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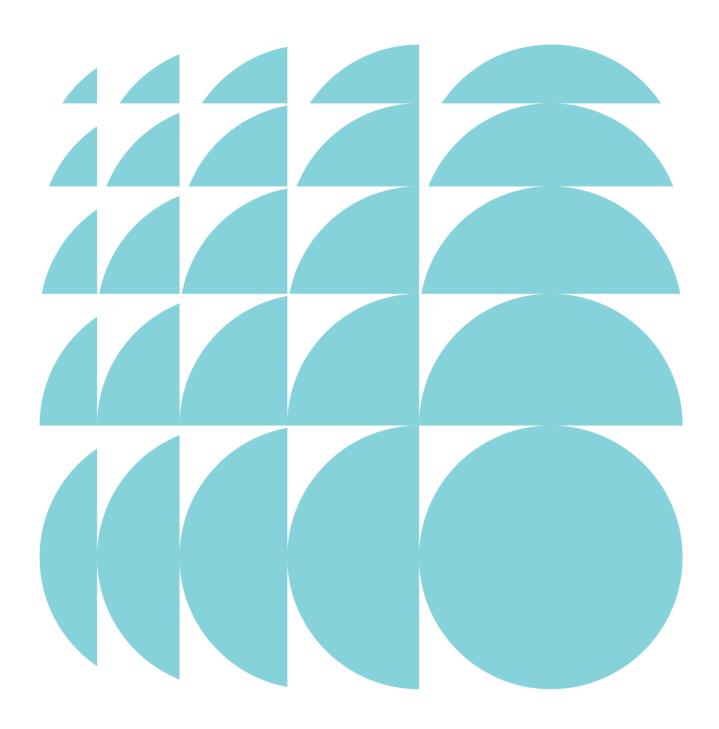
## Response to Submissions Edmondson Park South Concept Plan (MP 10\_0118) – MOD 12

Town Centre West School and RP3 Apartments Modification (MOD 12)

Submitted to Department of Planning and Environment

On behalf of Frasers Property Australia

16 June 2022 | 218133



Ethos Urban acknowledges the Traditional Custodians of Country throughout Australia and recognises their continuing connection to land, waters and culture.

We acknowledge the Gadigal people, of the Eora Nation, the Traditional Custodians of the land where this document was prepared, and all peoples and nations from lands affected.

We pay our respects to their Elders past, present and emerging.

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Indicative layout (only) of Ed. Square showing location of school in north-west quadrant

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#### 1.0 Introduction

This Response to Submissions (RTS) is submitted to the Department of Planning and Environment (DPE) to respond to submissions and key issues raised during the public exhibition of the 12<sup>th</sup> Section 75W Modification Application to Concept Plan Approval MP 10\_0118 (MP 10\_0118 MOD 12; MOD 12), which was lodged pursuant to clause 3C, Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017* (Savings and Transitional Regulation).

The modification was publicly exhibited from 18 January 2022 to 31 January 2022. A total of thirteen (13) submissions were received, including six (6) submissions from Government bodies and agencies; and seven (7) submissions from members of the public.

Key issues raised include:

- Relationship to MOD 11.
- Open Space and Landscape Design, including:
  - Overshadowing of the Town Park.
  - Impacts to the Regional Park.
  - Deep soil, canopy cover and species selection.
- Urban Design, including:
  - Building heights and the transition in height from Town Centre Core to the Residential Precincts.
  - Correlation between proposed heights and GFA.
  - Orientation of the school building.
  - Overshadowing within the Town Centre Core.
- Traffic and Transport.
- · Bushfire Safety.
- · Flooding, Stormwater and Water Cycle Management.

The applicant Frasers Property Australia (Frasers) and its specialist consultant team have reviewed and considered all issues raised.

This report, prepared by Ethos Urban on behalf of the applicant, sets out the responses to the issues raised and includes design amendments made in accordance with Clause 3BA(5B) of Schedule 2 of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017.* 

This report should be read in conjunction with the original Environmental Assessment Report (dated 2 December 2021) and other supporting documentation appended to this report (see Table of Contents).

In accordance with Condition 1.3 of the Concept Approval, future development must demonstrate consistency with the Public Domain Plan and the Design Guidelines. Other indicative design documents including the Urban Design Report and Illustrative Design Scheme Report are provided to inform the Concept Approval and assist with DPE's assessment of the Concept Plan Modification. Future development at the site may not take on the exact form presented in the Illustrative Design Scheme Report, provided it remains consistent with the Concept Approval, Public Domain Plan and Design Guidelines.

## 2.0 Background

In December 2021, Frasers lodged an application for amendments to the Concept Plan through a Section 75W Modification Application (MOD 12). MOD 12 as originally lodged sought consent for the following, to allow for the future development of a school in the north-west quadrant of the Ed. Square Town Centre:

- Amend the Ed. Square Design Guidelines (Design Guidelines) to:
  - Update the vision, principles, key elements and urban structure to reflect the introduction of the school and new relocated High Density Residential Precinct.
  - Provide design guidance for future development of the school and the High Density Residential Precinct.
- Introduce the Ed. Square Public Domain Plan Town Centre West and RP3 Modification 12 (Public Domain Plan) to guide the future design of public domain relating to:
  - Town Square West (an extension of the existing town square through Town Centre West).
  - The school in the North-Western Quadrant.
  - The High Density Residential Precinct.
- Introduce maximum Gross Floor Area (GFA) and building heights to the High Density Residential Precinct.
- Amend the existing maximum height and GFA for the Town Centre Core Quadrants to accommodate the school.
- Corresponding amendments to the conditions of approval as required to accommodate the above changes.

The Modification Application seeks to facilitate the required future development of a new NSW Department of Education secondary school in the North-West Quadrant of the Town Centre. The school will deliver important infrastructure to serve the growing population of the local area in a highly accessible location. Its integration into the town centre also reflects Fraser's on-going commitment to make Ed Square the benchmark for mixed use places. The introduction of the school will necessitate relocation of approved residential apartments out of the Town Centre Core to the Residential Precinct 3 Stage 9 (now known as the 'High Density Residential Precinct'), with no additional dwellings proposed beyond the currently approved total dwelling yield.



Figure 1 Indicative layout (only) of Ed. Square showing location of school in north-west quadrant Source: Plus Architecture / Terroir

#### 3.0 Submissions Received

During the public exhibition period of MOD 12 from 18 January 2022 to 31 January 2022, a total of thirteen (13) submissions were received, including:

- Six (6) submissions from Government bodies and agencies.
- Seven (7) submissions from members of the general public.

A summary of submissions received is provided in the below subsections.

## 3.1 Government and Agency Submissions

A total of six (6) submissions were received from the following local and state Government bodies and agencies:

- Liverpool Council (Council).
- Endeavour Energy.
- DPE Environment, Energy and Science Group (EESG).
- Heritage NSW.
- Heritage NSW Aboriginal Cultural Heritage (ACH).
- · Transport for NSW (TfNSW).

Additionally, DPE (as the consent authority) also provided its own Key Issues Letter dated 28 February 2022. All Government agency submissions provided comments and none opposed the modification, though a number of submissions raised concerns around specific elements of the proposal, and/or provided recommendations.

A detailed response to each agency submission has been prepared by Ethos Urban at **Appendix A** and is supported by other consultants' inputs and documentation (refer to Table of Contents). Changes to the proposal in response to submissions are described in **Section 5.0**.

## 3.2 Public Submissions

A total of seven (7) submissions were received from members of the general public. A detailed response to each public submission has been prepared by Ethos Urban at **Appendix B**.

## 4.0 Key Issues and Response

This section of the report provides a summary response to key issues raised by DPE, other Government agencies and bodies, and members of the general public during public exhibition. This includes the following key issues:

- Relationship to MOD 11.
- · Open Space and Landscape Design, including:
  - Overshadowing of the Town Park.
  - Impacts to the Regional Park.
  - Deep soil, canopy cover and species selection.
- · Urban Design, including:
  - Building heights and the transition in height from Town Centre Core to the Residential Precincts.
  - Correlation between proposed heights and GFA.
  - Orientation of the school building.
  - Overshadowing within the Town Centre Core.
- Traffic and Transport.
- · Bushfire Safety.
- Flooding, Stormwater and Water Cycle Management.

Where not addressed below, a response to each of submissions is also provided in **Appendix A**, and members of the general public in **Appendix B**. An overview of the key issues raised and a response to each is provided below.

## 4.1 Relationship to MOD 11

#### Issue

DPE and Council both noted that the proposed plans and documents include changes that are proposed under MOD 11. Both noted that if MOD 11 was not finalised prior to the determination of MOD 12, the documents would have to be updated accordingly prior to determination.

#### Response

At the time the submissions to MOD 12 were received, both MOD 11 and MOD 12 were concurrently under assessment by DPE. Nonetheless, MOD 11 was approved by DPE on 6 May 2022. The MOD 12 documents reflect the MOD 11 approval where relevant, to ensure consistency between the documentation in the MOD 12 application (although these changes were approved in MOD 11).

#### 4.2 Open Space and Landscape Design

## 4.2.1 Overshadowing of Town Park

## Issue

DPE, Council and several public submissions noted that the proposal would result in some overshadowing of the Town Park. DPE requested that a comparison of the shadows cast by the approved, MOD 11 and MOD 12 proposals be provided to allow for further clarification of the overshadowing impacts.

#### Response

A comparison between the shadows cast on the Town Park, mid-winter, between the indicative reference design for MOD 11 and MOD 12 has been provided at **Appendix D** for comparison. We note that since the time of writing of the Request RtS letter, MOD 11 has been approved. Therefore MOD 11 represents the approved configuration.

A best practice solar access requirement to preserve sunlight to the Town Park has been built into the planning controls and is included the Design Guidelines:

DS16.3 Residential apartment buildings do not prevent the adjoining Town Park and Local Park (immediately to the south) achieving 50% solar access for 4 hours mid-winter

The assessment shows that while there is an increase in shadows cast to the park under MOD 12, over 50% of the park receives at least four hours of sunlight on the shortest day of the year, which is a suitable outcome.

Any future development application in the High Density Residential Precinct will be required to demonstrate compliance with this Design Solution in the Design Guidelines. This amount of sunlight protection to the Town Park is representative of best-practice across Sydney and will result in a high amenity public park for residents and visitors of Ed. Square.

## 4.2.2 Impacts to Regional Park

#### Issue

DPE and EESG requested that further assessment of the impacts to the Regional Park to the west of the school be provided, in particular due to the introduction of the school use and the potential for an increased number of people accessing the Regional Park. An assessment of the direct and indirect impacts in accordance with the National Parks and Wildlife Service (NPWS) "Developments adjacent to NPWS lands: Guidelines for consent and planning authorities (2020)" was requested.

#### Response

Further consideration of the potential use of the Regional Park has been undertaken in preparing this RtS. SINSW are still to confirm final utilisation of the adjacent portion of the Edmondson Regional Park – which will be subject to final timetabling resolution by SINSW, and development plans being resolved by NSW National Park and Wildlife after land transfer from Landcom. SINSW have indicated that the park would likely be utilised for some outdoor learning opportunities for selected classes throughout the school day. The walking paths throughout the park will also be utilised for school students travelling to and from the Zouch Road playing fields.

NSW National Parks and Wildlife Service have confirmed the suitability of the adjacent park for this usage, they have been involved in these discussions, including a site walk between all parties on 11 April 2022. SINSW are working with the NSW National Parks and Wildlife Service to see if there is an opportunity to lease an area of the park to provide this resource for students. Commitment between SINSW and the NSW National Parks and Wildlife Service would be via a Lease Agreement. No discussion on the detail of this written agreement, such as annual costs and management obligations has occurred. NSW National Parks and Wildlife Service have also confirmed that it has always been their intention to encourage active use in this portion of the Edmondson Regional Park – and they believe there is capacity within their current plans to accommodate this increased number of people.

The NPWS Guidelines state that consent authorities need to consider ten issues when assessing proposals adjacent to NPWS land and, in particular, their impacts on the park, its values and NPWS management of the park. An assessment of MOD 12 against the ten issues in the Guideline is provided in **Table 1**. Note that many of the issues relate to detailed proposals for construction works and the erection of buildings and are thus not relevant to MOD 12.

Table 1 Assessment of MOD 12 against NPWS Guidelines for Proposals Adjacent to NPWS Parks

Issue	Comment	
Erosion and sediment control	Subject to future development applications that seek approval for construction works.	
Stormwater runoff	Subject to future development applications that seek approval for construction works.	
Wastewater	Subject to future development applications that seek approval for construction works.	
Management implications relating to pests, weeds and edge effects	Subject to future development applications that seek approval for construction works.	
Fire and the location of asset protection zones	An amended Asset Protection Zone of 43m from the edge of the park has been proposed. The APZ will comprise managed land outside of the Park and does not	

Issue	Comment	
	require any works or management of the Park itself. Refer to <b>Section 4.5</b> and <b>Appendix I</b> for further detail.	
Boundary encroachments and access through NPWS lands	There are no boundary encroachments or works proposed within the Regional Park. Access will be limited, with some outdoor teaching opportunities and access via the park's trails utilised by school staff and students.	
Visual, odour, noise, vibration, air quality and amenity impacts	Subject to future development applications that seek approval for construction works.	
Threats to ecological connectivity and groundwater-dependent ecosystems	Subject to future development applications that seek approval for construction works. No development is proposed within the park.	
Cultural heritage	Cultural heritage has been considered in the Concept Plan approvals to date and MOD 12 does not significantly alter the approach to cultural heritage. The future SSDA for the school will demonstrate how the future school design and operation addresses the GANSW Connecting with Country Framework.	
Road network design and its implications for continued access to the park.	MOD 12 does not seek to alter the road network in the vicinity of the Regional Park.	

MOD 12 seeks to modify the existing Concept Plan to allow for the future development of a school in the north-west quadrant and residential apartments in the High Density Residential Precinct. The modification does not seek approval for the construction of any development. Therefore, as many of the above considerations relate to development and construction activities, they will be considered at the appropriate future development application. To the extent that MOD 12 seeks to modify the Concept Plan, the primary impact to be considered is access to the Regional Park associated with the new adjacent school use. As described above, the park may be used for some outdoor education and for informal access via the park's paths/trails. Access to the Regional Park will be legal and in accordance with the NPWS Park Management Objectives.

Further details relating to access to the Regional Park by the school will be provided with the SSD Application for that development, which is expected to be lodged later in 2022.

Consultation has also been undertaken with NPWS which confirms potential use of the park by the school, as described above. This included a site walk between all parties on 11 April 2022.

## 4.2.3 Deep soil, canopy cover and species selection

#### Issue

DPE and EESG requested that the proposed MOD 12 amendments consider an increased number of local native provenance trees in the landscape species selection throughout Ed. Square.

## Response

The landscape strategy seeks to celebrate and connect with surrounding Cumberland Plain Woodland and historic planting at the site, while also ensuring that species selection will result in viable vegetation growth. In general, there will be proposed mix of local native and exotic deciduous tree species, with a focus on native species throughout the public domain. The Public Domain Plan has been amended to include a design target of 75% native groundcovers and tree planting throughout the public realm at Eq. Square, with the final planting selections being guided by micro-climatic conditions to ensure long-term viability (refer to page 4 of **Appendix F**). Local native provenance plants are encouraged where they would be viable. The Urban Design Report has also been updated to reflect this inclusion, for consistency (**Appendix G**).

Each future DA is required to demonstrate consistency with the Public Domain Plan in accordance with Condition 1.3 of the Concept Plan Approval. We note that the 75% native species target applies to the entire Ed. Square site (Frasers Town Centre) and not just the scope/boundaries of whichever DA is being assessed at the time.

While connection to vegetation of the Regional Park and planting of native species is important, there are reasons that some exotic trees are required in certain locations, including:

- Landscape Character: The Town Centre West project sits in the transition zone between the plaza and the Regional Park, therefore it is important to extend the character of the deciduous trees of the East Plaza to achieve a consistent character, as the tree species shift to the local native varieties.
- Light: Providing deciduous trees to the Town Square provides great amenity year-round through allowing light to penetrate the space in winter and provide shade in summer.
- Success: Typically, exotic species have a greater chance of success when planted in a podium condition.

For the reasons above, the design target of 75% native species is considered appropriate and will allow for a balance of connection to surrounding ecologies and successful planting where native species may not be the most appropriate choice.

#### Issue

DPE and Council suggested that a higher tree canopy coverage target be considered, beyond the 40% canopy target provided for public domain areas in the Public Domain Plan. Council stated that the proposed canopy target did not comply with provisions in the draft SEPP Design and Place (2021).

#### Response

It is also noted that the Edmondson Park South Concept Plan is predicated on the establishment of 72ha of regional parkland vegetation to enable the creation of a medium – high density Ed. Square Town Centre. The Mod 4 approved Public Domain Plan did not include a target for canopy coverage. The MOD 12 Public Domain Plan (for Town Square West) seeks to include a 40% canopy coverage target for the public domain areas, where there was previously not a target. The target is considered appropriate for the location and context of the site, which is an urban, mixed use precinct adjacent to a Regional Park.

We note that the draft SEPP Design and Place (2021) has no statutory weight or requirement for consideration of any application under assessment and does not apply to this Concept Plan Modification. The draft SEPP has been repealed since the submission made by Council on MOD 12. Therefore, it is not a matter for consideration.

The MOD 12 Public Domain Plan prevails over previously approved Public Domain Plans to the extent of any inconsistency and future DAs will be required to demonstrate consistency with the Public Domain Plan.

#### Issue

DPE requested that additional justification be provided for the amendments to the deep soil requirements in the Design Guidelines.

#### Response

The Edmondson Park South Concept Plan is predicated on the establishment of 72ha of regional parkland vegetation to enable the creation of a medium-high density Ed. Square Town Centre (see **Figure 2**). This creates a reasonable balance of impacts such as preservation of significant open space tree canopy and deep soil to enable the Town Centre which will feature denser development, homes and jobs to leverage the railway infrastructure at Edmondson Park. MOD 4 always envisioned a consolidated basement beneath the Town Centre which cannot support deep soil.

There has been conflicting interpretation of how deep soil should be considered in the local authority assessment of detailed applications facilitated by the Concept Plan. Accordingly, the Design Guidelines have been amended to include site-specific provisions relating to the provision of deep soil, where specific provisions did not previously exist.

Accordingly, due to some areas of the site being highly urban and built over basement structure, it is not possible for these areas to achieve true deep soil provision. For these areas, the deep soil requirements are effectively "achieved" within the neighbouring Regional Park, which is directly across Macdonald Road from the Town Centre Core and covers 150 hectares. The Town Centre benefits from proximity to this large park. Nonetheless, Frasers is still committed to providing high quality vegetation and tree planting within the Town Centre. DS3.6 and DS3.7 were included in the Design Guidelines to recognise that the Town Centre is constrained by basement and podium structures, and where landscaping may not meet the strict definition for deep soil due to these constraints, on-

structure planting can be implemented. This is important for assessing future individual DAs that may have site areas that are entirely confined to the footprint of the basement structure. Frasers and the design team have taken on detailed landscaping advice relating to the success of trees and other vegetation using on-structure planters which has led to successful planting in the completed sections of the Town Centre Core East. MOD 12 seeks to build on this success and acknowledge how deep soil and successful landscaping can be provided in the remaining sections of the Town Centre.

In addition, the Public Domain Plan has been amended to set a target of 20-30% of the area of the new Town Square West to be deep soil planting (this will not be on-structure planting). This is a significant change from MOD 4 which did not envisage any deep soil in the Town Centre core and will improve the landscaped connection between the Town Centre Core and the adjacent Regional Park.

Future development applications will be required to demonstrate consistency with the Design Guidelines and the Public Domain Plan.

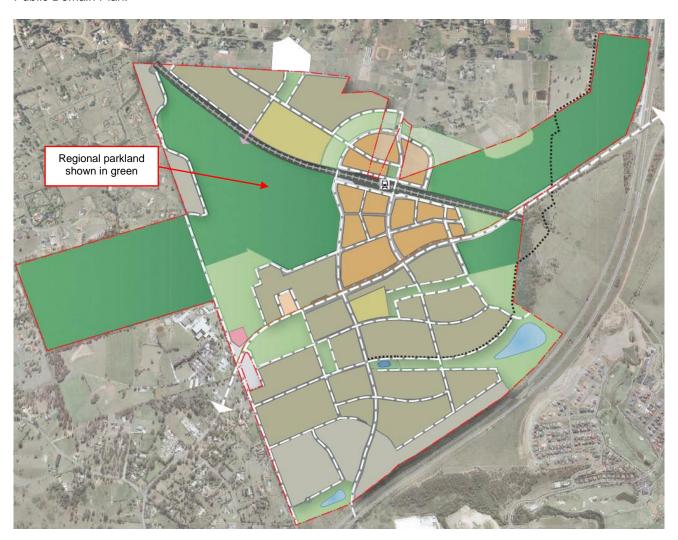


Figure 2 Edmondson Park South Concept Plan layout

## 4.3 Urban Design

## 4.3.1 Building height and transition

#### Issue

DPE and Council provided a recommendation that the maximum permissible height for the High Density Residential Precinct should be lower than, or equal to, the tower on the opposite side of Soldiers Parade to achieve a transition in built form towards the Medium Density Precinct. They also recommended that the Design Guidelines be amended to include additional controls that would encourage a transition from the Town Centre Core to the Medium Density Precinct in the east.

#### Response

A Design Response has been provided by Plus Architecture at **Appendix D** which details the proposal and how it achieves an appropriate height and transition to surrounding development in Ed. Square.

The proposed heights in the High Density Residential Precinct have been driven by the following considerations:

- Preserving appropriate levels of sunlight to the Town Park.
- Retaining the same overall residential yield across Ed. Square, with the inclusion of the school.
- Achieving compliance with the Design Guidelines and the Apartment Design Guide (ADG).
- Relating to, and transitioning between, the Town Centre Core (in its entirety not just Building 12 and 13) and the Medium Density Residential Precincts.

The proposed maximum building heights in the High Density Residential Precinct step down from north to south and can facilitate a design that would allow at least 50% of the Town Park to achieve four hours sunlight on 21 June (the shortest day of the year). This was a key determining factor in prescribing the heights for the precinct. Any future development application at the site would be required to meet this requirement as depicted in the Design Guidelines as submitted with the application (DS16.3 described in **Section 4.2**).

The need for a transition between the Town Centre Core and the Medium Density Precincts is understood and has been a fundamental consideration in the proposed controls and indicative reference scheme. However, the transition needs to be considered more broadly, in the context of the entire Ed. Square Precinct, which includes the Landmark Tower and School building, not just the directly adjacent Building 12 and Building 13. As shown in **Figure 3**, further west of Building 12 and Building 13 are the Landmark Tower, of approximately 20-storeys, and the school building of approximately 10-storeys. With these buildings taken as the highest datum point for Ed. Square, the Indicative Reference Scheme for the High Density Residential Precinct does in fact provide an appropriate transition from the Town Centre to the adjacent Medium Density Residential Precincts, as well as to the Town Park and the need to redistribute dwellings from the NE quad to the High Density Residential Precinct. This transition is further demonstrated in the north and south elevations shown at **Figure 4**. It is clearly shown that across the entire Ed. Square context, there will be an appropriate transition from the Landmark Tower in the Town Centre West to the Medium Density Precinct 3 in the west. Accordingly, Building 12 and 13 should not be used as constraints to responsible planning in the High Density Residential Precinct.

In addition, the indicative reference scheme submitted with the application included a 2-3 storey podium that referenced the scale of the townhouses in the Medium Density Residential Precincts, to provide an appropriate streetscape scale and to assist with the transition in height to tower elements in the High Density Residential Precinct and the Town Centre Core. This podium "base" aligns with the adjacent town houses and eat street scale creating consistency in height, character and materiality. This was reflected in the Design Guidelines at DS16.2, which required a 2-3 storey podium to be provided within the High Density Residential Precinct at all interfaces with the Medium Density Residential Precincts and the Town Park.

The proposed maximum height of the northern portion of the High Density Residential Precinct also contributes to marking the corner of Soldiers Parade in tandem with Building 13 when viewed from the north (near the train station), which is an important urban design and wayfinding concept. This is shown in an indicative view from Soldiers Parade to the north of Ed. Square at **Figure 5**. **Figure 5** also shows a view from further south along Soldiers Parade, where the transition is more evident (from a more sensitive view near the Town Park).

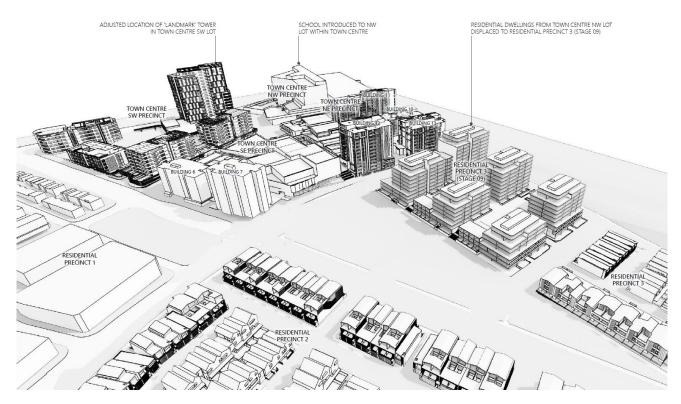
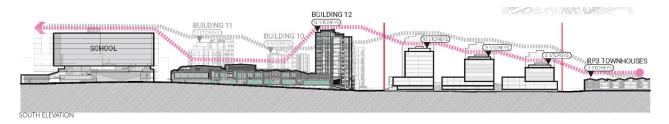


Figure 3 3D image of Ed. Square and the Indicative Reference Scheme

Source: Plus Architecture and Terroir



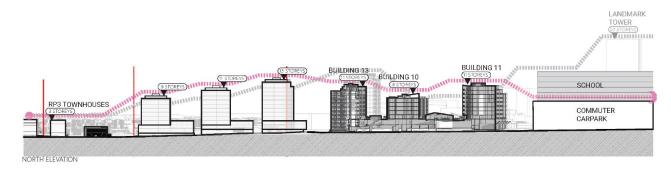
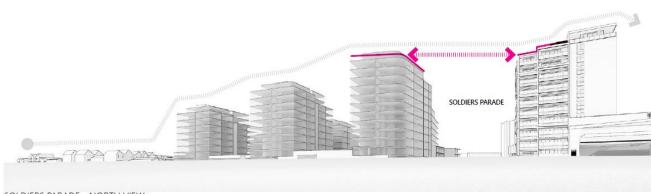


Figure 4 North (bottom) and South (top) Elevations of Ed. Square Town Centre

Source: Plus Architecture and Terroir



SOLDIERS PARADE - NORTH VIEW

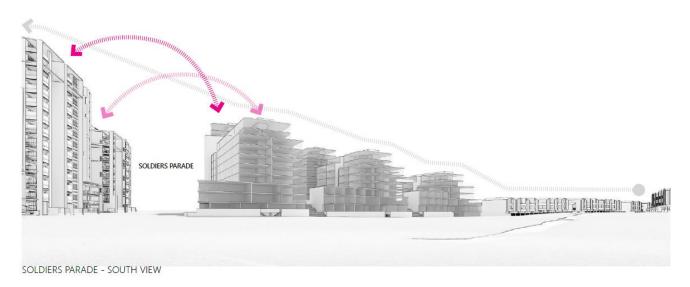


Figure 5 View of Ed. Square indicative reference scheme from north (top) and south (bottom) Soldiers Parade Source: Plus Architecture

Therefore, Frasers and the design team do not believe that a reduction in the proposed maximum building height for the High Density Residential Precinct is appropriate, since the proposed height will result in development that will transition from the taller portions of the Town Centre Core as well as providing appropriate levels of sunlight to the Town Park and marking a key corner at Soldiers Parade when viewed from the north. Nonetheless, to ensure an appropriate transition is achieved, the Design Guidelines have been amended to include a new Design Solution relating to building heights and transition within the High Density Residential Precinct:

**DS16.2** Development includes a variety of building heights within the maximum height limit. The building heights generally:

- Are higher scale near the Town Centre Core and railway
- · Are lower scale toward the interface with Town Square Park and the Medium Density Precinct
- Are of a scale in accordance with design solution DS16.3.
- Are of a scale to enable the Medium Density Precinct solar access requirements (see Table 3-7).

This will further ensure that any future development within the High Density Residential Precinct results in a form that will transition in height from the west to the east while preserving adequate sunlight to the Town Park and Medium Density Residential Precincts.

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## 4.3.2 Correlation between height and GFA

#### Issue

DPE requested that additional details be providing regarding the proposed changes in height and GFA within the town centre core and the proposed distribution within the High-Density Residential Precinct, outlining how the GFA and height changes correlate.

#### Response

MOD 12 is based on the premise that changes to the Town Centre Core are GFA neutral and the displaced residential yield caused by the introduction of a school in the north-west quadrant can be accommodated in the High Density Residential Precinct, with no net increase in overall dwelling yield. To achieve this, the amount of GFA in the south-west quad has decreased by 6,000sqm and the north-west quadrant has increased by 6,000sqm (to accommodate the required future NSW State Secondary School). The reduction in residential yield caused by this has been shifted to the High Density Residential Precinct (former Residential Precinct 3 Stage 9).

The proposed planning framework, as modified, provides the mechanisms to ensure that the distribution of height and GFA across the site is generally in accordance with the Illustrative scheme, whilst still providing appropriate flexibility for those designs to changes as the detailed design process evolves.

The proposed height and GFA in the north-west quadrant have been informed by the Illustrative Reference Scheme and represent an appropriate outcome based on NSW Department of Education (DoE) requirements for vertical schools, as well as requirement in the DoE EFSG and the GANSW Design Guide for Schools. In addition, the proposed Town Square West area has to be considered within the height and GFA controls. While the final layout of the school building will be the subject of a future development application, the Illustrative Reference Design has been used to inform how the Concept Plan could include appropriate maximum GFA and height controls while still allowing enough flexibility to accommodate reasonable design changes as the school is designed in more detail.

The High Density Residential Precinct has different site characteristics compared to the Town Centre Core and therefore requires a slightly different approach to the distribution of GFA and height. As described above, the overall yield of the precinct is dictated by the residential dwellings displaced in the Town Centre Core and the former Residential Precinct 3 Stage 9. This yield, combined with overshadowing limitations to the Town Park and the high-level requirements of the ADG and general urban design and amenity considerations, led to the Illustrative Reference Scheme prepared by Plus as provided with the original application. This reference scheme produced a GFA and heights that informed the proposed controls. Heights are stepped upwards to the north to allow for solar access to the Town Park, while an overall GFA cap is introduced to the precinct. The height and GFA controls work in tandem with the ADG and Amended Design Guidelines to provide a resulting development that will likely be similar to the Illustrative Design Scheme (but still allow some flexibility for appropriate design development to be undertaken). The Design Guidelines have been amended in this RtS to address concerns raised about the transition in height from the Town Centre Core to the Medium Density Residential Precincts.

While the GFA controls are proposed to be amended, the overall Ed. Square site continues to comply with the FSR set by the original (proposed) SEPP Amendment under MOD 4 of 2.5:1 and is therefore of a density that is commensurate with that envisaged by the previous approval.

A comparison of the approved and proposed maximum heights is provided at Table 2 and Figure 6. A comparison of the approved and proposed maximum GFA is provided at Table 3 and Figure 7. As described above, these have been informed by the Illustrative Reference Scheme provided with the original submission, and in tandem with the Design Guidelines will result in an outcome that is similar but not necessarily identical to the reference scheme.

Table 2 Comparison of approved and proposed maximum heights

Area	Height (Approved)	Height (Proposed)	Change
<b>Town Centre Core</b>			
North-West	99.5RL	110.0RL	+10.5m
North-East	105.8RL	105.8RL	No change
South-West	95.7RL (132.9RL for landmark tower)	95.7RL (132.9RL for landmark tower)	No change

Area	Height (Approved)	Height (Proposed)	Change		
South-East	96.4RL	96.4RL	No change		
High Density Residential Precinct					
High Density Residential north	24m	103.0RL	Varies		
High Density Residential south	24m	93.5RL	Varies		

Table 3 Comparison of approved and proposed maximum GFA

Area	GFA (Approved)	GFA (Proposed)	Change	
Town Centre Core				
North-West	20,000sqm	26,000sqm	+6,000sqm	
North-East	41,500sqm	41,500sqm	No change	
South-West	55,500sqm	49,500sqm	-6,000sqm	
South-East	28,025sqm	28,025sqm	No change	
Total	145,025sqm	145,025sqm	No change	
High Density Residential Precinct				
High Density Residential	N/A	41,400sqm	N/A	



Figure 6 Comparison of approved (left) and proposed (right) heights



Figure 7 Comparison of approved (left) and proposed (right) GFA

Source: Hassell

## 4.3.3 Orientation of school building

#### Issue

Council requested that a north-south orientation for the school building be explored to increase solar amenity to Town Square West.

#### Response

The layout of the school building is not subject to approval in this Concept Plan Modification. The layout and design of the school will be subject to a separate State Significant Development Application. However, an indicative reference scheme is provided with the application to inform the proposed controls and is intended to assist with assessment of the application.

A Design Response has been provided by the school's architect, Terroir, at **Appendix E**. The response provides a summary of the massing options tested and why the proposed layout in the indicative reference scheme was the most appropriate. In summary, an east-west orientation was selected as the best outcome for the project, balancing the numerous requirements of the school programme and maximising the public amenity including:

- Minimising additional overshadowing to the existing Town Square (East)
- Targeting similar or better solar amenity to the extension of the Town Square (West)
- Maximising the amenity opportunity of the public domain, including increased views to the Regional Park and the sky from within the Town Square.
- An elongated tower floorplate profile that aligns with the required flexible planning grid for schools (9 x 7.5m) and the requirements of the NSW Educational Facilities Standards & Guidelines (EFSG).
- Utilising the building massing to screen the commuter carpark from high amenity public domain areas (Sergeant Street and Town Square).
- Opening up sightlines and views to the Town Square and Regional Parklands for the existing residential buildings in the Town Centre Core East.
- Locating the school to the north to enable use of Henderson Lane for priority drop-off/pick-up near the building's central core.
- Orienting the school play space towards the park and plaza (not facing the commuter carpark), so the podium can serve as an extension of the plaza and invite community use outside of school hours.
- Using the building mass to help provide a balance of both solar access and shade to the outdoor playground spaces of the school across the podium, noting the continuing rise in mean temperature (particularly in Western Sydney) and the need for shade and shelter to mitigate against the known environmental and health impacts of this.
- The requirement for a minimum 43m bushfire asset protection zone from the Regional Park.

Therefore, while various orientations were tested for the indicative school layout, the east-west configuration was selected as the preferred balance between amenity and school programming requirements. This design has informed the controls that are proposed within MOD 12. We note that the final configuration of the school building is not the subject of this application and would be subject to a future State Significant Development Application. The school design will be further informed by the EFSG, the Design Guide for Schools and other appropriate requirements and controls.

## 4.3.4 Overshadowing within the Town Centre Core

#### Issue

DPE asked for clarification of the overshadowing impacts within the Town Centre Core and that a comparison between approved, MOD 11 and proposed MOD 12 impacts be provided (noting that MOD 11 is now approved). Several public submissions also raised concern about the overshadowing impacts within the Town Centre Core.

## Response

A comparison of the shadows cast mid-winter by the MOD 4 and MOD 12 indicative reference schemes is provided at **Appendix D**. We note that the indicative reference scheme for the Town Centre does not change between the approved MOD 4 and proposed MOD 11.

The indicative reference scheme for MOD 12 has shifted the landmark tower further west than that provided for MOD 4. This reduces the shadow impacts to existing residential dwellings in the Town Centre Core East and those approved but not yet constructed in Building 6 and Building 7 (noting that the final location of the landmark tower is subject to separate approval as part of a future development application). As shown at **Appendix D**, the MOD 12 indicative reference scheme also results in less overshadowing of the proposed Town Square West, particularly in the mid-winter afternoon. Excerpts of the shadow diagrams illustrating these benefits to overshadowing are provided at **Figure 8** and **Figure 9**.

Therefore, the proposed MOD 12 is considered to allow for an improvement in overshadowing impacts within the Town Centre when compared to the approved MOD 4 and MOD 11 configurations (subject to future separate approvals).

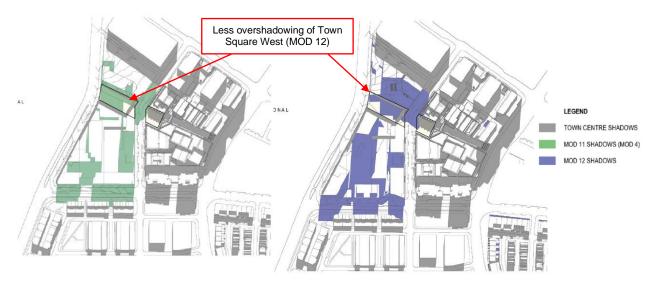


Figure 8 Comparison of shadows within Town Centre at 1pm mid-winter: Mod 4 and 11 (left), Mod 12 (right)

Source: Plus Architecture and Terroir

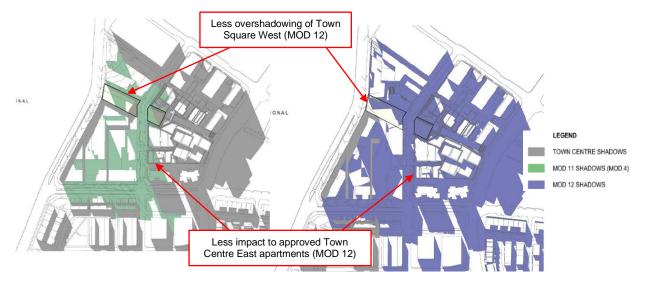


Figure 9 Comparison of shadows within Town Centre at 3pm mid-winter: Mod 4 and 11 (left), Mod 12 (right)

Source: Plus Architecture and Terroir

## 4.4 Traffic and Transport

#### Issue

Council and TfNSW raised questions about the traffic assessment in relation to the future school use. In particular, concerns were raised in relation to the trip generation of the school not being included in the PM peak analysis, a lack of detail and queuing analysis for the drop off and pick up area, whether any on-street and on-site parking for the staff and students was included in the analysis, and whether pedestrian crossing warrants would be met for traffic signals on Macdonald Road.

#### Response

A meeting between Council's traffic specialists, Frasers and the project's traffic engineer (Ason) was held on 24 March 2022 to discuss Council's submission and agree a way forward. Ason have provided a detailed response to each of the items raised by Council and TfNSW, including the outcomes of the meeting with Council, which is provided at **Appendix H**.

In summary, many items raised such as the detailed drop-off and pick-up design and associated queuing will be addressed as part of the SSD Application for the school, at which time the detailed design can be assessed. The assessment undertaken for MOD 12 has considered a range of scenarios that account for different outcomes that may occur under the SSD Application, such as whether or not the warrants for a signalised pedestrian crossing on Macdonald Road would be met.

Ason also clarify that the peak PM trip generation associated with the school occurs outside of the network PM peak, and also that DoE policy is to minimise on-site parking for students and encouraged alternative modes of transport (final mode shares and parking provision will be subject to the future SSD Application).

#### Issue

Council and TfNSW also raised more detailed questions about the traffic modelling assumptions and the choice of intersections modelled, as well as other issues related to the traffic assessment and staging of works within and surrounding Ed. Square and any cumulative impacts these may have, in tandem with MOD 12.

#### Response

Ason clarify at **Appendix H** that Frasers has limited control over intersections outside of the Ed. Square Town Centre area. As such, the modelling has included the following intersections:

- MacDonald Road / Henderson Road.
- MacDonald Road / General Blvd.
- Soldiers Parade / Henderson Road.
- Soldiers Parade / General Blvd.

The following intersections are outside of the Ed. Square sub-precinct and therefore considered the responsibility of others.

- MacDonald Road / Buchan Avenue.
- MacDonald Road / Bernera Road.

These intersections were agreed in a meeting with TfNSW on 14 September 2021.

For detailed responses to other issues raised by TfNSW and Council, as well as how the staging of works within and around the Ed. Square Town Centre have been assessed, refer to **Appendix H**.

#### 4.5 Bushfire

## Issue

DPE and EESG requested clarification of the proposed bushfire Asset Protection Zone (APZ) adjacent to the proposed school lot and confirmation that no encroachment into the Regional Park is required.

## Response

A response from the project's bushfire consultant Peterson Bushfire is provided at **Appendix I**. In summary, the minimum APZ proposed in this application is 43m, which is dependent on a performance solution. A range up to 50m minimum APZ was stated in the application as a worst case scenario where a performance-based solution is not supported by the NSW Rural Fire Services. A 50 m APZ from the woodland vegetation on the western side of MacDonald Road complies with the "acceptable solution" for Special Fire Protection Purpose developments adjacent woodland hazard situated on a slope class of 'downslope 0-5 degrees.' However, Peterson Bushfire advise that there is also an alternate solution to determine the APZ dimension using the NBC Bushfire Attack Assessor by using specific vegetation slope rather than the PBP slope class of 'downslope 0-5 degrees.' The land underneath the woodland falls away gently to the west allowing a smaller APZ than 50m based on modelling detailed slope transects. Therefore, the proposal includes a minimum 43m APZ utilising a performance solution.

The recommended APZ does not involve any vegetation removal or placement within the Regional Park across Macdonald Road. The APZ will comprise the managed portion of Macdonald Road (being the outer footpath and the road) and within the school site itself.

#### Issue

EESG requested further information regarding safe evacuation routes from the future school, including whether Macdonald Road would be a safe evacuation path due to its proximity to the Regional Park.

#### Response

A Bushfire Statement has been prepared and is provided at Appendix I, which responds to the EESG comments. In summary, the statement confirms that the school site will be able to comply with 'Planning for Bush Fire Protection 2019' in relation to evacuation capability. This would be subject to being demonstrated in the future SSD Application for the school.

The surrounding road network provides an alternate access option ensuring compliance. 'Planning for Bush Fire Protection 2019' requires an alternate access option to through public roads. The school will have access to both Macdonald Road and Sergeant Street. Macdonald Road is a dual carriageway road and acts as a perimeter road to the development. It offers access in both north and south directions and achieves compliance with 'Planning for Bush Fire Protection 2019'. Schools and SFPP development in general may utilise perimeter roads for evacuation.

## 4.6 Flooding, Stormwater and Water Cycle Management

#### Issue

DPE and EESG requested clarification on the proposed stormwater drainage strategy and an assessment of any resultant impacts to the Regional Park be provided.

## Response

MOD 12 does not propose any changes to the approved Water Cycle Management Plan (under MOD 4). MOD 12 does not seek approval for new stormwater infrastructure within the Regional Park. Therefore, an assessment of biodiversity impacts associated with potential stormwater infrastructure in the park is not required. We understand that changes to the water cycle management system were subject to discussions between the proponent, DPE and EESG during MOD 11, but were subsequently removed from the application. No subsequent changes are sought in this application.

## 5.0 Amendments to the Modification

Since exhibition, further refinements and improvements have been made to the concept proposal to respond to issues and comments raised by agencies and members of the public, along with adjustments made to strengthen and enhance the design and planning merit of the Section 75W Modification Application. The following section outlines where amendments have been made.

## 5.1 Amendments to the Design Guidelines

In response to Council and DPE comments, an additional Design Solution has been included in the Design Guidelines (**Appendix C**), for development within the High Density Residential Precinct (at Section 5.9). The new Design Solution is as follows:

DS16.2 Development includes a variety of building heights within the maximum height limit.

The building heights generally:

- Are higher scale near the Town Centre Core and railway
- Are lower scale toward the interface with Town Square Park and the Medium Density Precinct
- Are of a scale in accordance with design solution DS16.3.
- Are of a scale to enable the Medium Density Precinct solar access requirements (see Table 3-7).

Other minor changes to the Design Guidelines seek to reflect the changes approved under MOD 11 and bring consistency between the MOD 11 (as approved) and MOD 12 Design Guidelines. A track change version will be provided to DPE under separate cover.

#### 5.2 Amendments to the Public Domain Plan

In response to DPE and EESG comments, the Public Domain Plan has been updated to include targets and guidance for the use and location of native planting throughout Ed. Square. The following has been inserted at Section 1 Master Plan Vision of the Public Domain Plan (**Appendix F**):

Approach to planting

Planting at Ed Square celebrates the character of both the surrounding Cumberland Plain Woodland and the historic gardenesque style colonial homesteads which once occurred on site.

Across Ed Square's public realm, the design target is for 75% native groundcovers and tree planting. Final planting selections will be guided by micro-climatic conditions to ensure long-term viability including solar access and soil conditions. Where viable, local native provenance plants may be used.

In addition to the above changes, the Open Space Titling Plan on page 16 of the Public Domain Plan has been updated to remove Henderson Lane from being a future public road dedicated to Liverpool City Council. Due to the proposed change in use of the north-west quadrant to include a school, Henderson Lane will remain under control of the proponent and will become a private internal access road with school drop off (subject to separate application). No changes are proposed to Henderson Lane's functionality or alignment. All appropriate access will be retained as required. A similar arrangement exists with Soldiers Parade which is managed by Frasers.

## 5.3 Amendments to the Urban Design Report

To ensure consistency with the Amended Public Domain Plan, the Urban Design Report (**Appendix G**) has also been amended to include the above "Approach to Planting" text in Section 1 Introduction.

## 5.4 Amendments to the Illustrative Design Scheme

Minor amendments have also been made to the Illustrative Design Scheme (**Appendix J**). The amendments made represent minor design development undertaken since lodgement of the modification. There are no significant changes to the illustrative design scheme. As described in **Section 1.0**, the Illustrative Design Scheme is provided to assist with assessment of the modification and future development at the site may vary slightly to the scheme presented, provided it remains consistent with the Concept Approval, Public Domain Plan and Design Guidelines.

#### 6.0 Additional Information and Assessment

This chapter contains an environmental assessment of the amendments to MOD 12 as described in **Chapter 5** above, where environmental impacts have changed from that of the original MOD 12 submission, or additional clarifications have been provided.

Assessment of the following planning matters was documented in the original Section 75W Modification Application Report prepared by Ethos Urban dated 2 December 2021:

- State Environmental Planning Policy (State Significant Precincts) 2005.
- Edmondson Park South precinct mapping.
- SEPP 65 Design Quality of Residential Apartment Development.
- Built form and urban design.
- Overshadowing.
- · Open space, landscaping and deep soil provision.
- School design quality and amenity.
- Residential amenity.
- Bushfire protection.
- · Transport and parking impacts.
- · Visual Impact and views.
- Water cycle management.
- Waste management.
- · Social and community impacts.
- · Statement of commitments.
- · Reasons given for granting consent.
- Site suitability and public interest.

Except where addressed in the below subsections, the conclusions of the originally submitted MOD 12 report remain relevant and are considered to still be valid.

## 6.1 Environmental Planning Instruments

The amendments to MOD 12 described above do not alter the Concept Plan's consistency with any Environmental Planning Instruments, including that of the former State Environmental Planning Policy (State Significant Precincts) 2005 (now part of SEPP (Precincts – Western Parkland City) 2021).

It is the proponent's intention for future DAs within the Town Centre Core and High Density Residential Precinct to be compliant with the relevant planning controls for the site.

Development for residential apartments within the High Density Residential Precinct and Town Centre Core will be required to demonstrate consistency with SEPP 65 at the time the future application is made.

Development for the purposes of a school in the north-west quadrant will be required to demonstrate consistency with Chapter 3 of the T&I SEPP (the former Education SEPP) at the time the relevant development application is made.

All SEPPs will continue to apply as relevant for any future development applications made within Ed. Square.

## 6.2 Built Form and Residential Amenity

Amendments have been made to the MOD 12 Design Guidelines as originally submitted to further improve the built form transition in the High Density Residential Precinct between the Town Centre Core and the Medium Density Residential Precincts. These amendments will provide more certainty of the built form outcome within the precinct. The Amended Design Guidelines, working with the maximum GFA and building height controls and applicable planning policies such as the ADG will ensure a high quality built form outcome at the site, similar to the Indicative Reference Scheme that was provided with the original submission.

## 6.3 Transport and Parking Impacts

The amendments to MOD 12 described above do not result in any material impacts with regards to traffic and parking. A comprehensive response to traffic matters raised by DPE's Key Issues Letter, TfNSW and Liverpool Council submissions is provided in the Traffic Response Letter at **Appendix H**.

## 6.4 Open Space and Landscape Design

The proposed amendments to the Public Domain Plan will ensure that a high number of native species will be provided in future DAs, with the overall Ed. Square area targeting 75% native species. The Public Domain Plan also provides guidance on where other species may be more appropriate, such as for on-podium planting that has inappropriate micro-climatic conditions for natives. The amendments will ensure a high quality planting outcome is achieved in the public domain with an appropriate number of native species.

#### 6.5 Site Suitability and Public Interest

The proposal remains suitable for the site and in the public interest. Minor changes have been made to effectively respond to concerns raised in the submissions and will further improve the built form and public domain outcomes, whilst not introducing unreasonable environmental impacts.

#### 7.0 Conclusion

This RtS is submitted to DPE to respond to submissions and key issues raised during the public exhibition of the 12<sup>th</sup> Section 75W Modification Application (MOD 12) to Concept Plan Approval MP 10\_0118.

Frasers and its project team has undertaken a detailed review of all thirteen (13) submissions received. Where appropriate, design refinements have been made to respond to comments, and/or additional clarifications have been provided. Ultimately, the amendments described above represent an overall improvement to the MOD 12 documentation that was previously exhibited.

MOD 12, as amended, seeks to:

- Amend the Ed. Square Design Guidelines (Design Guidelines) to:
  - Update the vision, principles, key elements and urban structure to reflect the introduction of the school and new relocated High Density Residential Precinct.
  - Provide design guidance for future development of the school and the High Density Residential Precinct.
- Introduce the Ed. Square Public Domain Plan Town Centre West and RP3 Modification 12 (Public Domain Plan) to guide the future design of public domain relating to:
  - Town Square West (an extension of the existing town square through Town Centre West).
  - The school in the North-Western Quadrant.
  - The High Density Residential Precinct.
- Introduce maximum Gross Floor Area (GFA) and building heights to the High Density Residential Precinct.
- Amend the existing maximum height and GFA for the Town Centre Core Quadrants to accommodate the school.
- Corresponding amendments to the conditions of approval as required to accommodate the above changes.

In accordance with Schedule 2, Clause 3BA(5) of the *Environmental Planning and Assessment (Savings, Transitional and Other Provisions) Regulation 2017*, the consent authority may modify the consent as the proposed modification is:

- · Of minimal environmental impact.
- Substantially the same development as the project for which the consent was granted.
- Is suitable for the site, and in the public interest.

We trust that the responses provided above will enable DPE to finalise their assessment of the MOD. Given the environmental planning merits (and the ability to suitably manage and mitigate any potential impacts) and significant public benefits proposed, it is requested that DPE approve the application.