PLANNING COMPARISONS

05 PLANNING COMPARISONS

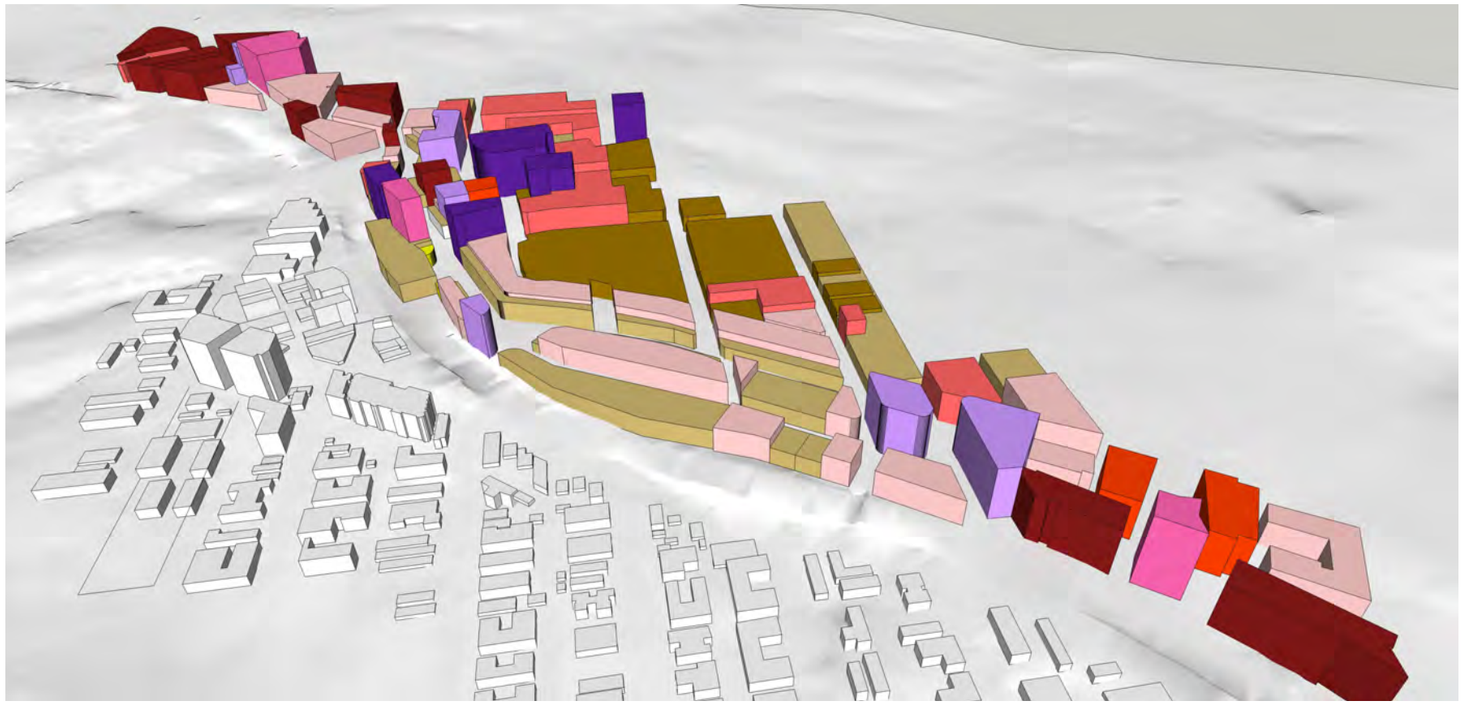
CITY CENTRE LEP BUILDING HEIGHTS

The Draft Hurstville LEP (Hurstville City Centre) 2010 (DHLEP-HCC) proposes increased heights within the Hurstville Town Centre. The building heights in the DHLEP-HCC are illustrated in the attached 3-D model. The building heights for the subject site are 15 and 23 metres.

The 3-D model reveals a ‘saddle’ of low to medium building heights between the Hurstville Rail station and the East Quarter residential development, where building heights of 55 and 60 metres are proposed. While this profiling is effective in maintaining a lower building scale along Forest Road and protecting its pedestrian amenity, it also erodes the definition of the urban edge to the Hurstville City Centre on its southern boundary. It fails to take advantage of the opportunity to develop higher density housing within walking distance of the Rail Station and town centre facilities.

LEGEND

8 M	23 M	45 M
11 M	30 M	55 M
15 M	35 M	60 M
19 M	40 M	



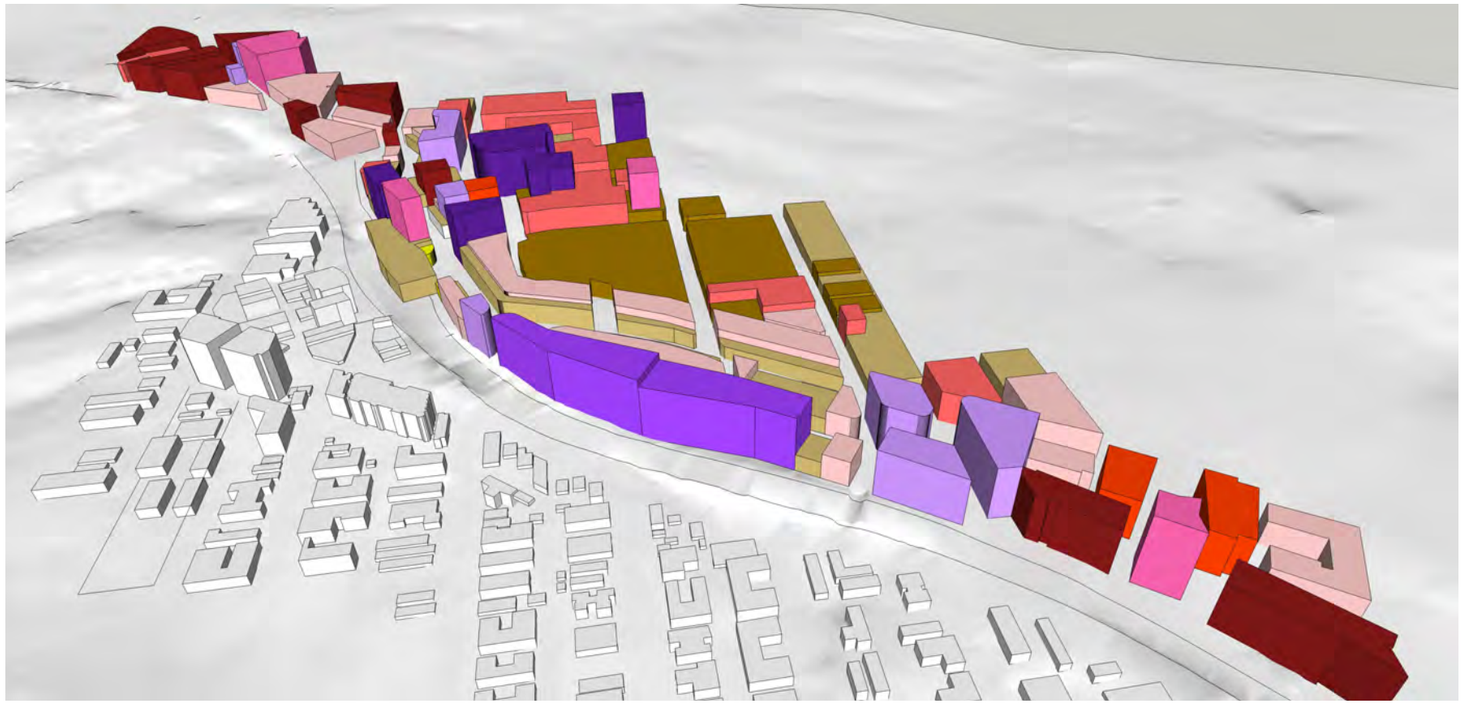
CITY CENTRE PROPOSED BUILDING HEIGHTS

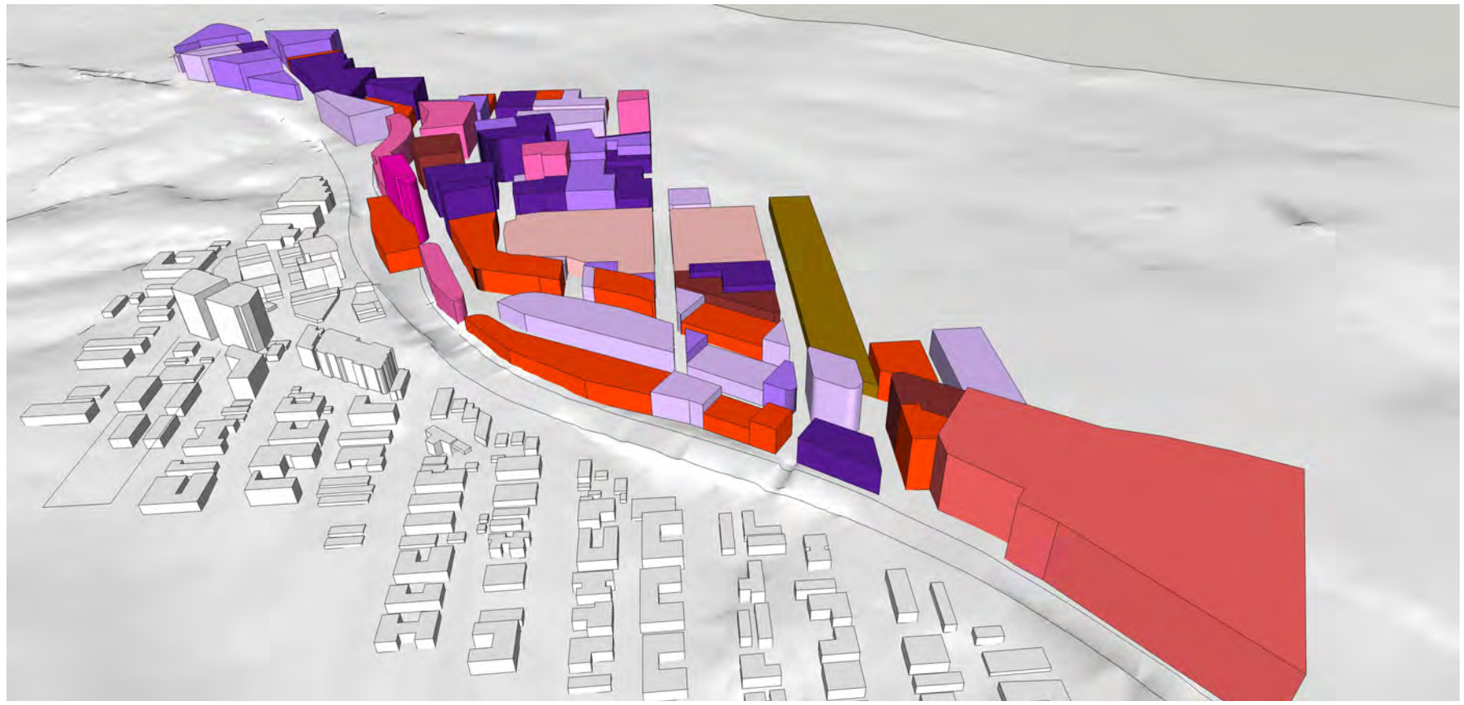
The proposed building height in the Concept Plan for the subject site is 55 metres as illustrated in the attached 3-D model. The 3-D model also projects a revised building height for the adjoining Council car park site on Treacy Street of 55 metres.

The proposed building height on the subject site and adjacent site is compatible with the existing building heights and building heights in the DHLEP-HCC for the surrounding area. It strengthens the definition of the urban edge along the Illawarra Rail line by extending the higher buildings along Treacy Street, between the Hurstville Rail Station and East Quarter. The subject site on Treacy Street, with its elongated site and northern orientation, is well suited to a sustainable, higher density development.

LEGEND

8 M	23 M	45 M
11 M	30 M	55 M
15 M	35 M	60 M
19 M	40 M	



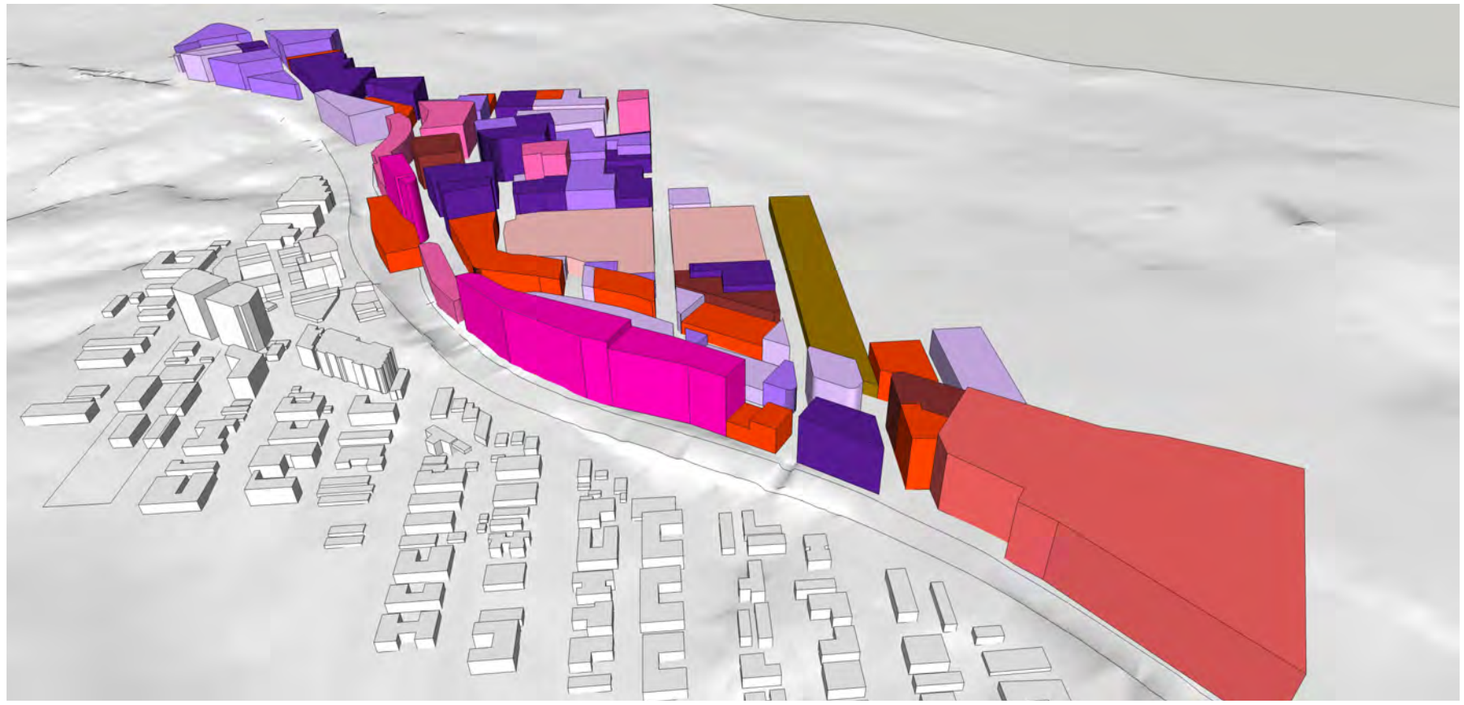


CITY CENTRE LEP FLOOR SPACE RATIO (FSR)

The Draft Hurstville LEP (Hurstville City Centre) 2010 (DHLEP-HCC) proposes increased FSR within the Hurstville Town Centre. The FSR in the DHLEP-HCC are illustrated in the attached 3-D model. The Floor Space Ratios for the subject site are 3.0:1 and 4.0:1, corresponding to building heights of 15 and 23 metres.

LEGEND

1.4:1	3.5:1	6.0:1
2.0:1	4.0:1	7.0:1
2.5:1	4.5:1	
3.0:1	5.0:1	



CITY CENTRE PROPOSED FLOOR SPACE RATIO (FSR)

The proposed FSR in the Concept Plan for the subject site is 7.0:1 as illustrated in the attached 3-D model. The model also projects a revised FSR for the adjoining Council car park on Treacy Street of 7.0:1 that correlates to the proposed increased building heights.

The subject site on Treacy Street, is well suited to a FSR uplift to encourage viable residential/ mixd use development.

The increased FSR for Treacy Street is compatible with the existing and proposed FSR in the DHLEP-HCC for the surrounding area, and stimulates growth and density in the Hurstville Town Centre.

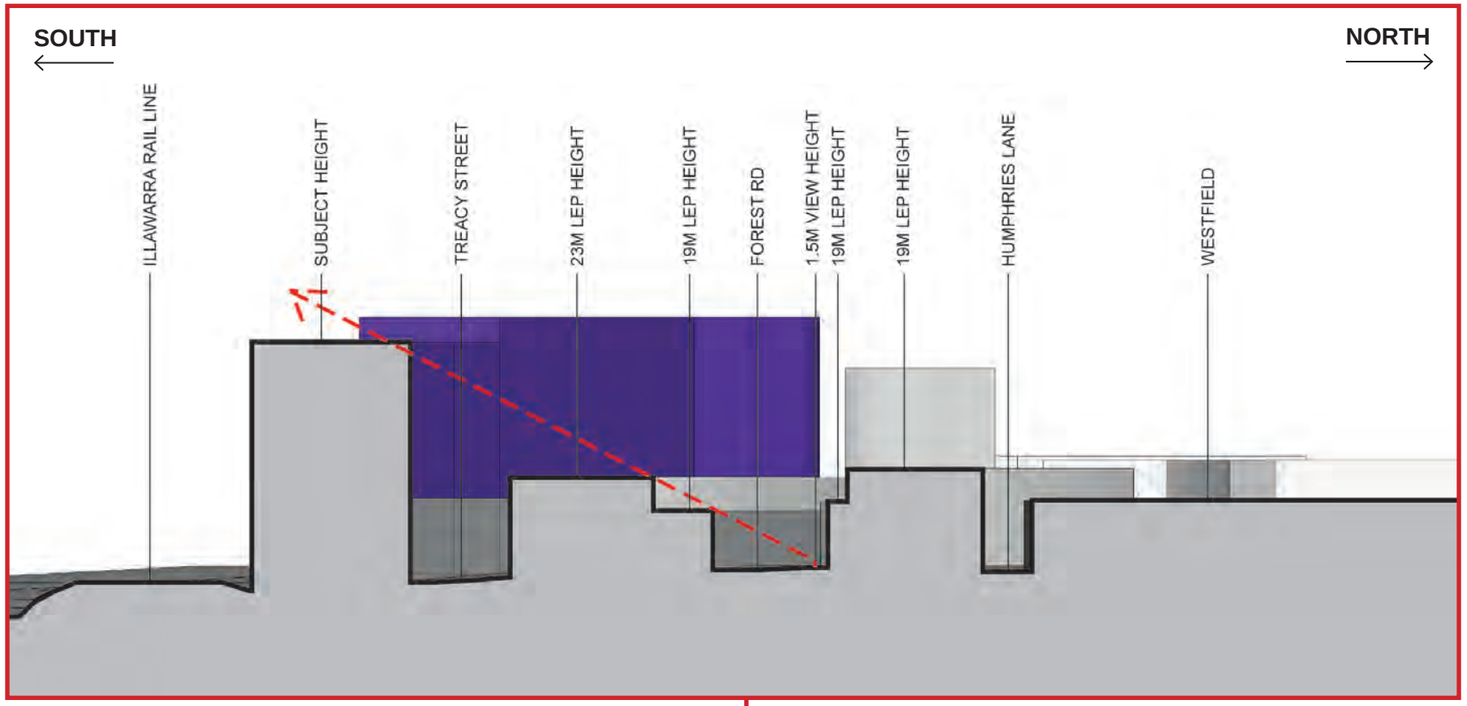
LEGEND

1.4:1	3.5:1	6.0:1
2.0:1	4.0:1	7.0:1
2.5:1	4.5:1	
3.0:1	5.0:1	

PLANNING COMPARISONS

CITY CENTRE PROPOSED CROSS SECTIONS: WEST-EAST

The east-west cross sections show the comparison between the proposed building height in the DHLEP-HCC and increases in the building height in the Concept Plan, both of which are placed onto the existing topography. The increased building heights on the subject site are extended to the adjoining Council car park site to the west. They also illustrate the improved definition of the urban edge along the Illawarra Rail line.

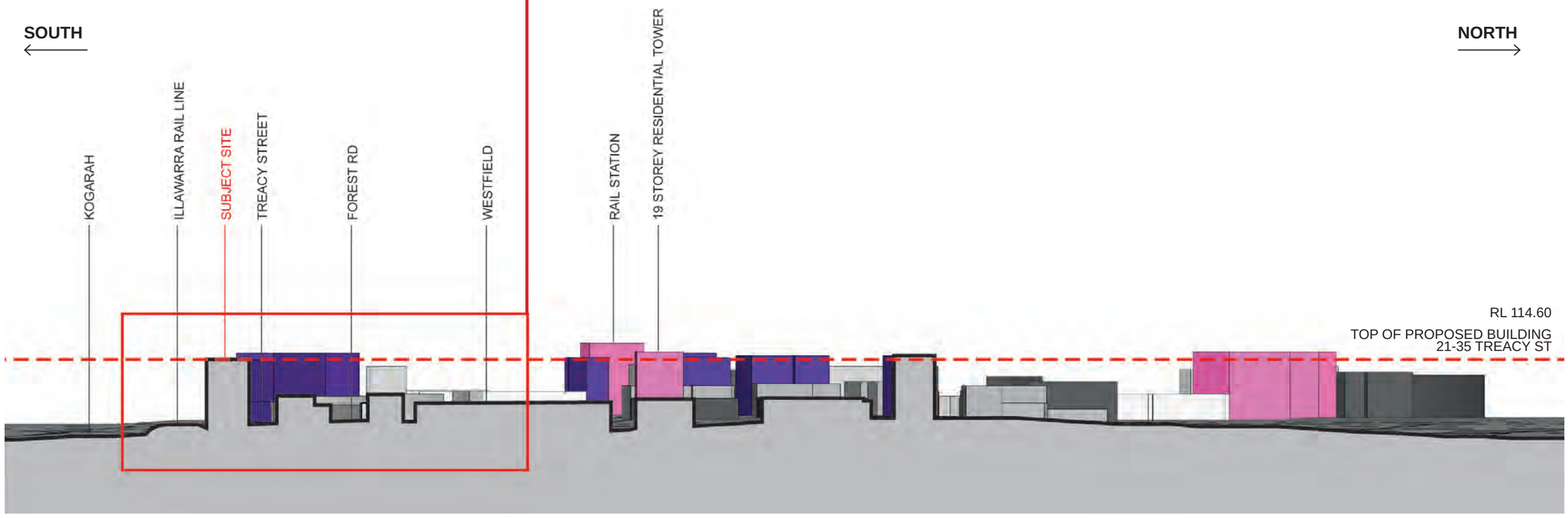


CITY CENTRE PROPOSED CROSS SECTIONS: SOUTH-NORTH

The east-west cross sections show the comparison between the proposed building height in the DHLEP-HCC and increases in the building height in the Concept Plan, both of which are placed onto the existing topography. The increased building heights on the subject site are compatible with the increased building heights in the City Centre.

HEIGHT OF BUILDING ABOVE GROUND*
55M
60M
TOP OF PROPOSED BUILDING HEIGHT ON SUBJECT SITE

* DRAFT HURSTVILLE LEP HURSTVILLE TOWN CENTRE 2010

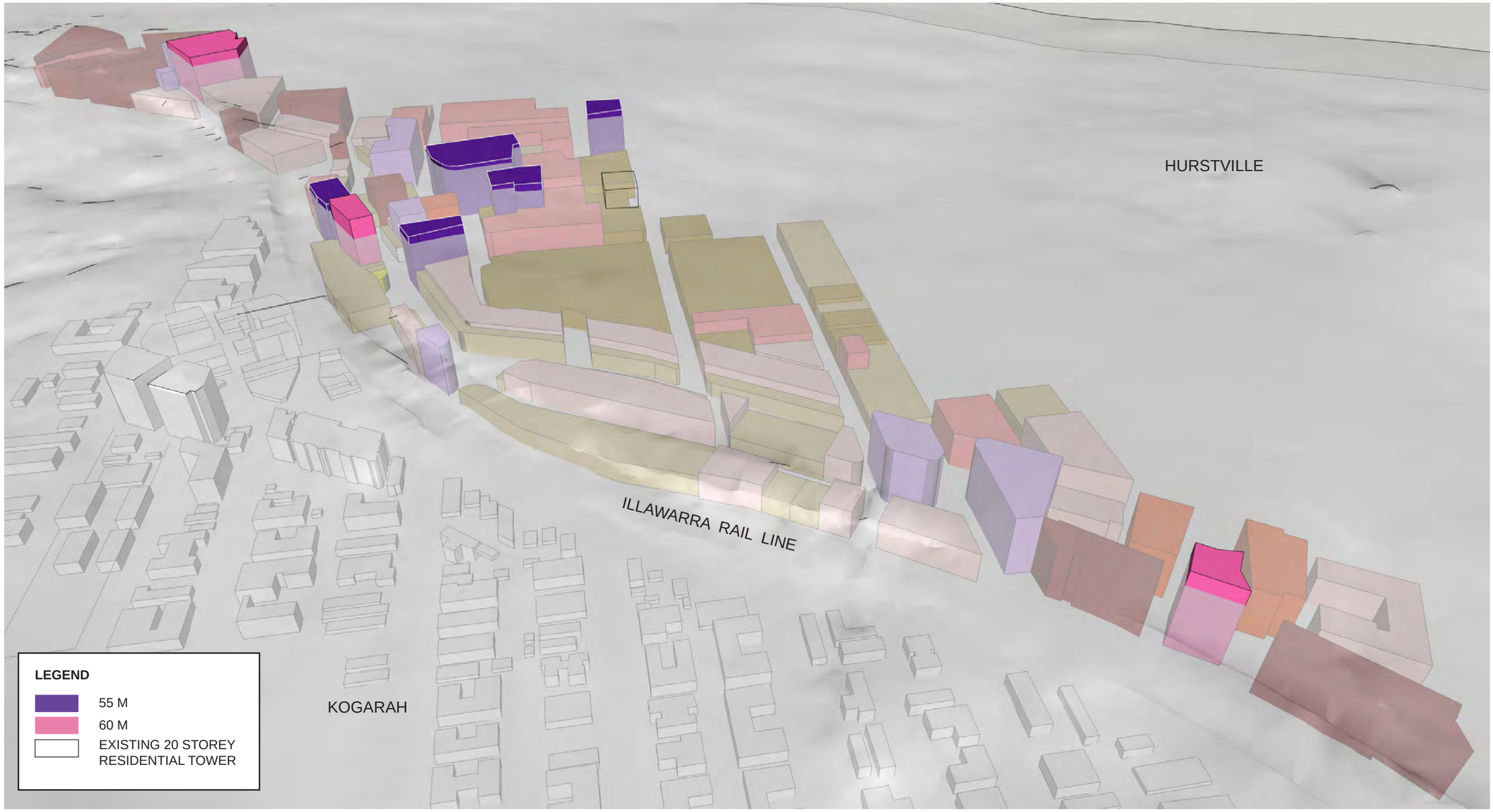


PLANNING COMPARISONS

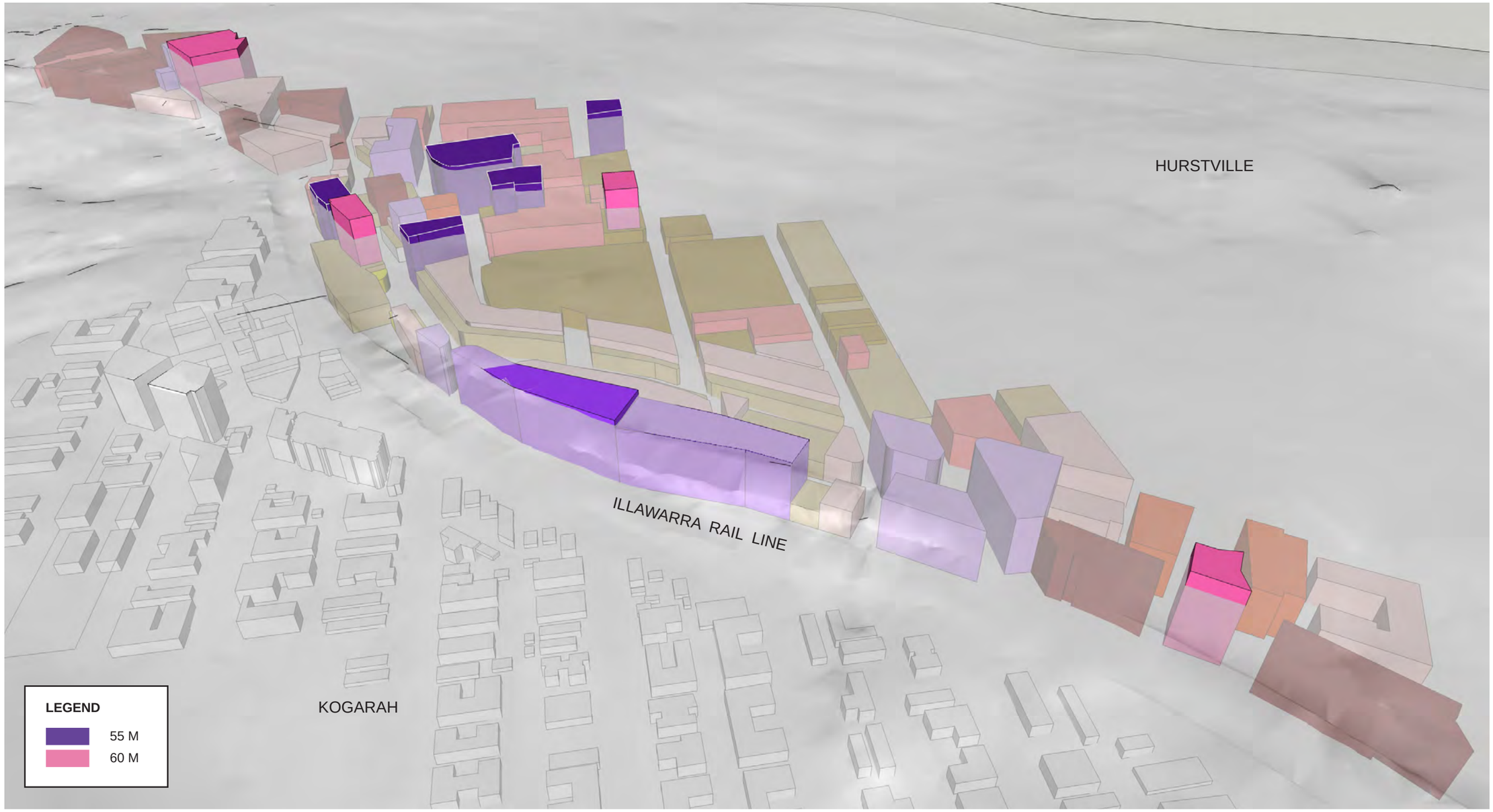
PLANNING COMPARISON

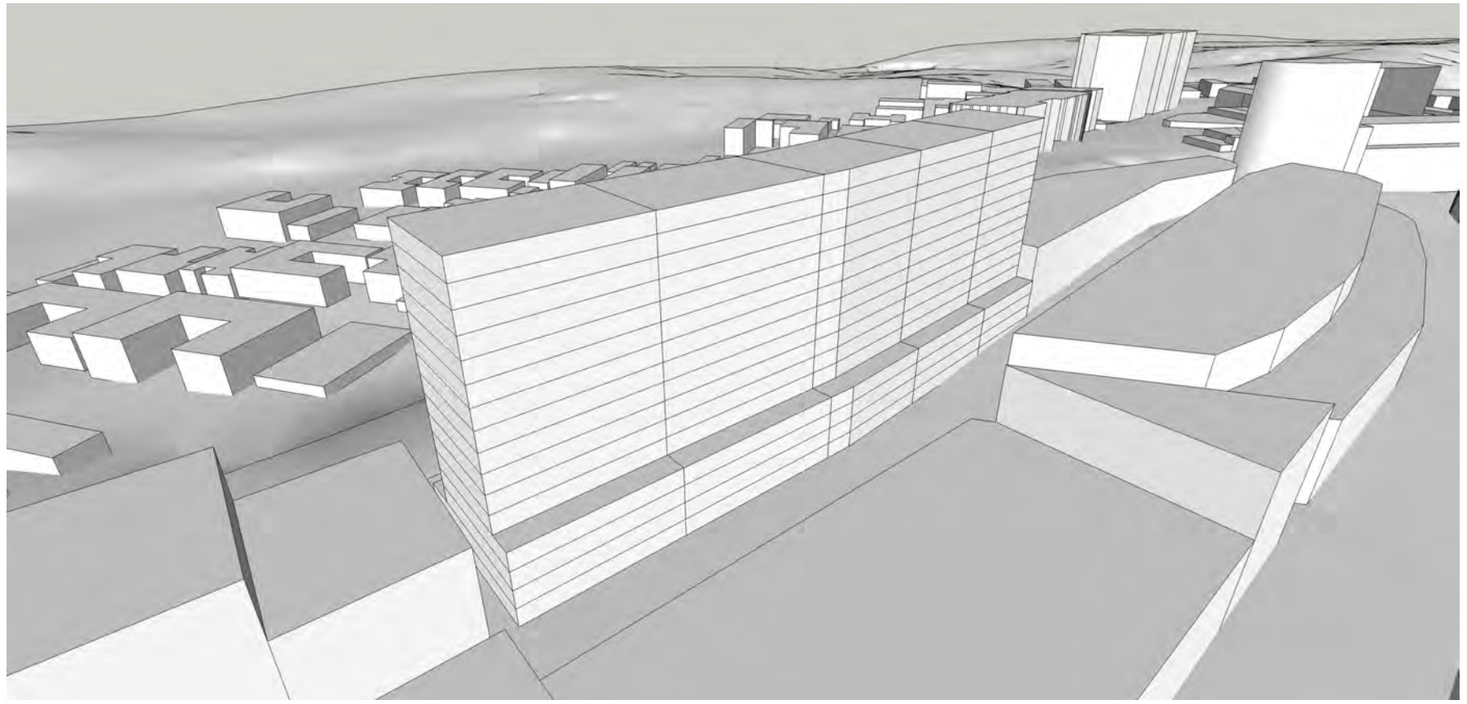
‘FOG’ VIEW

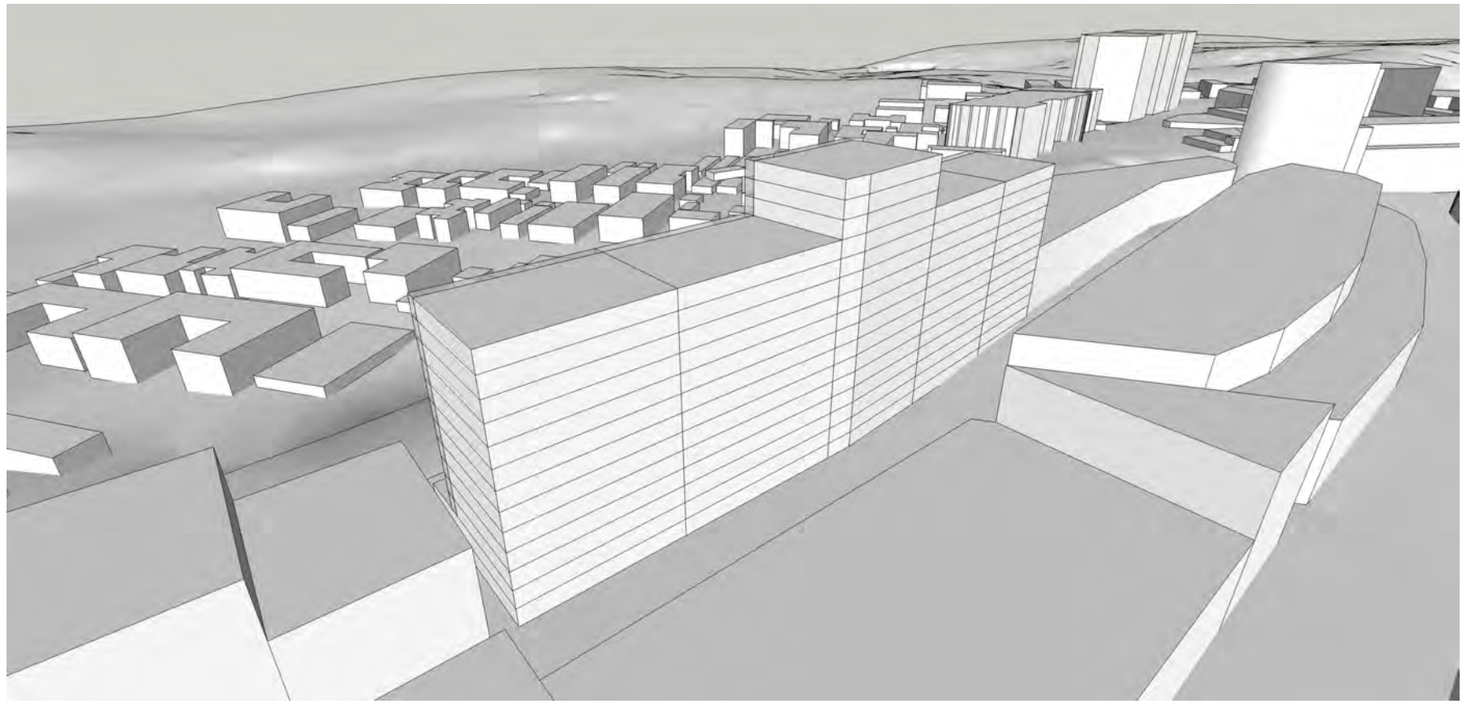
The ‘fog’ view illustrates the building heights for the subject site in relation to the existing topography and levels. It illustrates the building heights of the numerous sites that would have building heights that are above the proposed building height of the subject site in the Concept Plan.



PLANNING COMPARISON







06 SITING + LAYOUT OPTIONS

OPTION A - STEPPED STREET WALL

Option A is a continuous and stepped street wall with a building height of 55 metres (16 storeys). The building is setback 4 metres at level 5 and has floor plates of 22 metres at the lower levels and 18 metres at higher levels. The continuous 130 metres long building is too visually bulky. The lower floor plates are too deep for light and ventilation.

OPTION B - STREET WALL AND TOWER

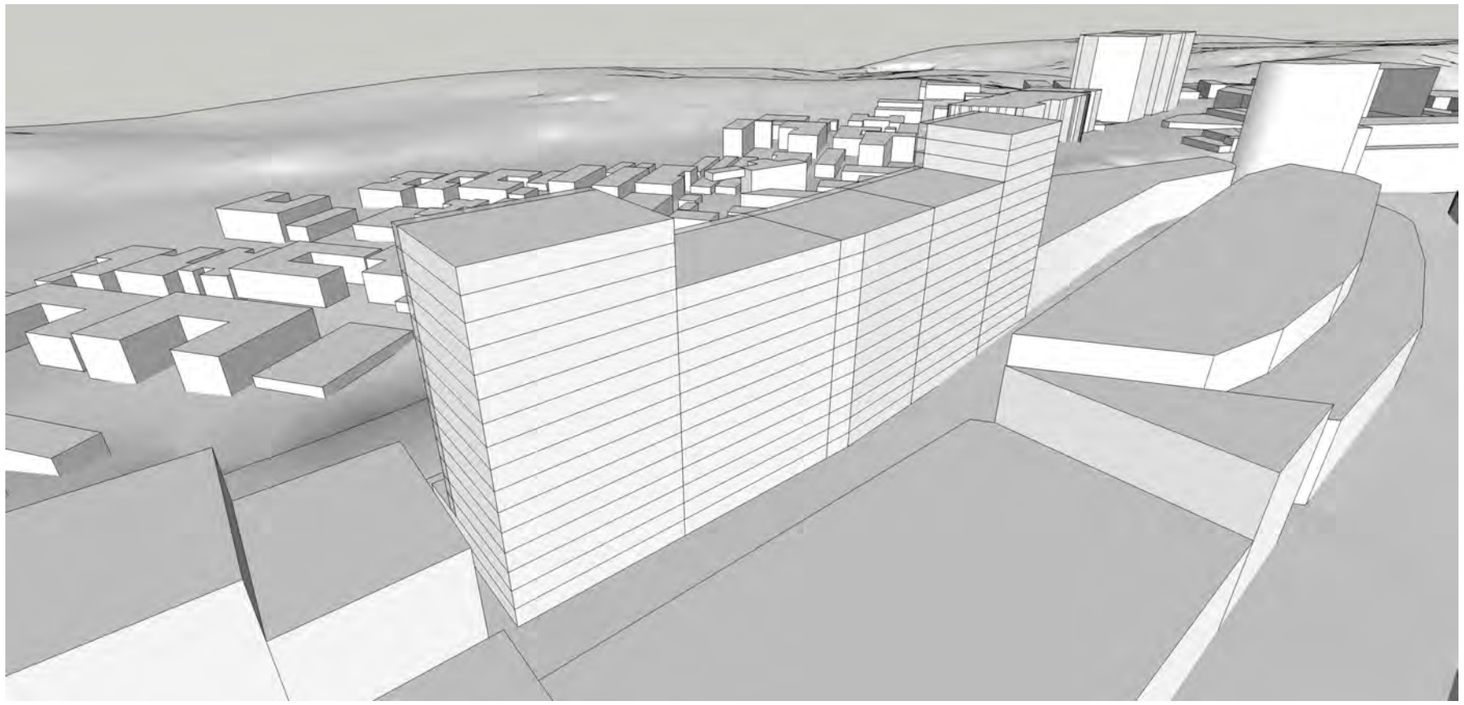
Option B is a continuous street wall with a building height of 45 metres (13 storeys) and a tower form with a building height of 55 metres (16 storeys) at the end of Alfred Street.

The building floor plate is 18 metres plus 2 metres rear articulation zone. The continuous 130 metres long building is too visually bulky and tower form is too prominent on the axis if Alfred Street.

SITING + LAYOUT OPTIONS

OPTION C - STREET WALL + TWIN TOWERS

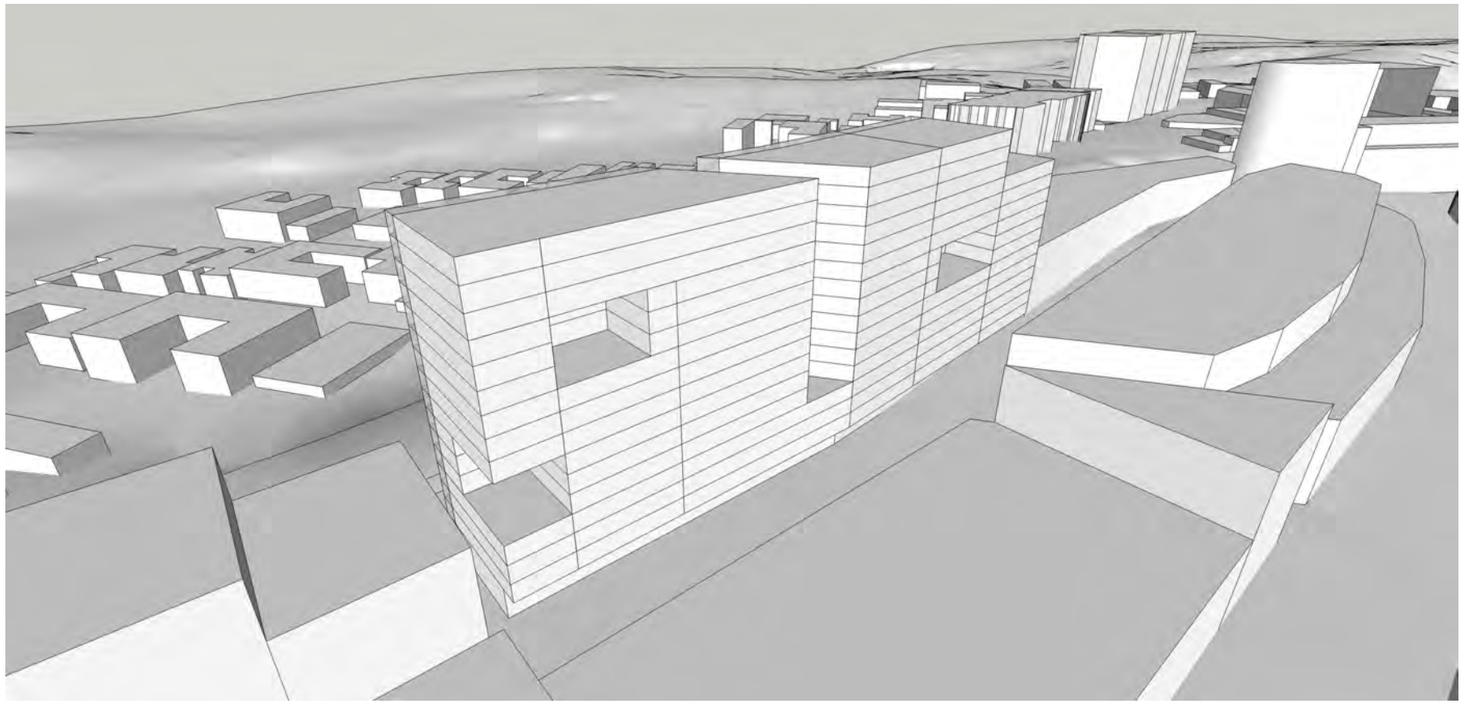
Option C is a continuous street wall with a building height of 45 metres (13 storeys) and a twin towers with building height of 55 metres (16 storeys) located at the east and west ends of the site. The building floor plate is 18 metres plus 2 metres rear articulation zone. The continuous 130 metres long building is too visually bulky and twin tower forms are poorly placed for staging.



OPTION D - HYBRID-PERFORATED WALL

Option D has a hybrid form that varies in height from 15 to 55 metres (4 to 16 storeys), that is a unique fusion of three form types: the urban street wall, slab and towers. This hybrid form is cut with a slot into two roughly equal parts and perforated with recesses to break down its visual bulk and mass. Connecting bridges are added in the slot to connect the towers and allow views out, along the visual axis. The building floor plate is 19 metres plus 3 metres rear articulation zone that is appropriate for achieving SEPP 65 environmental amenity. The building form is set back 6 to 10 metres from the southern site boundary to define a podium courtyard that interfaces with the Illawarra Rail line.

The building form is further adjusted at the roofline by setting down the western end to 45 metres (13 storeys), adjacent to the Council site to accommodate a projected future built form of 45 metres (13 storeys). The ground level is setback 3 metres along Treacy Street to provide covered pedestrian area in lieu of an awning attached to the building over the footpath. The colonnade is raised at the western end to accommodate the higher footpath level.



07 DESIGN CONCEPT

DESIGN ISSUES

The site has the capacity to achieve a mixed-use residential building that provides a sustainable, affordable and diverse living environment in the Hurstville City Centre and an exemplar for higher density housing along Sydney's rail corridors.

The design of the building for this important Hurstville site has emerged from a close and detailed contextual analysis of the existing and future urban form, streetscape and environmental parameters. Our objective was to create a very high quality, five green-star building of distinguished architecture, with an interconnected spatial network of landscaped, communal open spaces and public domain.

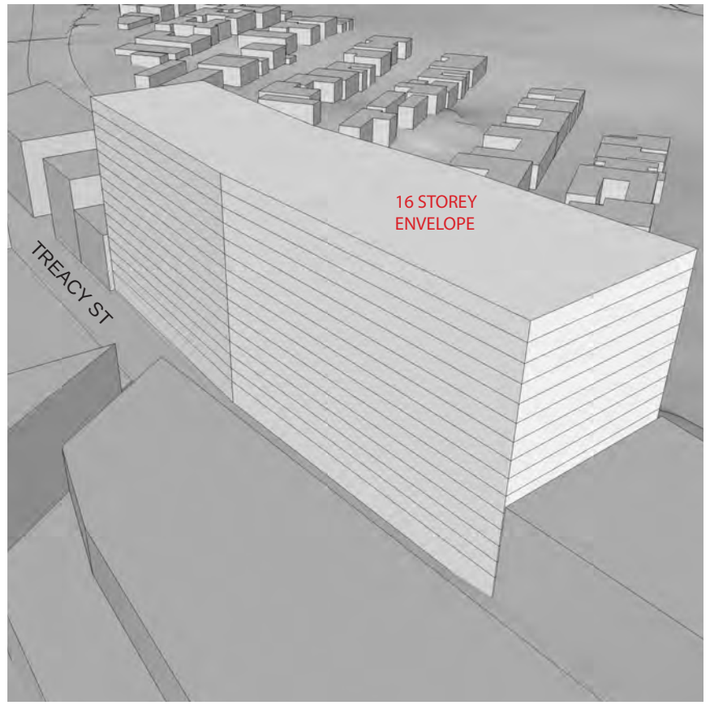
The building floor plate needs to be positioned to optimise amenity and maximise setback from the Illawarra Rail line. The floor plate, including north facing balconies, needs to be 19 metres, with multiple cores to optimise environmental amenity, particularly solar access, natural ventilation and light as required by SEPP 65 and the Residential Flat Design Code. With these key amenity criteria in mind we developed a unique hybrid form that is responsive to the site conditions, context, views, orientation and urban structure. Steps in the evolution of the design for the site are illustrated below.

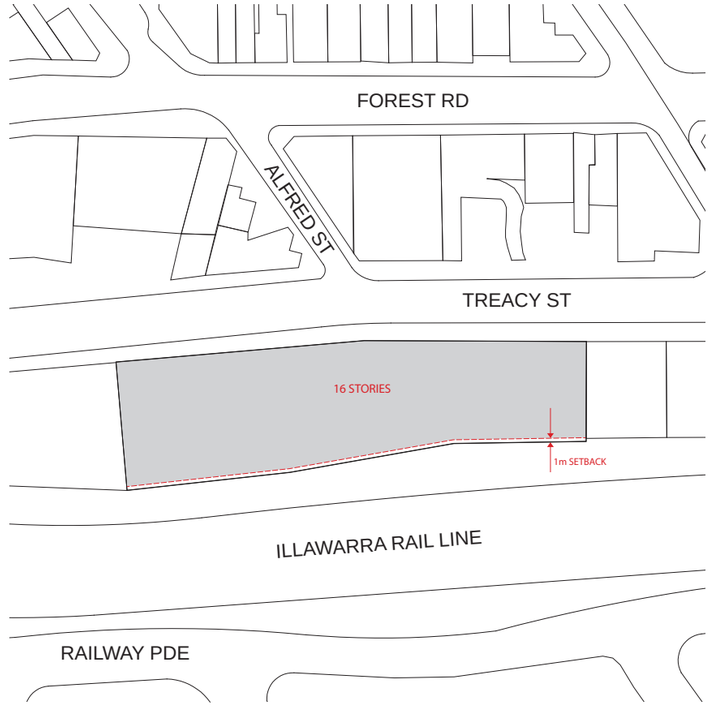
DESIGN CONCEPT

BUILDING HEIGHTS

A maximum envelope, with building heights of 55 metres (16 storey) is developed to relate to surrounding, existing and proposed DHLEP-HCC building heights, in the Hurstville City Centre and along the Illawarra Rail line.

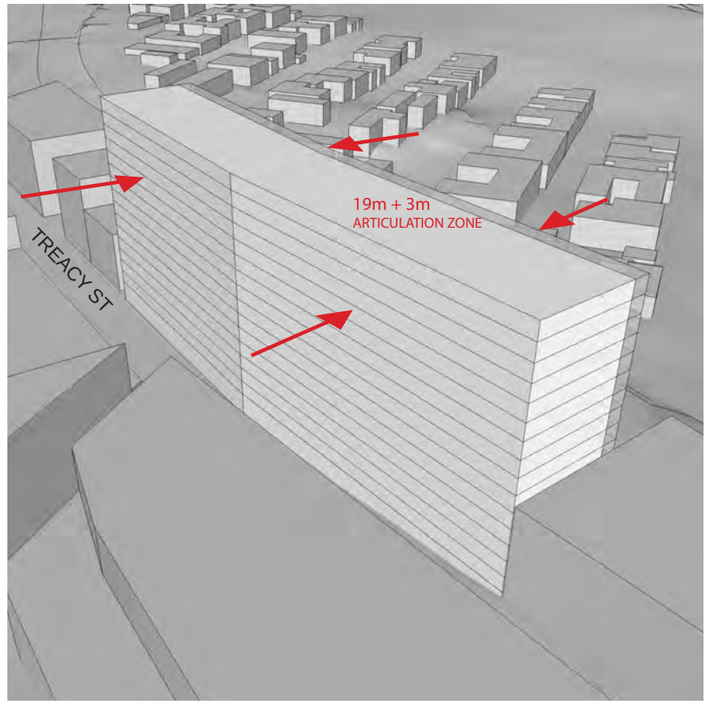
The building height defines the urban edge of the southern boundary of the Hurstville City Centre. There are no significant overshadowing impacts from the increased building heights on the private open space of existing dwellings or public space to the south in Kogarah.

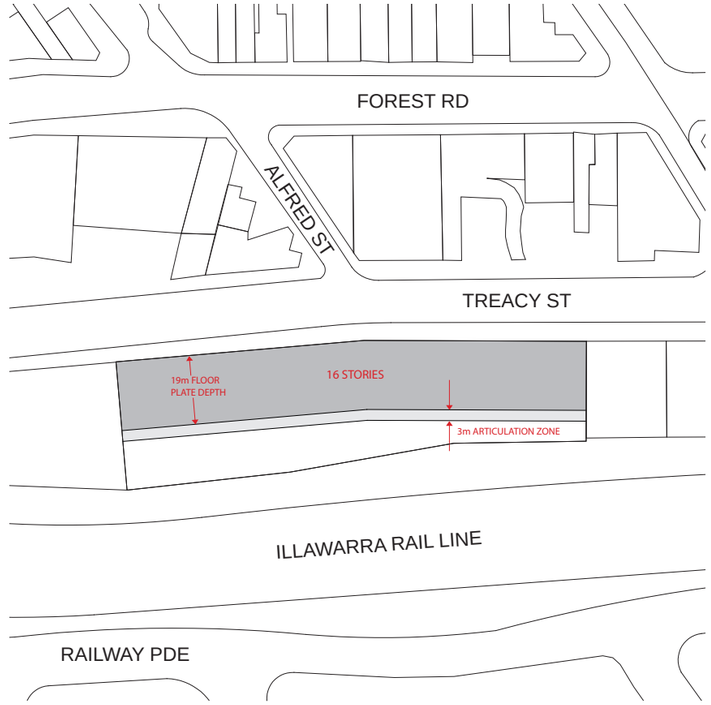




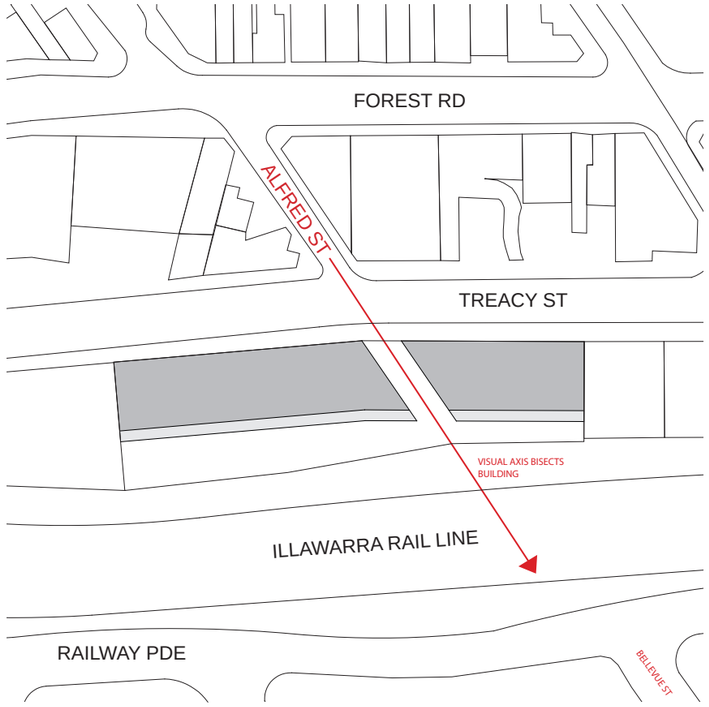
OPTIMUM FLOOR PLATE

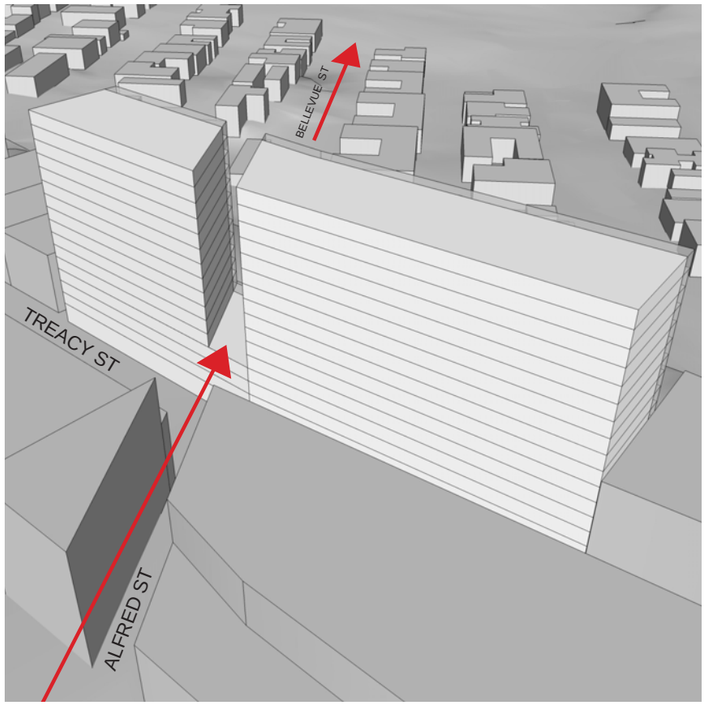
The maximum envelope is developed into a slab form, or street wall, with a maximum building width of 19 metres including a 3 metre wide balcony zone to the north; plus a 3 metre rear articulation zone for wintergardens sitting on a 1 storey podium with communal courtyard. The building perimeter optimises light, the building depth optimises cross ventilation and the setback to the Illawarra Rail line.





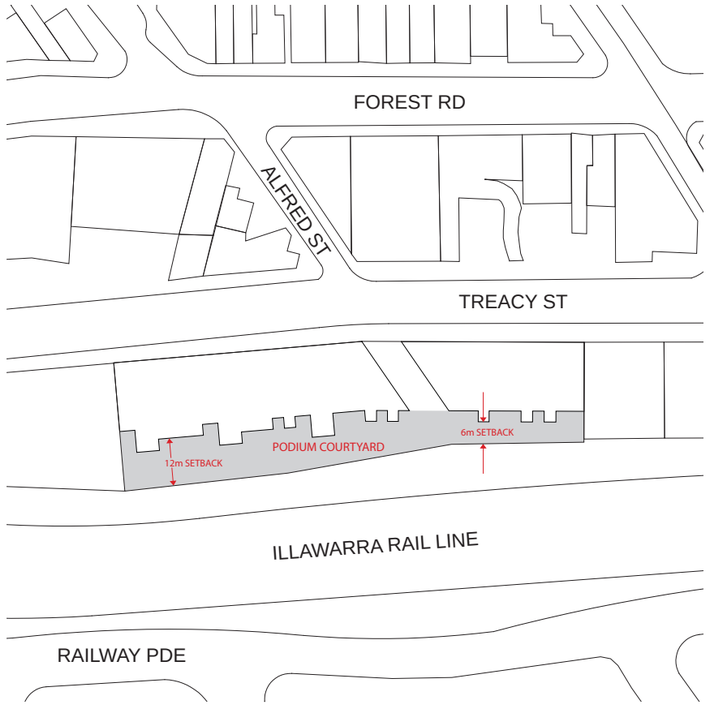
DESIGN CONCEPT

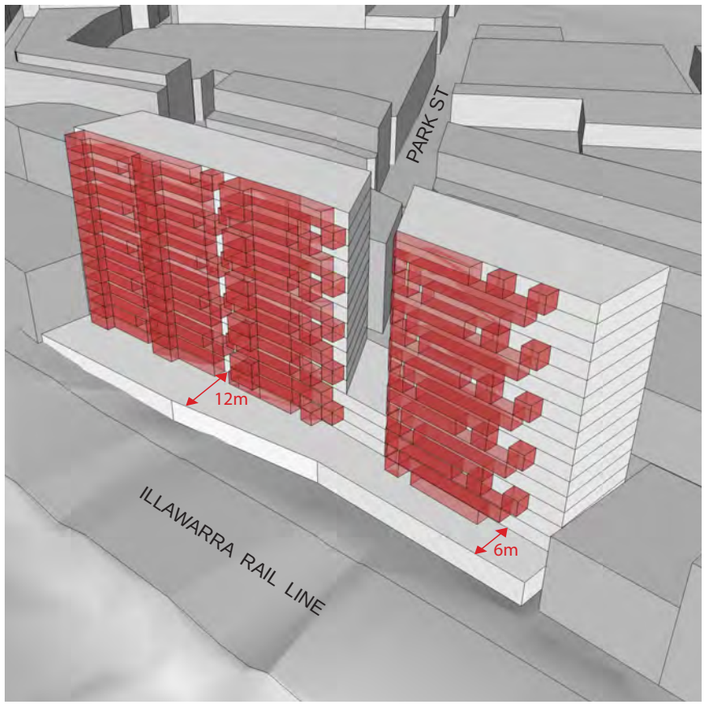




BUILDING FORM

The building form is bisected with a slot into two, roughly equal, towers above the rear podium level. The slot is aligned with the visual axis of Alfred and Bellevue Streets and visually connects Hurstville and Kogarah, the two side sides of the Illawarra Rail line.





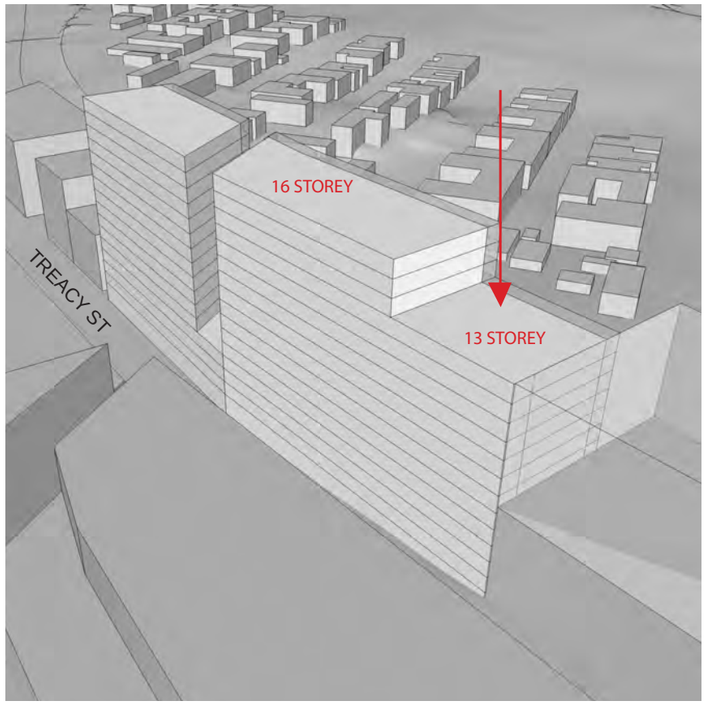
REAR SETBACK

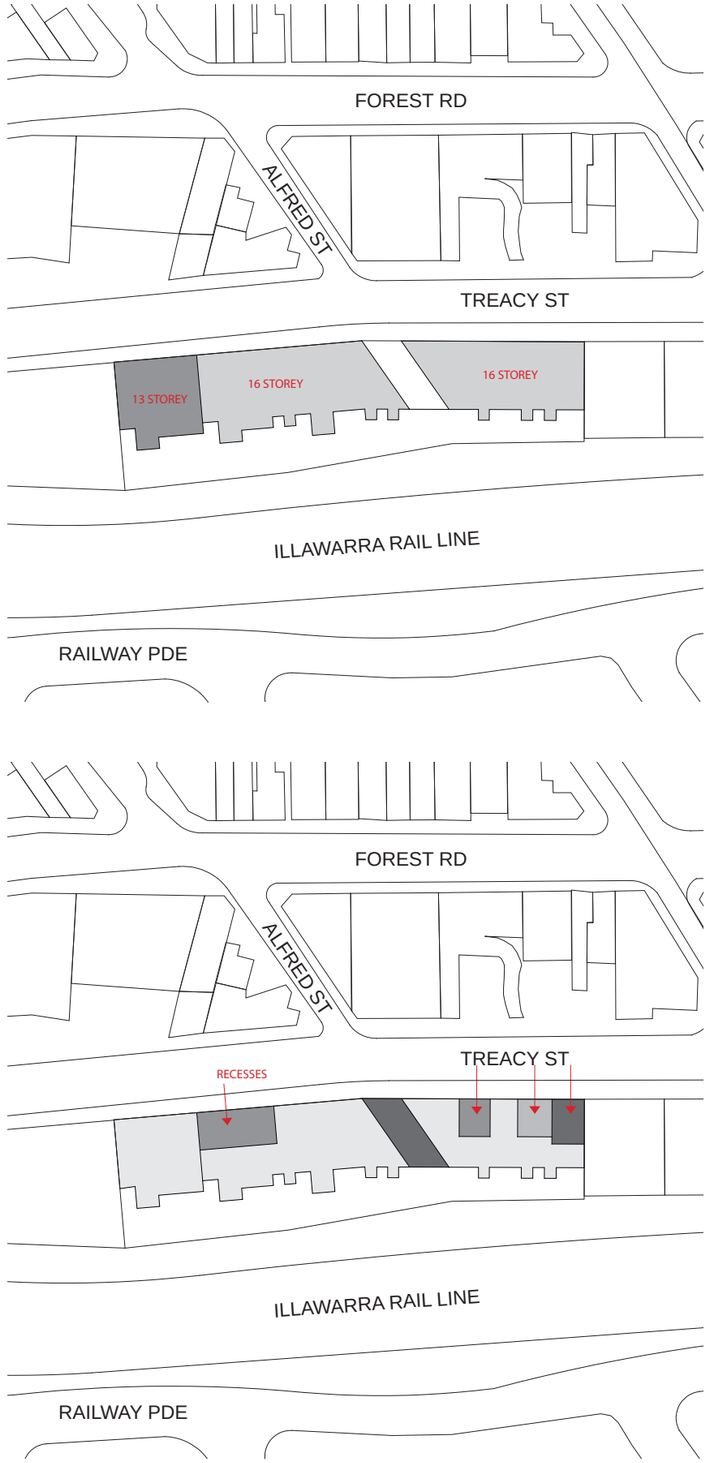
The building form is set back 6 to 10 metres from the southern site boundary to define a podium courtyard that interfaces with the Illawarra Rail line.

DESIGN CONCEPT

ADJUSTED ROOFLINE

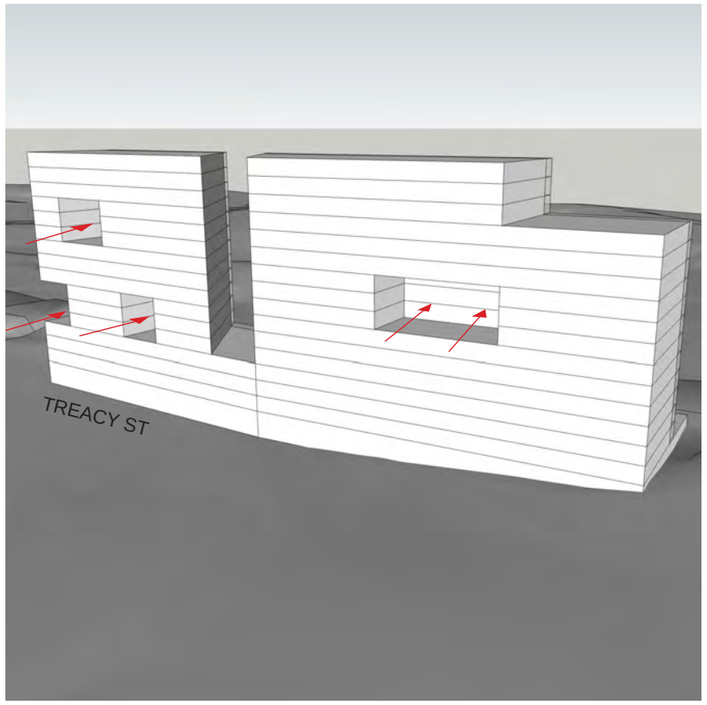
The building form is further adjusted at the roofline by setting down the western end to 45 metres (13 storeys), adjacent to the Council site to accommodate a projected future built form of 45 metres (13 storeys).

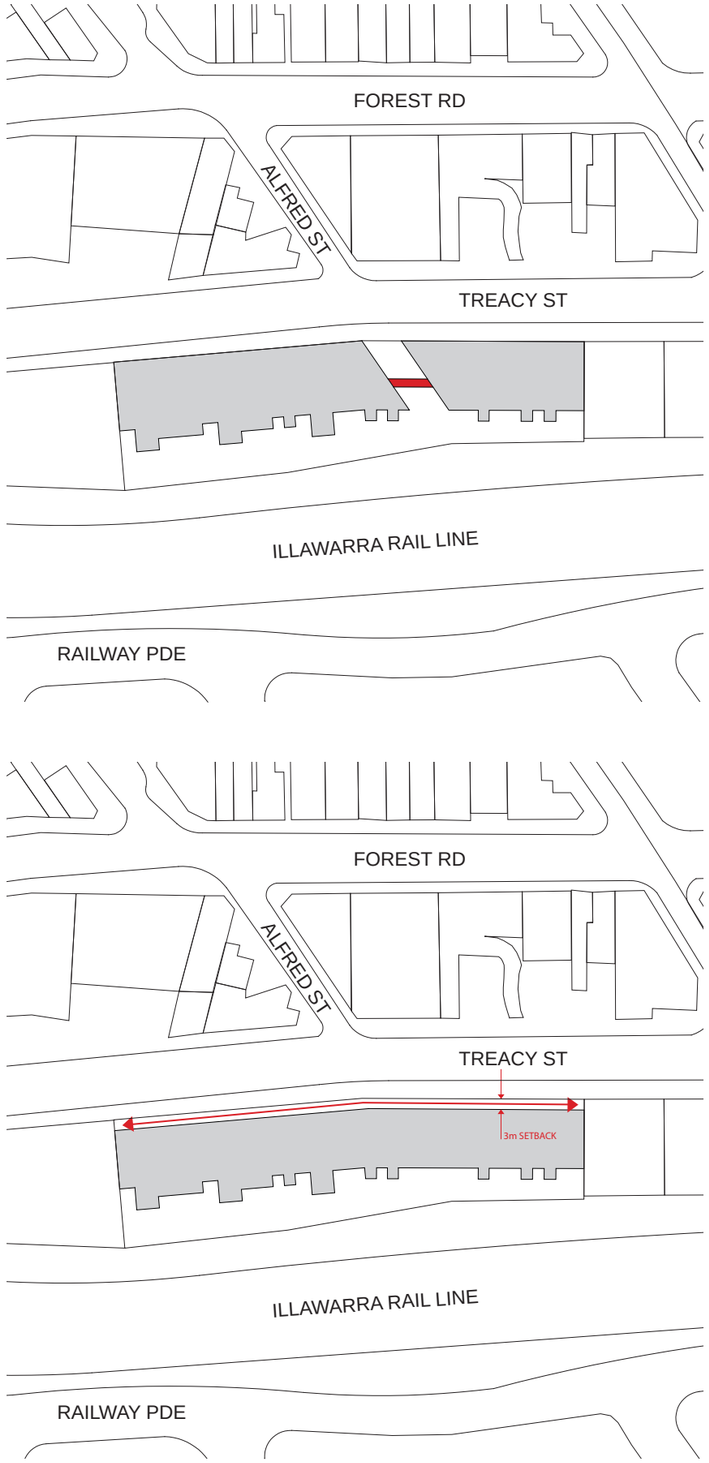


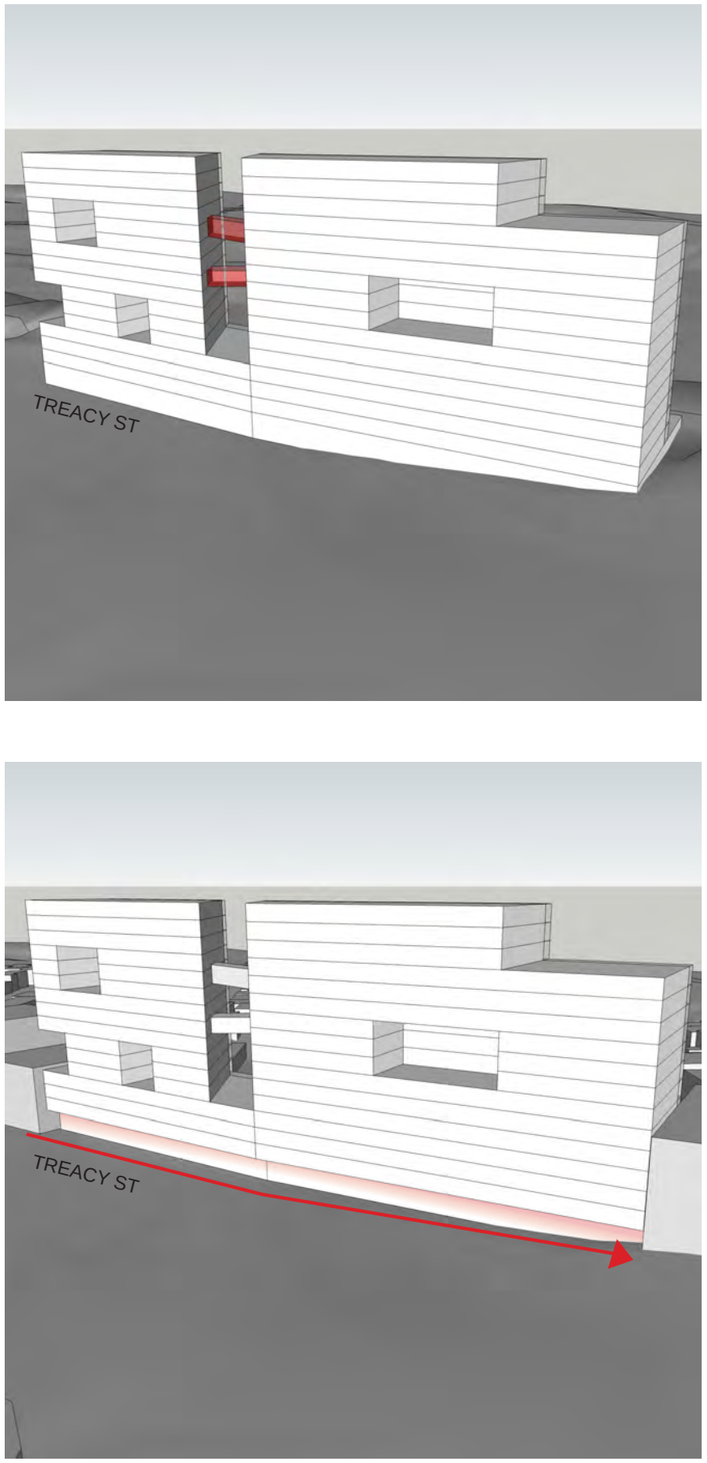


SKY GARDENS

The building form is perforated with carefully placed and proportioned urban-scaled recesses to adjust its visual bulk and mass to the existing and future context. The recesses in the north and east and east facades are developed as linked sky gardens. The recesses mediate between the scale of the slab form and the scale of the adjoining context while retaining the definition of the urban edge to the Hurstville City Centre.







SKY BRIDGES

Linking sky bridges are added in the slot to connect the two towers and multi-storey sky gardens.

ADJUSTED GROUNDLINE

The ground level is setback 3 metres along Treacy Street to provide covered pedestrian area in lieu of an awning attached to the building over the footpath. The colonnade is raised at the western end to accommodate the higher footpath level.

DESIGN CONCEPT

HYBRID FORM

The building is a unique fusion of three form types: the urban street wall, slab and towers to reduce its visual bulk and mass. This hybrid form is cut with a slot into two roughly equal parts and perforated with recesses. An optimal floor plate is developed which is setback from the Illawarra Rail line. The roofline is adjusted to decrease the height and scale of the building form. Sky gardens are added to provide a network of green space. Sky bridges are added in the slot to connect the two towers and provide views along the visual axis. The groundline is adjusted and setback to create a colonnade that relates to the pedestrian scale.