the Response Report at Appendix A. Details of pedestrian and vehicular movement are also detailed on page 38 of the updated Landscape Masterplan at Appendix C.	B and C
appropriate balance is achieved between movement spaces and those for dwelling.	The current Masterplan provides an open space hierarchy with:	



Agency/Comment	Response	Reference
	 A main public plaza to the east of Bella Vista Station. This space supplements existing spaces at the front of the station and the pathway linking the station to the Old Windsor Road pedestrian bridge. 	Refer Appendix A , B and C
	Two local parks that interspace development blocks along Elizabeth Macarthur Creek. These spaces will provide local amenity to future residents.	
	District open space in the Local Hub character area and adjacent to the primary school site. This space will provide passive and recreational opportunities for future residents and for residents beyond the Bella Vista Station Precinct.	
	Pocket parks along the riparian corridor	
	All open space areas have been designed and orientated to front future public roads to reinforce east to west movement across the Bella Vista concept SSDA site to	
	emphasise Elizabeth Macarthur Creek. The east to west connections will facilitate cross site movement due to the elongated nature of the site. The Landscape Masterplan and Open Space Strategy prepared by Clouston in the EIS demonstrates the district open space, two local parks and Commercial Plazas and Town Square would function as primary open spaces areas. The open space area along Elizabeth Macarthur Creek would function as contributory open space.	
 Ensure public domain and open space provisions support State Government targets and priorities. 	Elton Consulting prepared an open space demand assessment that forms part of the EIS. The recommendations from this report are based upon State Government targets and priorities, as well as benchmarking of other high-density precincts.	Refer Appendix A for the Design Guidelines
	The below table provides an assessment of the Masterplan based on Elton's recommendations. It should be noted that the proposed open space quantum in the Masterplan exceeds the space nominated by DPIE in its Bella Vista Station Precinct Finalisation Report (Nov 2017) which informed the rezoning of the precincts.	
	Recommendation by Elton Masterplan Provision* Consulting	
	 A total of around 8ha of open space to be distributed across: 6 to 8 local parks (minimum size of 0.2ha) A total of 8.02ha of open space onsite (total of 2.95ha in Kellyville and 5.07ha in Bella Vista) 	



Agency/Comment	Response	Reference
	 One large district park of approximately 3ha central to both precincts High-quality linear open space along the length of Elizabeth Macarthur Creek that is within 10 minutes walking or 800m to residents' (400m preference for highdensity areas) to residents and wide enough to accommodate both cyclists and pedestrians. Offsite provision to include the extension of the Caddies Creek Sporting Complex to incorporate 4 new single playing fields and associated amenities. Includes one 2.74ha district park in Bella Vista, 1.05ha of local recreation (sports courts) in Kellyville and ten local parks, plazas and linear open spaces ranging from 0.77ha to 0.24ha Includes one 2.74ha district park in Bella Vista, 1.05ha of local recreation (sports courts) in Kellyville and ten local parks, plazas and linear open spaces ranging from 0.77ha to 0.24ha Includes one 2.74ha district park in Bella Vista, 1.05ha of local recreation (sports courts) in Kellyville and ten local parks, plazas and linear open spaces ranging from 0.77ha to 0.24ha Includes one 2.74ha district park in Bella Vista, 1.05ha of local recreation (sports courts) in Kellyville and ten local parks, plazas and linear open spaces ranging from 0.77ha to 0.24ha Includes one 2.74ha district park in Bella Vista, 1.05ha of local recreation (sports courts) in Kellyville and ten local parks, plazas and linear open spaces ranging from 0.77ha to 0.24ha Includes one 2.74ha district park in Bella Vista, 1.05ha of local parks in Kellyville and ten local parks, plazas and linear open spaces ranging from 0.77ha to 0.24ha Includes one 2.74ha district park in Bella Vista, 1.05ha of local parks in the Measure plazas, and linear open spaces ranging from 0.7ha to 0.24ha Includes one 2.74ha district park in Bella Vista Precincts 	Refer Appendix A for the Design Guidelines
Landscape and Green Infrastructure	The Design Guidelines have been updated to reflect State Government targets of 40%.	Refer Appendix C
 Provide tree canopy targets consistent with State Government targets and priorities. 	Revised canopy calculations prepared by Clouston are also provided based on a revised street planting layout a canopy coverage of 49.8% could be achieved when the Precinct is fully developed.	
Explore further opportunities to strengthen the design intent for Elizabeth Macarthur Creek as a key public open space for the neighbourhood and a strong green infrastructure element. This requires greater consideration of the corridor as central open space located between neighbourhoods, rather than the eastern edge of Kellyville.	It should be noted the reach of Elizabeth Macarthur Creek is owned and managed by Sydney Water and is not in the control of Landcom. Clouston has prepared a plan for Elizabeth Macarthur Creek in the updated Landscape Masterplan which highlights: The alignment of the creek and protected vegetated areas, the proposed linear path along the creek and adjacent open spaces The relationship between open space, the creek and proposed built form	Refer Appendix C



Agency/Comment	Response	Reference
	The proposed landownership highlighting land to be owned and managed by Sydney Water, THSC and other landowners	Refer Appendix C
	The relationship between the creek and built form on each side of the creek.	
 Provide further clarification of ongoing management of the creek corridor and public open space, including confirmation on who will have responsibility. 	All open space identified across the Bella Vista concept SSDA site is proposed as public open space and will be built according to THSC's requirements and be dedicated to THSC following construction. Embellishment details would be detailed in Landcom's Letter of Offer to THSC.	Refer Appendix C
	Area within Elizabeth Macarthur Creek zoned SP2 Infrastructure will be transferred to Sydney Water to manage and maintain. This would be subject to ongoing negotiations. The Elizabeth Macarthur Creek plan prepared by Clouston illustrates the proposed future landownership of this land and other open space areas.	
Streets/ interfaces/ access/ connections	The street hierarchy and associated sections are set out in the Urban Design Report,	Refer Appendix A , B and C
Rationalise pedestrian and vehicle movements to:	proposed street types and the intended function of each street type. Existing street sections have been reviewed and optimised to improve efficiencies.	
 Create a clearer circulation hierarchy responding to different character areas of the precinct and the way in which people will move. Identify the different street types – such as collector and other street types, and what characteristics define them and the way in which they respond to their location and function. Provide street sections to describe. 		
 Improve utilisation of the streets. For example, whilst some streets have already been delivered, there are opportunities to the way in which the street trees, parking, footpaths might be designed to respond to associated uses. 	The street design has considered footpath and carriageway widths to respond to different locations and character in the Bella Vista Station Precinct. While some roads exist, a significant number of new roads will be constructed as part of future stages to connect to Celebration Drive and Mawson Avenue to frame future development blocks. Each road typology has been designed to accommodate car parking in main, local and one-way streets, interspaced with street tree plantings.	Refer Appendix A , B and C



Agency/Comment	Response	Reference
	Future use of street areas would be dictated to THSC by future applications for specific uses across the character areas of the Bella Vista Station Precinct. Key areas for active street frontages, such as along Mawson Avenue respond to future uses by providing a generous 5.5m wide area for a combined pedestrian footpath and outdoor dining.	Refer Appendix A, B and C
 Confirm minimum active frontage to the streets and how this will be delivered. 	Active frontage areas are detailed within the Design Guidelines, in excess of the active frontages mapped under THELP 2019. Active frontages have the following objectives at section 4.4 of the Design Guidelines:	Refer Appendix B
	 To ensure that public spaces and streets are activated along their edges with retail and residential activity. 	
	To maximise street frontage activity where ground floor apartments are located.	
	 To deliver amenity and safety for residents when designing ground floor apartments. 	
	Provide a vibrant town centre.	
	The Design Guidelines have been updated at section 4.4.4 to detail active street frontages including the addition of a new active frontage for development block A1.1. This change is consistent with the Active Street Frontages Map under THLEP 2019.	
	These objectives are enabled and supported by controls that prioritise the following:	
	 Restriction on the location of carpark and basement access to service laneways and away from pedestrian areas. 	
	 Collocation of public, retail, commercial and residential uses around open space and Bella Vista Station to drive use of public realm and retail throughout the day. 	
	Active retail frontages required to all public spaces in the town centre.	
	 All ground floor units along Mawson street to be designed to allow for small scale commercial tenancies. 	
	All ground floor apartments are to have their primary entry from the street.	
Confirm the street ownership.	All streets identified in the Masterplan will be public streets, except for the proposed laneways. Laneways will be privately owned as part of future community title schemes for those development blocks.	Refer Appendix A and B



Agency/Comment	Response	Reference
	All public roads will be constructed to THSC's requirements and dedicated to THSC after construction.	
Confirm measures to ensure basements are not incorporated under streets.	Landcom confirms that no basements will be incorporated under public streets.	Refer Appendix B
Provide greater clarity on the retail strategy and identify how the staging of ground floor retail uses will work, including temporary activation.	The Urban Design Report and Design Guidelines provide a broad and enabling framework within which developers and designers will develop their own approach to the sites in response to their desires and market conditions at the time. For this reason, it would be inappropriate for a retail strategy to be prescribed in the Design Guidelines.	Refer Appendix A , B and J
	A broad strategy for the approach to retail within the station precinct has been outlined in the land use and town centre sections of the Urban Design based on specialist retail advice (provided by Ethos Urban) that has been revised as part of this RtS (Appendix J). The reference scheme suggests a retail strategy that responds to the controls and site conditions to demonstrate one possible built form outcome.	
Ensure that land use zoning supports incorporation of local neighbourhood shops (corner shops) within the residential areas to the north of the precinct.	The concept SSDA seeks to carry the permissible land uses for each zone in the Bella Vista Station Precinct forward under future applications. Most of the northern area of the Precinct, consisting of the Local Hub character area is zoned R1 General Residential. One of the objectives of the R1 zone is to provide facilities or services that meet the day to day needs of residents. Neighbourhood shops, restaurants and cafes and shop top housing are permissible with development consent and could therefore be incorporated into future development blocks. The Masterplan provides a non-residential GFA allowance on Lot A1.0 which allows for the provision of neighbourhood shops which may include food and beverage or	N/A
Building Envelopes and Massing Ensure building envelopes are configured to enable innovative design (i.e. envelope surplus well in excess)	convenience stores to support the Local Hub (see Section 2.3.3 of this report). The Design Guidelines are not prescriptive and align with the existing height of building development controls under THELP 2019. The broad development envelope allows for a wide variety of design solutions. The overall site seeks to achieve an average FSR of	Refer Appendix B and N



Agency/Comment	Response	Reference
of max GFA), and a high-quality public domain by confirming the maximum building envelope to GFA ratios.	2.46:1. FSRs for each lot are detailed at section 4.9 of the Hassell Response Report at Appendix A.	Refer Appendix I and N
	The Design Guidelines include building envelopes that allow sufficient flexibility for future architectural design while also requiring 25% of the site of each lot to be provided as open space. This conservative model would allow innovative designs to be progressed as part of the revised Design Excellence Strategy.	
Review the form and orientation of the building	Building envelopes within Bella Vista have been designed to:	Refer Appendix
envelopes above the podiums – tower forms do not	provide a consistent street experience to Mawson Avenue	and B
need to follow the street geometry and could be more varied in form.	 reduce height along the rail corridor where views into the corridor and noise emerging from it negatively impact amenity 	
	increase opportunities for view sharing to Elizabeth Macarthur Creek	
	 provide flexibility of form and orientation between Mawson Avenue and Celebration Drive 	
	 Specify minimum separation distances for laneways from major intersections between Mawson Avenue and Celebration Drive. 	
	Amendments to Lots A2.0, A2.1, B1.0, B1.1 and B3.3 have been made to widen parts of those sites that would contain taller buildings (see Section 2.3.4 of this report). This change is also shown at section 4.10 of the Hassell Response report at Appendix A.	
	Whilst the above performance objectives are outlined in the Design Guidelines, the	
	building envelopes are sufficiently large to allow for a range of potential design solutions under future applications to achieve design excellence.	
Sustainability	The sustainability targets are outlined in the updated Ecologically Sustainable	Refer Appendix I
 Clarify the sustainability targets proposed, including response to greater temperatures. Ensure targets are ambitious but achievable. 	Development Report prepared by AECOM 'Bella Vista Station Precinct Ecologically Sustainable Development Report' (August 2019) at Appendix I. A summary of the targets for Bella Vista include:	TOICI Appelluix I
	5-star Green Star – Communities certification or equivalent and a minimum 5-star rating for development areas outside of the existing infrastructure and roads	
	WSUD as a minimum for all public realm	



Agency/Comment	Response	Reference
	Rooftop provision for solar panels	Refer Appendix I
	 Built form arrangement that enables buildings to achieve greater than minimum ADG requirements for solar access 	
	Street planting and regular public/ private realm in accordance with targets set by NSW Government and recommended by Clouston to achieve attractive, cool streets and open space	
	Minimum 40% tree canopy coverages	
	Provision of a street and block network that enables active transport for local trips.	
Staging, Divestment and Implementation	An indicative staging plan has been provided with the EIS and the Urban Design Report	Refer Appendix A
 Provide a staging, divestment and implementation strategy to describe the intent. 	and is separated by commercial and residential use. However, the staging approach is subject to change based off the divestment strategy for the site and market conditions. Stages may occur consecutively or concurrently.	
	The staging of the development has been informed by existing infrastructure and the triggers for additional new infrastructure and road connections required to support the future potential of the Bella Vista Station Precinct.	
	Landcom's strategy is to divest serviced superlots to the market. As such, Landcom will be responsible for delivering key pieces of enabling infrastructure and subdivision works to create serviced superlots.	
 Provide details of the timing of the commercial centre and the public realm. The early stages are the opportunity to set the canvas and provide temporary activation. 	Subject to market conditions, Landcom's intended divestment strategy is to divest the Town Centre East to the market as the first stage for Bella Vista. This will enable the delivery of the town centre early in the development life cycle and ensure activation around the Bella Vista Station. A staging plan is provided at Section 5.8 of the Urban Design Report, however, this staging is indicative and subject to change.	Refer Appendix A, K and O
	An interim activation space to the west of the Bella Vista Station is being progressed separately with THSC for passive recreational use. Other temporary activation initiatives for the Bella Vista precinct will be informed by the SNWMP Placemaking and Public Art frameworks.	



Agency/Comment	Response	Reference
	The successful developer who purchases the lots will have program conditions to meet, requiring timely delivery of buildings and the Town Square.	Refer Appendix A and K
	Ethos Urban has prepared an updated Economic Impact Assessment and Benefits Analysis (see Appendix K). Full development of the Bella Vista site is expected to take up to 25 years. While the assessment notes office space is difficult to forecast, a forecast growth of 190,000m² of office Net Lettable Area (NLA) by 2036 in the northwest market. As spare capacity in Norwest Business Park reduces, the Bella Vista Station Precinct can be expected to capture an increased proportion of new tenants and could potentially reach 90,000m² of NLA (or 145,000m² of GFA) of commercial office space by 2036.	
 Develop a working group with all key agencies, (Metro, the Council, Sydney Water, RMS and others as required) to work collaboratively to develop a delivery and on-going management strategy. 	Landcom is considering a draft strategy for ongoing management of the creek with external stakeholders including Sydney Water and THSC. DPIE has advised that Design Guidelines requiring the need for third party agreement and/or works outside the Bella Vista SSDA boundary should not be incorporated into the concept SSDAs.	N/A
	Landcom will prepare a strategy for ongoing management of the creek with external stakeholders including Sydney Water and THSC. DPIE has advised that Design Guidelines requiring the need for third party agreement and/or works outside the Bella Vista SSDA boundary should not be incorporated into the concept SSDAs.	
	Landcom is proposing to transfer ownership and management of all roads and proposed open space to THSC for ownership and ongoing maintenance with the exception of the Town Centre Plaza in the Bella Vista Town Square which is proposed as publicly accessible private open space.	
 Clarify the proposed divestment strategy on both precincts. It is stated that 'Landcom is the master developer of the precincts, in collaboration with Sydney Metro (landowner). Landcom's responsibility includes: 	Landcom's Role Under a Program Delivery Agreement with Sydney Metro, Landcom is responsible for master-planning and developing the Kellyville and Bella Vista Station Precincts. This includes the development of the concept design of each station precinct and submission of concept SSDAs. Landcom will also be responsible for divesting superlots and other portions of the site to proponents who will then prepare and lodge future applications. As	Refer Appendix N



Agency/Comment	Response	Reference
 Developing the concept masterplans for Kellyville and Bella Vista. Facilitating future development by achieving planning certainty Delivery of key infrastructure' Provide greater detail of Landcom's role as the master developer, and the role of other developers in ensuring design quality through the life of the project. 	these DAs are prepared, Applicants will be required to consult with Landcom and Sydney Metro, who will ultimately need to provide endorsement. The Design Guidelines and Design Review Panel will have important roles in ensuring the design quality is maintained through the life of the project. Sydney Metro's Role Sydney Metro's responsibilities include delivery and operation of the Sydney Metro, collaboration with Landcom through development of the concept proposal as well as evaluating tenders during the divestment stage. During the preparation of future applications, the applicants will be required to consult with Sydney Metro and achieve landowners' consent prior to the submission of any DAs. Divestment Strategy Landcom's divestment strategy is to deliver key enabling infrastructure works including roads, lead-in services and subdivision works in order to divest services superlots to the market. Private developers will participate in a tendering process during which a preferred tenderer will be nominated. The preferred tenderer will be required to prepare a DA for built form. During preparation of Detailed DAs, the proponent will be required to consult with Landcom and Sydney Metro, who will ultimately need to provide endorsement for submission of future applications. The Design Guidelines and Design Review Panel, through the proposed Design Excellence process, will have important ongoing roles in ensuring the design quality is maintained through the life of the project.	Refer Appendix N
Provide greater clarity of the role of the Design Guidelines in relation to the concept Masterplan, and subsequent stages of the project.	The Design Guidelines will be the key document which outlines objectives, parameters and controls to guide future development. In concert with the broader SSDA, the Design Guidelines, together with the supporting elements of the concept SSDA, will act as the deemed DCP for the site pursuant to section 4.23 of the EP&A Act. This process also seeks to satisfy the requirement and matters detailed under clause 8.5 of THLEP 2019	N/A



Agency/Comment	Response	Reference
Ensure that they are sufficiently detailed to inform future DCPs for the two precincts. Ensure that the Guidelines allow for and support difference where appropriate and do not support development that is homogenous and non-place specific.	The Design Guidelines have been reviewed and more detail included following engagement with THSC. The intent of the Design Guidelines, together with supporting elements of this concept SSDA, seek to act as an alternative to a DCP pursuant to section 4.23 of the EP&A Act. The Bella Vista Station Precinct will have a distinct commercial and residential character with supporting retail uses. The concept SSDA site contains three Character Areas. The first, the Town Centre — aims to be provide high and medium density residential and employment development alongside a retail hub, community hub and active street frontages. The Residential Core Character Area emphasises a pedestrian orientated district with significant street landscaping, a regular distribution of open space, small commercial uses, taller apartment buildings and strong connections to Elizabeth Macarthur Creek. The area will provide a range of residential dwelling types including apartments, integrated terrace style units at ground level and attached dwelling typologies. Small scale non-residential uses would provide highlights to the area. The Local Hub Character Area will provide key district open space in a lower density residential setting. The area also includes a site for a future primary school with a 1,000 student capacity, scope for local shops to service local needs and a greater emphasis on integrated terraces and medium density dwellings.	Refer Appendix A and B
Ensure that they are co-ordinated with the Design Guidelines for Bella Vista.	Updates to Design Guidelines have been coordinated across both precincts with the same structure implemented across both sets of Design Guidelines. Specific changes have also been made to the Design Guidelines following further consultation with the SDRP including:	Refer Appendix A, B and N
	Defining the relationship between the Design Guidelines, THLEP and responses to the LSPS	
	Identifying figures are illustrative where necessary	



Agency/Comment	Response	Reference
	Detail opportunities for design diversity in the Design Guidelines and accompanying Design Excellence Strategy.	
 General A further presentation to the SDRP is recommended during the submission period. The following material should be provided at the next meeting: 1. Updated precinct model. 2. Vignettes at street level of the key area of the public domain. 3. Site sections through the precinct and riparian corridor. 4. Staging, implementation and divestment strategy. 5. Design Guidelines. 6. Resolution of the items 1-29 noted above. 	The additional information requested such as vignettes and site sections now form part of the Urban Design Report. Landcom's staging, implementation and divestment strategy are commercial in confidence. Landcom's strategy is to divest serviced superlots to the market. An indicative staging plan is provided at Section 5.8 of the Urban Design Report. A further design session was held with the SDRP on 8 April 2020. Correspondence from this meeting dated 5 May 2020 is provided at Appendix L.	Refer Appendix A , B and L
8. Sydney Metro		
Noted that concurrence under Clause 86 of State Environmental Planning Policy (Infrastructure) 2007 does not apply as the application is SSD.	Landcom agrees to the imposition of a condition requiring future DAs or modification applications to be referred to Sydney Metro for review.	N/A
 Recommends a condition is included requiring any future applications and requested any amended DA to be referred for review. 		
9. Office of Environment and Heritage (now EES)		
 Recommends that any conditions recommended by the Aboriginal Cultural Heritage Assessment Report prepared by Kelleher Nightingale Consulting Pty Ltd dated July 2019 be included as conditions of consent. 	As the final Aboriginal Heritage Impact Statement forms part of the application (as amended by this RtS at Appendix M), it would be captured in any approval issued by DPIE. As the majority of archaeological sites in the Bella Vista Station concept SSDA site were destroyed prior to construction of the station, no remaining sites are present. However, measures to manage impacts to Aboriginal objects outside of the concept SSDA site are recommended and include:	Refer Appendix M



Agency/Comment	Response	Reference
	 Fencing and identification of no-go zones on all maps for the project and within any Construction Environmental Management Plan Holding toolbox talks to ensure all contractors under future applications are made aware of the requirements to protect Aboriginal heritage in adjacent areas. The only changes in the revised ACHAR at Appendix M relates to details on consultation. 	Refer Appendix M
EES considers that the BDAR has not provided appropriate justification for why the footprint cannot be reduced to avoid clearing a CEEC.	The rezoning and proposed urbanisation of both of the Kellyville and Bella Vista station precincts strongly align with the Greater Sydney Commission's housing and employment targets for The Hills Shire as set out in its Central City District Plan and associated priorities and actions. This includes the priority of accommodating the predicted growth demand of 207,500 dwellings across the district by the year 2036.	Refer Appendix H
	WSP has prepared a revised BDAR in response to comments from EES. Design changes were made in response to WSP biodiversity surveys in 2018 and 2019. These changes prioritised the use of native vegetation areas with the lowest biodiversity value and sought to minimise the impact to areas with highest biodiversity risk weighting (within design and project limitations).	
	Section 8.1 of the BDAR at Appendix H addresses the steps taken to avoid and minimise impacts to biodiversity values as required by section 8.1 of the BAM. Items considered and steps taken to minimise and avoid biodiversity impacts would include:	
	Prioritising the use of the site with limited or no biodiversity value due to previous disturbance where practicable.	
	Open space areas have been incorporated into the conceptual masterplan layout to align with areas with the highest biodiversity risk weighting. This step avoided impacts to 1.01ha of CPW.	
	 Riparian areas will be avoided to the greatest extent possible. The concept design of the Bella Vista precinct has resulted in the avoidance of 0.06ha of River-flat Eucalypt forest community. The structure plan has been designed to integrate into existing residential areas 	



Agency/Comment	Response	Reference
	The BDAR also recommends a range of management and mitigation measures at section 10 to reduce direct impacts on existing vegetation throughout the phases of future applications including during detailed design, prior to construction, during construction, post construction and prior to and during operation.	Refer Appendix H
The BDAR does not include a number of maps or information required by the Biodiversity Assessment Method.	A revised BDAR has been prepared by WSP and is provided at Appendix H. In accordance with section 5.2.1.12 of the BAM, justification is provided in the form of quantitative analysis of Vegetation Integrity Plots. This information is provided at section 5.2 and in tables 5.2, 5.4 and 5.6 of the revised BDAR. Additional maps have been included in the revised BDAR.	Refer Appendix H
Assessment of direct impacts including type, frequency, intensity, duration and consequence of impact (as per section 9.3.1.2 and 9.3.2.4)	Section 1.1 and Table 9.4 of the updated BDAR provides a summary of the direct and indirect impacts of the concept SSDA. Direct impacts that would occur over a short duration with a frequency associated with construction activities under future applications include:	Refer Appendix H
	 The loss of 1.85ha of native vegetation consisting of: 0.06ha of PCT 835 Forest Red Gum - Rough-barked Apple grassy woodland on alluvial flats of the Cumberland Plain, Sydney Basin Bioregion 0.75ha of PCT 849 Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion in moderate condition 1.04ha of PCT 849 Grey Box - Forest Red Gum grassy woodland on flats of the Cumberland Plain, Sydney Basin Bioregion in poor condition. The loss of 1.60ha of foraging habitat for threatened fauna for the Southern Myotis. 	
	Indirect impacts arising from the development of the site are provided at Section 9.2 and 9.3 of the BDAR and include:	
	 Edge effects - reduced viability of adjacent vegetation that would occur daily during construction and operation on a potentially long-term duration and timing Weeds - spread of weeds that would occur daily during construction and operation on a potentially long-term duration and timing Pathogens - reduced vegetation quality that would occur daily during construction and operation on a potentially long-term duration and timing 	



Agency/Comment	Response	Reference
	 Noise, dust or light spill reduced viability of adjacent vegetation that would occur daily during construction and operation on a potentially long-term duration and timing Loss of breeding habitat – loss of hollow bearing trees that would occur during construction phases associated with earthworks and clearing which may potentially have a long-term timing. 	Refer Appendix H
 Identification of measures to mitigate or manage impacts, including techniques, timing, frequency and responsibility; identify measures for which there is risk of failure; evaluate the risk and consequence of any residual impacts (as per section 9.3) 	WSP has revised the BDAR provided with the EIS to include additional mitigation measures. These are detailed at section 10 of Appendix H. This section also provides the anticipated timing of each impact (e.g. during detailed design, prior to construction, during construction) and allocates responsibilities. A risk assessment for each potential impact has been carried out to evaluate the effectiveness of the mitigation measure recommended.	Refer Appendix H
A map of impacts requiring offset (as per Table 26)	Figure 11.1 in the BDAR details the vegetation zones in the concept SSDA site area that require offsets to be purchased and retired. These areas consist of all vegetation zones that qualify for assessment under the BAM.	Refer Appendix H
A map and identification of impacts not requiring offset (or discussion of this where it's not applicable) (as per section 10.3.2.2)	All vegetation zones (excluding areas not requiring assessment) have a Vegetation Integrity Score greater than 17 and therefore all zones require offsetting. A map confirming the areas that do not require offsetting is included at Figure 9.3 of the revised BDAR. These areas are associated with miscellaneous ecosystems and highly disturbed areas.	Refer Appendix H
A map and identification of areas not requiring assessment (as per Table 26)	The BDAR has been updated to include a map illustrating areas not requiring assessment.	Refer Appendix H
Details of future vegetation integrity scores for each vegetation zone.	The BDAR has been updated to include Vegetation Integrity Scores for each zone.	Refer Appendix H
A flood impact assessment should be undertaken.	An updated SMP has been prepared that includes the existing detailed flood modelling associated with the preferred concept design of Elizabeth Macarthur Creek commissioned by Sydney Water and is provided at Appendix G .	Refer Appendix G



Agency/Comment	Response	Reference
	The AAJV report identifies that part of the Bella Vista Station Precinct Site is affected by the 1 in 100 Average Recurrence Interval (ARI) event where no filling or construction works are undertaken (the baseline condition. This area is located approximately at the corner of Unaipon Avenue and Celebration Drive near Lots B4.0 and B3.3 and shown at Figure 4.14 of the SMP. The report assumes that all land outside of the SP2 Infrastructure zone would be filled above the 1 in 100 ARI level to mitigate flood impacts. As the site will be filled as part of future applications, the relevant flood planning levels will either be: The 1 in 100 ARI level from Elizabeth Macarthur Creek plus a 500mm freeboard, or The 1 in 100 ARI overland flow level plus 500mm freeboard. Given the existing flood extents affecting the site demonstrated by the AAJV report and that an adequate flood planning level has already been identified, Landcom is of the view that a further flood impact assessment is not required. Notwithstanding, future applications may include further investigations into flooding impacts and potential changes to finished floor levels, basement design and materials as part of the detailed design process. An overland flow path assessment would also be undertaken for the detailed design of the proposed road reserves to confirm overland flood depths in the 1 in 100 ARI event.	Refer Appendix G
10. Heritage Council of NSW		
 Advised there are no heritage items identified within the Bella Vista Station Precinct and impacts to the items identified in Appendix F of the EIS would be nil to minor. Recommends from the Advisian report would need to be addressed in detail as part of future SSD applications. 	 The "Landcom European Heritage Services for the Bella Vista and Kellyville Precincts – Precinct Wide Heritage Significance and Impact Assessment" report prepared by Advisian and provided with the EIS recommended design considerations to investigate the: opportunity for the design of open space areas to incorporate cues from the historic agricultural and farming land along the Old Windsor Road alignment that supported the growing NSW colony. potential to interpret the '19th century cottage site' through a combination of signage, an archaeological drawing, images and plans and/or artefact/relic displays. 	Refer Appendix A



Agency/Comment	Response	Reference
	 opportunity to name local streets and/or public spaces after the Rudd and James families who were long-term residents of the area and notable in the local community. potential for the form, materials and finish of sandstone 'boundary stones' to be reflected in the design and finish of bollards, street kerbing, wayfinding markers and other similar demarcations. The Design Guidelines have also been updated to reference this report at and would 	Refer Appendix A
	therefore need to be considered as part of future applications.	
11. Environment Protection Authority (EPA)		
 Advised the development is not a Scheduled Activity but noted future developments near the rail line should include requirements for acceptable vibration and ground-borne noise limits from EPA and DECC Guidelines. 	Future applications would be referred to the EPA from either DPIE or THSC depending on the characteristics and location of each DA and their assessment pathway.	N/A
12. Sydney Water		
Existing 300mm DICL watermain in Balmoral Road will need to be extended for water servicing.	Delivery of this service connection would be detailed as part of future stages and applications. No physical works are proposed under this application.	Refer Appendix F
The 250mm recycled watermain in Balmoral Avenue can service the site but would need to be extended by the Applicant on either side of Balmoral Road to service both sides of the development.	Extension of this service connection would be detailed as part of future stages and applications. No physical works are proposed under this application.	Refer Appendix F
The Balmoral Road Carrier has sufficient capacity for wastewater servicing. The Applicant will need to submit a flow schedule for the development as part of their Section 73 application.	Extension of this service connection would be detailed as part of future stages and applications. No physical works are proposed under this application and therefore a Section 73 application is unlikely to occur following the determination of this specific concept SSDA.	Refer Appendix F
Existing stormwater assets will need to be protected and measures to minimise or eliminate potential	It is anticipated future DAs and conditions will consider the protection of existing stormwater assets, including dilapidation reports.	Refer Appendix F



Agency/Comment	Response	Reference
flooding, degradation of water quality, adverse heritage impacts and pipeline easements should be taken where required.	Applications for pipeline easements will take place as part of future applications across the Station Precinct to extend local services.	Refer Appendix F
13. Blacktown City Council		
Raised no issues and did not object.	No response required.	N/A
14. Endeavour Energy		
Confirmed the site can be serviced with power infrastructure by installing feeders from the Parklea Zone Substation.	Details of future substation location and design would be addressed as part of future applications.	N/A
 Raised concern regarding reduced setbacks and location of pad mount substations and additional fire rated construction standards. Endeavour energy has a preference for pad mount substations. 		



3.2. Public Submissions

During the exhibition of the proposal, a total of 12 community submissions were received. Six submissions objected to the proposal. Four supported the proposal and two provided comments.

Key issues and concerns raised by the local community were:

- the proposal is an overdevelopment for the locality and no additional housing, particularly highdensity housing, is needed
- insufficient supporting infrastructure to support the proposal, including:
 - transport/road upgrades
 - o green/open space
 - car parking
 - o pedestrian infrastructure
 - o demand for schools
 - hospital services
- · existing traffic congestion will be exacerbated
- not consistent with existing zoning and incompatible with the lifestyle and character of the locality
- proposed height, scale and setback of future built form
- consistency of the application's design excellence measures
- visual and privacy impacts
- construction impacts (i.e. noise, air quality and off-site car parking impacts).

Each submission and associated responses are provided in Table 10 below. A summary of the issue raised in each submission is provided for brevity. In some cases the actual wording of a submission has been included.



Table 10: Responses to Issues Raised in Public Submissions

Submitter/Issues	Response	Reference
Name Withheld - Objects KELLYVILLE, New South Wales Insufficient supporting infrastructure for additional development. Exiting roads are at capacity, including Balmoral Road. Insufficient metro car park capacity and congestion accessing Old Windsor Road. Lack of traffic measures taken on Norwest Boulevard. The feeder Balmoral Road will not be able to take any more traffic than it can currently take.	Infrastructure This concept SSDA identifies necessary infrastructure and service upgrades to support future development. These works would be subject to detailed design and construction as part of future applications. The Traffic and Transport Assessment (TTA) identifies several road upgrade options to the local road network to mitigate the impact of the Bella Vista Station Precinct so that the road network condition would not worsen as a direct result of the development. These measures include: 1. Strict limits on the number of car parking spaces that new developments will be allowed to provide. 2. A well-connected network of pedestrian and cycling facilities to encourage greater take up of these modes to reduce need for using a car particularly for shorter distance trips. 3. Inclusion of green travel plans to encourage greater use of non-motorised trips. 4. Road infrastructure improvements at intersections and new access roads to ensure that the operation of the surrounding roads would not worsen as a direct result of development of the two precincts and additional traffic generated. Landcom is working with TfNSW to refine the measures and road improvements proposed in order to maximise their benefits so that as well as accommodating the traffic from the SSDA, these improvements will provide wider benefits to the community and alleviate some of the existing problems. The measures identified in the traffic assessment include a recommendation to increase capacity of the intersection of Balmoral Road/Old Windsor Road to accommodate traffic from the two precincts so that there will be no net disbenefit to other traffic.	Refer Appendix D and E



Submitter/Issues	Response	Reference
	The intersection of Norwest Boulevard/Century Circuit and Brookhollow Avenue was upgraded to a signalised intersection prior to the introduction of the Metro North West Line. This improved the performance of the intersection in the afternoon and Saturday peak periods.	Refer Appendix D and E
 Name Withheld - Objects CUMBERLAND REACH, New South Wales Insufficient supporting infrastructure Traffic congestion and impact during construction and operation Routinely takes 1 hour to get from Lexington Drive to Old Windsor Road due to lack of time and space to access Old Windsor Road from Celebration Drive Long delays at intersections The metro has done little to improve local traffic. 	Traffic impacts A core aim of the Bella Vista Station Precinct is to encourage public transport use and reduce the dependency on private vehicles to access services, open space, education and workplaces. The revised TTA has factored in revised yields and identifies several road upgrade options to the local road network to mitigate the impact of the Bella Vista Station Precinct so that the road network condition would not worsen as a direct result of the development. The roundabout at Celebration Drive and Lexington Drive was upgraded to a	Refer Appendix D
	signalised intersection as part of the SSI-5414 approval.	
 Name Withheld - Objects GLENWOOD, New South Wales Traffic congestion and traffic queues Future traffic impacts from changing Parklea Markets to residential development Air quality impacts Noise impacts 	Traffic impacts A core aim of the Bella Vista Station Precinct is to encourage public transport use and reduce the dependency on private vehicles to access services, open space, education and workplaces. The TTA identifies several road upgrade options to the local road network to mitigate the impact of the Bella Vista Station Precinct so that the road network condition would not worsen as a direct result of the development.	Refer Appendix A , B and D
Amenity impacts.	Air quality impacts The EIS included an air quality assessment prepared by GHD which concluded the concept SSDA is not anticipated to result in any adverse air quality impacts. Air quality impacts associated with future construction activities and operation across the Station	



Submitter/Issues	Response	Reference
	Precinct would be assessed in detail as part of future applications for civil works and built form.	Refer Appendix A B and D
	Noise impacts The EIS included a noise impact assessment prepared by GHD. The assessment established noise targets for future indoor and outdoor areas as a result of the existing road and rail infrastructure. Future applications for each development block would assess construction and operational noise emissions (road traffic noise and plant and equipment) on a case by case basis. Amenity impacts on and from future built form would be managed by the Design Excellence process in addition to compliance with the Design Guidelines and ADG.	
Name Withheld - Objects GLENWOOD, New South Wales Concerns over the scale of development and subsequent impacts on traffic at Miami Street and Sunnyholt Road Traffic impacts from additional residential development Buses from the Hills were terminated due to the opening of the metro Car spaces required for all new homes The mixed retail will mean restaurants and late evening traffic as well? Noise and dust during construction Noise during operation and sleep disturbance.	Concerns regarding overdevelopment The Station Precinct was investigated to deliver additional housing supply as new TOD communities and were rezoned with an identified maximum number of dwellings. This 'cap' is specified under Clause 8.9 of THLEP 2019 which states a maximum of 8,400 dwellings can be approved across both precincts. This concept SSDA seeks to set a design framework for a maximum of 3,804 new residential dwellings within the Bella Vista precinct. The design guidelines for the Kellyville Station Precinct under SSD-10343 seeks approval for a maximum of 1,910 dwellings. Therefore, the total development across both sites is 5,714, which is well below the legislated development 'cap' for both precincts. Traffic impacts The TTA identifies a range of traffic improvements for the Bella Vista Station Precinct that aim to accommodate the additional traffic that would be generated so that traffic condition would not worsen as a result.	Refer Appendix D and E
	In 2026, the average vehicle delay on Miami Street is anticipated to: reduce from 313 seconds per vehicle (sec/veh) to 270 sec/veh in the AM peak	



Submitter/Issues Response Reference reduce 266 sec/veh to 114 sec/veh in the PM peak Refer Appendix D and E as a result of the project and road improvements. The average vehicle delay for Sunnyholt Road in in 2036 is anticipated to: fall from 195 sec/veh to 189 sec/veh in the AM peak. slightly worsen from 171 sec/veh to 184 sec/veh in the PM peak. as a result of the project and road improvements. In July 2019 TfNSW announced changes to Hillsbus operations in the Hills District and the North West. The changes built on the then opening of the Sydney Metro Northwest in May 2019. The changes provided more frequent services in the local area to cover the new stations, shopping and medical precincts. The TTA also identified that the existing intersections and roads in the Bella Vista Station Precinct have sufficient capacity to handle construction traffic and these routes would be maintained. Future applications would also include Construction Traffic Management Plans to control hours of construction, placement of noisy plant and equipment, construction access points and identify possible mitigation measures. Car parking The revised car parking rates for new dwellings are consistent with the Guide to Traffic Generating Development which are based off surveys of similar developments located near rail stations. The proposed rates are one measure that aims to encourage active and public transport use and reduce car dependency as part of the new TOD community. The mixed use and retail areas within the proposed residential and commercial lots are intended to support the needs of local residents and workers in the precinct.



Submitter/Issues	Response	Reference
	Air quality impacts The EIS included an air quality assessment prepared by GHD which concluded the concept SSDA is not anticipated to result in any adverse air quality impacts. Air quality impacts associated with future construction activities and operation across the Station Precinct would be assessed in detail as part of future applications for civil works and built form.	Refer Appendix D and E
	Noise impacts The EIS included a noise impact assessment prepared by GHD. The assessment established noise targets for future indoor and outdoor areas as a result of the existing road and rail infrastructure. Future applications for each development block would assess construction and operational noise levels (road traffic noise and plant and equipment) to ensure noise project trigger levels and sleep disturbance levels are met.	
Name Withheld - Objects Norwest, New South Wales Insufficient supporting infrastructure Overdevelopment of high-density residential Likelihood of transport modal shift of new residents Preference for restaurants, cafes and open space.	Infrastructure This concept SSDA identifies the necessary infrastructure and service connections required to support future development. Future infrastructure requirements with detailed design would be confirmed as part of Landcom's Letter of Offer to THSC in preparing a Voluntary Planning Agreement. A core aim of the Bella Vista Station Precinct is to encourage public transport use and reduce the dependency on private vehicles to access services, open space, education and workplaces.	Refer Appendix D
	Concerns regarding overdevelopment The Station Precinct was investigated to deliver additional housing supply as new TOD communities and were rezoned with an identified maximum number of dwellings. This 'cap' is specified under Clause 8.9 of THLEP 2019 which states a maximum of 8,400 dwellings can be approved across both precincts. This concept SSDA seeks to set a design framework for a maximum of 3,804 new residential dwellings within the Bella Vista precinct. The design guidelines for the Kellyville Station Precinct under SSD-10343 seeks approval for a maximum of 1,910 dwellings. Therefore, the total	



Submitter/Issues	Response	Reference
	development across both sites is 5,714, which is well below the legislated development 'cap' for both precincts.	Refer Appendix D
	Land use The proposed land use strategy seeks to facilitate future mixed use, retail and commercial uses along active street frontages consistent with THLEP 2019. This would include opportunities for cafes, restaurants and non-residential uses as part of future applications to provide local services and amenities.	
Rebecca Correa - Objects STANHOPE GARDENS, New South Wales The necessary infrastructure is not there The current schools are at capacity There are no nearby public hospitals The roads are heavily congested and it takes 30-45 minutes to travel 3 blocks on Old Windsor Road The area cannot accommodate development without additional traffic lanes on main roads and new schools.	Infrastructure This concept SSDA identifies the necessary infrastructure and service connections required to support future development. Future infrastructure requirements with detailed design would be confirmed as part of Landcom's Letter of Offer to THSC in preparing a Voluntary Planning Agreement. A core aim of the Bella Vista Station Precinct is to encourage public transport use and reduce the dependency on private vehicles to access services, open space, education and workplaces. Education demand The Bella Vista Station Precinct provides a site for a 1,000 student primary school site to respond to anticipated increase in education demand. Based on demographic trend analysis undertaken as part of the Elton Social Impact Assessment, it is assumed that around 3% of the population will be of high school age, creating potential new demand	Refer Appendix F and G Refer to the Social Impact Assessmen at Appendix M of the EIS.
	for approximately 400 high school places. Glenwood High School is located near to the site and is currently being upgraded. Other nearby public high schools that can service the site include Rouse Hill High School (Rouse Hill) and Kellyville High School (Kellyville). It is acknowledged that Castle Hill High School is currently considered at capacity, however enrolment trends are highly subject to change over time.	



Submitter/Issues	Response	Reference
	The proposed primary school site will also provide additional school capacity in the area.	Refer Appendix F and G
	Consultation with the Department of Education confirmed that existing high school facilities will be able to cope with new demand from the proposal, estimated to be around 400 high school places. Some of this demand (approximately 120 places) is likely to be met by nearby independent high schools.	Refer to the Social Impact Assessment at Appendix M of the EIS.
	Hospital demand Consultation with the Western Sydney Local Health District confirmed that existing hospital infrastructure is meeting all acute demand and can cope with additional new population demand that would arise from the proposal.	
	There are several major hospitals that are considered nearby the site (less than 20-minutes drive). The nearest public hospital is 9km from the site (Blacktown hospital) and the nearest private hospital is located 7km from the site (Norwest). A new public health service is also being planned for Rouse Hill. Blacktown and Mount Druitt hospitals are undergoing expansions that will enhance their capacity.	
Name Withheld - Comments	Pedestrian access	N/A
 NORTH ROCKS, New South Wales Provide additional pedestrian access from western side of Bella Vista Station, towards Glenwood Landcom's original planning provided additional pedestrian access from Emmanuel Terrace to Bella Vista 	Sydney Metro constructed a new pedestrian bridge across Old Windsor Road, north of Celebration Drive, in conjunction with the development of Bella Vista Station to improve the safety and crossing times of pedestrians and provide a connection between the shared paths on either side of Old Windsor Road and the southern station entrance.	
Potential for property resumptions to provide pedestrian connections at the northern end of the station and car park. These could be from the top of Whibley Avenue, Sharrock Avenue and the previously proposed one at Swansea Court.	Sydney Metro has also acquired a property in Swansea Court to safeguard for the potential future construction of a new pedestrian link between Glenwood and Old Windsor Road to supplement existing access at Emmanuel Terrace, Miami Street and Arnold Place. Sydney Metro is monitoring demand for pedestrian and cycling access from Glenwood to the Bella Vista Station Precinct. The results of this monitoring, along with the outcomes of further investigation works, will inform future decisions	



Submitter/Issues	Response	Reference
	about access to Bella Vista Station. Sydney Metro will continue to keep the community updated.	N/A
	A small pedestrian link is currently located on Emmanuel Terrace and provides access between the residential areas of Glenwood and Old Windsor Road.	
Derrick Ginger - Supports	Car parking	Refer Appendix B
 Kellyville, New South Wales The parking station is full everyday and people need to get there early to get a parking space. Recommend additional land is allocated for additional parking. 	While high demand for car parking within the Bella Vista Station Precinct is noted, this concept SSDA does not seek to allocate additional land for commuter car parking. However, additional street parking will be provided alongside new roads as part of the proposed road hierarchy, beyond those built under SSI-5414 and in basements for future commercial, mixed use and residential development. The TTA proposes sustainable car parking rates for future buildings to encourage public and active transport use.	and D
	There are no plans to construct additional commuter car parking at the Kellyville or Bella Vista Sydney Metro Northwest stations. Increasing parking spaces will also result in increased traffic generation. The Bella Vista concept SSDA Design Guidelines will provide additional bicycle, pedestrian infrastructure that connects to existing facilities and encourages patrons, workers and residents to consider other access modes including walking, cycling, buses (feeder and T-Way services), taxi/ride share and kiss and ride.	
Jing Zhang - Supports	The development of the Bella Vista Station Precinct aims to promote public transport	Refer Appendix D
GLENWOOD, New South Wales	use and active transport by locating medium and high-density dwelling types near the	
 Thousands have moved to the northwest in recent years and development of the rail line was a brilliant idea Government should consider how to reduce vehicles 	The land use strategy and mixture of commercial and retail uses has the potential to	
on Old Windsor Road The project might offer locals more jobs.		



Submitter/Issues	Response	Reference
 Donglong Chen - Supports GLENWOOD, New South Wales As noted in Appendix H, a new pedestrian connection from Swansea Court in Glenwood to the pedestrian bridge should be proposed. This will help Glenwood residents benefit from the metro The current walking route is a large circle and is inefficient Preference to catch 616X or 607X from the bus station, but if the Swansea Court access is possible, the metro will be the first option. 	Sydney Metro has acquired a property in Swansea Court to safeguard for the potential future construction of a new pedestrian link between Glenwood and Old Windsor Road. Sydney Metro is monitoring demand for pedestrian and cycling access from Glenwood to the Bella Vista Station Precinct. The results of this monitoring, along with the outcomes of further investigation works, will inform future decisions about access to Bella Vista Station. Discussions about this proposed pedestrian connection are ongoing. Sydney Metro will continue to keep the community updated.	N/A
 Name Withheld - Supports SCHOFIELDS, New South Wales Believes the development will help create more job opportunities and create a better living environment around the area. 	A core objective of the land use strategy for the Bella Vista Station Precinct is to provide additional retail and commercial GFA to leverage off existing employment land in Norwest while also providing jobs for future residents. The land use strategy and mixture of commercial and retail uses has the potential to provide up to 7,700 new jobs generated directly and indirectly as a result of the project.	N/A
 Larissa Rapisardi - Comments BELLA VISTA, New South Wales Increase in traffic noise and cars using Celebration Drive as a rat-run to Balmoral Road It has been increasingly difficult to cross from Brighton Drive to Celebration Drive to catch the metro The proposed pedestrian access leads to the Celebration Drive and Brighton Drive intersection which is difficult to cross The location for a new 4-way intersection on Brighton Drive is questionable in terms of meeting engineering design standards for turning vehicles. Pedestrian 	Road traffic noise Future applications would be required to assess noise impacts, including road traffic noise for the extension of Celebration Drive. Traffic impacts The revised TTA identifies a range of road network upgrades and transport measures that aim to encourage greater use of public and active transport. The road improvements proposed for the Bella Vista Station Precinct aim to mitigate the traffic impacts from future development of the site. Table A1.1 in the TTA summarises the identified road upgrades to accommodate the additional traffic from the Bella Vista Station Precinct.	Refer Appendix A , B , D and L



Submitter/Issues Response Reference

priority is considered warranted, where there are safety concerns at this location

- Sight line concerns along Celebration Drive
- Concerns over building setback and pathway width along Celebration drive with potential for reduced landscape screening and visual impact
- The concept proposal allows for no landscaping setbacks on Celebration Drive and is out of context for the surrounding Business Park and residential areas and is detrimental to the opportunity for landscaping
- Setbacks should be increased along Celebration Drive to provide additional ground level landscaping
- The setbacks proposed on Celebration Drive (Bella Vista Town Centre) are minimal and do not allow for landscaping or a buffer from future buildings to the creek. Building setbacks should be increased to 2-5m at ground level to accommodate landscaping.

The Design Guidelines identify potential future creek crossings for pedestrians to access the Bella Vista Station. These crossings would form part of future applications and will require additional consultation with Sydney Water and the Natural Resources Access Regulator (NRAR).

Sight lines on Celebration Drive and New Brighton Drive

The existing road layout and geometry of Celebration Drive was delivered under the SSI-5414 approval for the construction of the MNWL.

Detailed design of future intersection upgrades at Celebration Drive and Brighton Drive would form part of future applications as the Bella Vista Precinct is developed. This process would include sight line analysis. Sydney Metro is monitoring traffic volumes before and after the opening of MNWL. When current and future monitoring blocks are completed it will be possible to determine if there is increased usage of Celebration Drive and Mawson Avenue to access Balmoral Road.

Building setbacks

The Design Guidelines propose a building setback regime that aims to provide a dense urban form that maximises views and access of future residential dwellings to Elizabeth Macarthur Creek. Zero metre setbacks for Lots C1.2 and C2.2 and 2m setbacks for residential uses for Lot C2.3 along Celebration Drive would provide this desired level of connectivity. Increasing the ground floor setback for development block C2.3 would result in a narrow building floor plate that may cause difficulties in designing future apartments in accordance with the ADG.

Furthermore, existing vegetation creates a dense landscape buffer that would screen future construction work and built form from dwellings to the east of block C2.3. Notwithstanding, the Design Guidelines have been revised to include deeper setbacks between 2m and 5m along the northern and southern frontages of development blocks between Balmoral Road and Celebration Drive. An amended clause 4.6 variation request is included with this RtS addressing the amended setbacks.

Refer **Appendix A**, **B**, **D** and **L**



4.0 Conclusion

This RtS report has been prepared to satisfy Section 4.39 of the EP&A Act and Section 58A of the EP&A Regulation. It has been prepared to respond to the issues raised during the public exhibition of SSD 10344 Bella Vista Station Precinct. All submissions received have been reviewed and carefully considered. Amendments to the application have been made to address issues raised in submissions. These include:

- updates to the legal description of the site to capture recent subdivision works
- a revision to the proposed delivery of Affordable Housing across the site
- an amended land use strategy with revised potential dwelling yields and areas of:
 - o a minimum residential GFA of 204,675m² (compared to 151,000m² in the EIS)
 - o a potential maximum residential GFA of 304,770m² (compared to 305,770m² in the EIS)
 - o revised potential residential dwelling yields of:
 - a minimum of 2,559 dwellings (compared to 2,662 under the EIS)
 - a maximum of 3,804 dwellings (compared to 3,822 under the EIS)
 - providing a minimum of 5% of Affordable Housing between the Kellyville and Bella Vista Station Precincts
 - o revised commercial GFA within the station precinct of:
 - a minimum of 116,815m² (compared to 163,900m² in the EIS)
 - a maximum of 151,000m² (compared to 167,080m² in the EIS)
 - o revised retail GFA within the station precinct of:
 - a minimum of 13,115m² (compared to 3,667m² under the EIS)
 - a maximum of 15,000m² (compared to 14,000m² in the EIS) of retail GFA within the station precinct.
 - revised community GFA of 15,000m² consisting of 4,000m² for the proposed community facility (compared to 3,250m² in the EIS) and 11,000m² associated with the Bella Vista school site
- revised and updated Design Guidelines that:
 - o provide revised ground level setbacks of:
 - 2m ground level setbacks for all uses excluding commercial buildings across the site



- zero metres for non-residential ground floor uses along commercial streets and public plazas.
- amend the concept masterplan to clarify potential future connections from the Bella Vista Station Precinct to existing local roads, adjacent private lands and across Elizabeth Macarthur Creek.
- o revise the car parking rates that would apply to future development within the station precinct SSDA site to encourage public transport use as recommended by TfNSW.
- o amend street hierarchy, road typologies and access points surrounding future development blocks and potential future connections to the existing road network.
- expand public and communal open space, landscaping and bicycle controls
- include a minimum requirement for terraces in development blocks A2.0, A2.1 and A2.2 in the Local Hub character area.
- provide retail uses in Lot A1.0 next to the proposed primary school site with a corresponding reduction in residential yield to accommodate this use.
- o amend Lots A2.0, A2.1, B1.0, B1.1 and B3.3 to increase the depth of each building envelope to accommodate a greater proportion of taller building elements.
- a revised street tree planting strategy with deep soil specifications
- revised ESD measures to seek Green Star Communities certification or equivalent for the Kellyville and Bella Vista Precincts and target of a minimum five-star rating for the development areas outside the existing infrastructure and roads.

The proposal will provide the planning and design framework to guide future development in a location that benefits from a high level of public transport access at the new Bella Vista Station. The mix and allocation of land uses proposed across the station precinct are consistent with the existing land use zoning under THLEP 2019. They are also considered appropriate in this location to capitalise on the NSW Government's substantial public transport investment, ensuring that future residents, workers and visitors are able to enjoy the significant benefits offered by the Sydney Metro project.

The proposal builds upon previous strategic planning undertaken by both THSC and DPIE, wherein land surrounding Bella Vista Station was identified for urban renewal, and the importance this role would have in supporting the creation of a vibrant and active place around the station.

The urban renewal of the station precinct in conjunction with the implementation of the Masterplan layout will ensure the delivery of an integrated station precinct that provides housing, employment and recreation opportunities that contribute to an active and vibrant transport precinct. This will ensure that future development within the station precinct under the framework established by this concept SSDA complements the operations of Bella Vista Station and supports the creation of a TOD precinct, while ensuring that this future development does not unduly result in any adverse impacts on the developing built environment.



Having regard to the above, the amended concept SSDA is considered to warrant approval for the following key reasons:

- The development blocks and proposed layout enables a degree of flexibility in the future detailed building design to enable further refinements to facilitate a high-quality built environment outcome across the site, whilst providing an indication on the maximum residential yields attainable on each block.
- The proposal directly responds to the demand for provision of additional housing in locations close to jobs, consistent with the 30-minute city concept, which would provide greater residential amenity and contribute to reduced congestion associated with longer commutes.
- Potential impacts of any future buildings on proposed public domain and open space areas are shown to be minimal and will ensure amenity impacts are appropriately mitigated through the application of proposed Design Guidelines.
- An extensive program of consultation has contributed to the formation of this application, which
 has led to the provision of a development form which reflects the comments of relevant
 stakeholders.
- The proposal includes a robust urban design framework supported by Design Guidelines and a Design Excellence Strategy to ensure design excellence is achieved in future detailed built form.
- The concept SSDA would not result in any adverse social or economic impacts and would result
 in several significant benefits including the provision of increased housing diversity, open space
 and public domain infrastructure with high levels of amenity.
- The site is suitable for the proposed development.

Overall, it is considered that the proposal affords substantial benefits for the surrounding locality, which would help to contribute to the strong legacy of the MNWL project. Where potential impacts have been identified, these have been considered and evaluated as being appropriate in the context of the site. On this basis, it is considered approval of the concept SSDA is warranted.



Glossary and Abbreviations

Term	Definition
Applicant	Landcom, on behalf of Sydney Metro
AHIS	Aboriginal Heritage Impact Statement
BAM	Biodiversity Assessment Method
BDAR	Biodiversity Development Assessment Report
CHP	Community Housing Provider
concept SSDA	A concept development application as defined in section 4.22 of the EP&A Act, as 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. Note: Also refer to definition for State significant Development (SSD)
CPTED	Crime Prevention Through Environmental Design
CPW	Cumberland Plain Woodland
DCP	Development Control Plan
Detailed SSD Application	The subsequent detailed Development Applications made after a concept SSDA is approved, that seeks consent to carry out the proposal.
DPIE	Department of Planning, Industry and Environment
EP&A Act	Environmental Planning and Assessment Act 1979
EP&A Regulation	Environmental Planning and Assessment Regulation 2000
EIS	Environmental Impact Statement titled "Sydney Metro Northwest: Bella Vista Station Precinct Concept State Significant development Application (SSD 10344)" dated 3 October 2019
FSR	Floor Space Ratio
GA NSW	Government Architect NSW
GFA	Gross Floor Area
GLFA	Gross Lettable Floor Area
GPT	Gross Pollutant Trap
Heritage item	An item of environmental heritage listed in Schedule 5 of <i>The Hills Local Environmental Plan 2012</i> or on the State Heritage Register under the <i>Heritage Act 1977</i> .
Landcom	The Applicant for the concept SSDA.
LSPS	Local Strategic Planning Statement
Minister	Minister for Planning and Public Spaces
MNWL	Metro North West Line
NLA	Net Lettable Area



Term	Definition
NRAR	Natural Resources Access Regulator
OSL	Office of Strategic Lands
RtS	Response to Submissions
SAII	Serious and Irreversible Impact
Secretary	Secretary of the NSW Department of Planning, Industry and Environment, or their delegate
SEARs	Secretary's Environmental Assessment Requirements
SDRP	State Design Review Panel
SMNWP Program	Sydney Metro Northwest Places Program
SMP	Stormwater Management Plan
SRD SEPP	State Environmental Planning Policy (State and Regional Development) 2011
SSD	State significant development as defined by section 4.36 of the EP&A Act
SSI	State significant infrastructure, as defined by section 5.12 of the EP&A Act
SSI 5100	The approval under the EP&A Act of a modification to the transitional staged SSI approval (MP 06_0157) and for major civil construction works for North West Rail Link Stage 1 project between Epping and the Sydney Metro Trains Facility. SS1 5100 was approved by the Minister for Planning on 25 September 2012 and was amended on 18 April 2013 (SSI 5100 MOD 1).
SSI 5414	The approval under the EP&A Act for North West Rail Link Stage 2 comprising the construction and operation of the railway, station construction and operation. SSI-5414 was approved by the Minister for Planning on 8 May 2013 and was amended on 20 May 2014 (SSI-5414 MOD 1).
THSC	The Hills Shire Council
TfNSW	Transport for NSW
TOD	Transit oriented development
VRZ	Vegetated Riparian Zone



Appendix A Updated Urban Design Report



Appendix B Updated Design Guidelines



Appendix C Updated Landscape Masterplan and Open Space Strategy



Appendix D Updated Traffic and Transport Assessment Report



Appendix E Car Parking Technical Memorandum



Appendix F Updated Utilities and Servicing Report



Appendix G Updated Stormwater Management Plan



Appendix H Updated Biodiversity Development Assessment Report



Appendix I Updated Ecologically Sustainable Development Memorandum



Appendix J Updated Economic Impact Assessment and Benefits Statement



Appendix K Amended Clause 4.6 Variation Request



Appendix L State Design Review Panel Response



Appendix M Final Aboriginal Heritage Impact Statement



Appendix N Updated Design Excellence Strategy



Appendix O Draft Sydney Metro Northwest Places (SMNWP) Public Art Guidelines