URBAN DESIGN ISSUES REPORT : 24 - 36 Langston Place, EPPING (Council DA/237/2017)

This Report has been prepared by Richard Thorp of Thorparchitecture Pty Ltd for Sydney Central City Planning Panel *

Report INTENT (panel reference 2017SWC048)

A clear and concise report on urban design issues with this application and its impact on the approved adjoining flat development (3 buildings) was requested by the Panel to assist resolution of the impact of the proposal. The DA proposal is for a 27 storey shop top housing development comprised of ground floor retail unit, first floor commercial office unit and 102 residential units above, including 5 storeys of basement car parking, following demolition of existing buildings. The proposal will be determined by the Sydney Central City Planning Panel. The application is being re-advertised for reasons including, but not limited to: increase in height from 22 storeys to 27 storeys; and revised side boundary setbacks, footprint, dwelling mix and facade design. The report is to include a check shadow study.

In preparing the Report, a review was undertaken of the material relevant to this application that was sent to the Panel. The most relevant documents include Council's assessment report, addendum to Council's assessment report, an urban design report and the deferral report, plus architectural drawings.

This report should be read in conjunction with COUNCIL ASSESSMENT REPORT dated 21 March 2018 (panel ref 2017SWC048).

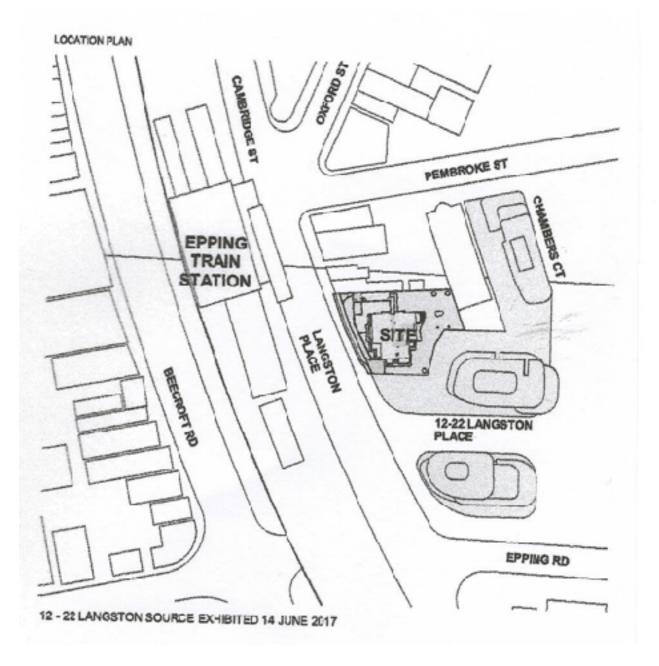
- Illustrations ,Tables and texts from this report are both included and quoted herein.

* Richard Thorp is unrelated to Peddle Thorp & Walker Architects.

CONTENTS - KEY URBAN DESIGN ISSUES TO BE CONSIDERED

- 1. OVERVIEW
- 2. Check Shadow Study
- 3. Building separation & Privacy
- 4. Building Height and proposed increase
- 5. Communal open space(s) solar access
- 6. Overshadowing impacts
- 7. CONCLUSION & Impact of development on neighbouring properties

Appendix - comparison of shadow diagrams: check study vs existing



1. OVERVIEW

The proposed development is located on Langston Place between Pembroke Street to the north and Epping Road to the south, and is opposite Epping Train Station. To the north of the site is a potential future development site referred to herein as *Future North Development*. To the east and south of the site is the approved *Cbus Development* at 12 - 22 Langston Street that consists of three high-rise residential Towers.

The Precinct is an important element in the Epping Town Centre - the centre piece of the Epping Priority Precinct Plan that was completed in March 2014 and prioritised higher residential density within an 800m catchment of Epping Station.

Together with the potential for the surrounding sites, the proposed development at 24 - 36 Langston Place offers Epping the opportunity to achieve an exciting and appropriate urban design response. The vision is for a new urban silhouette within a cluster of new slender residential towers.

The architect PTW for the the development describes the proposal as:

The chosen built form type of podium with residential tower will make a positive contribution to the future skyline of the Town Centre and will compliment the tower cluster of the adjoining Cbus development.

The disposition of built form of the Proposal considers the urban context for the site as well as providing high quality housing in close proximity to bus and railway routes.

Since Lodgement of the Proposal, there have been a number of concerns raised by Council and others, and the applicant has submitted further revised drawings and documentation. Of relevance to this Report, the following changes are commented upon:

- Compliant solar access
- · Increased tower separation
- · Reduction in tower footprint
- · Additional storeys

2. CHECK SHADOW STUDY

An independent check of the Shadow Analysis has been undertaken and is illustrated in the Appendix, together with Shadow Diagrams included in the DA Documents for 24 - 36 Langston Place for <u>comparison</u>.

The study shows that the *original* Shadow Diagrams are correct and are considered appropriate for use in assessing the impacts of overshadowing and solar access on both proposed and approved developments for the site.

3. BUILDING SEPARATION AND PRIVACY

In Council's DEAP meeting on 29 June 2017 when considering the application, the panel raised concern including but not limited to, the podium design, lack of landscaping, small amount of communal open space and the aesthetic proportions of the tower. The panel also suggested there could be considered reduction of building separation through careful design and on a site by site basis.

Following discussion and comments received concerning the original design proposal, and the aesthetic proportions of the tower, the Applicant submitted a revised design with a slimmer tower, smaller tower footprint and increased height. The following drawing (below) was submitted showing a comparison of original tower footprint (red line) vs revised tower footprint (green line). Light red shaded area indicate increased separation: light green shaded areas indicates less setback from street.

In undertaking their assessment, Council has noted that the Department issued a Circular in regard to the ADG on 27 June 2017 which noted: "*The ADG is not intended to be and should not be applied as a set of strict development standards*".

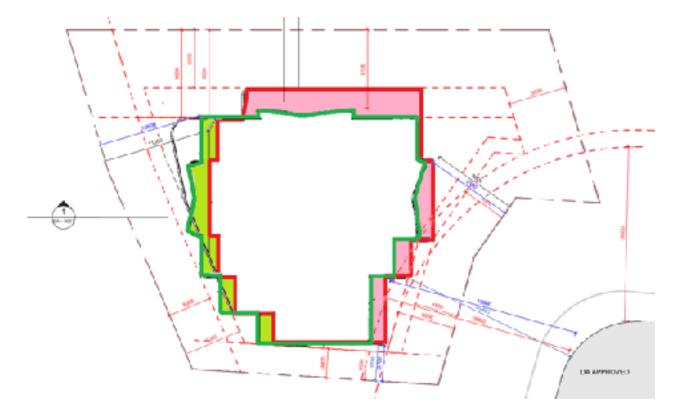


Fig 5. Comparison of original tower footprint (red line) vs revised tower footprint (green line). Light shaded area indicates increased separation, light green shaded area indicates less setback from the street.

Reviewing the revision to the Tower footprint reveals that there are improved outcomes to both separation and privacy between the towers.

A summary of the separation dimensions contained in Fig 5 (above) including ADG recommendations follows:

Upper Level Tower separation to:	ADG	Original DA	Revised DA
North (boundary)	12m	6m (50%)	9m (75%)
Approved Tower 2 @ 12 -22 Langston Place	24m	18m (75%)	19.8m (83%)
South (boundary)	12m	3m (25%)	3m (25%)

The Council's Table (above) outlining the *ADG recommended, originally proposed, and currently proposed separation* dimensions demonstrate acceptable improvements as a result of the Design Revisions and should be supported.

Of the above 3 'separation issues', the first two seem reasonable and acceptable given the constrained nature of the site. They are also supported and "considered acceptable" by Council's Urban Design Team, City Architect and DEAP.

The separation to the South boundary of only 3m compared to ADG 12m should be considered with regard to the Site Plan, which shows that beyond the South boundary it is open space rather than a built element that abuts the site. Tower 3 is a considerable distance away and does not present as an issue. This 3m separation to boundary is also supported by Council Urban Design Team, City Architect and DEAP.

There are several provisions regarding required blank walls and obscure glazing in specific locations in the design contained in a <u>recommended Condition</u> that is essential to be fully supported.

OUTCOME : In summary, the increase in building separation is considered a positive revision to the development.

4. BUILDING HEIGHT AND PROPOSED INCREASE

Following from 3 above, and in response to Council's DEAP suggestion to also consider an increase in building height beyond current limits, the applicants submission included a Clause 4.6 Variation regarding a taller and slimmer tower design.

The proposed height was increased from 72m to 87.8m, an increase of 21.95% above the Control, and with greater separation from the approved adjoining towers.

Council Officers have commented that "the proposed height is in keeping with that of the approved adjoining development at 12 - 22 Langston Place. The applicant has demonstrated that the form as proposed is appropriate, and would not result in unacceptable amenity impacts on adjoining/nearby properties."

OUTCOME The increase in height of the tower has clear improvements to :

- the aesthetic proportions and overall appearance of the scheme
- improvements in separation to adjoining towers
- no significant increase in overshadowing (most of the increased shadow is moving quite fast on the ground plane, and mostly it falls on road and rail areas.)
- the view of the cluster of towers when seen from the local area is good and provides a fitting marker for the new Epping Town Centre.

5. COMMUNAL OPEN SPACE(S) - SOLAR ACCESS

It is required to consider the latest design revisions on the ongoing solar access to communal open spaces for each of the residential towers on the site and adjacent sites.

This would include:

- a) the Residential Tower at 24 36 Langston Place
- b) the Residential Towers 1, 2, and 3 at 12 22 Langston Place (Cbus)
- c) a Residential Tower on the Future Northern Development at Langston Place

a) **RESIDENTIAL TOWER** at 24 - 36 Langston Place

The Proposal is located on an important site within the eastern portion of the Epping Town Centre, that is constrained on three sides by adjoining development, and has a single street frontage to Langston Place. Langston Place is proposed with a podium with retail uses within a widened pavement that will enhance the existing public domain. It is intended this renewed retail activity will activate the streetscape.

In consequence of a street edge alignment for the podium, a widened pavement, and the limited depth of the site to the east, the new residential tower seeks a balanced location relative to Council's set back provisions and requirements for building separation under the Apartment Design Guidelines (ADG).

In achieving such an outcome, the design locates the required Communal Open Space on the podium roof where it is subject to overshadowing from the residential tower above, as well as shadows cast by the adjacent towers of the *Cbus Development* and the *Future North Development*.

It is required that the Communal Open Space have an area not less than 25% of the site area which equates to 365sqm., and that at least 50% of this receive direct sunlight for a minimum of two (2) hours 9.00am & 3.00pm on June 21st. The Proposed Communal Open Space provided in the current application is 500sqm which is 34% of site area.

OUTCOME: The (confirmed) Shadow Diagrams indicate that more than 50% of the required Communal Open Space will receive sunlight between 10.00am and 3.00pm = 3 hrs

b) **RESIDENTIAL TOWERS 1, 2, and 3** at 12 - 22 Langston Place.

TOWER 1 & 2

The (confirmed) Shadow Diagrams indicate that approximately 50% of the required Communal Open Space located at first floor podium level will receive sunlight between 10.00am and 3.00pm. = 3 hrs

The Council Assessment Report notes:

The proposal is considered to satisfy the numerical requirement. Further, the primary communal open space areas for Tower 1 & Tower 2 are connected and as such a resident from one can move to the other if solar access is desired. As the adjoining open space is not yet built it would also be possible for the adjoining owner to slightly revise the location of the principle usable open space eastwards to maximise solar access should they so desire.

TOWER 3

The (confirmed) Shadow Diagrams indicate that approximately 50% of the proposed Communal Open Space located at first floor podium area will receive sunlight between 11.30am and 12.15pm (45 mins) and between 12.00pm and 12.15pm (15 mins) and between 2.00pm and 3.00pm (60 mins)

OUTCOME : The (confirmed) Shadow Diagrams indicate Communal Open Space at Towers 1, 2, & 3 will receive appropriate sunlight between 9.00am and 3.00pm

c) **RESIDENTIAL TOWER on the Future Northern Development** at Langston Place

Assuming the Communal Open Space was located at a first or second floor podium level with an area of approximately 450sqm mostly with solar access to the east and north sky, such that it received sunlight between 9.00am and 1.00pm. *

The (confirmed) Shadow Diagrams demonstrate that most of the Communal Open Space will receive sunlight for approximately 4 hrs.

* Assumes that the tower leaves 25% of the podium clear to the northeast.

OUTCOME : The (confirmed) Shadow Diagrams demonstrate that more than 50% of the Communal Open Space will receive appropriate sunlight between 9.00am and 3.00pm.

6. OVERSHADOWING IMPACTS - LIVING ROOMS & PRIVATE OPEN SPACE

It is also required to consider the latest design revisions on the ongoing solar access to Living Rooms and Private Open Spaces for the adjacent approved residential tower development (Cbus)

The Council Assessment Report reviewed this aspect of the application following receipt of modelling by the adjoining applicant for the approved development on the adjoining site, No 12 - 22 Langston Place. Following from the confirmation of the Shadow Diagrams as being accurate for use in assessment, it is the intention of this Report to only review the recommended impacts as determined by Council Officers.

The adjoining applicant provided: modelling of the current solar access versus a) the impact of a complying envelope scheme and b) versus the proposed scheme with non-complying height/setbacks.

Modelling of this type is complex and difficult, and needs to consider the solar access 'planning principle' as established by the NSW Land & and Environment Court in 2010. The planning principle set out tests for overshadowing. The Council Assessment Report used these planning principles in undertaking an assessment of the matter and concluded the following:

• The site and immediately adjoining buildings are located in an area designated for high density development. As such sunlight access is harder to protect.

• It is not considered possible for the applicant of 24 -36 Langston Place to reduce the impact on the adjoining property without severely compromising the development potential of the site.

• Assessment should be based on the principle that the amount of sunlight lost should be taken into account, as well as the amount of sunlight retained.

The assessment provided in the Council Assessment Report (see pages 19/20) shows the total number of units on the adjoining property considered to lose the required 2 full hours of solar access as a result of the proposal is considered to be closer to 48 (14.5% less than approved). As such 282 units out of 463 units approved (61%) would retain the required solar access.

The Assessment concludes : given the high density character of the area, the amount of solar access retained (61% of units) and the relatively low percentage of units affected by height and setback non-compliances (3%), the overshadowing impact on adjoining units is considered acceptable in this instance.

OUTCOME: The above assessment as 'acceptable' is supported.

7. CONCLUSION and IMPACT ON NEIGHBOURING PROPERTIES

The design of the proposed 27 storey shop top Residential Tower with 5 storeys of basement car parking has been progressed with consideration for the neighbouring properties. Recent revisions have addressed a number of design issues that were highlighted in Urban Design and Architectural Assessments.

The increase in Building height and the reduction in the width of the tower have improved the design, and together with associated changes to setbacks and separation to neighbouring towers represent an improvement for the development. Any resulting increase in overshadowing is mitigated as a result of the new shadow falling mostly on road and rail corridors. The additional shadow that does impact other properties is moving very fast and in consequence has minimal impact.

Privacy has also been improved to adjacent residential towers, and proper consideration given to the adjacent potential future development on the site immediately to the north.

The proposal demonstrates a high quality of Urban Design and proposes an elegant architectural solution for a challenging and constrained site.

APPENDIX

24 - 36 LANGSTON PLACE EPPING

CHECK SHADOW COMPARISON

The following 3 pages show side by side comparisons of the Shadow Diagrams for the site as submitted by the applicant, and used in the Council assessment Report, with <u>new</u> Shadow Diagrams produced independently by Thorparchitecture for this report.

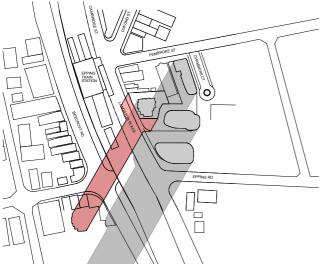
That both sets of Diagrams are almost identical offer sufficient evidence to state that the 'submitted shadow diagrams' are accurate and appropriate for use in Council undertaking the assessment.

24-36 LANGSTON PLACE

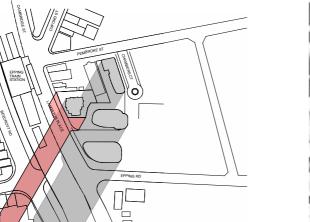
CHECK SHADOW COMPARISON

note: tower and podium geometry has been simplified for the purpose of the Check Shadow Study may result in minor discrepancies

CHECK SHADOW STUDY 21 JUNE - 9AM

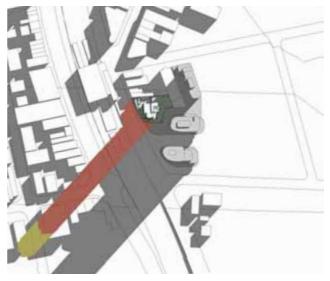


CHECK SHADOW STUDY 21 JUNE - 10AM



SCALE 1:5000 @ A4 30 MAY 2018





DA SHADOW DIAGRAM 21 JUNE - 9AM



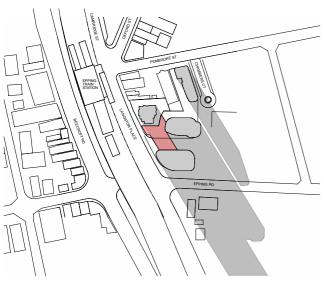
DA SHADOW DIAGRAM JUNE 21 - 10AM



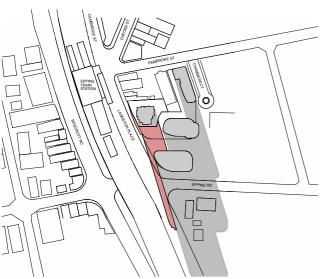
DA SHADOW DIAGRAM JUNE 21 - 11AM



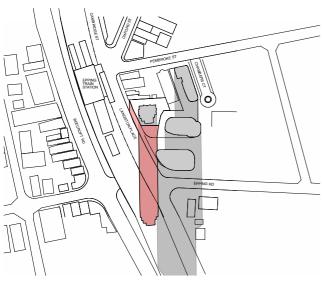
CHECK SHADOW STUDY 21 JUNE - 2 PM



CHECK SHADOW STUDY 21 JUNE - 1 PM

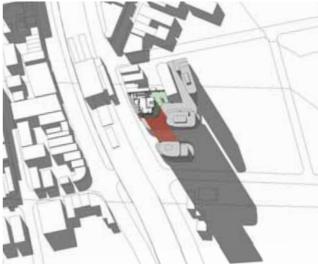


CHECK SHADOW STUDY 21 JUNE - 12 PM



SCALE 1:5000 @ A4 30 MAY 2018

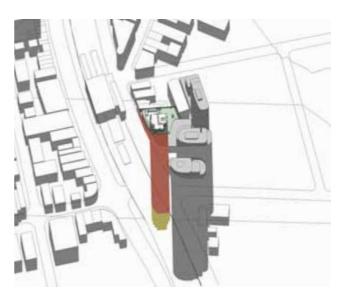




DA SHADOW DIAGRAM JUNE 21 - 1PM



DA SHADOW DIAGRAM 21 JUNE - 9AM



24-36 LANGSTON PLACE

CHECK SHADOW COMPARISON

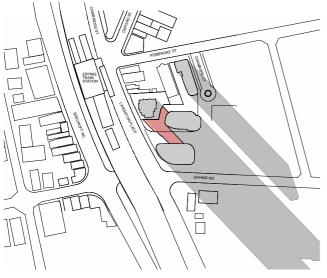
note: tower and podium geometry has been simplified for the purpose of the Check Shadow Study may result in minor discrepancies

N

24-36 LANGSTON PLACE

CHECK SHADOW COMPARISON

note: tower and podium geometry has been simplified for the purpose of the Check Shadow Study may result in minor discrepancies



CHECK SHADOW STUDY 21 JUNE - 3 PM

SCALE 1:5000 @ A4 30 MAY 2018





DA SHADOW DIAGRAM 21 JUNE - 3PM