

STATEMENT OF ENVIRONMENTAL EFFECTS

Accompanying a development application for

Removal of Trees, and the Construction of a Four (4) Storey Residential Flat Building comprising Twenty Three (23) Units including Fourteen (14) x One-bedroom units and Nine (9) x Two-bedroom units, and Consolidation into a Single Lot.

at

Lots 10 & 11 in DP 35980 188 – 190 Moore Street LIVERPOOL NSW 2170

July 2016

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	SITE DESCRIPTION AND ANALYSIS Location and Property Description Site Characteristics Surrounding Development DETAILS OF PROPOSAL Proposed Works Section 79C – Matters for Consideration OTHER CONSIDERATIONS Visual Impacts Open Space Overshadowing and Privacy Noise Erosion Control Measures Economic & Social Impacts Environmental Benefits Disabled Access Fencing and walls Security, Site Facilities and Safety Waste Management

1. INTRODUCTION

This statement of environmental effects has been prepared to accompany a development application for removal of trees, and construction of a four (4) storey residential flat building comprising twenty three (23) units including fourteen (14) x one-bedroom units and nine (9) x twobedroom units, the construction of twenty-one (21) basement car parking spaces, and associated landscaping works, plus consolidation into a single lot at 188-190 Moore Street, Liverpool. The application is being lodged by, Technical Services, Projects, NSW Land & Housing Corporation (LAHC), pursuant to Section 78A of the *Environmental Planning and Assessment Act 1979*.

The proposal has been designed to achieve the relevant provisions and objectives of *Liverpool Local Environmental Plan 2008*, *State Environmental Planning Policy (Affordable Rental Housing)* 2009 (ARH SEPP), State Environmental Planning Policy No. 65, and Section 79C of the *Environmental Planning & Assessment Act 1979* (as amended).

The works address the site and its context and will upgrade the overall streetscape through the provision of modern, well designed residential units. The proposed dwellings will meet an increasing demand for smaller, one and two bedroom units within the Liverpool local government area.

In terms of design, the proposed units have been given careful consideration in relation to the floor layout, dwelling design, appearance, and amenity to the residents and the neighbours. The works will ensure that the needs of the future residents will be met and that the development is, in scale and character, compatible and consistent with the existing and adjoining developments.

2. SITE DESCRIPTION AND ANALYSIS

2.1 Location and Property Description

The site consists of two lots with a legal property description of Lots 10 & 11 in DP 35980. The street address of the site is 188 - 190 Moore Street, Liverpool. The site has a primary street frontage of 30.48m to Moore Street.



Figure 1: Site Plan, subject site highlighted in red. Source: Google Maps

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Figure 2: Location Plan, depicting the subject site in relation to the surrounding developments Source: Google Maps



Figure 3: View of the site from Moore Street Source: Near Maps

2.2 Site Characteristics

The site comprises two lots that are generally regular in shape with a splayed south east corner, with a site area of 1,375.60m², and a frontage of 30.48m to Moore Street. The western side boundary is 46.03m, and the eastern side boundary is 40.69m. The rear boundary is 15.24m with a splayed south-eastern corner 11.53m in length (refer to accompanying plans for boundary dimensions).

The site comprises two lots, one of which is currently vacant and one which contains a single storey fibro clad with metal roof dwelling house which is to be demolished.

A grouping of trees/shrubs is located in the south-west rear corner of the site. The site slopes towards the rear, from an elevation of 19.69m AHD in the north-west corner to 18.55m AHD in the south-east corner of the site (refer to accompanying detail survey plan).

The site is fully serviced with telephone, electricity, water, and sewerage services.

2.3 Surrounding Development

The subject site is located within an established area with a mix of predominately residential development types including single dwellings, and multi unit housing on rectangular lots. Liverpool centre and rail station are located approximately 1.5km to the south-east of the subject site.

3.0 DETAILS OF PROPOSAL

3.1 Proposed Works

The proposed works are as follows:

- The removal of three trees located on the site.
- The construction of a four storey residential flat building comprising fourteen (14) x onebedroom units and nine (9) x two-bedroom units.
- The construction of twenty-one basement car parking spaces including two disabled spaces.
- The construction of one new driveway off Moore Street.
- The construction of stairs, a lift, and concrete pathways.
- The provision 1 x 3000 litre rainwater tank.
- A variety of landscape plantings of varying size throughout the site.
- Consolidation of two lots into a single lot.

Overall, the site will be enhanced as currently vacant land, and residential development past its economic life span in Liverpool will be replaced with modern, well-designed housing, accessible to local facilities. The development will satisfy an increasing demand for one and two bedroom affordable housing units within the Liverpool local government area.

The proposed development is permissible with Council's consent.

LAHC will certify the building works as complying with the Building Code of Australia under Section 109R of the *Environmental Planning and Assessment Act 1979.*

4.0 Section 79C – Matters for Consideration

The following provides an assessment of the proposal against the provisions of Section 79C of the *Environmental Planning and Assessment Act 1979* (as amended).

(a) the provisions of:

(i) any environmental planning instrument

Liverpool Local Environmental Plan 2008

The subject site is zoned R4 High Density Residential under the *Liverpool Local Environmental Plan 2008.*

The relevant R4 objectives are as follows:

- To provide for the housing needs of the community within a high density residential environment.
- To provide a variety of housing types within a high density residential environment.
- To provide for a high concentration of housing with good access to transport, services and facilities.
- To minimise the fragmentation of land that would prevent the achievement of high density residential development.

It is considered that the proposed works are consistent with the above objectives, being a residential flat building development that is located within an area containing a range of residential building types. Residential flat buildings are permissible within the zone with Council's consent.

Clause 4.3 – Height of Buildings

The height of buildings map, referred to in this clause, provides a maximum building height of 15m for the site. The development complies with this height, with a proposed14.15m height.

Clause 4.4 – Floor Space Ratio

The floor space ratio map, referred to in this clause, provides a maximum floor space ratio for this site of 1:1. The proposed development has a floor space ratio of 1.47:1. However, the proposal falls under the provisions of Clause 13(2)(a)(i) of ARH SEPP, which provides for a floor space ratio bonus of 0.5:1. Accordingly, the proposed FSR complies with a maximum of 1.5:1. Refer to discussion under ARH SEPP later in this statement for further detail.

Clause 5.9 Preservation of trees or vegetation

This clause provides that the removal of certain trees requires the consent of Council. The removal of three trees is sought through this application. An arborist report has not been submitted, as the trees/ shrubs do not exceed the height, canopy spread, or trunk diameter as nominated in the Liverpool Development Control Plan nor are they natives on the *Threatened Species Conservation Act 1995*. The removal of existing trees will be compensated through new landscape planting including four trees that will reach a mature height of at least 6m.

State Environmental Planning Policy (Affordable Rental Housing) 2009

Division 1 In-fill Affordable Housing

Division 1 of ARH SEPP relates to in-fill affordable housing. The table below demonstrates that the proposed development complies with Division 1 ARH SEPP.

Table 1 Compliance with Division 1 In-fill Affordable Housing Clause Compliance		
 10 Development to which Division applies (1) This Division applies to development for the purposes of dual occupancies, multi dwelling 		
housing or residential flat buildings if:		
 (a) the development concerned is permitted with consent under another environmental planning instrument, and 	The subject site is zoned R4 High Density Residential under the <i>Liverpool Local Environmental Plan 2008</i> . Residential Flat Buildings are permissible in this zone with the consent of Council.	
(b) the development is on land that does not contain a heritage item that is identified in an environmental planning instrument, or an interim heritage order or on the State Heritage Register under the <u>Heritage Act 1977</u> .	The site does not contain a heritage item.	
(2) Despite subclause (1), this Division does not apply to development on land in the Sydney region unless all or part of the development is within an accessible area.	The subject site is within an 'accessible area', as defined in the SEPP, The site is within an accessible area as it is located approximately 180m from bus stops Stop ID: 2170523 and 2170519 on Moore Street which are served by bus routes 853 and 854 operated by Interline Bus Service. These bus services provide travel between Carnes Hill Liverpool centres.	
(3) Despite subclause (1), this Division does not apply to development on land that is not in the Sydney region unless all or part of the development is within 400 metres walking distance of land within Zone B2 Local Centre or Zone B4 Mixed Use, or within a land use zone that is equivalent to any of those zones	Not applicable, as the site is located within the Sydney Region, as defined in the SEPP.	
13 Floor space ratios		
(1) This clause applies to development to which this Division applies if the percentage of the gross floor area of the development that is to be used for the purposes of affordable housing is at least 20 per cent.	The site is being developed by LAHC; accordingly 100% of the gross floor area of the development will be dedicated to affordable housing.	
(2) The maximum floor space ratio for the development to which this clause applies is the existing maximum floor space ratio for any form of residential accommodation permitted on the land on which the development is to occur, plus:		
(a) if the existing maximum floor space ratio is 2.5:1 or less: (i) 0.5:1—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or (ii) Y:1—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent, where: AH is the percentage of the gross floor area of the development that is used for affordable housing. $Y = AH \div 100$ or	The existing maximum FSR under the LEP for the site is 1:1. Accordingly, an additional 0.5:1 FSR is allowed, giving a maximum total of 1.5:1. The proposed FSR is 1.47:1, which complies with this requirement.	
 (b) if the existing maximum floor space ratio is greater than 2.5:1: (i) 20 per cent of the existing maximum floor space ratio—if the percentage of the gross floor area of the development that is used for affordable housing is 50 per cent or higher, or 		

Table 1 Compliance with Division 1 In-fill Affordable Housing

(ii) Z per cent of the existing maximum floor space ratio—if the percentage of the gross floor area of the development that is used for affordable housing is less than 50 per cent,	
14 Standards that cannot be used to refuse consent	
(1) Site and solar access requirements	
A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:	
(b) site area if the site area on which it is proposed to carry out the development is at least 450 square metres,	The site has an area of 1,375.60sqm.
(c) landscaped area	
 (i) in the case of a development application made by a social housing provider—at least 35 square metres of landscaped area per dwelling is provided, or (ii) in any other case—at least 30 per cent of the site area is to be landscaped, 	The proposed development is being undertaken by LAHC and requires 805sqm (23 x 35) of landscaped area. With the proposal to include a total landscaped area of 282sqm which is equivalent to 20.5% of the site area.
(d) deep soil zones	
 if, in relation to that part of the site area (being the site, not only of that particular development, but also of any other associated development to which this Policy applies) that is not built on, paved or otherwise sealed: (i) there is soil of a sufficient depth to support the growth of trees and shrubs on an area of not less than 15 per cent of the site area (the <i>deep soil zone</i>), and (ii) each area forming part of the deep soil zone has a minimum dimension of 3 metres, and (iii) if practicable, at least two-thirds of the deep soil zone is located at the rear of the site area, 	The proposed development includes a total deep soil zone of 179sqm, which is equivalent to 13% of the site area.
if living rooms and private open spaces for a minimum of 70 per cent of the dwellings of the development receive a minimum of 3 hours direct sunlight between 9am and 3pm in mid-winter.	74% of the dwellings of the development will receive more than 3 hours of direct sunlight between 9am and 3pm in mid-winter to Living Areas (All units except G Units 4 and 5, L1 Units 4 and 5 and L2 Units 4 and 5). 82 % of the dwellings of the development will receive more than 3 hours of direct sunlight between 9am and 3pm in mid-winter to Private Open Space (All units except G Unit 5, L1 Unit 4 and 5 and L2 Units 5) (see submitted shadow diagrams).
A consent authority must not refuse consent to development to which this Division applies on any of the following grounds:	
(a) parking	
 if: (i) in the case of a development application made by a social housing provider for development on land in an accessible area—at least 0.4 parking spaces are provided for each dwelling containing 1 bedroom, at least 0.5 parking spaces are provided for each dwelling containing 2 bedrooms and at least 1 parking space is provided for each dwelling containing 3 or more bedrooms, or 	The proposed development is being undertaken by LAHC (a social housing provider) and includes a total of 21 car spaces for 23 dwellings, with 10 spaces required. $14 \times 0.4 = 5.4$ $9 \times 0.5 = 4.5$ = 10 car parking spaces

 (ii) in any other case—at least 0.5 parking spaces are provided for each dwelling containing 1 bedroom, at least 1 parking space is provided for each dwelling containing 2 bedrooms and at least 1.5 parking spaces are provided for each dwelling containing 3 or more bedrooms, 	The site is within an accessible area as it is located approximately 180m from bus stops Stop ID: 2170523 and 2170519 on Moore Street which are served by bus routes 853 and 854 operated by Interline Bus Service. These bus services provide travel between Carnes Hill Liverpool centres.
(b) dwelling size	SEPP.
 if each dwelling has a gross floor area of at least: (i) 35 square metres in the case of a bedsitter or studio, or (ii) 50 square metres in the case of a dwelling having 1 bedroom, or 	Proposed 1 bedroom units have a minimum floor area of 51sqm.
(iii) 70 square metres in the case of a dwelling having 2 bedrooms, or(iv) 95 square metres in the case of a dwelling	Proposed 2 bedroom units have a minimum floor area of 70sqm.
 having 3 or more bedrooms. (3) A consent authority may consent to development to which this Division applies whether or not the development complies with the standards set out in subclause (1) or (2). 	The proposed development complies with the standards set out in subclauses (1) and (2).
15 Design requirements	
 A consent authority must not consent to development to which this Division applies unless it has taken into consideration the provisions of the <i>Seniors Living Policy: Urban Design Guidelines for</i> <i>Infill Development</i> published by the Department of Infrastructure, Planning, and Natural Resources in March 2004, to the extent that those provisions are consistent with this Policy. This clause does not apply to development for the purposes of a residential flat building if <u>State</u> <u>Environmental Planning Policy No 65—Design</u> <u>Quality of Residential Flat Development</u> applies to the development. 	Not applicable, as SEPP 65 applies to the development.
16 Continued application of SEPP 65	
Nothing in this Policy affects the application of <u>State</u> <u>Environmental Planning Policy No 65—Design</u> <u>Quality of Residential Flat Development</u> to any development to which this Division applies.	The development is designed to comply with SEPP 65 and compliance with SEPP 65 is addressed below.
16A Character of local area	
A consent authority must not consent to development to which this Division applies unless it has taken into consideration whether the design of the development is compatible with the character of the local area.	The proposed development is considered to be compatible with the desired future character of the local area. The area is in transition from older style low density dwellings on a single lot to contemporary multi- unit housing developments. The site is zoned R4 High Density with Residential Flat Buildings permissible in the zone, with a maximum height limit of 15m. The four storey RFB proposes a high quality design which will integrate with the surrounding development and is compatible with the transforming character of the local area.
17 Must be used for affordable housing for 10 years	
(1) A consent authority must not consent to development to which this Division applies unless conditions are imposed by the consent authority to the effect that:	This requirement is not applicable to development on land owned by LAHC.

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 (a) for 10 years from the date of the issue of the occupation certificate: (i) the dwellings proposed to be used for the purposes of affordable housing will be used for the purposes of affordable housing, and (ii) all accommodation that is used for affordable housing will be managed by a registered 	
 community housing provider, and (b) a restriction will be registered, before the date of the issue of the occupation certificate, against the title of the property on which development is to be carried out, in accordance with section 88E of the <u>Conveyancing Act 1919</u>, that will ensure that the requirements of paragraph (a) are met. (2) Subclause (1) does not apply to development on land owned by the Land and Housing Corporation or to a development application made by, or on behalf of, a public authority. 	
18 Subdivision Land on which development has been carried out under this Division may be subdivided with the consent of the consent authority.	No subdivision is proposed as part of this application.

The proposed development complies with the development standards prescribed in Clause 14 of ARH SEPP, except for the following:

Landscaped area provision, which is required to be provided at 35sqm per dwelling (805sqm). The proposal is for 282sqm (20.5%) of landscaped area. This is considered justified as the proposal is for affordable housing, and the control is a non-refusable standard.

Deep soil zone provision, which is required to be provided as 15% of the site. The proposal is for 179sqm (13%) of deep soil zone within the site. However, this is considered acceptable as the variation is not expected to have a significant impact to deep soil zone landscape planting or infiltration of stormwater, and the control is a non-refusable standard.

The proposed development complies with the broader requirements of Division 1 of the SEPP.

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development

State Environmental Planning Policy No. 65 – Design Quality of Residential Flat Development (SEPP 65) aims to provide an improved quality to the design and development of residential apartment buildings across NSW. SEPP 65 is applicable to all new multi-unit residential apartment building developments.

Pursuant to Clause 4 of SEPP 65, the proposed development comprises a residential flat building development as the proposed works include a development which includes or exceeds three storeys in height and contains four or more individual dwellings. The proposed residential apartment building meets the nominated criteria and therefore this policy applies to the assessment of the current development.

Clause 28(2) of the SEPP states:

In determining a development application a consent authority is to take into account:

(a) the advice (if any) obtained from the design review panel, and

(b) the design quality of the development when evaluated in accordance with the design quality principles, and

(c) the Apartment Design Guide.

Liverpool Council Design Review Panel meeting was held on 30 October 2014 to discuss the

proposed development. The recommendations of this were considered in the final design of the proposed residential flat building development. The Design Review Panel Assessment Report is attached as an appendix to this statement.

DWP Suters Architects have prepared a Design Qualities Principles evaluation as part of the design of the proposed building. This design statement is submitted in addition to this SEE. The Design Qualities Principles evaluation addresses each of the SEPP 65 design quality principles contained within the *Apartment Design Guide*, which are to be addressed as part of the design of a new development. The Design Qualities Principles evaluation is submitted as an appendix to this SEE.

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Director-General has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved)

Nil.

(iii) any development control plan

Liverpool Development Control Plan 2008

Part 1 - General Controls for all Development

The following table states compliance with relevant clauses of Part 1 of the DCP:

CONTROL	PROPOSED	COMPLIES
Part 1.1 – General (Controls for all Development	
Tree Preservation	The removal of trees on the site will be subject to obtaining a tree removal permit under Council's Tree Preservation Order.	Yes
Landscaping	The application is accompanied by Landscape Plans that detail the proposed site landscaping.	Yes
Bushland & Fauna Habitat Preservation	The site does not contain any significant flora or fauna habitats and is not located within or near to urban bushland.	Yes
Bushfire Risk	The site is not identified as being bush fire prone land.	Yes
Water Cycle Management	The application is accompanied by a stormwater drainage design that will manage stormwater collected on-site.	Yes
Development Near Creeks and Rivers	The site is not located within 50m of a watercourse, creek, or river, is unlikely to impact upon the bed, bank, or stream flow of a watercourse, and does not propose the removal of any riparian vegetation. Accordingly, this section of the DCP is not relevant to the application.	Yes
Erosion and Sediment Control	The site has an area less than 2,500m2. As required for sites less than 2,500m2, the application is accompanied by an Erosion and Sediment Control Plan.	Yes
Flooding Risk	The site is not identified as being subject to flooding.	Yes
Contaminated Land Risk	The site has been used for the purposes of low density residential development for many years and there is no evidence to suggest that the site is potentially contaminated or unsuitable for the proposed development. As such, remediation and/or site validation is not necessary.	Yes
Salinity Risk	Site Investigations for Urban Salinity" indicates that ECe values of 0.9 and 6.3 dS/m are consistent with the presence of non and moderately saline soils. The proposal does not involve salinity risk activities.	Yes
Acid Sulfate Soils Risk	The site is not identified in the Section 149 Certificate as being affected by Acid Sulfate Soils.	
Weeds	The site does not contain any noxious weeds. The site is to be extensively landscaped in accordance with the landscape plans.	Yes
Demolition of Existing Developments	The site is currently contains one vacant lot and one single storey dwelling house. The existing dwelling and associated structures on the site are to be demolished to accommodate the proposed development	Yes

Table 2 – Compliance with Part 1 Liverpool Development Control Plan 2008

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	in accordance with Australian Standards.	
	A Waste Management Plan (WMP) is submitted with the Development Application.	
On-site Sewage Disposal	The site has access to the reticulated sewer system and does not require on-site sewerage disposal.	Yes
Aboriginal Archaeology	The site is not identified as containing any aboriginal sites, places, or relics.	Yes
Heritage and Archaeological Sites	The site is not listed as a heritage item.	Yes
Notification of Applications	The application will require notification/ advertising in accordance with the DCP and any submissions made in response to the notification/advertising will need to be considered in the assessment of the application.	Yes
Part 1.2 – Additiona	I General Controls for Development	
Car Parking and Access	Car parking provision is in accordance with the ARH SEPP requirements for a site in an accessible area.	Yes
Water Conservation	Refer to the SEE and BASIX Certificate for details on the water conserving measures to be incorporated in order to meet the BASIX targets.	Yes
Energy Conservation	Refer to the SEE and BASIX Certificate for details on the energy conserving measures to be incorporated in order to meet the BASIX targets.	Yes
Waste Disposal and Re-use Facilities	A Waste Management Plan accompanies the application and details the waste management practices to be adopted, including the ongoing collection, storage, recycling and disposal of waste.	Yes

Part 3.7 - Residential Flat Buildings

The following table states compliance with relevant clauses of the DCP for Residential Flat Buildings within the R4 zone.

CONTROL	REQUIRED	PROPOSED	COMPLIES
Frontage and Site Are	a		
Minimum Lot Width	The minimum lot width 24m.	30.48m	Yes
Site Planning			
Site Planning	1. The building should relate to the site's topography with minimal earthworks, except for basement car parking.	The site slopes to the rear with minor cut (90mm) and fill (approximately 1m) required. Basement car parking is proposed.	Yes
	2. Siting of buildings should provide usable and efficient spaces, with consideration given to energy efficiency in the building design.	The building is orientated with a north-east aspect that provides for good solar access, with 74% of units achieving solar access to living areas and 82% to private open space. Private open space areas are accessible from living areas. The building meets its targets for BASIX commitments and has a NatHERS star rating range from 4.5 – 8 Stars (Average 6.4)	Yes
	3. Site layout should provide safe pedestrian, cycle, and vehicle access to and from the street.	The site is proposed with a single entry and exit driveway, via Moore Street, which enables	Yes

		vehicles to enter and exit in a forward direction.	
	4. Siting of buildings should be sympathetic to surrounding development, taking specific account of the streetscape in terms of scale, bulk, setbacks, materials, and visual amenity.	The proposed building bulk and scale is larger than existing adjoining dwellings. The building is proposed with a minimum 5.5m front setback. The design is contemporary, using a mix of building elements and design features to create a positive visual impact on the street scape.	Yes
	5. Stormwater from the site must be able to be drained satisfactorily. Where the site falls away from the street, it may be necessary to obtain an easement over adjoining property to drain water satisfactorily to a Council stormwater system.	Stormwater is proposed to drain to the street, via a minimum 6.6m ³ underground stormchamber in the rear of the site and connected to a 15.4m ³ detention	Yes
	Where stormwater drains directly to the street, there may also be a need to incorporate on-site detention of stormwater where street drainage is inadequate.	tank at the front of the site. Refer to Stormwater Drainage Plan.	Yes
	6. The development will need to satisfy the requirements of State Environmental Planning Policy No 65—Design Quality of Residential Flat Development.	Compliance with this control is addressed above.	Yes
4. Setbacks			
Front	Front setback 5.5m	5.5m	Yes
Side and Rear	Side in R4 zone:		
Setbacks	 First 10m in height = 3m Greater than 10m in height = 8m 	3m 3m	Yes No
	Rear in R4 zone:		
	• First 10m in height = 8m	8m	Yes
	• Greater than 10m in height = 8m	8m	Yes
5 Landscaped Area	and Private Open Space		
Landscaped Area (deep soil area)	1. A minimum of 25% of the site area shall be landscaped area.	282sqm (20.5%) of the site is proposed as landscaped area and 179sqm (13%) is provided as deep soil zone.	No
	2. A minimum of 50% of the front setback area shall be landscaped area.	Less than 50% of the front setback is proposed as landscaped area.	No
	3. Optimise the provision of consolidated landscaped area within a site by:The design of basement and sub-	Basement parking is	Yes
	basement car parking, so as not to fully	proposed.	
	cover the site. - The use of front and side setbacks.	The proposal complies with front and side setbacks for the ground floor.	Yes
	- Optimise the extent of landscaped area beyond the site boundaries by locating them contiguous with the landscaped	Landscaped area to rear is contiguous with adjoining lots landscaped	Yes

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	area of adiagont propertia-	07000	
	area of adjacent properties. 4. Promote landscape health by supporting for a rich variety of vegetation type and size.	areas. Landscape species have been selected for their durability and low water tolerance.	Yes
Private Open Space	1. POS provided for each dwelling in accordance with the following:		
	Small > 65sqm = 10sqm +2m minimum dimension.	Units L1 3, L2 3, L2 6, L3 3, L3 6 do not comply.	No, Provided in accordance with LAHC Design Guidelines.
	Medium 65 – 100sqm = 12sqm + 2m minimum dimension.	Units L1 2, L2 2, L3 2, L3 4 do not comply.	No, Provided in accordance with LAHC Design Guidelines.
	2. Private open space may be provided as a courtyard for ground floor dwellings or as balconies for dwellings above the ground floor.	POS provided as both courtyards and balconies.	Yes
	3. Private open space areas should be an extension of indoor living areas and be functional in size to accommodate seating and the like.	POS is accessible through adjoining living areas.	Yes
Drying Areas	Clothes drying facilities must be provided at a rate of 5 lineal m of line per unit. Clothes drying areas should not be visible from a public place and should have solar access.	Clothes drying facilities, at least 5m of line, provided for each dwelling within balconies or POS, screened from view from the street frontage.	Yes
6. Building Design, S	Streetscape and Layout	·	
Building Height	LEP control = 15m	The proposal is for 14.15m maximum building height.	Yes
Building Appearance and Streetscape	1. Residential Flat Buildings shall comply with State Environmental Planning Policy No 65 – Design Quality of Residential Flat Development, and should consider the Residential Flat Design Code.	This is addressed above.	NA
Roof Design	 Relate roof design to the desired built form. This may include: Articulating the roof, or breaking down its massing on large buildings, to minimise the apparent bulk or to relate to a context of smaller building forms. Using a similar roof pitch or material to adjacent buildings, particularly in existing special character areas or heritage conservation areas. Minimising the expression of roof forms gives prominence to a strong horizontal datum in the adjacent context, such as an existing parapet line. Using special roof features, which relate to the desired character of an area, to express important corners. 	The proposed roof has a pitch of 3 degrees, and is broken up into sections which minimises mass. Roof features and Level 3 articulation fit with the R4 High Density zoning of the site.	Yes
Building Entry	 Improve the presentation of the development to the street by: Locating entries so that they relate to the existing street and subdivision pattern, street tree planting, and pedestrian access network. 	The primary building entry is located on the eastern elevation, accessible via a pedestrian pathway from	Yes

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		the street frontage.	
	- Designing the entry as a clearly identifiable element of the building in the street.	The entry is clearly identifiable, with entry awning, pedestrian pathway and letter boxes providing a sense of address.	
	- Utilising multiple entries-main entry plus private ground floor dwelling entries- where it is desirable to activate the street edge or reinforce a rhythm of entries along a street.	Multiple entries are provided with access to ground floor Units 1 and 2 available from the street frontage.	
	4. Ensure equal access for all.	The building is accessible to people with a disability, and complies with AS1428.1.	
	 5. Provide safe and secure access by: Avoiding ambiguous and publicly accessible small spaces in entry areas. Providing a clear line of sight between one circulation space and the next. 	Entry lobby provides safe access to ground floor and upper level units. Line of site is available between circulation spaces.	
	- Providing sheltered well-lit and highly visible spaces to enter the building, meet, and collect mail.	Covered pedestrian accessway and entry lobby provide visible spaces to enter the building, meet, and collect mail.	
	8. Provide and design letterboxes to be convenient for residents and not to clutter the appearance of the development from the street by:	Letter boxes are provided at the street frontage, positioned obliquely to the street to avoid visual clutter.	
Balconies	1. Balconies may project up to 1m from the façade of a building.	Balconies project up to 500mm from building façade.	Yes
	4. Design balustrades to allow views and casual surveillance of the street.	Open metal slat balcony balustrades are proposed.	
	5. Balustrades on balconies at lower levels shall be of solid construction.	Ground floor units are proposed with brick and transparent wall panels for passive surveillance.	
	10. Primary balconies should be: - Located adjacent to the main living areas, such as living room, dining room or kitchen to extend the dwelling living space;	Balconies will be accessible from living areas.	
	- Sufficiently large and well proportioned to be functional and promote indoor/outdoor living.	Balcony area and dimensions are provided in accordance with LAHC Design Guidelines.	
	13. Provide primary balconies for all dwellings with a minimum depth of 2m.	Balconies proposed with minimum dimension at least 2m depth.	
Daylight Access	1. Plan the site so that new residential flat development is oriented to optimise northern aspect.	The proposal has been designed to optimise access to sunlight.	Yes

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	2. Ensure direct daylight access to	The proposal is for at	
	communal open space between March	least 60% of dwellings	
	and September and provide appropriate shading in summer.	with living areas and balconies orientated to	
	3. Optimise the number of dwellings	the north. 74% of living	
	receiving daylight access to habitable	rooms and 82% of POS	
	rooms and principal windows.	receive at least 3 hours of	
		solar access mid-winter.	
Internal design	1. All staircases should be internal.	Internal fire stairs is	Yes
		proposed.	
	3. Basement car parking shall be located beneath the building footprint.	Basement carparking is proposed beneath the building footprint.	
	5. Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings.	Privacy screens to windows and balconies mitigate overlooking on to adjacent dwellings.	
Ground Floor	1. Design front gardens or terraces,	Landscaped front	Yes
Dwellings	which contribute to the spatial and visual structure of the street while maintaining adequate privacy for dwelling occupants. This can be achieved by animating the street edge, for example, by promoting individual entries for ground floor dwellings.	setbacks are proposed, in addition to enclosed POS areas fronting the street. Individual separate entries are available to ground floor units.	165
	2. Create more pedestrian activity along the street and articulate the street edge by:	Pedestrian access available from Moore Street.	
	 Balancing privacy requirements and pedestrian accessibility. Providing appropriate fencing, lighting and/ or landscaping to meet privacy and safety requirements of occupants while contributing to a pleasant streetscape. 	POS areas are located in front setbacks suitably enclosed with fencing and transparent wall panels for privacy and passive surveillance.	
	- Utilising a change in level from the street to the private garden or terrace to minimise site lines from the streets into the dwelling for some dwellings.	FFL of courtyards fronting Moore Street are stepped up approximately 400mm from the street.	
	- Increasing street surveillance with doors and windows facing onto the street.	Windows, balconies and habitable rooms face the street frontage for passive surveillance.	
	3. Planting along the terrace edge contributes to a quality streetscape.	Planter boxes for landscape plantings are proposed within the street setback area.	
	5. Optimise the number of ground floor dwellings with separate entries and consider requiring an appropriate percentage of accessible units. This relates to the desired streetscape and topography of the site.	All dwellings are designed to LAHC Liveable standards. Eight dwellings are designed to accessible/disabled standard. Four ground floor units have separate access at ground floor.	
Occurit	6. Provide ground floor dwellings with access to private open space, preferably as a courtyard.	All ground floor units have an outside courtyard POS area.	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Security	1. Entrances to buildings should be orientated towards the front of the site and facing the street.	Entrances to ground floor dwellings face the street frontage.	Yes

Natural Ventilation	 Utilise the building layout and section to increase the potential for natural ventilation. Design solutions may include: Facilitating cross ventilation by designing narrow building depths and providing dual aspect dwellings, for example, cross through dwellings and corner dwellings. Facilitating convective currents by designing units, which draw cool air in at lower levels and allow warm air to escape at higher levels, for example, maisonette dwellings. 	Cross ventilation achievable with multiple opening windows and doors to each dwelling.	Yes
Building Layout	The layout of dwellings within a residential flat building should minimise the extent of common walls.	Common walls minimised where appropriate.	Yes
Storage Areas	1. A secure storage space is to be provided for each dwelling with a minimum volume 8 m3 (minimum dimension 1m2). This must be set aside exclusively for storage as part of the basement or garage.	Over bonnet storage space is provided for each dwelling within the basement car park.	Yes
7. Landscaping and		1	I
Landscaping	1. The setback areas are to be utilised for canopy tree planting. The landscape design for all development must include canopy trees that will achieve a minimum 8 m height at maturity within front and rear setback areas.	Four trees that can reach a mature height of 6m are proposed.	No
	2. Landscape planting should be principally comprised of native species to maintain the character of Liverpool and provide an integrated streetscape appearance.	A mix of native and exotic species is proposed.	Yes
	3. The landscaping shall contain an appropriate mix of canopy trees, shrubs, and groundcovers. Avoid medium height shrubs (600 – 1800mm) especially along paths and close to windows and doors.	A mix of ground covers, grasses, shrubs, and trees are proposed.	Yes
	7. The development must be designed around significant vegetation on the site.	All trees are to remain, except for three trees which are proposed to be removed to accommodate the development.	Yes
	8. It is important to retain significant vegetation to maintain an existing streetscape and enhance the visual appearance of new dwellings.	Compensatory plantings are proposed to replace trees to be removed.	Yes
	11. All species of trees and shrubs should be drought resistant.	Landscape plantings have been selected for their drought tolerance.	Yes
Planting on Structures	 Design for optimum conditions for plant growth by: Providing soil depth, soil volume and soil area appropriate to the size of the plants to be established. Providing appropriate soil conditions and irrigation methods. Providing appropriate drainage. Design planters to support the appropriate soil depth and plant selection by: Ensuring planter proportions 	Landscape planting to be undertaken in accordance with the specification on the Landscape Plans.	Yes

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	accommodate the largest volume of soil possible. Minimum soil depths will vary depending on the size of the plant. However, soil depths greater than 1.5 m are unlikely to have any benefits for tree growth. - Providing square or rectangular planting areas rather than long narrow linear areas.		
Fencing	Primary Frontage 1. The maximum height of a front fence is 1.2m.	Front boundary fencing is not proposed. POS areas within the front setback are proposed with 1.8m high enclosing walls.	Yes
	2. The front fence may be built to a maximum height of 1.5m if the fence is setback 1m from the front boundary with suitable landscaping in front of the proposed fence.	Enclosing walls to POS are setback approximately 5.2m from the property boundary.	
	3. Fences should not prevent surveillance by the dwelling's occupants of the street or communal areas.	Enclosing walls to POS are proposed with transparent wall panels for passive surveillance.	
	4. The front fence must be 30% transparent.	Front boundary fencing is not proposed.	
	Boundary Fences 9. The maximum height of side boundary fencing within the setback to the street is 1.2m.	Side boundary fencing forward of the building line is not proposed.	
	10. Boundary fences shall be lapped and capped timber or metal sheeting.	Side boundary fencing behind the building line is proposed as 1.8m high metal fencing.	
8. Car Parking and A	ccess		
Car Parking	1. Visitor car parking shall be clearly identified and may not be stacked car parking.	21 car parking spaces are proposed, with 10 spaces only required under the ARH SEPP.	Yes
	 Visitor car parking shall be located between any roller shutter door and the front boundary. 	Underground carparking is proposed.	
	3. Pedestrian and driveways shall be separated.	Underground carparking is proposed with a separate pedestrian and driveway access.	
Pedestrian Access	2. Provide high quality accessible routes to public and semi-public areas of the building and the site, including major entries, lobbies, communal open space, site facilities, parking areas, public streets, and internal roads.	All dwellings have accessible access in accordance with AS1428.	Yes
	 3. Promote equity by: Ensuring the main building entrance is accessible for all from the street and from car parking areas. Integrating ramps into the overall building and landscape design. Design ground floor dwellings to be accessible from the street, where applicable, and to their associated private open space. 	Eight dwellings are compliant with AS4299 for Adaptable Housing.	

Overshadowing	1. Adjoining properties must receive a	Adjoining dwellings will	Yes
Oversnauowing	minimum of three hours of sunlight between 9am and 5pm on 21 June to at least: - One living, rumpus room or the like; and	not be significantly overshadowed and will receive the required solar access between 9am –	Tes
	- 50% of the private open space.	5pm.	
Privacy	 Building siting, window location, balconies, and fencing should take account of the importance of the privacy of onsite and adjoining buildings and outdoor spaces. Windows to habitable rooms should be located so they do not overlook such windows in adjoining properties, other dwellings within the development or areas of private open space. Design building layouts to minimise direct overlooking of rooms and private open spaces adjacent to dwellings by: Balconies to screen other balconies and any ground level private open space. 	The use of privacy screens to windows and balconies to the proposed RFB will mitigate opportunities for overlooking.	Yes
	- Separating communal open space, common areas and access routes through the development from the windows of rooms, particularly habitable rooms.	Communal open space, common areas and access routes are separated from ground floor habitable rooms where required by landscaped planting and privacy screens.	
	- Changing the level between ground floor dwellings with their associated private open space, and the public domain or communal open space.	FFL of courtyards fronting Moore Street are stepped up approximately 400mm from the street.	
Acoustic Impact	1. Noise attenuation measures should be incorporated into building design to ensure acoustic privacy between on-site and adjoining buildings.	Acceptable noise levels between dwellings will be achieved in accordance with the Building Code of Australia (BCA) requirements for sound and impact transmission.	Yes
10. Site Services			
Letterboxes	1. Letterboxes shall to be provided for each dwelling on site, easily accessible from the street, able to be securely locked and provided in accordance with Australia Post's requirements.	Individual letter boxes are proposed adjacent to the common pedestrian entranceway.	Yes
Waste management	1. Waste disposal facilities shall be provided for development. These shall be located adjacent to the driveway entrance to the site.	Garbage bin storage area located adjacent to the western boundary within close proximity of the street frontage.	Yes
	 2.Any structure involving waste disposal facilities shall be located as follows: Setback 1 m from the front boundary to the street. 	Bins are setback 1m from the street frontage with landscaping proposed between bins and street	Yes
	- Landscaped between the structure and the front boundary and adjoining areas to minimise the impact on the streetscape.	frontage.	Yes
	 Not be located adjacent to an adjoining residential property. 	Bin storage areas are proposed to be located along the boundaries of the site.	No

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The development principally complies with the objectives and requirements of the DCP where relevant, with the exception of the following instances:

The DCP requires a minimum side setback of 8m for those parts of a building greater than 8m in height in the R4 zone. The proposal provides for a minimum side setback of 3.45m to the western elevation. The proposed side setback is considered to be justified on the basis that the proposed building setbacks are compliant at the ground floor, and are mitigated on upper level floors through the use of effective screening and detailing at the balcony edges. Furthermore, given the orientation of the site, there will be no significant overshadowing impacts onto the adjoining properties.

The DCD requires that 25% of the site to be landscaped area (deep soil zone). The proposal is for 282sqm (20.5%) of the site is proposed as landscaped area and 179sqm (13%) is provided as deep soil zone. However, this variation is considered acceptable as landscaping is provided sufficiently within the site to enhance the existing streetscape and soften the visual appearance of the buildings, and is not expected to have a significant impact on infiltration of stormwater.

The DCP requires that a minimum of 50% of the front setback area shall be landscaped area. The proposal is for landscaped raised garden beds and paved areas within the front setback. However, this is considered acceptable as an on site detention tank is located below the front setback, with this area providing accessways for dwellings facing the street, incorporates POS for ground floor dwellings, and provides landscaping including feature trees and garden beds that contribute to a positive visual appearance from the street frontage.

The DCP requires the setback areas to be utilised for canopy tree planting. The landscape design for all development must include canopy trees that will achieve a minimum 8m height at maturity within front and rear setback areas. The proposal is for four trees that can reach a mature height of 6m. However, this is considered justified as the proposed tree height is not a significant variation on the DCP control and is appropriate fro the proposed development.

The DCP requires that garbage storage areas are not be located adjacent to an adjoining residential property. The proposal is for garbage storage areas to be located adjacent to the north-east property boundary. However, this is considered justified as the garbage storage area is enclosed in accordance with Council requirements and the location allows for easy access by residents and is in close proximity to the street for garbage bin placement in accordance with Council's requirements.

(iiia) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F

None applicable.

(iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph)

None applicable.

(v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,

The subject site is not known to be affected by a coastal zone management plan within the meaning of the Coastal Protection Act 1979.

(b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,

The proposed development will not create significant environmental impacts on the natural and built environments. The proposed works will comprise a modern, well designed building, on a currently under-utilised site.

In relation to social and economic impacts on the locality, the site is currently being underutilised, with a single dwelling being located on centrally located land within Liverpool and the Liverpool LGA. The redevelopment of the subject site will assist LAHC in meeting the demand for appropriate affordable accommodation.

The social effect of the development on the wider community will be beneficial in providing housing for those with a demonstrated housing need. LAHC already owns the site and its redevelopment is considered to be wise management of public assets. Economic benefits will be incurred as a result of the employment of local tradespeople in the construction of the development.

(c) The suitability of the site for the development,

The proposed development is permissible under relevant planning controls, is compatible with surrounding land uses, and satisfies Council's objectives for the zone and locality.

The subject site is also zoned specifically for residential purposes and is therefore consistent with Council's broad objectives for the area.

(d) any submissions made in accordance with this Act or the regulations,

Consideration will be given to any submissions made as a result of Council's consultation and notification processes.

(e) the public interest.

No adverse impacts relating to the public interest are expected to arise from the proposal. The proposed development aims to provide modern, well-designed housing for persons on low incomes (including for seniors and persons with a disability) and satisfy an increasing demand for affordable housing within the local area. The proposed works are also regarded to be an improvement on the previous residential development that had exceeded its economical lifespan that was situated on the site.

5.0 OTHER CONSIDERATIONS

5.1 Visual Impacts

The development is considered to represent a high visual standard and will not block any substantial views. The external works proposed have been designed in accordance with Council's DCP where possible and will improve the overall visual aesthetics of the site. It is the intention of the proposal to improve the image and appearance of the site. Retained trees and compensatory planting will contribute to creating a streetscape with a positive visual impact over time.

5.2 Open Space

Useable open space for each individual unit has been provided in accordance with the requirements of the DCP and LAHC Design Requirements where possible, having regard to the constraints of the site. All future residents will have direct access to useable private open space from their individual units, with common open space also provided.

5.3 Overshadowing and Privacy

Shadow diagrams have been prepared for the proposed development. The plans indicate that surrounding development will maintain 3 hours sunlight on June 21.

The Shadow Diagrams indicate that there will be some overshadowing to the multi-unit housing development adjoining the site to the immediate south of the subject site. However, the multi-unit housing development will maintain 3 hours sunlight on June 21.

5.4 Noise

Usual noise levels associated with building work will be generated within normal working hours during construction of the project, which should have minimal adverse effects. No major plant or equipment is to be installed and noise generated upon completion will be similar to that of the previous residential development which is compatible with the residential environment.

Acceptable noise levels between dwellings will be achieved in accordance with the Building Code of Australia (BCA) requirements for sound and impact transmission.

5.5 Erosion Control Measures

Appropriate measures will be implemented during construction to mitigate against soil erosion and sedimentation. Such measures are set out in the Department's "Managing Urban Stormwater, Soil and Construction" Manual (4th Edition 2004).

5.6 Economic & Social Impacts

The proposed development is likely to contribute to a range of economic benefits in the Liverpool local government and surrounding areas through:

- more efficient use of land resources, existing infrastructure and existing services
- local sourcing of construction materials
- the local sourcing of tradesmen and other construction-related professionals
- on-going consumption from new/additional households
- the reduced maintenance costs of the newer housing
- savings associated with improved energy and water efficiency.

The social effect of the development on the wider community will be beneficial in providing housing for those with a demonstrated housing need. LAHC already owns the site and the proposed development will utilise the site more efficiently, with a greater number of modern residential units able to be provided on the property.

5.7 Environmental Benefits

The design meets BASIX energy efficiency requirements and the proposal will not increase peak stormwater flows or cause soil erosion or have a significant impact on trees on the site. There will be no adverse impact in terms of soil contamination or air pollution or on rare or endangered plant or animal species.

5.8 Disabled Access

One of the primary aims of the proposed development is to provide access for aged and disabled persons within the site. This is proposed to be achieved through the installation of a lift and the provision of wheelchair accessible pathways. These elements will combine to enable an accessible path of travel to all units. All of the units on the site have been designated as universal units meaning that they are capable of accommodating aged or disabled persons without significant modification should the need arise.

5.9 Fencing and walls

Rear boundary fencing and side boundaries behind the building line are proposed to be provided with 1.8m high "Colorbond" metal fences. Fencing forward of the building line is not proposed.

5.10 Security, Site Facilities and Safety

Fencing at the side boundaries of the site will provide territorial reinforcement whilst being sympathetic to the streetscape. A secure lobby prior to entry to the dwellings will ensure security for individual units. Common garbage storage areas and letterboxes are proposed. The principle entrance to the site is clearly defined and disabled access is provided to dwellings and common areas.

5.11 Waste Management

The proposed development entails the provision of garbage bin storage areas to be located adjacent to the western boundary close to the Moore Street frontage adjacent to the driveway entrance to the site, and along the south-west boundary of the site. Garbage bins will be placed on the street for collection in accordance with Council's requirements.

6.0 CONCLUSION

The residential flat building development proposed for the subject site, located at 188-190 Moore Street, Liverpool has been considered in terms of the matters for consideration that are contained within Section 79C(1)(a) of the *Environmental Planning and Assessment Act 1979* ("the Act").

As indicated in Part 4 of this Statement, the proposed development is considered to be acceptable in terms of the relevant provisions of the *Liverpool Local Environmental Plan 2008*, *State Environmental Planning Policy (Affordable Rental Housing) 2009* and *State Environmental Planning Policy No. 65*, which are the principal environmental planning instruments applicable to the subject site. As such, it is considered to be acceptable in terms of Sections 79C(1)(a)(i) and (ii) of the Act.

As indicated in Part 4 of this Statement, the proposed development is considered to be acceptable in terms of all the relevant aims, objectives and standards contained within the Liverpool Development Control Plan 2008, and is, therefore, consistent with Section 79C(1)(a)(iii) of the Act.

In addition, the proposed development would have a number of positive effects on both the natural and built environments, as well as a range of social and economic benefits. It is considered unlikely that the proposed development, given its nature, scale, and location, would have any detrimental impacts on the built or natural environment, or any detrimental social or economic impacts on the surrounding locality. Thus, it is considered to be acceptable in terms of Section 79C(b) of the Act.

Further, the subject site, given its location, size and natural features, and given it is not subject to any significant hazards, is considered to be, pursuant to Section 79C(1)(c) of the Act, suitable for the proposed development.

The proposed development would allow LAHC to modernise its housing stock, assist it in meeting a strong demands for affordable housing, and allow a site that is centrally located within Liverpool to be utilised. Thus, the proposed development is clearly in the public interest, and acceptable in terms of Section 79C(1)(e) of the Act.

Given the above, the proposed development is worthy of approval, and it is requested that the development application to which this Statement of Environmental Effects relates be approved by Council as submitted.