A-139 WASTE MANAGEMENT PLAN
A-140 PHOTO MONTAGE 01
A-141 PHOTO MONTAGE 02
A-142 PHOTO MONTAGE 03
LS-01 LANDSCAPE PROPOSAL - PLAN
LS-02 LANDSCAPE PROPOSAL - INDICATIVE PLANT SCHEDULE
LS-03 LANDSCAPE PROPOSAL - DIAGRAMMATIC LANDSCAPE DETAILS
LS-04 LANDSCAPE PROPOSAL - SPECIFICATION- SITE AND OPEN SPACES
LS-05 LANDSCAPE PROPOSAL - DIAGRAMMATIC STRUCTURAL DETAIL

This design verification statement has been prepared in response to SEPP 65 and is intended to respond to the key principles embodied in SEPP65 and is to be read in conjunction with the Assessment Table prepared by Geoff Baker Urban Design Principal dated 4th September 2014

The site for the mixed use development incorporating residential fat buildings is located on the northern side the Great Western Highway at the corner of Broxbourne Street Westmead.

The site is a regular shaped parcel of land with an approximate 60metre frontage to the Highway and a depth of approximately 36 metres. The total site area is 2251m2.

Design Principles

Principle 1: Context

Good design responds and contributes to its context. Context can be defined as the key natural and built features of an area.

Responding to context involves identifying the desirable elements of a location's current character or, in the case of precincts undergoing a transition, the desired future character as stated in planning and design policies. New buildings will thereby contribute to the quality and identity of the area.

Development in the surrounding area comprises a diverse mix of uses including; single dwellings single and two storey constructions, a kindergarten and service station directly opposite the site
.
The context is captured in the site analysis plan (Drawing A103)

The project has been designed to respond to the form of proposed development envisaged in the planning controls and development standards promoted by Council through the LEP and DCP documents and public consultation processes.

Principle 2: Scale

Good design provides an appropriate scale in terms of the bulk and height that suits the scale of the street and the surrounding buildings.

Establishing an appropriate scale requires a considered response to the scale of existing development. In precincts undergoing a transition, proposed bulk and height needs to achieve the scale identified for the desired future character of the area.

The proposed building is designed as a part 6 and part 7 storey building, comprising 72 dwellings (21 x 1bed, 50 x 2 bed and 1 x 3 bed) and a community facility (59m2) on its lowest floor.

The Building will read as a part six and part seven storey flat roofed building when viewed from all elevations of the building. Elements of the building have been protruded to read as a notional four storey wall along the highway frontage. This scale is consistent with the future scale, bulk and height of this precinct.

The building is set back over 10m from the northern boundary of the site, which forms the rear boundary of the neighbouring residential buildings to the north.

The ground floor configuration of the building, showing relevant setbacks is set out in the Ground Floor Plan Drawing A105.

Principle 3: Built form

Good design achieves an appropriate built form for a site and the building's purpose, in terms of building alignments, proportions, building type and the manipulation of building elements.

Appropriate built form defines the public domain, contributes to the character of streetscapes and parks, including their views and vistas, and provides internal amenity and outlook.

The building has been carefully sculpted to directly respond to its location with its main axis running east west and will have heights ranging from 18.7m to 23.0m.

The building is designed in a contemporary feel yet grounded in traditional materials including face brick work and lightweight steel framing and applied finished panel. An air of transparency to the façade is added through the use of perforated metal sheets which simple, elegant and sophisticated. The use of the punctuating framed window and balcony elements along the southern facade is used to create a sophisticated, rhythmic aesthetic, yet creating strong visual interest while responding to the four storey wall planning control promoted in Council's DCP.

Photomontages of the proposal have been produced and these are captured in Drawings, A140, 141 and 142.

Principle 4: Density

Good design has a density appropriate for a site and its context, in terms of floor space yields (or number of units or residents).

Appropriate densities are sustainable and consistent with the existing density in an area or, in precincts undergoing a transition, are consistent with the stated desired future density. Sustainable densities respond to the regional context, availability of infrastructure, public transport, community facilities and environmental quality.

The building includes 72 dwellings and is of a scale and density consistent with the future adjoining mixed use and residential flat buildings and will sit comfortably within its future built form context.

Principle 5: Resource, energy and water efficiency

Good design makes efficient use of natural resources, energy and water throughout its full life cycle, including construction.

Sustainability is integral to the design process. Aspects include demolition of existing structures, recycling of materials, selection of appropriate and sustainable materials, adaptability and reuse of buildings, layouts and built form, passive solar design principles, efficient appliances and mechanical services, soil zones for vegetation and reuse of water.

The proposal makes use of a redundant service station property and is more suitable to be used for a more sensitive end use, such as affordable housing.

The proposed exceeds the rule of thumb standards for natural ventilation and solar access, and also exceeds minimum BASIX requirements.

Water from its roof is harvested for reuse in landscape irrigation. The Building will contain energy and water efficient appliances, and is to be constructed of readily recyclable materials including brick, concrete, steel, aluminium and glass.

The area between the building and the eastern boundary of the site is predominantly deep soil Planting as is the south west corner of the site (near corner of Broxbourne Street)

A preliminary Greenstar assessment has been undertaken demonstrating that the proposed development is on track to secure a "four star" Greenstar rating. The "BASIX" report/certificate also forms part of this development application.

Principle 6: Landscape

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both occupants and the adjoining public domain.

Landscape design builds on the existing site's natural and cultural features in responsible and creative ways. It enhances the development's natural environmental performance by co-ordinating water and soil management, solar access, micro-climate, tree canopy and habitat values. It contributes to the positive image and contextual fit of development through respect for streetscape and neighbourhood character, or desired future character.

Landscape design should optimise useability, privacy and social opportunity, equitable access and respect for neighbours' amenity, and provide for practical establishment and long term management.

Private courtyards are provided for all ten ground floor apartments in the Building, while common landscaped areas to the north of the building are made publicly accessible and link through to the wider development which contains an extensive amount of landscaped area. Use has been made of the on-site detention structure which has creatively been integrated into the common open space design.

Landscaping will generally comprise a combination of trees and shrubs, lawn, paved areas and walkways, all of which form an integral part of the design of external spaces for outdoor recreational activities for residents. The landscaped space has also been designed to provide a series of smaller open spaces.

A landscaping design forms part of this development application; specifically drawings LS01, LSO2, LS03, LS04 & LS05.

Principle 7: Amenity

Good design provides amenity through the physical, spatial and environmental quality of a development.

Optimising amenity requires appropriate room dimensions and shapes, access to sunlight, natural ventilation, visual and acoustic privacy, storage, indoor and outdoor space, efficient layouts and service areas, outlook and ease of access for all age groups and degrees of mobility.

Most dwellings in the building have multiple aspects, providing for cross ventilation opportunities and solar access and outlook from more than one orientation.

All apartments have been designed to comply with the requirements of AS1428, and residents will be able to access their dwelling via a passenger lift which also connects the basement car park.

The proposal will encourage pedestrian access from the facility to the Great Western Highway and Broxbourne Street frontages with some facilities of convenience within very close walking distance.

The development is directly adjacent the Mays Hill T way stop.

An Access Report has been prepared by BCA Logic which details how all aspects of accessibility have been accommodated in the design of the project.

The proposed Building satisfy the rules of thumb in SEPP 65 for solar access (>70%), cross ventilation (>60%) and single aspect South facing apartments (<10%).

In that regard, we confirm that an estimated 50 (69.4%) of units receive 3 hours direct sunlight between 9am and 3pm in mid-winter, that 51 (71%) of the total number of units are naturally cross ventilated. and 14 (or 19%) of total units are single aspect south facing. Site size, proportions and orientation and efficiency requirements for Affordable Housing do not allow standard to be met.

Principle 8: Safety and security

Good design optimises safety and security, both internal to the development and for the public domain.

This is achieved by maximising overlooking of public and communal spaces while maintaining internal privacy, avoiding dark and non-visible areas, maximising activity on streets, providing clear, safe access points, providing quality public spaces that cater for desired recreational uses, providing lighting appropriate to the location and desired activities, and clear definition between public and private spaces.

The main entry points to the buildings for Residents and Visitors are from the Highway or Broxbourne Street. These entry points are overlooked by units which will ensure a high level of surveillance.

Car parking for the building is located below ground in a secure car park with lift access directly to the residential floors.

Secure residential lobbies are provided for each of the two cores. The entries to both these lobbies are clearly visible from the development.

Principle 9: Social dimensions and housing affordability

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability, and access to social facilities.

New developments should optimise the provision of housing to suit the social mix and needs in the neighbourhood or, in the case of precincts undergoing transition, provide for the desired future community.

New developments should address housing affordability by optimising the provision of economic housing choices and providing a mix of housing types to cater for different budgets and housing needs.

The development is entirely aimed at providing affordable housing accommodation consistent with the future community of this precinct.

Principle 10: Aesthetics

Quality aesthetics require the appropriate composition of building elements, textures, materials and colours and reflect the use, internal design and structure of the development. Aesthetics should respond to the environment and context, particularly to desirable elements of the existing streetscape or, in precincts undergoing transition, contribute to the desired future character of the area.

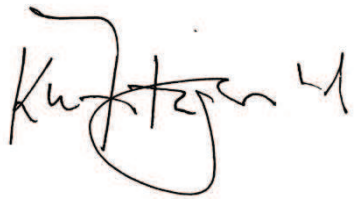
The building is contemporary, simple, elegant and sophisticated. The use of the punctuating framed window and balcony elements to the southern facades is used to create a sophisticated, rhythmic aesthetic responding to the planning controls inherent in the DCP for this precinct. The scale of the proposed building is sympathetic with its future built form; this precinct is in transition.

The proposed development will make a positive contribution to the site and surrounds and will substantially improve the appearance of the site and will be an important catalyst for the future redevelopment of the “enterprise” precinct.

I am satisfied that the design quality principles set out in Part 2 of State Environmental Planning Policy No 65—Design Quality of Residential Flat Development are achieved for the proposed residential flat development component within the mixed use development

If matters of clarification are required please contact the writer or Mr Graeme Allen National Principal Architecture.

Yours sincerely:
HBO EMTB Architecture Pty Ltd



Kevin Fitzgerald
Managing Director
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Encs. SEPP 65 – Residential Flat Design Code – Compliance Table
Prepared by Geoff Baker, Urban Design Principal, 4 September 2014

148-150 Great Western Highway: SEPP 65 – Residential Flat Design Code – Compliance Table			
ITEM	**GUIDELINE**	**COMMENT**	**COMPLIES?**
Part 01 Local Context			
Context	*Relating to Local Context* • Undertake a local context analysis.	Analysis provided in Architectural documentation.	Yes
Primary Development Controls	*Building Height*	No numerical standards in RFDC (complies with LEP height limits)	N/A
	Building Depth An apartment building depth of 10-18 metres is appropriate. Developments that propose wider than 18 metres must demonstrate how satisfactory daylighting and natural ventilation are to be achieved.	Block A is significantly less than 18m deep. The eastern and western ends of Block B are 9.0m deep. The central portion of Block B varies in depth from 19.0m to 21.5m. However, this portion of Block B is only 24.0m wide and: ▪ the two units facing south (Great Western Highway) have a maximum depth of 7.5m (RFDC maximum is 8.0m) ▪ two of the units facing north are corner units and receive ample light and air ▪ The remaining unit facing north has a maximum habitable room depth of 8.5m and will receive direct sunlight at all times of the year.	Yes. Minor technical non-compliance, but satisfactory day lighting and natural ventilation are achieved.
	Building Separation Increase building separation distances as building height increases as follows: Up to four storeys: • 12m between habitable rooms/balconies. • 9m between habitable rooms/balconies and non-habitable rooms. • 6m between non-habitable rooms. Up to five to eight storeys: • 18m between habitable rooms/balconies. • 13m between habitable rooms/balconies and non-habitable rooms. • 9m between non-habitable rooms	Does not apply -- although referred to as “Block A” and “Block B”, these two “blocks” are joined to form a single building	N/A

148-150 Great Western Highway: SEPP 65 – Residential Flat Design Code – Compliance Table			
ITEM	**GUIDELINE**	**COMMENT**	**COMPLIES?**
	Street Setbacks	No numerical standards in RFDC. (Generally complies with front setbacks in Council's DCP. Framed balconies are used to create a visual equivalent to the 3m setback at upper levels required for mixed-use developments in Section 1.4 of Part C of DCP.)	N/A
	Side and Rear Setbacks	No numerical standards in RFDC. (Generally complies with setbacks in Council's DCP)	N/A
	Floor Space Ratio	No numerical standards in RFDC. Generally satisfies the objectives for FSR in the RFDC.	N/A
Part 02 Site Design			
Site Analysis		Site analysis provided in Architectural documentation.	Yes
Site Configuration	*Deep Soil Zones* Minimum of 25% of open space area of site should be a deep soil zone.	20% of the open space area of the site comprises areas of deep soil. (Measurement of deep soil excludes basement car park ramp and basement car parking) Deep soil provided along Great Western Highway frontage allows for large screening trees. Area behind Transit way stop cannot be counted as deep soil because Council requires paving here.	Minor Non-Compliance
	Fences and Walls	Fencing (at min height 1.7m) provided: ▪ To secure private courtyards/external areas of ground floor units ▪ To secure communal open space.	Yes
	Landscape Design	Landscape proposal meets intent of RFDC.	Yes

148-150 Great Western Highway: SEPP 65 – Residential Flat Design Code – Compliance Table			
ITEM	**GUIDELINE**	**COMMENT**	**COMPLIES?**
	Open Space • Area of Communal open space should be 25% to 30% of site area. • Minimum private open space for each apartment is $25m^2$ at ground level/above podium with minimum dimension of 4m.	The minimum required area of Communal open space is $0.25 \times 2251 = 563m^2$ Area of Communal open space provided is: ▪ 663m2 at grade. ▪ The major contiguous Communal open space has a usable area of approximately 470 m2, northerly aspect and is shielded from noise from The Great Western Highway by the proposed building 4 units at ground level (notably smaller 1 bedroom units) do not achieve $25m^2$ of private open space. Fencing for 3 of these could be adjusted to meet $25m^2$ standard.	Yes (Minor non-compliances)
	Orientation	Building placement and massing responds to adjoining streets and maximizes north facing walls and living spaces within this configuration.	Yes
	Planting on Structures	To be addressed during design development stage.	N/A
	Storm water Management	To be addressed during design development stage	N/A
Site Amenity	*Safety*	The principles of Crime Prevention Through Environmental Design (CPTED) have been and will continue to be adopted: ▪ Casual surveillance of streets from private courtyards, balconies, habitable rooms and communal open space areas ▪ Access controlled through fencing and security locks	Yes
	Visual Privacy	Visual privacy generally achieved, with some orienting (angling) and offsetting of openings to bedrooms on north side of building. At ground level, some of these openings require fencing/planting to ensure adequate privacy from Communal open space. For bedroom in Unit 01 and above, separation distance from wall opposite is 9.0m, whereas RFDC requires 13m. However, no loss of visual privacy results.	Yes

148-150 Great Western Highway: SEPP 65 – Residential Flat Design Code – Compliance Table			
ITEM	**GUIDELINE**	**COMMENT**	**COMPLIES?**
Site Access	*Building Entry*	▪ Both main building entries and lobbies are visible and accessed directly from public streets ▪ All ground level units facing streets have direct entry from the street.	Yes
	Parking	▪ All parking is located below grade. ▪ Bicycle parking is provided in the basement	Yes
	Pedestrian Access	Direct access from streets maximized	Yes
	Vehicle Access	Vehicle access is from Broxbourne Street and as distant as possible from The Great Western Highway.	Yes
Part 03 Building Design			
Building Configuration	*Apartment Layout*	Single aspect units generally have a depth less than 8m.	Yes
	Apartment Mix	This scheme is for Affordable Housing. The apartment mix has been determined in consultation with the housing operator and is considered optimal for the target market.	Yes
	Balconies	All balconies have a minimum depth of 2.0m	Yes
	Ceiling Heights	Except at ground level (where heights are greater) floor-to-floor height is 3.0m, allowing minimum floor to ceiling height of 2.7m for all residential units.	Yes
	Flexibility	Typical for this type of residential development.	Yes
	Ground Floor Apartments	All ground floor units have direct access from the street or Communal open space.	
	Internal Circulation	Two cores make all corridors very short	Yes

148-150 Great Western Highway: SEPP 65 – Residential Flat Design Code – Compliance Table			
ITEM	**GUIDELINE**	**COMMENT**	**COMPLIES?**
	Storage	Various types of storage space (including over bonnet storage) for individual units provided in basement parking garage. To be further addressed during design development.	Yes
Building Amenity	*Acoustic Privacy*	Adequate acoustic privacy is achieved through compliance with minimum building separation distances and apartment layout design. Angled windows to recess on north side of building should ensure acceptable acoustic privacy for associated habitable rooms. For bedroom in Unit 01 and above, separation distance from wall opposite is 9.0m, whereas RFDC requires 13m. However, no loss of acoustic privacy results.	Yes
	Daylight Access • Living rooms and private open space of at least 70% of apartments should receive 3 hours direct sunlight between 9am and 3pm in mid-winter. Limit single aspect apartments with a southerly aspect to a maximum of 10% of total units.	▪ Estimated that 50 (69.4%) of units receive 3 hours direct sunlight between 9am and 3pm in mid-winter ▪ 14 (or 19%) of total units are single aspect south facing. Site size, proportions and orientation and efficiency requirements for Affordable Housing do not allow standard to be met.	Yes Non-compliance for maximum number of single aspect apartments
	Natural Ventilation • 60% of units to be naturally cross ventilated.	51 (71%) of the total number of units are naturally cross ventilated.	Yes
Building Form	*Awnings and Signage*	Awnings are provided to both building entries. To be further addressed during design development.	Yes
	Facades	Generally consistent with RFDC. To be further addressed during design development.	Yes

148-150 Great Western Highway: SEPP 65 – Residential Flat Design Code – Compliance Table			
ITEM	GUIDELINE	COMMENT	COMPLIES?
	Roof Design	Flat roofs are adopted – the design strategy is relies on the architectural expression of walls, with the roof suppressed.	Yes
Building Performance	*Energy Efficiency*	General northerly orientation of building allows for effective passive energy design and sets the framework for an energy efficient building. Building to comply with BASIX requirements and is to achieve a 4 Star Green Star rating. Energy efficient appliances are to be incorporated, along with high levels of thermal insulation, motion sensor lighting and natural ventilation where possible	Yes
	Maintenance	Building designed to ensure the on-going requirement for maintenance is minimized. Generally, these issues will be addressed during the design development stage.	Yes
	Waste Management	Waste Management plan provided and to be in accordance with council's DCP.	Yes
	Water Conservation	As per requirements of BASIX. To be addressed further during the design development stage	Yes

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