



Metro North-West Joint Development Assessment Panel Agenda

Meeting Date and Time: 15 March 2018; 2.00pm
Meeting Number: MNWJDAP/204
Meeting Venue: City of Joondalup
90 Boas Avenue, Joondalup

Attendance

DAP Members

Ms Karen Hyde (Presiding Member)
Mr Ray Haeren (Deputy Presiding Member)
Mr John Syme (Specialist Member)
Cr Christine Hamilton-Prime (Local Government Member, City of Joondalup)
Cr Philippa Taylor (Local Government Member, City of Joondalup)

Officers in attendance

Ms Bronwyn Jenkins (City of Joondalup)
Mr Ryan Baily (City of Joondalup)

Minute Secretary

Mr John Byrne (City of Joondalup)

Applicants and Submitters

Mr Marc Karol (T&Z Architects)
Mr Tayne Evershed (Planning Solutions)

Members of the Public / Media

Nil

1. Declaration of Opening

The Presiding Member declares the meeting open and acknowledges the past and present traditional owners and custodians of the land on which the meeting is being held.

2. Apologies

Nil



3. Members on Leave of Absence

Nil

4. Noting of Minutes

Minutes of meeting no.2013 held on 7 March 2018 were not available at time of agenda preparation.

5. Declarations of Due Consideration

Any member who is not familiar with the substance of any report or other information provided for consideration at the DAP meeting must declare that fact before the meeting considers the matter.

6. Disclosure of Interests

Nil

7. Deputations and Presentations

- 7.1** Mr Tayne Evershed (Planning Solutions) and Mr Marc Karol (T&Z Architects) presenting in support of the application at Item 8.1. The presentation will briefly outline the proposal and answer any questions from the panel.

8. Form 1 – Responsible Authority Reports – DAP Applications

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|------------|------------------------|--|
| 8.1 | Property Location: | Lot 11581 (9) Harvest Loop, Edgewater |
| | Application Details: | 128 Bed Residential Aged Care Facility |
| | Applicant: | Marc Karol – T&Z Architects |
| | Owner: | Mr David Penny - McAuley |
| | Responsible authority: | City of Joondalup |
| | DAP File No: | DAP/17/01336 |

9. Form 2 – Responsible Authority Reports – Amending or cancelling DAP development approval

Nil

10. Appeals to the State Administrative Tribunal

Nil

11. General Business / Meeting Closure

In accordance with Section 7.3 of the DAP Standing Orders 2017 only the Presiding Member may publicly comment on the operations or determinations of a DAP and other DAP members should not be approached to make comment.



Form 1 - Responsible Authority Report (Regulation 12)

Property Location:	Lot 11581 (9) Harvest Loop, Edgewater
Development Description:	128 Bed Residential Aged Care Facility
DAP Name:	Metro North-West JDAP
Applicant:	Marc Karol – T&Z Architects
Owner:	Mr David Penny - McAuley
Value of Development:	\$26 million
LG Reference:	DA17/1387
Responsible Authority:	City of Joondalup
Authorising Officer:	Dale Page Director Planning and Community Development
DAP File No:	DAP/17/01336
Report Due Date:	6 March 2018
Application Received Date:	23 November 2017
Application Process Days:	103 days
Attachment(s):	1. Location plan 2. Development plans and elevations 3. Building perspectives 4. Landscaping Concept Plans 5. BAL Assessment (basic) 6. Traffic Assessment 7. Environmentally sustainable checklist

Officer Recommendation:

That the Metro North-West JDAP resolves to:

1. **Approve** DAP Application reference DAP/17/01336 and accompanying plans SK11 revB, SK12 revB, SK21 rev B, SK22 revB, SK23 revA, SK51 rev B in accordance with Clause 68 of the *Planning and Development (Local Planning Schemes) Regulations 2015* and the provisions of the City of Joondalup *District Planning Scheme No. 2*, subject to the following conditions as follows:

Conditions

1. This decision constitutes planning approval only and is valid for a period of two (2) years from the date of approval. If the subject development is not substantially commenced within the two year period, the approval shall lapse and be of no further effect.
2. This approval relates to the 'Nursing Home' (Residential Aged Care Facility) and associated works only as indicated on the approved plans. It does not relate to any other development on the lot.
3. A Construction Management Plan being submitted and approved prior to the commencement of development. The management plan shall detail how it is proposed to manage:
 - all forward works for the site;

- the delivery of materials and equipment to the site;
- the storage of materials and equipment on the site;
- the parking arrangements for the contractors and subcontractors;
- the management of dust during the construction process;
- other matters likely to impact on the surrounding properties

and works shall be undertaken in accordance with the approved Construction Management Plan.

4. A refuse management plan indicating the method of rubbish collection is to be submitted prior to the commencement of development, and approved by the City prior to the development first being occupied.
5. All stormwater shall be collected on-site and disposed of in a manner acceptable to the City.
6. Any proposed building plant and equipment, including air conditioning units, piping, ducting, solar collectors and water tanks shall be located so as to minimise any visual and noise impact on surrounding landowners, and screened from view from the street, and where practicable from adjoining buildings. Details shall be submitted to and approved by the City prior to the commencement of development. Development shall be in accordance with these approved details.
7. Any bicycle parking facilities provided should be designed in accordance with the Australian Standard for Off-street Car parking – Bicycles (AS2890.3-1993) prior to the development first being occupied.
8. The external surface of the development, including roofing, shall be finished in materials and colours that have low reflective characteristics, to the satisfaction of the City. The external surfaces shall be treated to the satisfaction of the City if it is determined by the City that glare from the completed development has a significant adverse effect on the amenity of adjoining or nearby neighbours.
9. All development shall be contained within the property boundaries.
10. A full schedule of colours and materials for all exterior parts of the development (including retaining walls) shall be submitted and approved prior to the commencement of development. Development shall be in accordance with the approved schedule and all external materials and finishes shall be maintained to a high standard, including being free of vandalism, to the satisfaction of the City.
11. All external walls and retaining walls of the development shall be of a clean finish, and shall at all times be maintained to a high standard, including being free of vandalism, to the satisfaction of the City.
12. The applicant shall remove the existing crossovers (as depicted on the approved plans), make good the verge, and reinstate the footpaths to the specifications and satisfaction of the City, prior to occupation.
13. The car parking area located adjacent to Pioneer Drive shall be used for staff parking only and shall be permanently marked and set aside as such.

14. The car parking bays, driveways and access points shown on the approved plans are to be designed, constructed, drained and marked in accordance with the Australian Standard for Off-street Car Parking (AS/NZS2890.1 2004), Off-street Parking for People with Disabilities (AS/NZS2890.6 2009) and Off-street Commercial Vehicle Facilities (AS2890.2:2002), prior to the occupation of the development. These bays are to be thereafter maintained to the satisfaction of the City.
15. Lighting shall be installed along all driveways and pedestrian pathways and in all common service areas prior to the development first being occupied, to the satisfaction of the City.
16. A signage strategy shall be submitted to and approved by the City prior to the occupation of the development. All signage shall be installed in accordance with the approved strategy.
17. The car parking area shall be provided with one shade tree for every four car bays prior to the development first being occupied. The trees shall be located within tree wells protected from damage by vehicles and maintained to the satisfaction of the City.
18. Detailed landscaping plans shall be submitted to and approved by the City prior to the commencement of development. These landscaping plans are to indicate the proposed landscaping treatment(s) of the subject site and the adjoining Endeavour Road verge area, and shall:
 - Be drawn at an appropriate scale of either 1:100, 1:200 or 1:500;
 - Provide all details relating to paving, treatment of verges and tree planting in the car park;
 - Show spot levels and/or contours of the site;
 - Indicate any existing vegetation to be retained and the proposed manner in which this will be managed;
 - Be based on water sensitive urban design principles to the satisfaction of the City;
 - Be based on Designing out Crime principles to the satisfaction of the City;
 - Show all irrigation design details;
 - Provide landscaping that discourages the parking of vehicles within the Pioneer Drive and Harvest Loop verge; and
 - Provide sufficient screening of the transformer as viewed from Harvest Loop.
19. Landscaping and reticulation shall be established in accordance with the approved landscaping plans, Australian Standards and best trade practice prior to the development first being occupied and thereafter maintained to the satisfaction of the City.

Advice Notes

1. Further to condition 2, the City of Joondalup District Planning Scheme No. 2 defines 'Nursing Home' as a premises in which persons who do not require constant medical attention are received as patients and lodged for the purposes of medical supervision and nursing care.
2. Further to condition 18, the applicant is advised that verge treatments are required to comply with the City's Street Verge Guidelines. A copy of the Guidelines can be obtained at <http://www.joondalup.wa.gov.au/Live/Streetscapes.aspx>
3. Any existing footpath and kerbing shall be retained and protected during construction of the development and shall not be removed or altered for the purposes of a vehicle crossover. Should the footpath/kerb be damaged during the construction of the development, it shall be reinstated to the satisfaction of the City.
4. The applicant/land owner is advised that food is to be provided in accordance with the *Food Act 2008*. The applicant is encouraged to ensure plans of food handling and storage areas are provided to the City for comment prior to lodging for a building permit. For further information please contact Health & Environmental Services on 9400 4933
5. The applicant is advised that bin storage areas must incorporate wash-down facilities and be in accordance with the City's *Health Local Law 1999*. The minimum specification includes a concrete floor graded to a floor waste that is connected to sewer and a hose cock.

Details: outline of development application

Zoning	MRS:	Urban
	TPS:	Centre
Use Class:		'Nursing Home'
Strategy Policy:		N/A
Development Scheme:		District Planning Scheme No. 2
Lot Size:		20,000.6m ²
Existing Land Use:		'Aged Persons Dwellings', 'Frail Aged Hostel'

The applicant seeks approval for the development of a Nursing Home (Residential Aged Care Facility) at Lot 11581 (9) Harvest Loop, Edgewater (subject site). The subject site is currently owned and operated by Mercy Health and the proposal seeks approval for the development of a 128 bedroom facility with associated and incidental amenities. The proposed development consists of:

- Demolition of the existing 33 bed residential care facility.
- Development of four clusters of buildings, ranging in height from two to three storeys, accommodating 128 residential care bedrooms.
- A common reception area with amenities comprising of a small grocer, café, lounge, a 'town hall', health and well-being centre, administration and resident store rooms.
- Landscaping on-site along street frontages and internal courtyards.

- A maximum of 41 staff on site at any time.
- A total of 67 car parking bays, comprising 63 bays accessed off Harvest Loop and four bays provided off Pioneer Drive (staff only).

The development plans and building perspectives are provided as Attachments 2 and 3.

Background:

The subject site is bound by Pioneer Drive to the north-east, Harvest Loop to the south-east, Joondalup Drive to the south-west and a secondary school (Marter Dei College) to the north-west.

The subject site currently comprises a 22 villa retirement village (independent living units) to the south-west and 33 bed residential aged care facility to the north-east; which is intended to be replaced by the proposed Nursing Home development.

The subject site is zoned 'Urban' under the *Metropolitan Region Scheme* (MRS) and 'Residential' under the City's *District Planning Scheme No. 2* (DPS2) with a density code of R20. The land use 'Nursing Home' is a discretionary ("D") use under DPS2 within the Residential Zone. The residential properties adjoining the site are within Housing Opportunity Area No.8 and are coded R20/R40 under DPS2.

Whilst the City's draft *Non-residential Development in the Residential Zone Local Planning Policy* is yet to be adopted, and will only apply once *Local Planning Scheme No. 3* is gazetted, due regard is given to the policy as a seriously entertained planning policy.

Legislation & policy:

Legislation

- *Planning and Development Act 2005.*
- *Metropolitan Region Scheme* (MRS).
- *Planning and Development (Local Planning Schemes) Regulations 2015* (Regulations).
- *City of Joondalup District Planning Scheme No. 2* (DPS2).

State Government Policies

- *State Planning Policy 3.7 Planning in Bushfire Prone Areas (SPP3.7)*

Local Policies

- *Height of Non-Residential Buildings Local Planning Policy (HNRBLPP).*
- *Environmentally Sustainable Design.*
- *Draft Non-residential Development in the Residential Zone Local Planning Policy (Draft NRDRZLPP).*

Consultation:

Public Consultation

The proposal was advertised by way of letters to 84 surrounding landowners/occupiers as well as to the local residents' association (Edgewater Community Residents Association). Information was also placed on the City's website.

Consultation was undertaken for 21 days from 5 February 2018 to 26 February 2018, in accordance with clause 64 of the *Planning and Development (Local Planning Schemes) Regulations 2015*.

Nine submissions were received during the advertising period and one late submission was received, all being objections to the proposal. The issues raised in the submissions are summarised in the below table:

Issue Raised	Applicant response	Officer's comments
Increase in the amount of traffic the development will bring to the area given a larger patient base and associated visitor flow. There is existing congestion in relation to the current nursing home, Mater Dei College and Edgewater Primary School. The schools are located within close proximity to this development and bring a large amount of traffic to the area between 8-9am and 3-3.45pm (school pick up and drop off times).	A traffic impact assessment has been undertaken by KCTT which confirms that the existing surrounding road network has the capacity to accommodate additional vehicle trips generated by the development.	The applicant's traffic impact report (Attachment 6 refers) prepared by KCTT has demonstrated that the existing road network can accommodate the increase in vehicle trips generated by the development. Refer to detailed response in comments section of this report.
Increased number of emergency service vehicles given the increase in patient numbers causing disruption to nearby residents through evening/nights. No access for emergency vehicles into the area between 8-9am and 3-3.45pm given poor traffic management.	It is our understanding that emergency service vehicles (ambulance) endeavour to avoid the use of sirens in suburban areas after hours. This would be subject to, against other things, the prevailing road and traffic conditions and the urgency of the request. No evidence has been provided to demonstrate the site will be inaccessible during peak school times. In addition, no specific evidence has been provided that would indicate that there are "poor traffic management" practices that would result in the site being inaccessible.	The applicant's traffic impact report prepared by KCTT confirms there is sufficient area within the site for emergency vehicles to manoeuvre and that that the existing road network can accommodate the increase in vehicle trips generated by the development.

<p>The number of proposed car parking bays for the development is inadequate when taking into consideration the increased number of visitors during holidays/peak visiting times.</p>	<p>In accordance with the City of Joondalup <i>draft Non-Residential Development within the Residential Zone Local Planning Policy</i>, the proposed development is compliant with the applicable car parking standards.</p> <p>In addition, the traffic impact assessment prepared by KCTT confirms the proposed development is capable of accommodating parking on-site having regard to the differing peak hours of operation and visiting times.</p>	<p>The 67 bays proposed are considered sufficient to adequately cater for the demand generated by the development, given the justification provided by the applicant.</p> <p>Refer to detailed response in comments section of this report.</p>
<p>Issues with staff working in the existing 33 bed aged care facility parking within the verge area surrounding the site. There will be an increase in the amount of verge parking.</p>	<p>The traffic impact assessment prepared by KCTT confirms the proposed development is capable of accommodating parking on-site having regard to the differing peak hours of operation and visiting times.</p>	<p>The 67 bays proposed are considered sufficient to adequately cater for the demand generated by the development.</p> <p>The applicant will be required to provide landscaping that discourages the parking of vehicles within the verge and detailed landscaping plans required to be submitted to and approved by the City prior to commencement of development.</p> <p>Refer to detailed response in comments section of this report.</p>
<p>Windows on the second and third storeys facing Harvest Loop will overlook adjoining residential backyards and windows.</p>	<p>The proposed development and upper floors will be setback at least 20 metres from the front boundaries of dwellings opposite Harvest Loop. This separation distance is more than sufficient to overcome any perception of overlooking.</p>	<p>There are no visual privacy/overlooking provisions within DPS2 for non-residential development, or within the City's draft <i>NRDRZLPP</i>.</p> <p>Notwithstanding, it is</p>

		noted that windows and balconies facing Harvest Loop are to be setback in excess of 20 metres from the closest residential property boundary.
The three storey building development is not in keeping with Edgewater's aesthetic and will be imposing in nature, when considered within the context of a residential area.	Under the City of Joondalup District Planning Scheme No.2, the subject site is zoned 'Residential'. The proposed third storey element is largely in 'undercroft' format and is set well back into the site. This will minimise any perceived impact the development will have on the surrounding amenity. More generally the proposed development presents as two storey to the street.	<p>The design of the development is considered to be compatible with the area, although a different form of development to the single houses that currently characterise the area. Further to this, the proposed development is considered to reflect the built form, colours and materials of the adjoining site occupied by Mater Dei College; being two storey limestone/facebrick buildings with pitched terracotta tiled rooves.</p> <p>The applicant has also designed the building using similar colours and materials to that of existing dwellings in the vicinity.</p>
Construction of such a large complex will have years of impact on residents, flora and fauna of the region. Ongoing disruption through a lengthy building process will be a great imposition with regards to noise of the building and landscaping construction in addition to dust and dirt.	<p>The proposed development incorporates approximately 30% of the site area for high quality landscaping on-site, along street frontages and to internal courtyards.</p> <p>Matters relating to construction (noise, dust and dirt) will be managed in accordance with relevant legislation.</p>	Should the development be approved, a condition is recommended requiring a Construction Management plan be submitted to and approved by the City prior to commencement of development which will be required to detail measures to be undertaken to minimise impacts of construction

		Development will also be subject to compliance with relevant noise regulations.
Concerns that the development devalue surrounding residential properties.	Property values are not a land use planning consideration. In any event, no evidence has been provided to support this assertion.	Property values are not a valid planning consideration.

Consultation with other Agencies or Consultants

Not applicable.

Joondalup Design Reference Panel

The proposal was presented to the City's Joondalup Design Reference Panel (JDRP) at its meeting held on 9 January 2018. The key issues raised by the JDRP, and the summary of applicant's responses and modifications are provided below:

No.	JDRP comment	Applicant response	City response
1	Overall the Panel felt that the proposed façade could be improved so as to provide more visual interest and reduce the bland/institutional feel of the development as viewed from the surrounding residential streets. It was also queried if it was possible to add further design features to break up the roof line. Further to this the Panel commented that the elevation drawings should be amended to better reflect the chosen materials, colours and finishes.	<p>The proposed building façade has been updated to provide a greater variation of materials and colour which will assist in breaking up the building mass and convey a more domestic building appearance. This is combined with ground level courtyards, upper level balconies and areas of recession and intrusion that also assist in breaking mass and adding visual interest.</p> <p>An updated material palette has also been included, providing greater clarity as to the list of materials used.</p>	The proposed materials described by the applicant are considered acceptable and will be detailed further through a colours and materials schedule recommended as a condition of any approval.
2	The Panel queried the external interface of the development with Harvest Loop and Pioneer Drive. In	The landscape plan has been updated to include further detail around the treatment adjacent to House 1	The City supports the proposed external interface between Harvest Loop and Pioneer Drive given the

	particular the retaining walls along the harvest loop street boundary (adjacent to the public zone/house 1 and 9 and houses 7/8/15 and 16) and fencing detail along Pioneer Drive.	and 9. Details of fencing and retaining to the Pioneer Drive frontage are also provided on the landscaping plan and articulate a boundary treatment that is domestic in scale and appropriate to its setting.	details included in the updated landscaping plan. Detailed landscaping plans will be required to be submitted through relevant recommended conditions of approval and required to be thereafter maintained to the satisfaction of the City.
3	The Panel sought clarification as to the intended 'incorporation of environmentally sustainable design aspects into the facility' as stated in the ESD check list submitted with the development application.	The ESD checklist has been updated to reflect the intended use of solar hot water and rain water collection systems. It should be noted that solar energy systems will be integrated into the overall design of the building and located on rooftops (with hot water boosters screened from view).	The development appropriately incorporates sustainable design principles in its building design as listed in the updated Environmentally Sustainable Design Checklist (Attachment 7 refers).
4	The Panel expressed concerns with regards to wayfinding from Harvest Loop and car parking areas to the entrance of the building. Further to this the Panel queried the management of the Pioneer Drive entrance and whether or not this would be accessed by visitors in addition to staff or staff only.	Car parking aisles within the Harvest Loop car park have been realigned to remove aisle staggering across the internal access drive which services the rear of the development. This improves pedestrian and vehicle sightlines and assists in wayfinding. A direct pedestrian path within the site connects the main entrance to the internal parking area and Harvest Loop foot path. The car parking area off Pioneer Drive will be used for staff parking only as noted on the	The large entry statement to the administration and reception building provides a prominent design feature which identifies the pedestrian entry of the building from the car parking. In addition, a condition of approval is recommended to ensure the car parking area accessed from Pioneer Drive is utilised by staff only.

		development plans.	
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Planning assessment:

The City's planning assessment against the relevant provisions of the Regulations, DPS2, HNRBLLP and *SPP 3.7* are included below:

Item	Requirement	Proposal	Compliance
Clause 4.7 of DPS2 – Building Setbacks	Primary street setback of 9 metres to the Harvest Loop street boundary.	Nursing home setback 5.065 metres. Landscaped retaining wall with a nil setback.	Does not comply. Refer to officer comments section of the report.
	A minimum rear lot boundary setback of 6 metres.	Nursing home setback 3 metres.	Does not comply. Refer to officer comments section of the report.
	A minimum setback of 3 metres to Pioneer Drive.	Nursing home setback 8.025 metres.	Complies.
Clause 4.8 of DPS2 Car parking standards	The number of on-site car parking bays to be provided for specified development shall be in accordance with Table 2. Where development is not specified in Table 2 the local government shall determine the parking standard. The local government may also determine that a general car parking standard shall apply irrespective of the development proposed in cases where it considers this to be appropriate.	A total of 67 on-site car parking bays.	No car parking standard for 'Nursing Home' within Table 2. Refer to officer comments section of the report.
Clause 4.12 of DPS2 –	A minimum of 8% of the area of a	A total of 30% of the site is to be	Complies.

Landscaping	development site shall be designed, developed and maintained as landscaping.	designated as landscaping.	
	A minimum landscaping strip of 3 metres.	A minimum landscaping strip of 1.5 metres.	Does not comply. Refer to officer comments section of the report.
	Shade trees shall be provided at a rate of one tree for every four car parking bays. 16.75 (17) shade trees required.	20 car parking shade trees to be provided.	Complies.
HNRBLLP Part 6 Details: Maximum height of non-residential buildings	Maximum top of external wall height of 9 metres.	A 9.9 metres maximum top of external wall height.	Does not comply. Refer to officer comments section of the report.
	Maximum top of pitched roof height of 12 metres.	A 12.65 metres maximum top of pitched roof height.	
SPP 3.7 Planning in Bushfire Prone Areas	A portion of the parent lot is located within 100m of a bushfire prone area. A BAL (basic) assessment required to be provided in association with the proposed building on a site that is not within 100m of bushfire prone vegetation. Note that the proposed land use considered to be 'vulnerable'.	A BAL-LOW has been determined.	The development application is able to be supported. Refer to the BAL Assessment (basic) provided as Attachment 5.

The City's planning assessment against the relevant provisions of the draft *NRDRZLPP* are included below:

Item	Requirement	Proposal	Compliance
Clause 4.1 Building Setbacks – R20/25	Primary street setback of 6 metres to Harvest Loop.	Nursing home setback 5.065 metres. Landscaped	Does not comply. Refer to officer comments section of the report.

		retaining wall with a nil setback.	
	Secondary street setback of 1.5 metres to Pioneer Drive.	Nursing home setback 8.025 metres.	Complies.
	Rear setbacks are to be in accordance with Part 5 of the R-Codes. A 3m setback is required to balconies and 3.4m to the nursing home is required.	Nursing home setback a minimum of 3 metres to rear lot boundary.	Complies.
Clause 4.2 Building Height	Maximum top of external wall height of 9 metres.	A 9.9 metres maximum top of external wall height.	Does not comply. Refer to officer comments section of the report.
	Maximum top of pitched roof height of 12 metres.	A 12.65 metres maximum top of pitched roof height.	
Clause 4.4.1 Car parking standard	Car parking requirement in association with the 'Nursing Home' use class is 1 bay per 5 bed plus 1 per employee. 128 beds and a maximum of 41 staff members results in a requirement for 66.6 (67) on-site bays.	A total of 67 on-site parking bays proposed.	Complies.
4.5 Landscaping	A minimum of 8% of the area of a lot shall be landscaped.	A total of 30% of the site is to be designated as landscaping.	Complies.
	The landscaped area shall include a minimum strip of 1.5 metres wide.	A minimum landscaping strip of 1.5 metres wide.	
	Any landscaped area shall have a minimum width of 1.0 metre and	Landscaped areas meet minimum width and area requirements.	

	distributed in areas of not less than 4 square metres.		
	Shade trees shall be provided and maintained in uncovered car parks at the rate of one tree for every four car parking bays.	20 car parking shade trees to be provided.	
	16.75 (17) shade trees required.		

Officer Comments

Land use

The proposed development is considered to fall under the 'Nursing Home' land use definition which is a discretionary ("D") use under DPS2 within the Residential Zone. The definition of a nursing home under schedule 1 (clause 1.9) of DPS2 states the following:

nursing home: means premises in which persons who do not require constant medical attention are received as patients and lodged for the purposes of medical supervision and nursing care.

The objectives of the 'Residential' zone are included in clause 3.4.1 of DPS2, which states as follows:

- (a) *maintain the predominantly single residential character and amenity of established residential areas;*
- (b) *provide the opportunity for grouped and multiple dwellings in selected locations so that there is a choice in the type of housing available within the City; and*
- (c) *provide the opportunity for aged persons housing in most residential areas in recognition of an increasing percentage of aged residents within the City.*

Given 3.4.1(c) refers specifically to the provision of opportunities for aged persons housing in recognition of an increasing percentage of aged residents within the City; the proposed land use is considered to be appropriate to operate from the site. It is also noted that the development intends to replace an existing facility.

Building Design

The design of the development reflects the residential character of the locality, with the development offering care within four clustered houses ranging in height from two to three storeys set amongst landscaped grounds. Each house is provided with their own communal dining, kitchen and lounge area and eight individual single bedroom units with ensuite bathroom facilities overlooking landscaped areas.

The proposed building façade includes brown facebrick and both smooth and rough cut limestone blockwork, and a pitched terracotta tiled roof. Articulation of the building as viewed from the street is provided through the inclusion of building elements such as balconies, feature metal cladding, timber battens to port cochere, areas of recession, and 'dormer window' elements assist in breaking up the roof line of each building.

Overall, the building design is considered to be compatible with and complements the character of the surrounding residential environment, and adjoining Marter Dei College.

Building Setbacks

Street setback

The development does not comply with the minimum nine metre street setback requirement under DPS2 as the building is proposed with a minimum setback of 5.065 metres with landscaped retaining walls located at nil to the Harvest Loop street boundary.

The residential development currently fronting Harvest Loop is generally setback an average of six metres or greater from the street boundary. These lots are coded R20/R40 under DPS2 and therefore future development at the higher R40 code could achieve an average setback of four metres, and retaining to a height of one metre up to the street boundary. Given the proposed setback of the development would be consistent with, or greater than, the allowable street setbacks applicable to a residential dwelling, it is considered that the proposed street setback to Harvest Loop is appropriate.

It is noted that the draft *Non-Residential Development in the Residential Zone Local Planning Policy* (draft NRDRZLPP) proposes to reduce these setback requirements to a minimum of six metres to a primary street boundary and would therefore be considered a minor variation. It is also noted that the minimum setback only applies to portions of the building with recessions providing relief to the street. Further to this, the development is separated into individual buildings which also assists to mitigate the bulk impact along the street.

In relation to the nil setback to retaining walls, the subject site has a cross fall of approximately 6.5 metres ranging from 45.0 metres AHD to the north of the site abutting Pioneer Drive, falling to approximately 38.5 metres AHD in the southern corner fronting Harvest Loop. Due to the topography of the site, a terraced limestone retaining wall is located along the Harvest Loop street boundary that has a maximum wall height of approximately 3.6 metres above natural ground level.

The incorporation of substantial landscaping within the terraces and the setting in of fencing will soften the interface between the development and verge area adjacent to the Harvest Loop Street boundary, improving the transition of levels in this location. As such, the nil setback of the retaining walls to the Harvest Loop boundary is considered to be appropriate.

Rear setback

In relation to the rear (south-west) lot boundary, a minimum setback of three metres to upper floor balconies and four metres to the building line is proposed in lieu of six metres as required under DPS2.

It is noted that the draft *NRDRZLPP* requires that rear lot boundary setbacks be provided in accordance with Part 5 of the Residential Design Codes of WA (R-Codes). As a result, a three metre setback is required to balconies and 3.4 metres to the building is required and would therefore be compliant.

It should be noted that the rear lot boundary adjoins Marter Dei College and as such the reduced setback of the building will not impact upon residential amenity and is considered to be appropriate.

Building Height

The development exceeds maximum building height requirements as stipulated by the City of Joondalup *Height of Non-Residential Buildings Local Planning Policy* (HNRBLPP and draft *NRDRZLPP*) with a maximum external wall height (roof above) of 9.9 metres, in lieu of a maximum of nine metres. The proposed maximum pitched roof height of 12.65 metres exceeds the maximum pitched roof height prescribed by the policy of 12 metres.

As previously stated, the subject site has a cross fall of approximately 6.5 metres ranging from 45.0 metres AHD to the north of the site abutting Pioneer Drive, falling to approximately 38.5 metres AHD in the southern corner fronting Harvest Loop. The exceedance is largely due to the natural fall in topography and only occurs for a relatively minor section of the overall frontage of the development site which is located directly behind the location subject to increased terraced landscaping; the clustered building south western building containing the Administration and Public Zone/House 1 and 2/House 9 and 10.

The nominated finished floor of the 'Administration' and 'Public Zone' at 40.4 metres AHD considers the natural ground levels of the south western portion of the site and an undercroft type area has been created rather than the ground level raised so as to match the north eastern portion of the site. Additionally, the area of increased height is to be located directly adjacent to the internal car parking areas only. The development will appear as two storey from Pioneer Drive.

The proposed building height variations are considered minor (less than one metre), in the context of the development. The proposed building façade provides variation in terms of materials and colours which assists in reducing the overall building mass and adds visual interest. When taking into consideration the substantial amounts of ground level landscaping treatments; the proposed maximum external wall and pitched roof heights are not considered to significantly compromise surrounding residential amenity.

Landscaping

The application exceeds the landscaping requirements of DPS2. A total of 8% of the development site is required to be landscaped but 30% of the development site is proposed to be occupied by soft landscaping.

DPS2 also requires a landscaping strip of three metres between the street boundary and any proposed car parking. However, a minimum landscaping strip width of 1.5 metres is proposed. The reduced landscaping strip width is considered to be sufficient given the significant amount of additional proposed verge landscaping which will visually result in a greater than three metre landscaped area between the road reserve, proposed development and associated car parking areas. Further to this, the proposed landscaping strip is compliant with the provisions of the draft *NRDRZLPP* and as such is considered to be appropriate.

A total of one shade tree is required for every four car parking bays, which equates to 16.75 (17) shade trees being required for the proposed car parking area on-site. A total of 20 shade trees is proposed.

The City's standard conditions relating to the provision of detailed landscaping concept plans has been modified to require landscaping that discourages the parking of vehicles within the verge. This has been requested in response to adjoining land owner concerns surrounding visitors to the development parking within the Pioneer Drive/Harvest Loop verge area.

Landscaping concept plans are provided at Attachment 4.

Traffic

The main vehicle access point to the development site is to be provided from Harvest Loop. A second vehicle access point is provided from Pioneer Drive in association with four staff car parking bays. Currently, the site has two vehicle access points and as such the proposed development does not result in additional vehicle crossovers to the surrounding residential streets.

A traffic report was provided as part of the application demonstrating that the additional traffic generated as a result of the development can be adequately accommodated within the existing road network.

The report outlines that based on data from a 2015 traffic count, a total of 1,350 vehicles per day (VPD) utilise Pioneer Drive (north of Harvest Loop). Specifically, in relation to peak hours, a total of 243 vehicles during AM peak periods (8am) and 205 vehicles during PM peak periods (3pm). During the development's generated peak periods, the proposed development is anticipated to only contribute a further 22 vehicles per hour (VPH) to the existing road network. It is also noted that the PM peak for the development occurs outside of the existing road network's PM peak period. The traffic report details that the development is expected to generate 273 VPD. Based on the fact that the existing facility generates 66 VPD, the proposed development is expected to result in a total increase of 207 VPD.

Given the indicative traffic volume capacity for an Access Road is 3,000 VPD, the proposed development is considered to be able to be accommodated within the existing road network.

The traffic assessment is provided at Attachment 6.

Car Parking

The development proposes 67 bays, including four 'staff only' bays accessed from Pioneer Drive and two universal access bays adjacent to the building entry. It is noted that due to the high level of care associated with the facility, it is unlikely that residents will drive or own a car.

DPS2 does not contain a car parking standard for a 'Nursing Home' land use, however, Council at its meeting held on 21 July 2009 (CJ150-07/09 refers) determined that the car parking standard allocated to a 'Hospital' land use of 1 bay per 3 residents plus 1 bay per staff member on duty to be appropriate for a Nursing Home.

Based on the above-mentioned car parking standard, the development application requires 83.6 (84) bays with 67 bays provided representing an overall car parking shortfall of 17 bays across the site.

A car parking standard specifically for a 'Nursing Home' land use is included within the draft *NRDRZLPP*. This car parking standard is 1 bay per 5 beds plus 1 per employee resulting in a requirement for 66.6 (67) bays. It is considered appropriate to give due regard to the parking standard contained in the draft *NRDRZLPP* as it is specific to the proposed land use.

Notwithstanding the above, the car parking shortfall in association with the 'Hospital' car parking requirement is considered appropriate as there will be a degree of reciprocity between the start and end times of employee shifts and popular visiting hours. The applicant has provided the following information with regards to Mercy Health employee shifts and visiting hours;

- 07:00 – 15:00 approximately 30 staff members
- 07:00 – 13:00 approximately 10 staff members
- 15:00 – 22:00 approximately 20 staff members
- 15:00 – 19:00 approximately 10 staff members
- 22:00 – 07:00 approximately 5 staff members
- Most common visiting times weekends between 10:00 – 16:00

The reduction of staff by 10 employees in both the morning and afternoon shift means that there will be additional available parking bays for visitors of the development. With approximately 40 staff members occupying 40 parking bays between 07:00-13:00 there would be 27 car bays available for visitors. This is applicable to the afternoon shift with 37 bays available for visitors when considering that only 30 employees would be on shift between 15:00- 19:00.

Environmental Sustainability

The applicant has completed the City's Environmentally Sustainable Design Checklist to the extent that it is applicable to the development. The applicant has indicated that the following will be provided as part of the development:

- Retention of existing vegetation and natural landforms/topography.
- Northerly orientation of daytime living/working areas with large windows, and minimal windows to the east and west.
- Passive shading of glass.

The applicant has stated that the operator will incorporate environmentally sustainable design aspects to the extent possible for a Nursing Home.

The completed checklist is provided at Attachment 7.

Options/Alternatives:

Not applicable.

Council Recommendation:

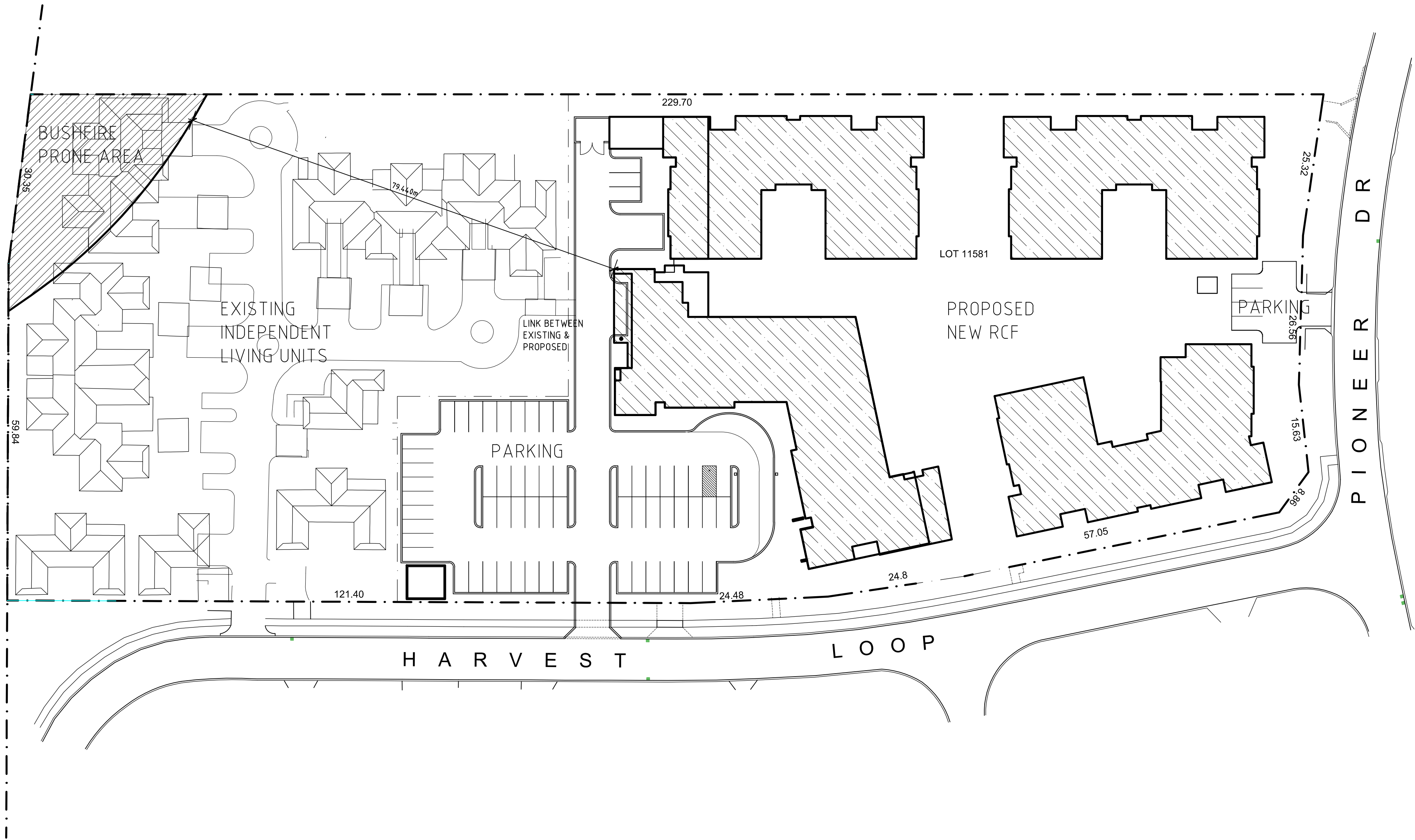
Not applicable.

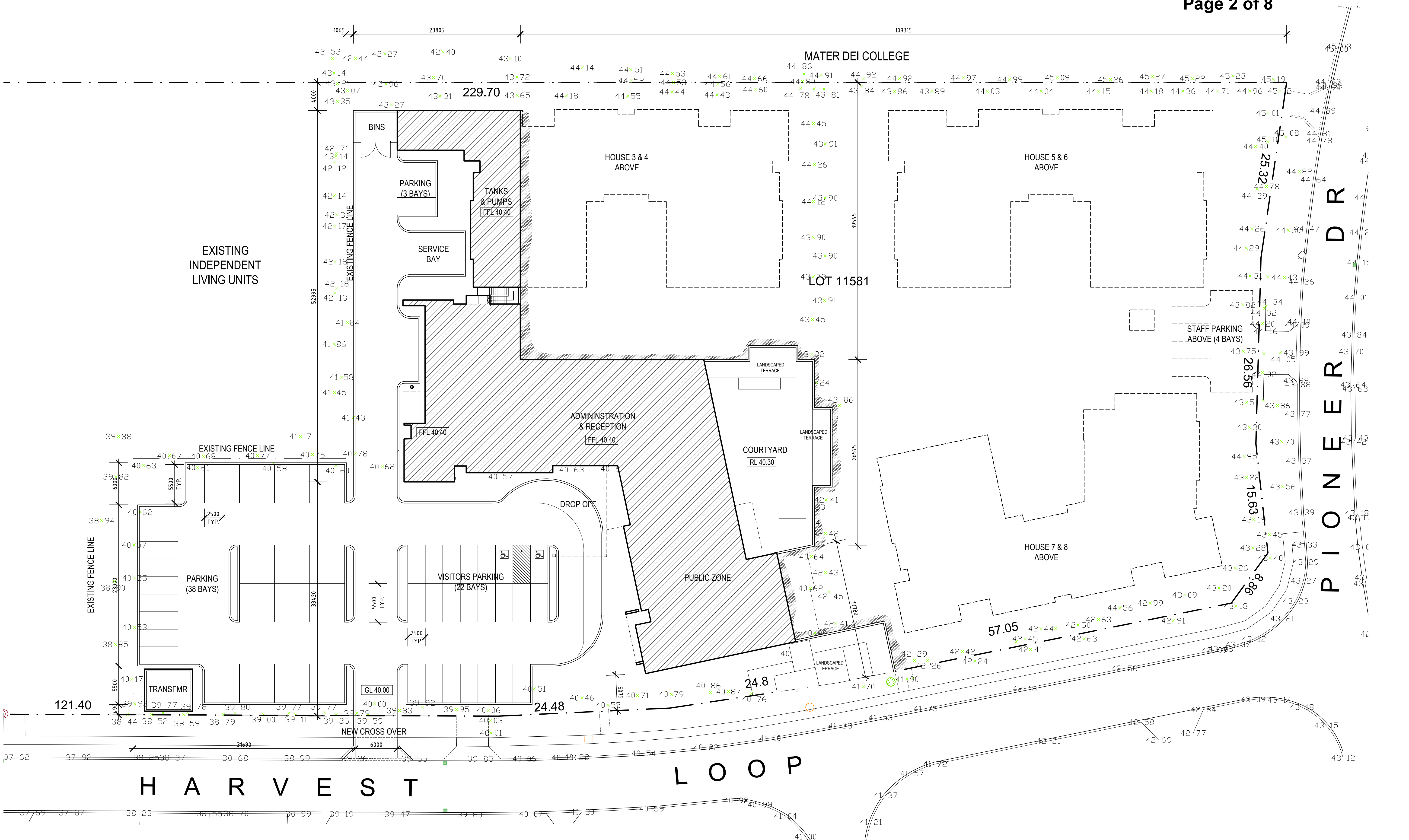
Conclusion:

The proposed 'Nursing Home' (Residential Aged Care Facility) is considered to have been designed so as to reflect the residential character of the locality through the use of a range of materials, varied setbacks, colours, textures and significant amounts of soft landscaping treatments which are considered to positively contribute towards and enhance the streetscape amenity.

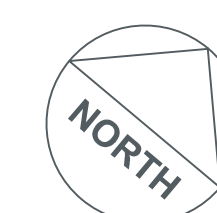
The areas of discretion sought are considered to satisfy the relevant objectives of the Residential zone within DPS2, HNRBLLP and draft *NRDRZLPP*. It is therefore recommended that the application be approved, subject to conditions.



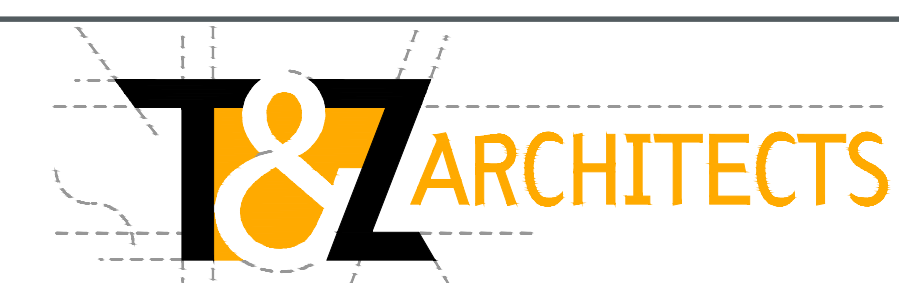




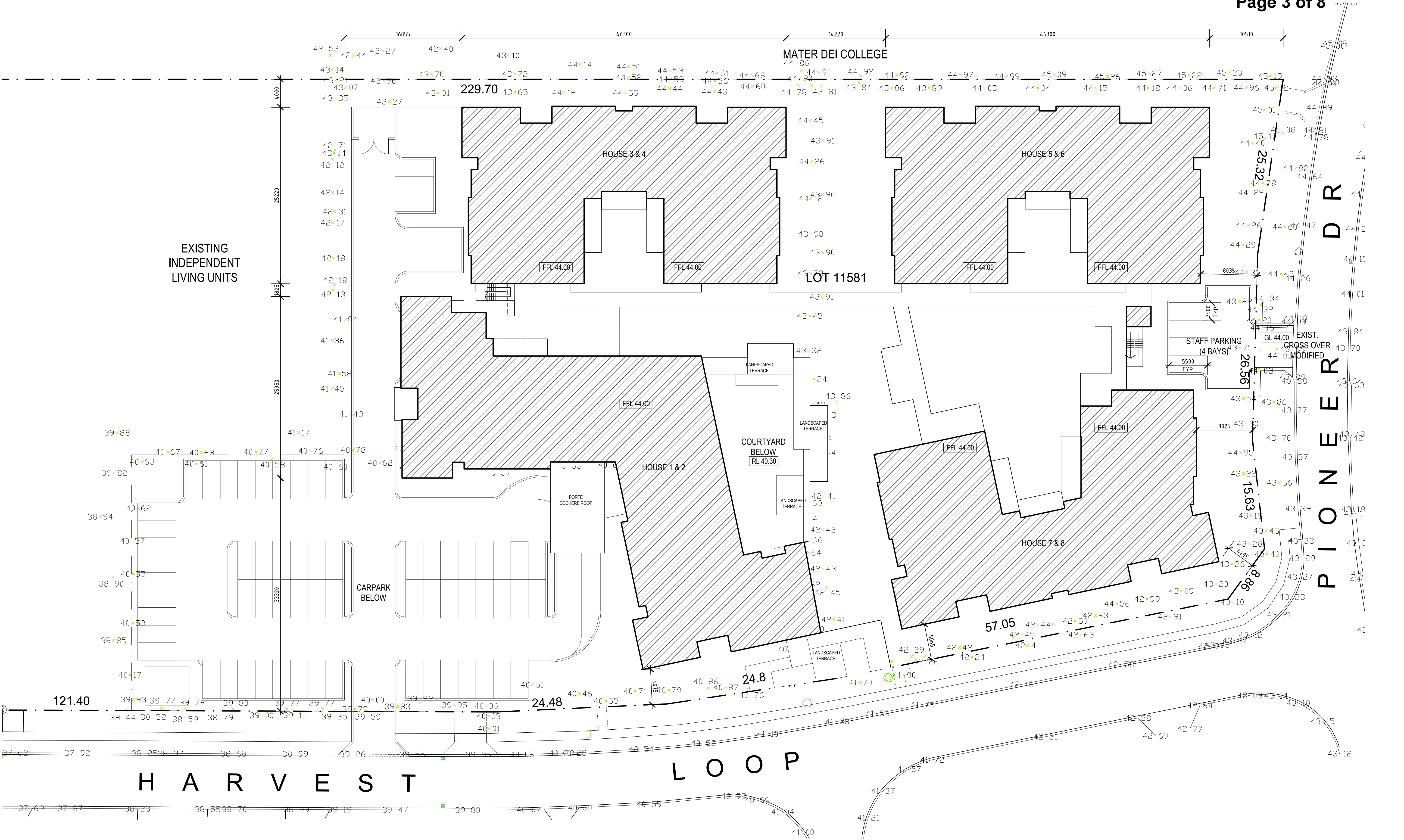
MERCY PLACE EDGEWATER LOWER GROUND SITE PLAN



SCALE: 1:250
DATE: 29/09/17
DRAWN: MK
JOB NO: 616014
DRAWING NO: SK11 revB



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MERCY PLACE EDGEWATER
UPPER GROUND SITE PLAN



SCALE: 1:250
DATE: 29/09/17
DRAWN: MK
JOB NO: 616014
DRAWING NO: SK12 revB



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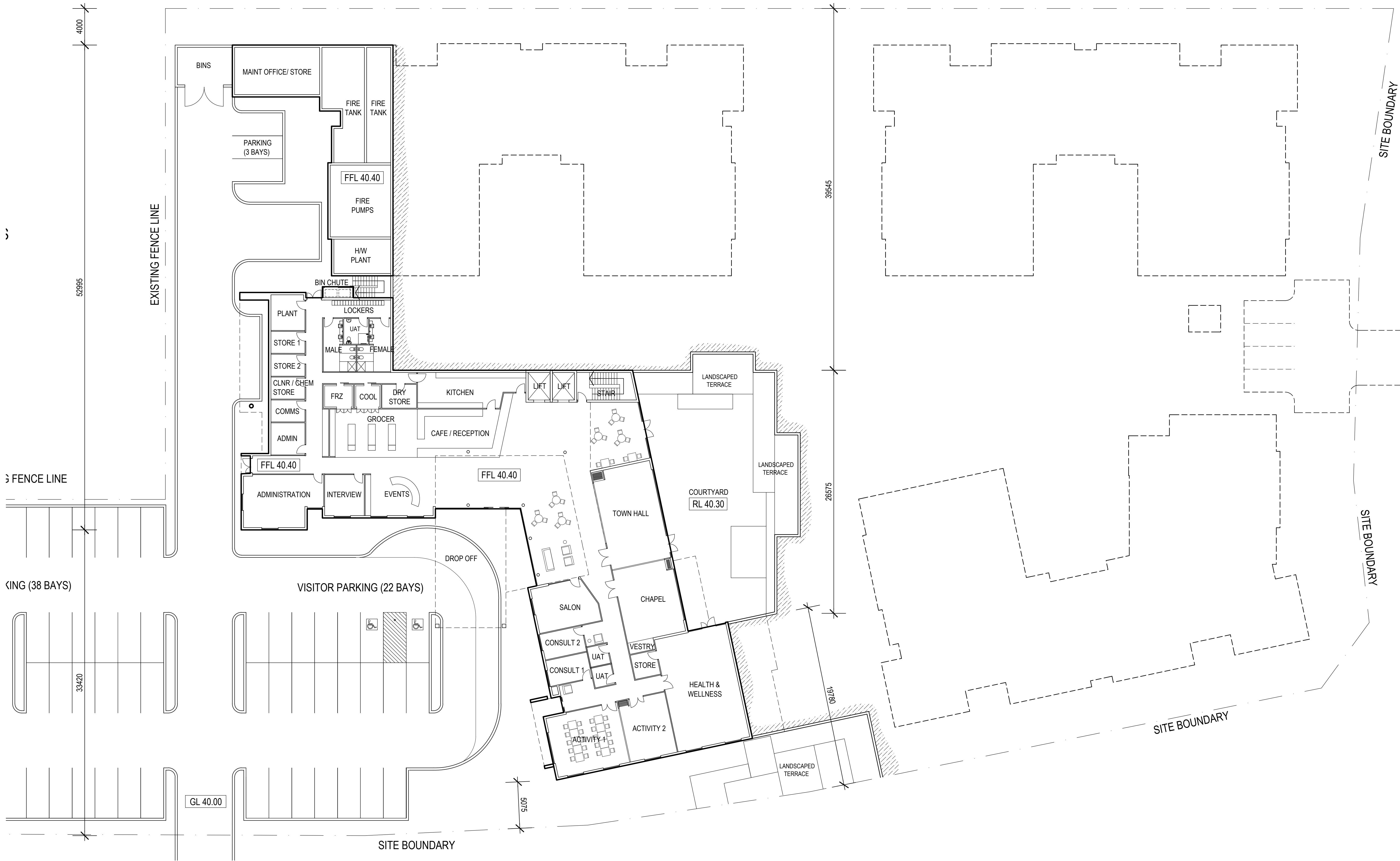
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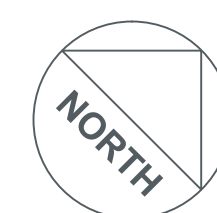
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MATER DEI COLLEGE





MERCY PLACE EDGEWATER
GROUND FLOOR PLAN



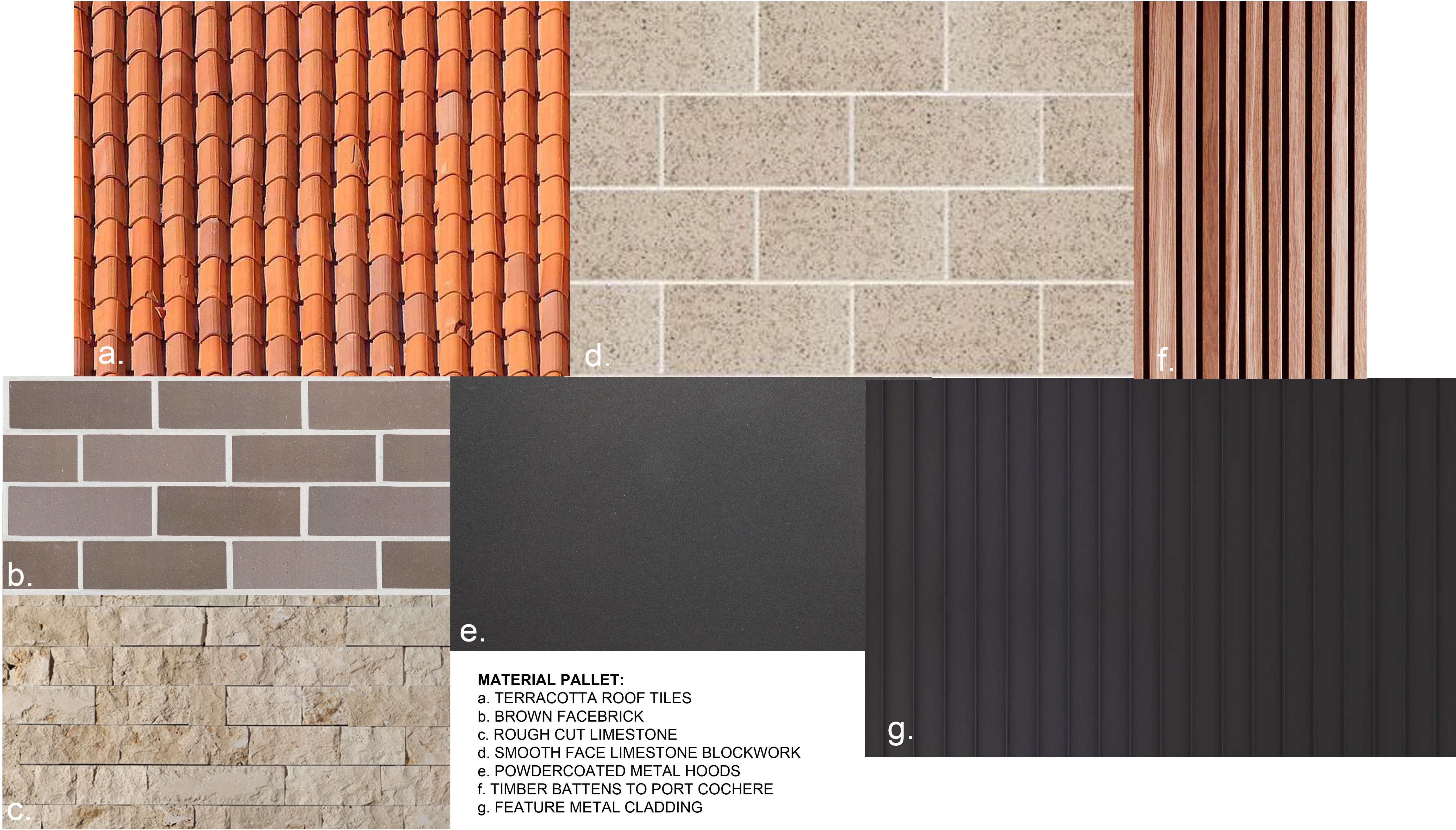
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DRAWN: MK
JOB NO: 616014
DRAWING NO: SK22 revB



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MATERIAL PALLET:
a. TERRACOTTA ROOF TILES
b. BROWN FACEBRICK
c. ROUGH CUT LIMESTONE
d. SMOOTH FACE LIMESTONE BLOCKWORK
e. POWDERCOATED METAL HOODS
f. TIMBER BATTENS TO PORT COCHERE
g. FEATURE METAL CLADDING

MERCY PLACE EDGEWATER

CONCEPT
MATERIAL PALLET

SCALE: NTS
DATE: JAN 2018
DRAWN: MK/LJ
JOB NO: 616014
DRAWING NO: A701 revB



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VIEW FROM HARVEST LOOP



VIEW FROM CNR OF PIONEER DR
AND HARVEST LOOP

MERCY PLACE EDGEWATER

CONCEPT
PERSPECTIVES

SCALE: NTS
DATE: JAN 2018
DRAWN: MK/LJ
JOB NO: 616014
DRAWING NO: A702 revC



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MERCY PLACE, EDGEWATER

LANDSCAPE CONCEPT PLAN
FEBRUARY 2018

JOB NO. 1710301
1:250 @ A1

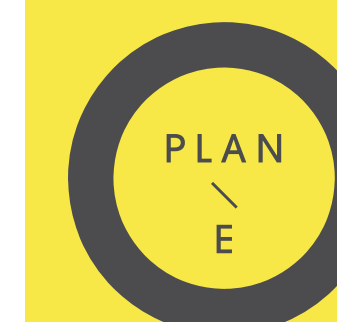
C1.101 REVE

0 2.5 5 10 15 25m



Item	Length (m)
C1.101	5
REVE	25

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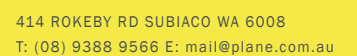
LANDSCAPE ARCHITECTS

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LIMESTONE BLOCK WALL WITH TIMBER INFILL FENCING





Department of
PlanningWestern
Australian
Planning
Commission

PLANNING IN BUSHFIRE PRONE AREAS

BAL ASSESSMENT (BASIC) REPORT

A BAL REPORT FOR A PROPOSED BUILDING ON A SITE THAT IS NOT WITHIN 100 METRES OF BUSHFIRE PRONE VEGETATION

Please read the **BAL Assessment (Basic) fact sheet** before completing this report.

1. Fire Danger Index (FDI)

Determine the FDI for your site. The FDI for all of Western Australia is 80.

80

2. Bushfire prone vegetation

Determine if there is bushfire prone vegetation within 100 metres of the proposed building. Insert NIL where there is no bushfire prone vegetation within 100 metres of the proposed building.

NIL

3. Distance between the proposed building and bushfire prone vegetation

Determine the horizontal distance between the proposed building and the nearest bushfire prone vegetation in the area surrounding the proposed building. Insert YES where the horizontal distance is greater than 100 metres on flat land and 110 metres on sloping land.

Yes

4. Slope of the land under bushfire prone vegetation

N/A

Determine the horizontal distance between the proposed building and the nearest bushfire prone vegetation. Insert N/A where the horizontal distance is greater than 100 metres on flat land and 110 metres on sloping land.

Step 5: Bushfire Attack Level (BAL)

Determine the BAL for the proposed building or development. Insert the BAL.

LOW

If the BAL is BAL-LOW, then this report may be used to support a relevant application for the proposed building or development. If the BAL is **not** BAL-LOW, this report should not be used.

Attach any supporting information (i.e. site plans, photos, aerial photography and other design documents and specifications) as evidence that your site is not within 100 metres of bushfire prone vegetation.

I certify that the inputs into this BAL assessment (basic) report are a true and accurate representation of the conditions of the proposed building and site on the date of this assessment for the site located at:

Lot 11581 (9) Harvest Loop, Edgewater

And being the whole of the land described in Certificate of Title: **Lot 11581 on Vol. LR3093 Fol. 795**

The BAL rating is: **BAL-LOW** Date of assessment: **04.12.2017**

Signed: **Tayne Evershed (Planning Solutions)**

Postal address: **Planning Solutions, GPO Box 2709**

Phone: **(08) 9227 7970** Email: **admin@planningsolutions.com.au**

gwater



Meters
Measurement Result

156.5 Meters

gwater



Measurement Result

17.6 Meters

TRANSPORT IMPACT STATEMENT

Corner of Pioneer Drive and Harvest Loop
Edgewater

January 2018

Rev E



HISTORY AND STATUS OF THE DOCUMENT

Revision	Date issued	Reviewed by	Approved by	Date approved	Revision type
Rev A Draft	26.09.2017	M Kleyweg	M Kleyweg	27.09.2017	Issued for Review
Rev A	4.10.2017	M Kleyweg	M Kleyweg	5.10.2017	Proposed layout amended
Rev B	24.10.2017	M Kleyweg	M Kleyweg	24.10.2017	Amended according to architect comments received on 24.10.2017.
Rev C	29.11.2017	M Kleyweg	M Kleyweg	29.11.2017	Parking rates amended
Rev D	22.01.2018	M Kleyweg	M Kleyweg	22.01.2018	Proposed layout amended
Rev E	29.01.2018	M Kleyweg	M Kleyweg	29.01.2018	Amended according to architect comments received on 29.01.2018.

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Revision	Date of issue	Quantity	Issued to
Rev A Draft	27.09.2017	1 (PDF)	Marc Karol (T&Z Architect)
Rev A	5.10.2017	1 (PDF)	Marc Karol (T&Z Architect)
Rev B	24.10.2017	1 (PDF)	Marc Karol (T&Z Architect)
Rev C	29.11.2017	1 (PDF)	Marc Karol (T&Z Architect)
Rev D	22.01.2018	1 (PDF)	Marc Karol (T&Z Architect)
Rev E	29.01.2018	1 (PDF)	Marc Karol (T&Z Architect)

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Appendices

Appendix 1 - The layout of the proposed development

Appendix 2 - Transport Planning and Traffic Plans

Appendix 3 - Vehicle Turning Circle Plans



Quality
ISO 9001

SAI GLOBAL

Prepared by: KCTT (Trading as Traffic and Transport Pty Ltd)

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1. Executive Summary

- The proposed development is located at the corner of Pioneer Drive and Harvest Loop, Edgewater.
- Currently the lot is occupied by the Edgewater Mercy Hostel with 33 bedrooms for aged persons. The development plans show the new Mercy Place with 128 beds for aged persons. Additionally, the plans include ancillary facilities of a chapel, health and wellbeing, administration, town hall, salon and interview room for private purpose of the tenants only.
- According to City of Joondalup Draft Local Planning Policy – Non-residential Development in Residential Zone, 67 parking bays are required for this development. The plans show a total of 67 parking bays inclusive of 2 ACROD bays, which successfully cater for the parking requirements of the development.
- The development is expected to generate 273 VPD and 29 VPH. The total additional traffic to the surrounding network will be **207 VPD and 22 VPH**. It is expected that the surrounding network will successfully cater for this additional traffic.
- Two main routes are expected to be used for accessing / egressing the site:
 - To / from the west via Pioneer Drive
 - Egress point on Pioneer Drive > Pioneer Drive to the west
 - Egress point on Harvest Loop > Harvest Loop to the North > Pioneer Drive to the west
 - To / from the east via Pioneer Drive
 - Egress point on Pioneer Drive > Pioneer Drive to the east
 - Egress point on Harvest Loop > Harvest Loop to the North > Pioneer Drive to the east
- There are no relevant documents stipulating the required bicycle parking by the City of Joondalup. It is highly unlikely that the residents will use bicycles, however, KCTT believe that some bicycle parking spaces for staff members and visitors should be provided to promote the use of alternative means of transportation.
- According to NSW RTA Guide to Traffic Generating Developments 3 delivery bays are required for this development. The plans show 2 dedicated delivery / service bays. KCTT believe that this is enough to cater for the development's requirements, since the trucks are not expected to access the site at the same time.

2. Transport Impact Statement

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2.1 Location

Lot Number	11581
Street Name and Number	No. 15 and 19 Pioneer Drive; No. 9 and 19 Harvest Loop
Suburb	Edgewater
Description of Site	<p>The site is currently occupied by the existing Mercy Hostel residential aged care.</p> <p>The proposed plans show the expansion of the current residential aged care facility to 128 beds and development of supporting land uses of health & wellbeing, salon, chapel, town hall, administration and an interview room.</p> <p>The site is fronting two roads, Pioneer Drive to the north and Harvest Loop to the East.</p>

2.2 Technical Literature Used

Local Government Authority	City of Joondalup
Type of Development	Residential Care Facility
Are the R-Codes referenced?	YES
If <u>YES</u> , nominate which:	State Planning Policy 3.1 Residential Design Codes 2015 R-Codes (incorporating amendments gazetted on 23/10/15)
Is the NSW RTA Guide to Traffic Generating Developments Version 2.2 October 2002 (referenced to determine trip generation / attraction rates for various land uses) referenced?	YES
Which WAPC Transport Impact Assessment Guideline should be referenced?	Volume 4 - Individual Developments
Are there applicable LGA schemes for this type of development?	YES
If <u>YES</u> , Nominate:	
Number of Scheme	No. 2
Name of Scheme	District Planning Scheme

Are Austroads documents referenced?	NO
Are there applicable DAP schemes for this type of development?	NO
Is the Perth Transport Plan for 3.5 million and Beyond referenced?	NO

2.3 Land Uses

Are there any existing Land Uses	YES
<i>If YES, Nominate:</i>	Residential Aged Care Facility – 33 beds

Proposed Land Uses

How many types of land uses are proposed?	1
Nominate land use type and yield	Residential Aged Care Facility with ancillary land uses (health & wellbeing, hair salon, chapel, town hall, administration, interview room) 128 beds
Are the proposed land uses complimentary with the surrounding land-uses?	YES

2.4 Local Road Network Information

How many roads front the subject site?	2
--	---

Name of Roads Fronting Subject Site / Road Classification and Description:

Road 1

Road Name	Pioneer Drive
Number of Lanes	One lane, two-way
Road Reservation Width	Approximately 20m
Road Pavement Width	Approximately 7.5m
Classification	Urban Local Road / Access Road
Speed Limit	50kph
Bus Route	NO
<i>If YES Nominate Bus Routes</i>	
On-street parking	NO

Road 2

Road Name	Harvest Loop
Number of Lanes	One lane, two-way
Road Reservation Width	Approximately 20m
Road Pavement Width	Approximately 7m
Classification	Urban Local Road / Access Road
Speed Limit	50kph

Bus Route	NO
<i>If YES Nominate Bus Routes</i>	
On-street parking	NO

Name of Other Roads within 400m radius of site, or roads likely to take increased traffic due to the development.

Road 1

Road Name	Treetop Avenue
Number of Lanes	Two-way, one lane each direction
Road Reservation Width	Approximately 24m
Road Pavement Width	Approximately 10m
Classification	Significant Urban Local Road / Local Distributor
Speed Limit	50kph
Bus Route	YES
<i>If YES Nominate Bus Routes</i>	465,466
On-street parking	YES

Road 2

Road Name	Emerald Way
Number of Lanes	One lane, two-way
Road Reservation Width	Approximately 20m
Road Pavement Width	Approximately 7m
Classification	Urban Local Road / Access Road
Speed Limit	50kph
Bus Route	NO
<i>If YES Nominate Bus Routes</i>	
On-street parking	NO

Road 3

Road Name	Joondalup Drive
Number of Lanes	Two-way, two lanes each direction separated by median
Road Reservation Width	Approximately 60m
Road Pavement Width	Approximately 17m (including bicycle lanes)
Classification	Significant Urban Local Road / Distributor A
Speed Limit	70kph / 80kph
Bus Route	YES (North of Treetop Avenue)
<i>If YES Nominate Bus Routes</i>	465,466
On-street parking	NO

Road 4

Road Name	Mitchell Freeway
Number of Lanes	Two-way, two lanes each direction separated by median
Road Reservation Width	Approximately 130m
Road Pavement Width	Approximately 20m (including bicycle lanes)
Classification	Urban Highway / Primary Distributor

Speed Limit 100kph
 Bus Route NO
 If YES Nominate Bus Routes
 On-street parking NO

2.5 Traffic Volumes

Road Name	Location of Traffic Count	Vehicles Per Day (VPD)	Vehicles per Peak Hour (VPH)				Heavy Vehicle % <i>If HV count is Not Available, are HV likely to be in higher volumes than generally expected?</i>	Year	
			AM Peak Time	AM - Peak VPH	PM Peak Time	PM - Peak VPH		Date of Traffic Count	<i>If older than 3 years multiply with a growth rate</i>
Joondalup Drive	North of Ocean Reef Road	27,753	07:45 – 2,162		15:15 – 2,541		6.8%	Jul 2015	N/A
Eddystone Avenue	North of Caridean Street	9,862	08:00 – 876		16:00 – 973		3.6%	Jun 2017	N/A
Wedgewood Drive	East of Treetop Avenue	3,167	07:45 – 239		15:15 – 348		5.7%	May 2015	N/A
Treetop Avenue	North of Wedgewood Drive*	3,506	08:00 – 455		15:00 – 446		6.3%	Mar 2016	N/A
	North of Woodview Court*	2,496	08:00 – 403		15:00 – 386		6.9%		
	East of Joondalup Drive*	6,313	08:00 – 807		15:00 – 708		5.4%		
Mitchell Freeway Southbound	North of Ocean Reef Road	41,275	05:30 – 3,426		15:15 – 2,926		9.4%	Nov 2014	N/A
Mitchell Freeway Northbound	North of Ocean Reef Road	41,781	07:30 – 3,038		16:00 – 3,898		N/A HV are not likely to be in higher volumes than generally expected	Sep 2014	N/A
Pioneer Drive	South of Treetop Avenue*	1,693	08:00 – 263		15:00 – 227		4.5%	Nov 2015	N/A
	North of Harvest Loop*	1,350	08:00 – 243		15:00 – 205		2.3%		

	North of Emerald Way*	1,135	08:00 – 230	15:00 – 204	4.5%		
Regatta Drive	North of Treetop Avenue*	2,523	08:00 – 225	16:00 – 233	5.7%	Mar 2016	N/A

2.6 Vehicular Crash Information

Is Crash Data Available on Main Roads WA website?

NO

KCTT have accessed the Main Roads WA website and reporting centre on 11/09/2017. There were no reported accidents for the period from 01/01/2012 to 31/12/2016 in vicinity of the proposed access point to the subject site.

2.7 Parking Requirements

Local Government

City of Joondalup

Local Government Document Utilised

Non-residential Development in the Residential Zone Local Planning Policy

Description of Parking Requirements in accordance with Scheme:

DRAFT: Non-residential Development in Residential Zone Local Planning Policy.

The parking requirements for an aged care home is classified as 'nursing home' under the Non-residential Development in Residential Zone Local Planning Policy. The policy requires a parking provision of 1 parking bay per 5 beds plus one bay per staff member.

Calculation of Parking

Land Use	Requirements	Yield	Required Parking
Nursing Home	1 bay per 5 beds	128 residents	26
	1 bay per staff member	41 staff members	41
Total:			67

Total Volume of Parking Provided by Proponent

67

Justification

According to City of Joondalup's requirements, the total required parking for this development is 67 parking bays, inclusive of residents, visitors and staff members. The development proposes the provision of 67 car parking bays (inclusive of 63 parking bays in the carpark of Harvest Loop for visitors and staff and a 4 parking bays for the staff only in the carpark off Pioneer Drive), which is in accordance with the City's requirements and will cater for all the parking requirements of the development.

It is important to note that the requirements are sourced as per the City of Joondalup's draft document Non-Residential Development in Residential Zone Local Planning Policy. The City has advised this Local Planning Policy is a seriously entertained planning instrument and therefore provides the most current parking rates to assess the development given none exist within Town Planning Scheme No. 2.

Prior to the seriously entertained policy, the city applied a parking requirement of 1 car bay per 3 beds. The Non-Residential Development in Residential Zone Local Planning Policy implies a reduced requirement of 17 bays. However, this reduction of car bays against the 1 per 3 beds requirement can also be justified by reciprocity of demand due to the start and end times of employee shifts and popular visiting hours.

Mercy Health Care have provided the following information in regards to employee shifts and visiting hours;

- 07:00 – 15:00 approx. 30 staff members
- 07:00 – 13:00 approx. 10 staff members
- 15:00 – 22:00 approx. 20 staff members
- 15:00 – 19:00 approx. 10 staff members
- 22:00 – 07:00 approx. 5 staff members
- Most common visiting times weekend morning 10:00 – 16:00

Such information poses an impact for the proposed developments parking demand. The reduction of staff by 10 employees in both the morning and afternoon shift means that there will be additional available parking bays for visitors of the development. With approximately 40 staff members occupying up to 40 parking bays throughout the morning shift during the time of 7:00-13:00 there is still an available 27 car bays available for visitors of the development. This is applicable to the afternoon shift with 37 bays available for visitors when considering that 30 employees are on shift from 15:00 – 19:00.

Have Vehicle Swept Paths been checked for YES
Parking?

If YES, provide description of performance:

KCTT have checked the navigability of the parking layout with a B99 (5.2m) passenger vehicle, service vehicle and an ambulance vehicle. No major issues were presented. Please refer to Appendix 3 for vehicle swept path drawings.

2.8 Parking Surveys

Was a parking survey required? NO

2.9 Bicycle Parking

Local Government City of Joondalup

Reference Document Utilised N/A

Description of Parking Requirements in accordance with Scheme:

There is no reference document concerning bicycle parking requirements stipulated by the City of Joondalup. It is expected that some requirements will be added to the document that will eventually substitute District Planning Scheme No. 2.

N/A

Justification

It is highly unlikely that future residents of the proposed development will use bicycles. However, KCTT believe that some bicycle parking should be provided for visitors and staff to promote alternative means of transportation to and from the development.

2.10 ACROD Parking

Class of Building Class 9c
 Does this building class require specific provision of ACROD Parking? YES

Reference Document Utilised Building Codes of Australia

Description of Parking Requirements:

The Building codes of Australia state the requirement for 1 ACROD parking space for every 100 carparking space or part thereof.

Parking Requirement in accordance with regulatory documents

Land Use	Requirements	Yield	Total Parking
Residential (aged care)	1 ACROD bay per 100 carparking space	67	1

The proposed plan identifies a total of **2 ACROD bays** which is above the applicable requirements.

2.11 Delivery and Service Vehicles

Guideline Document used as reference NSW RTA Guide to Traffic Generating Developments
 Requirements

No requirements are specified for the land uses Residential Aged Care or a Nursing Home. KCTT believe that in this case the closest requirements are as for:

Residential flat buildings (50% of spaces adequate for trucks): < 200 flats or home units = 1 space per 50 flats or home units

Parking Requirement in accordance with regulatory documents

Land Use	Requirements	Yield	Total Parking
Residential (aged care)	1 space per 50 flats	128	3

Total Volume of Parking Provided by Proponent

Service and Delivery Parking	1
------------------------------	---

Justification

We believe that requirement for 3 delivery spaces is unnecessary due to the service vehicles will not be required to access the site at the same time and therefore this requirement may be reduced. This is also supported due to the delivery of goods will also be delivered to a single communal space and distributed throughout the site from there to each individual dwelling.

2.12 Calculation of Development Generated / Attracted Trips

What are the likely hours of operation? n/a for Residential Aged Care.
 What are the likely peak hours of operation? AM 07:30 - 08:30 and PM 17:30 - 18:30
 Do the development generated peaks coincide with existing road network peaks? YES

If YES, Which:

AM peak – partially

Guideline Document Used

NSW RTA Guide to Traffic Generating Developments

Rates from above document:

Housing for aged and disabled persons:

- 1 - 2 vehicular trips per dwelling
 - PM Peak - 0.1 - 0.2 per dwelling;
- Administration (Office and commercial):
- 10 vehicular trips per 100m² of GFA
 - PM Peak - 2 per 100m² of GFA

Land Use Type	Rate above	Yield	Daily Traffic Generation	Peak Hour Traffic Generation
Residential Aged Care	Daily – 2 VPD per dwelling Peak – 0.2 VPH per dwelling	128 beds	256 VPD	26 VPH
Administration	Daily - 10 VPD per 100m ² GFA AM Peak – 2 per 100m ² GFA PM Peak - 2 per 100m ² GFA	168m ² GFA	17 VPD	3
Total:			273 VPD	29 VPH

Does the site have existing trip generation / attraction?	YES
No of Daily Trips	Residential Aged Care – 33 beds 2 VPD per dwelling = 66 VPD
No of AM Peak Hour Trips	0.2 per dwelling = 7 VPH
No of PM Peak Hour Trips	0.2 per dwelling = 7 VPH
What is the total impact of the new proposed development?	Moderate impact. 207 VPD and 22 VPH of additional traffic to the surrounding network.

2.13 Traffic Flow Distribution

How many routes are available for access / egress to the site?	2 routes
Route 1	
Provide details for Route No 1	Egress point on Pioneer Drive > Pioneer Drive to the west; Egress point on Harvest Loop > Harvest Loop to the North > Pioneer Drive to the west
Percentage of Vehicular Movements via Route No 1	65% [177 VPD / 19 VPH]
Route 2	
Provide details for Route No 2	Egress point on Pioneer Drive > Pioneer Drive to the east; Egress point on Harvest Loop > Harvest Loop to the North > Pioneer Drive to the east
Percentage of Vehicular Movements via Route No 2	35% [96 VPD / 10 VPH]

2.14 Road Safety

Are sight distances adequate at proposed intersections?	YES
---	-----

Justification

In order to navigate the access/egress point of the subject site, vehicles must reduce operating speed to a maximum of 20km/h (if not stop fully), therefore the requirements for ASD and SISD are not applicable. A review of the plan for the proposed development indicates there are sufficient sight distances for safe traffic movements.

2.15 Road Cross-Section Requirements

Does this development propose the construction of new roads? NO

2.16 Vehicle Crossover Requirements

Are vehicle crossovers required onto existing road networks? YES

How many existing crossovers? 3

How many proposed crossovers? 2

How close are proposed crossovers to existing intersections? Access / egress point from / to Pioneer Drive will be approximately 40m to the west from the intersection of Pioneer Drive and Harvest Loop.
 Access / egress point from / to Harvest Loop will be located approximately 150m south from the intersection of Pioneer Drive and Harvest Loop/

Does this meet existing standards? YES

2.17 Public Transport Accessibility

How many bus routes are within 400 metres of the subject site? 2

How many rail routes are within 800 metres of the subject site? 1

Bus / Rail Route	Description	Peak Frequency	Off-Peak Frequency
465	Joondalup Station – Whitfords Station via Trappers Drive	20 minutes	60 minutes
466	Joondalup Station – Whitfords Station via Timberlane Drive	20 minutes	60 minutes
Joondalup Train Line	Butler – Elizabeth Quay	4 minutes	15 minutes

Walkscore Rating for Accessibility to Public Transport
 51 Good Transit – Many nearby public transportation options.

Is the development in a Greenfields area? NO

2.18 Pedestrian Infrastructure

Describe existing local pedestrian infrastructure within a 400m radius of the site:

Classification	Road Name
High Quality Shared Path	Harvest Loop, Joondalup Drive
Other Shared Path (Shared by Pedestrians & Cyclists)	Treetop avenue, Pioneer Drive

Does the site have existing pedestrian facilities? YES

Does the site propose to improve pedestrian facilities? YES

If YES, describe the measures proposed.

Pedestrian access into the site from both Harvest Loop and Pioneer Drive.

What is the Walk Score Rating?

40 Car Dependant – most errands require a car

2.19 Cyclist Infrastructure

Are there any PBN Routes within an 800m radius of the subject site? YES

If YES, describe:

Classification	Road Name
Principal Shared Path	Mitchell Freeway
Bicycle Lane or Sealed Shoulder Either Side	Joondalup Drive, Eddystone Avenue
High Quality Shared Path	Joondalup Drive, Eddystone Avenue, Harvest Loop
Other Shared Path	Treetop Avenue, Pioneer Drive
Good Riding Environment	Treetop Avenue, Regatta Drive, Outlook Drive, Woodview Court

Are there any PBN Routes within a 400m radius of the subject site? YES

If YES, describe:

Classification	Road Name
Principal Shared Path	Mitchell Freeway
Bicycle Lane or Sealed Shoulder Either Side	Joondalup Drive
High Quality Shared Path	Joondalup Drive
Other Shared Path	Treetop avenue, Pioneer Drive
Good Riding Environment	Treetop Avenue
Does the site have existing cyclist facilities?	YES
Does the site propose to improve cyclist facilities?	NO

2.20 Site Specific Issues and Proposed Remedial Measures

How many site-specific issues need to be discussed? Two

Site Specific Issue No 1

Remedial Measure / Response

Parking provision

According to City of Joondalup Draft Local Planning Policy – Non-residential Development in the residential zone, 67 parking bays are required for this development. The plans show a total of 67 parking bays inclusive of 2 ACROD bays, which successfully cater for the parking requirements of the development.

Site Specific Issue No 12

Remedial Measure / Response

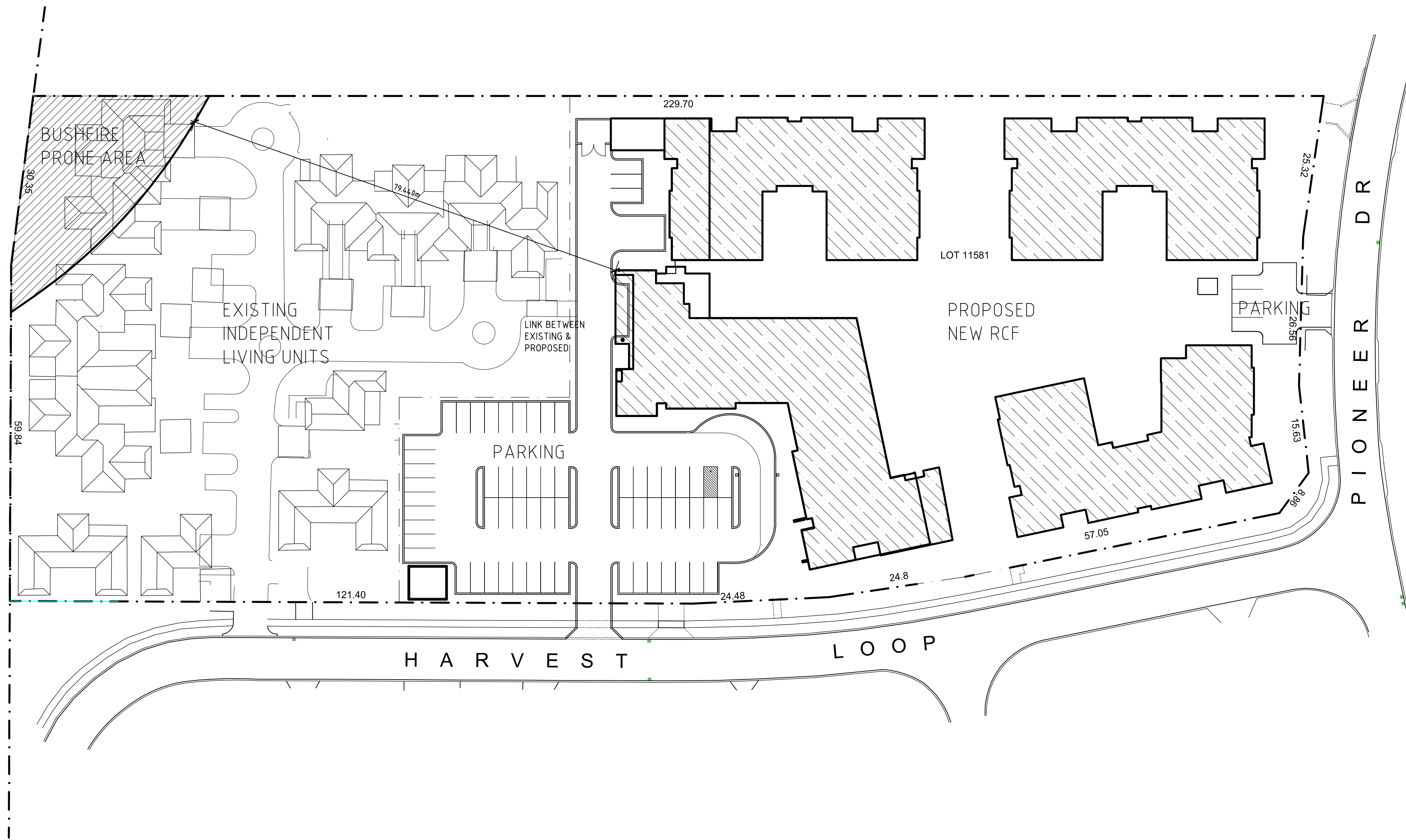
Impact on the surrounding network.

It is expected that the proposed development will generate additional 207 VPD and 22 VPH when completed. KCTT believe that the surrounding road network will successfully cater for the generated traffic.

Appendix 1

The Layout of the Proposed Development

0m 10m 20m 40m



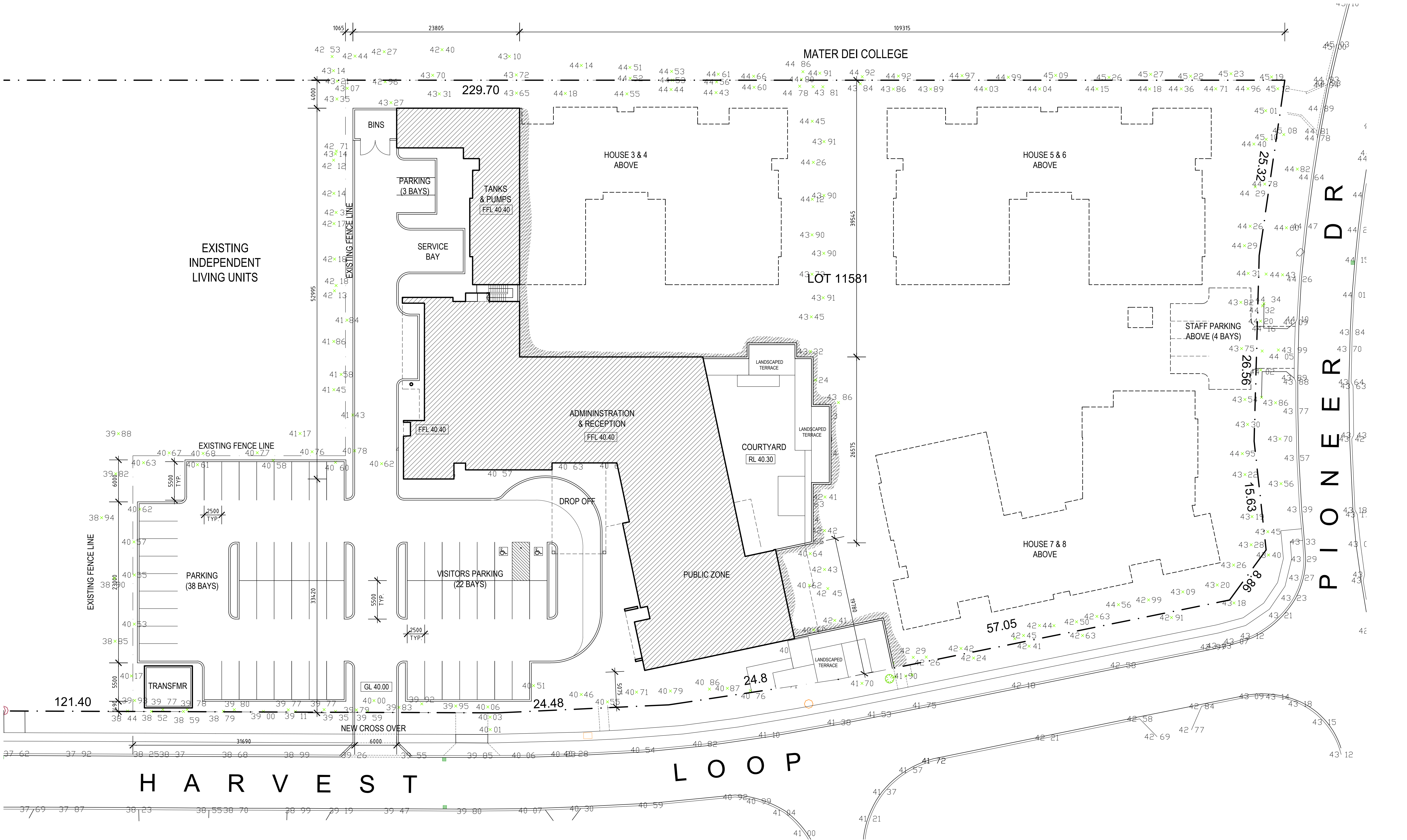
MERCY PLACE EDGEWATER
□USH FIRE □IA□RAM



SCALE: 1:500
DATE: 19/10/17
DRAWN: JW
JOB NO: 616014
DRAWING NO: SK01 revB



679 MURRAY STREET WEST PERTH
T 9423 0000 W www.tz.com.au
E mail@tz.com.au



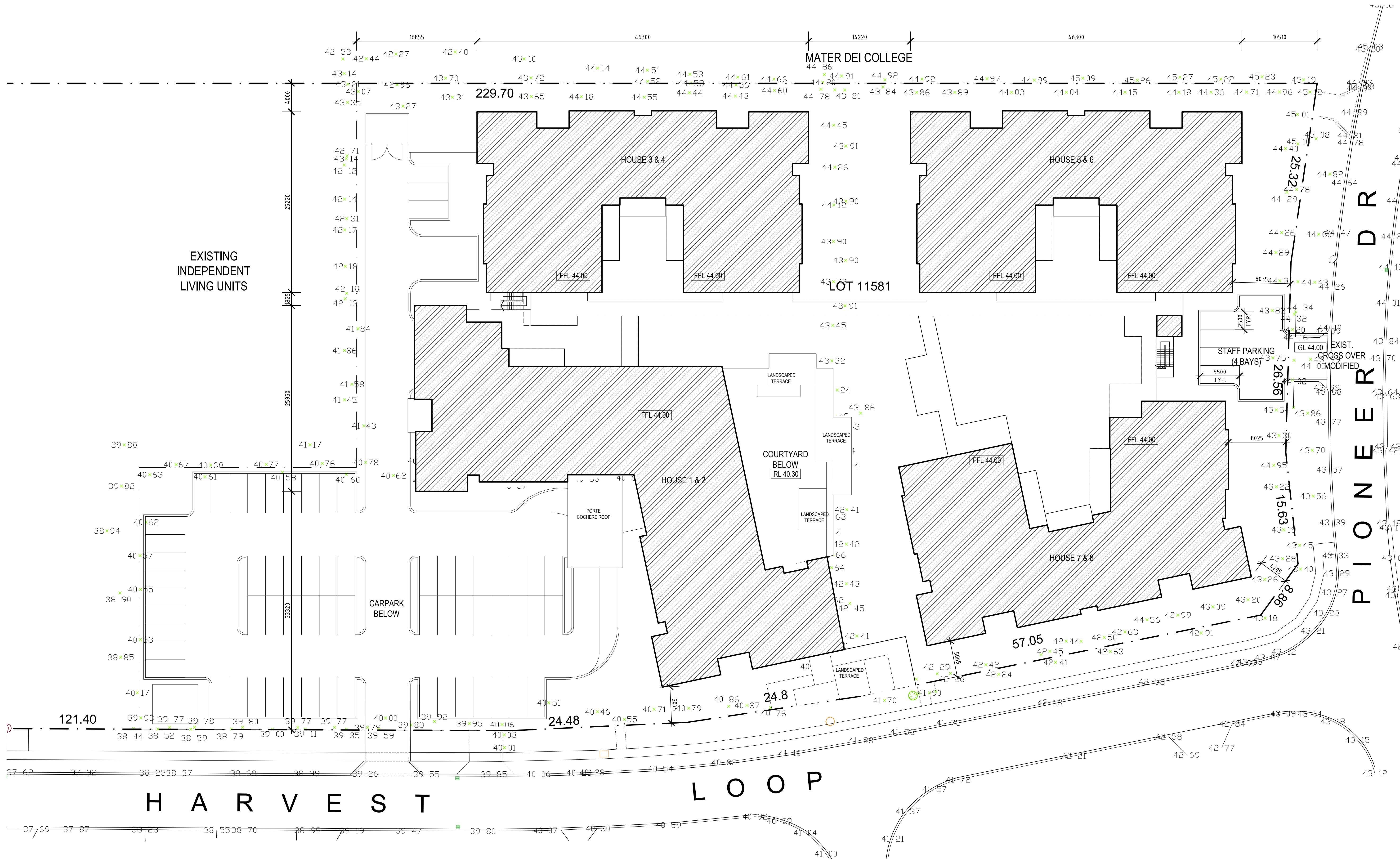
MERCY PLACE EDGEWATER
LOWER ROUND SITE PLAN



SCALE: 1:250
DATE: 29/09/17
DRAWN: MK
JOB NO: 616014
DRAWING NO: SK11 revB



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MERCY PLACE EDGEWATER
UPPER ROUND SITE PLAN



SCALE: 1:250
DATE: 29/09/17
DRAWN: MK
JOB NO: 616014
DRAWING NO: SK12 revB

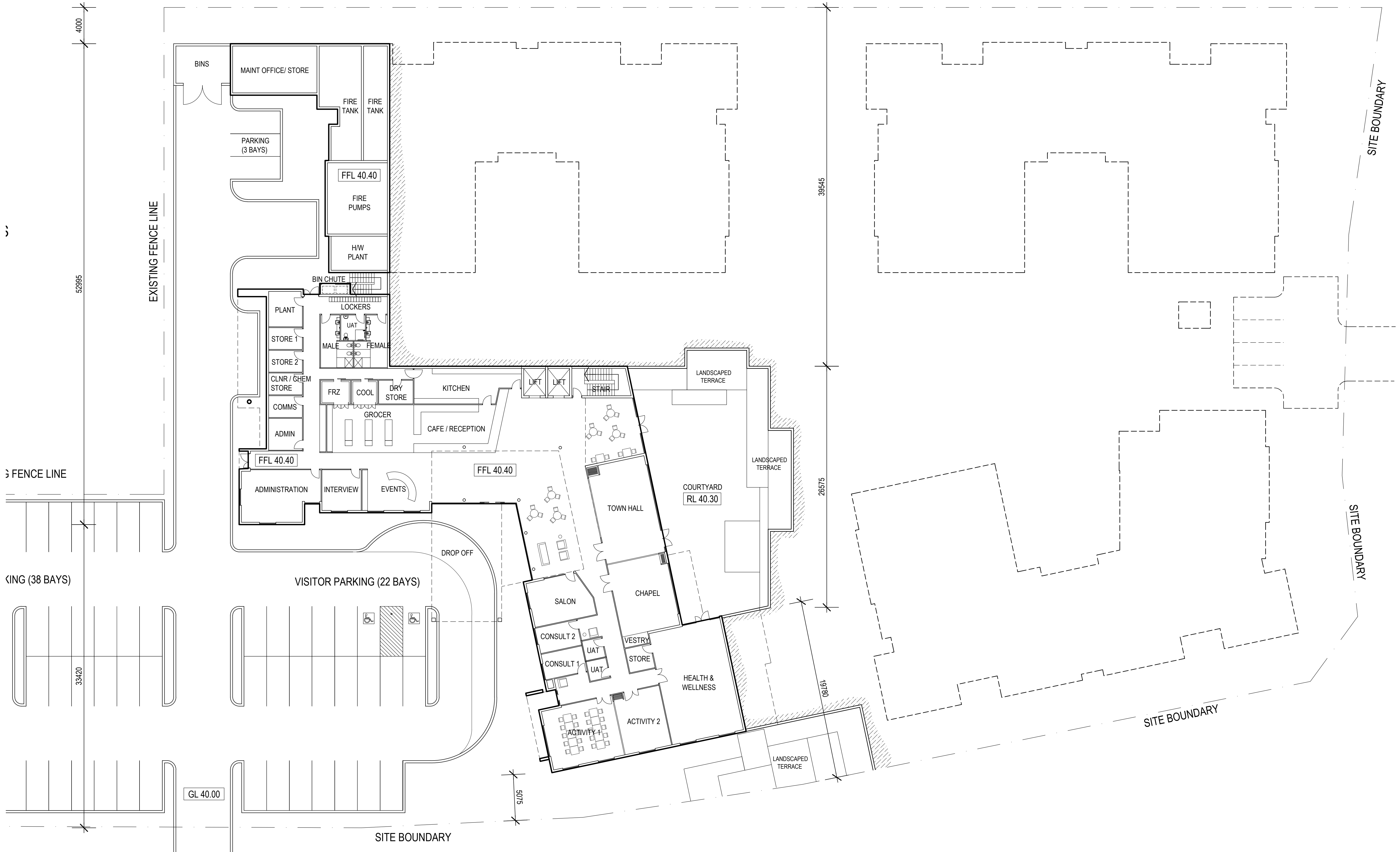


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MATER DEI COLLEGE

SITE BOUNDARY



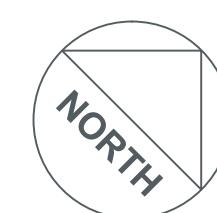
MERCY PLACE EDGEWATER
LOWER GROUND FLOOR PLAN



SCALE: 1:200
DATE: 29/09/17
DRAWN: MK
JOB NO: 616014
DRAWING NO: SK21 revB



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Appendix 2

Transport Planning and Traffic Plans



PARKS AND RECREATION

PUBLIC PURPOSE

WATERWAYS

LOCATION BOUNDARY

Hay Street

RAILWAY

ROAD BRIDGE, FOOT BRIDGE

CITY OF JOONDALUP

EDGEWATER

SUBURBS

ROAD

STREET NAME

RAILWAY

ROAD BRIDGE, FOOT BRIDGE

LOCAL GOVERNMENT NAME

SUBURBS

DISTANCE FROM LOCATION

Certified System

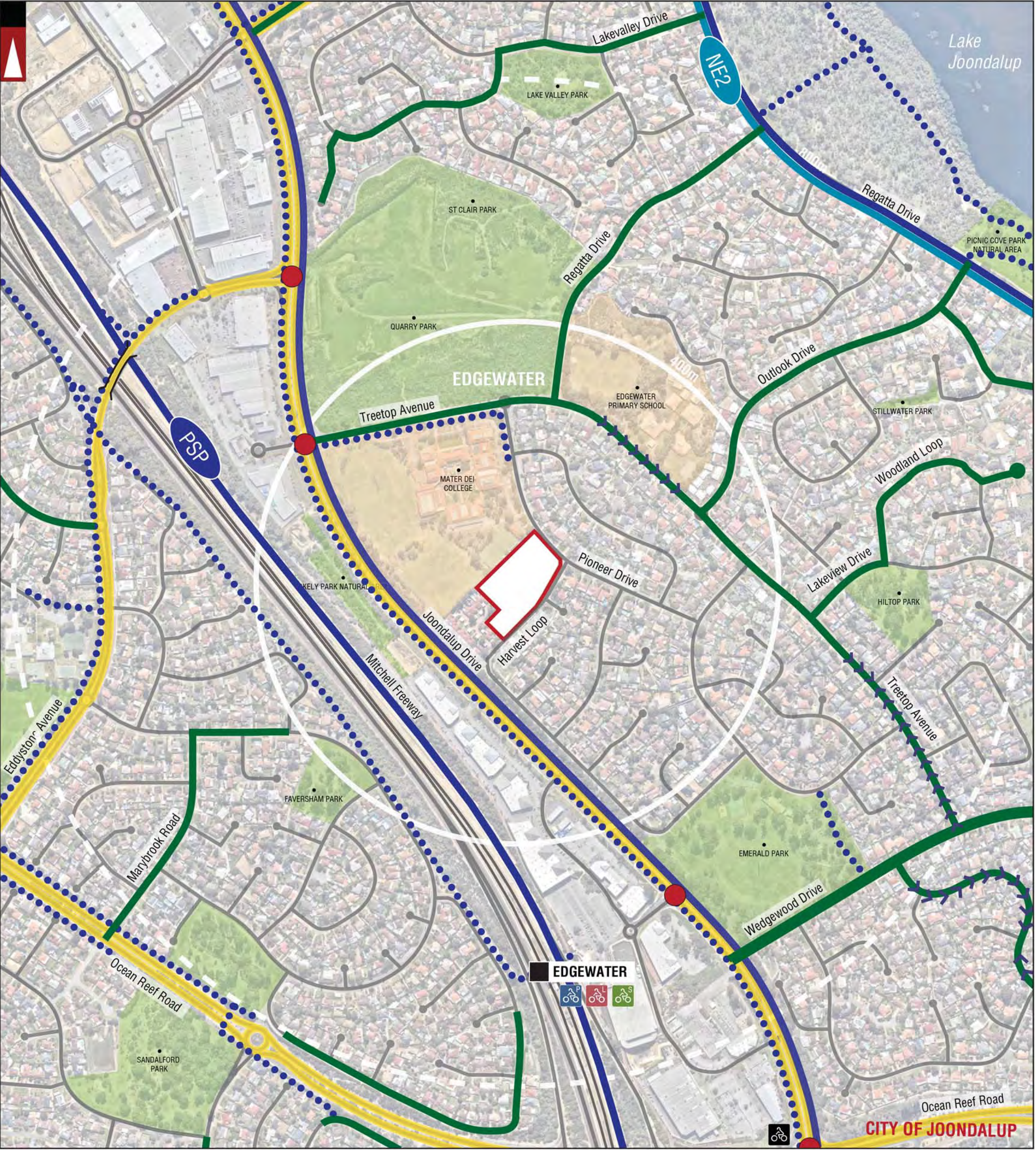
Quality ISO 9001

SAI GLOBAL

LEGEND

			PROJECT:	CORNER OF PIONEER DRIVE AND HARVEST LOOP, EDGEWATER	DRAWN BY:	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021
B	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE:	LOCALITY PLAN - 800M RADIUS	J.S.	
A	25-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER:	KC00660.000_ S01		
No	DATE	AMENDMENT				





PARKS AND RECREATION

PUBLIC PURPOSE

WATERWAYS

LOCATION BOUNDARY

Hay Street

RAILWAY

ROAD BRIDGE, FOOT BRIDGE

CITY OF JOONDALUP

EDGEWATER

EDGESUBURBS

DISTANCE FROM LOCATION

BIKE PARKING

BIKE LOCKER

BIKE SHELTER

BIKE SHOP

NE2

PSP

HIGH QUALITY SHARED PATH

OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)

TRAIN STATION

GOOD ROAD RIDING ENVIRONMENT

BICYCLE LANES OR SEALED SHOULDER EITHER SIDE

GRADIENT ARROW

TRAFFIC LIGHT

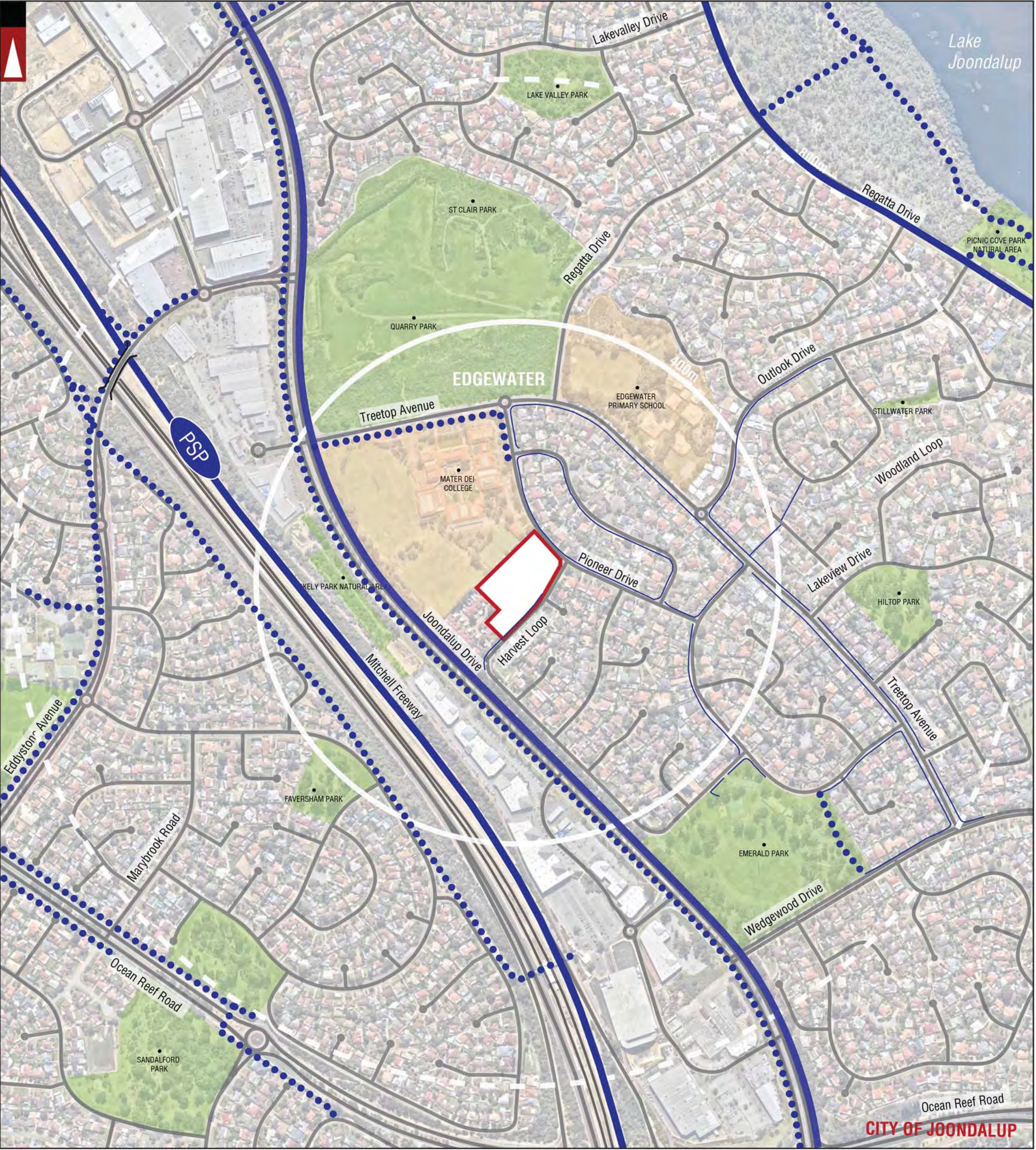
Certified System

Quality ISO 9001

SAI GLOBAL

LEGEND

			PROJECT: CORNER OF PIONEER DRIVE AND HARVEST LOOP, EDGEWATER	DRAWN BY: J.S.	<div>Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021</div> <div>PH: 08 9441 2700 WEB: www.kctt.com.au</div> <div>kctt</div>
			TITLE: BICYCLE NETWORK PLAN - 800M RADIUS		
B	22-01-2018	PROPOSED LAYOUT AMENDED	DRAWING NUMBER: KC00660.000_ S02		
A	25-09-2017	ISSUED FOR REVIEW			
No	DATE	AMENDMENT			



PARKS AND RECREATION

PUBLIC PURPOSE

WATERWAYS

LOCATION BOUNDARY

Hay Street

RAILWAY

ROAD BRIDGE, FOOT BRIDGE

CITY OF JOONDALUP

EDGEWATER

EDGEMOOR

ROAD STREET NAME

RAILWAY

ROAD BRIDGE, FOOT BRIDGE

LOCAL GOVERNMENT NAME

SUBURBS

DISTANCE FROM LOCATION

PSP

HIGH QUALITY SHARED PATH

OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)

PEDESTRIAN PATH

PRINCIPAL SHARED PATH

HIGH QUALITY SHARED PATH

OTHER SHARED PATH (SHARED BY PEDESTRIANS & CYCLISTS)

PEDESTRIAN PATH

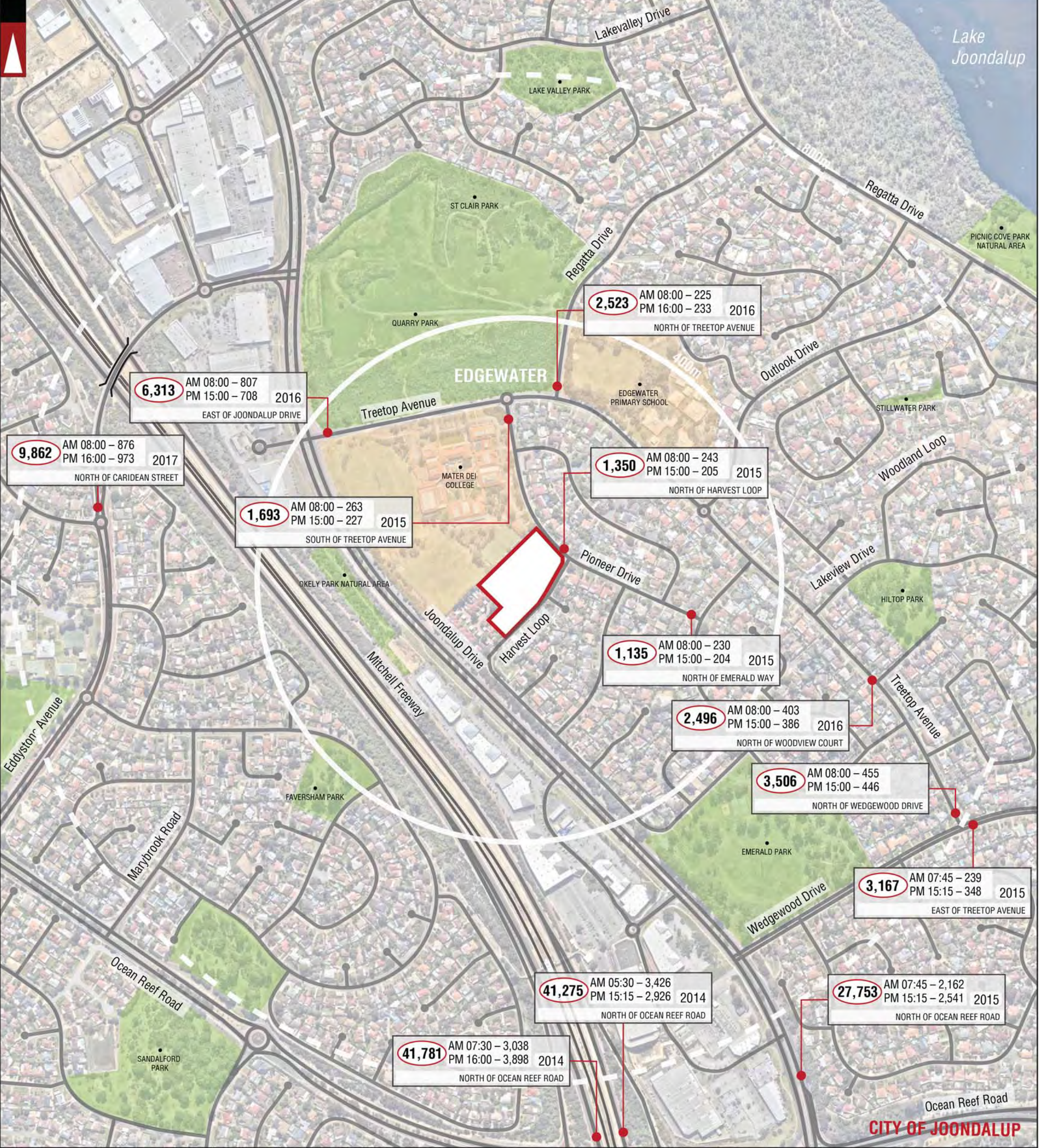
Certified System

Quality ISO 9001

SAI GLOBAL

LEGEND

			PROJECT:	DRAWN BY: J.S.	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021 PH: 08 9441 2700 WEB: www.kctt.com.au	
			CORNER OF PIONEER DRIVE AND HARVEST LOOP, EDGEWATER			
			TITLE:			
			PEDESTRIAN PATHS PLAN - 800M RADIUS			
			DRAWING NUMBER:	J.S.		
			KC00660.000_ S04			
B	22-01-2018	PROPOSED LAYOUT AMENDED				
A	25-09-2017	ISSUED FOR REVIEW				
No	DATE	AMENDMENT				



PARKS AND RECREATION

PUBLIC PURPOSE

WATERWAYS

LOCATION BOUNDARY

Hay Street

RAILWAY

ROAD BRIDGE, FOOT BRIDGE

CITY OF JOONDALUP

EDGEWATER

SUBURBS

ROAD STREET NAME

LOCAL GOVERNMENT NAME

SUBURBS

DISTANCE FROM LOCATION

5,512

AM 1145 - 381

PM 1630 - 480

2014

EAST OF HARLOW ROAD

01

NUMBER OF VEHICLES PER DAY

NUMBER OF VEHICLES PER AM PEAK HOUR

NUMBER OF VEHICLES PER PM PEAK HOUR

YEAR

LOCATION

LOCATION OF TRAFFIC COUNT DATA (for detailed information on traffic volumes refer to section 1.6 of the report)

Certified System

Quality ISO 9001

SAIGLOBAL

LEGEND

			PROJECT:	CORNER OF PIONEER DRIVE AND HARVEST LOOP, EDGEWATER	DRAWN BY:	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021 PH: 08 9443 2700 WEB: www.kctt.com.au			
			TITLE:	EXISTING TRAFFIC COUNTS - 800M RADIUS	J.S.				
			DRAWING NUMBER:	KC00660.000_ S05					
B	22-01-2018	PROPOSED LAYOUT AMENDED							
A	25-09-2017	ISSUED FOR REVIEW							
No	DATE	AMENDMENT							



LOCATION BOUNDARY

STAGE BOUNDARY

ROAD (VARIED WITH ROAD WIDTH)

Harvest Loop

CITY OF JOONDALUP

EDGEWATER

ROAD NAME

LOCAL GOVERNMENT NAME

SUBURBS

1,389

Total Expected Traffic Generation from the proposed development

503

Total Expected Traffic Generation from Subject Site on the specific section of road - IN and OUT direction

Traffic Flow IN Direction

Traffic Flow OUT Direction

Certified System

Quality ISO 9001

SAI GLOBAL

Note: The plan is courtesy of T&Z Architects

LEGEND

			PROJECT: CORNER OF PIONEER DRIVE AND HARVEST LOOP, EDGEWATER	DRAWN BY: J.S.	<div>Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021</div> <div>PH: 08 9441 2700 WEB: www.kctt.com.au</div> <div>kctt</div>
REV B	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: TRAFFIC FLOW DIAGRAM		
REV A	04-10-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S06		
DRAFT	26-09-2017	ISSUED FOR REVIEW			
No	DATE	AMENDMENT			





LOCATION BOUNDARY

STAGE BOUNDARY

ROAD (VARIED WITH ROAD WIDTH)

Harvest Loop

CITY OF JOONDALUP

EDGEWATER

ROAD NAME

LOCAL GOVERNMENT NAME

SUBURBS

1,389

Total Expected Traffic Generation from the proposed development - PM Peak

503

Total Expected Traffic Generation from Subject Site on the specific section of road - IN and OUT direction - PM Peak

Traffic Flow IN Direction

Traffic Flow OUT Direction

Note: The plan is courtesy of T&Z Architects

LEGEND

Certified System

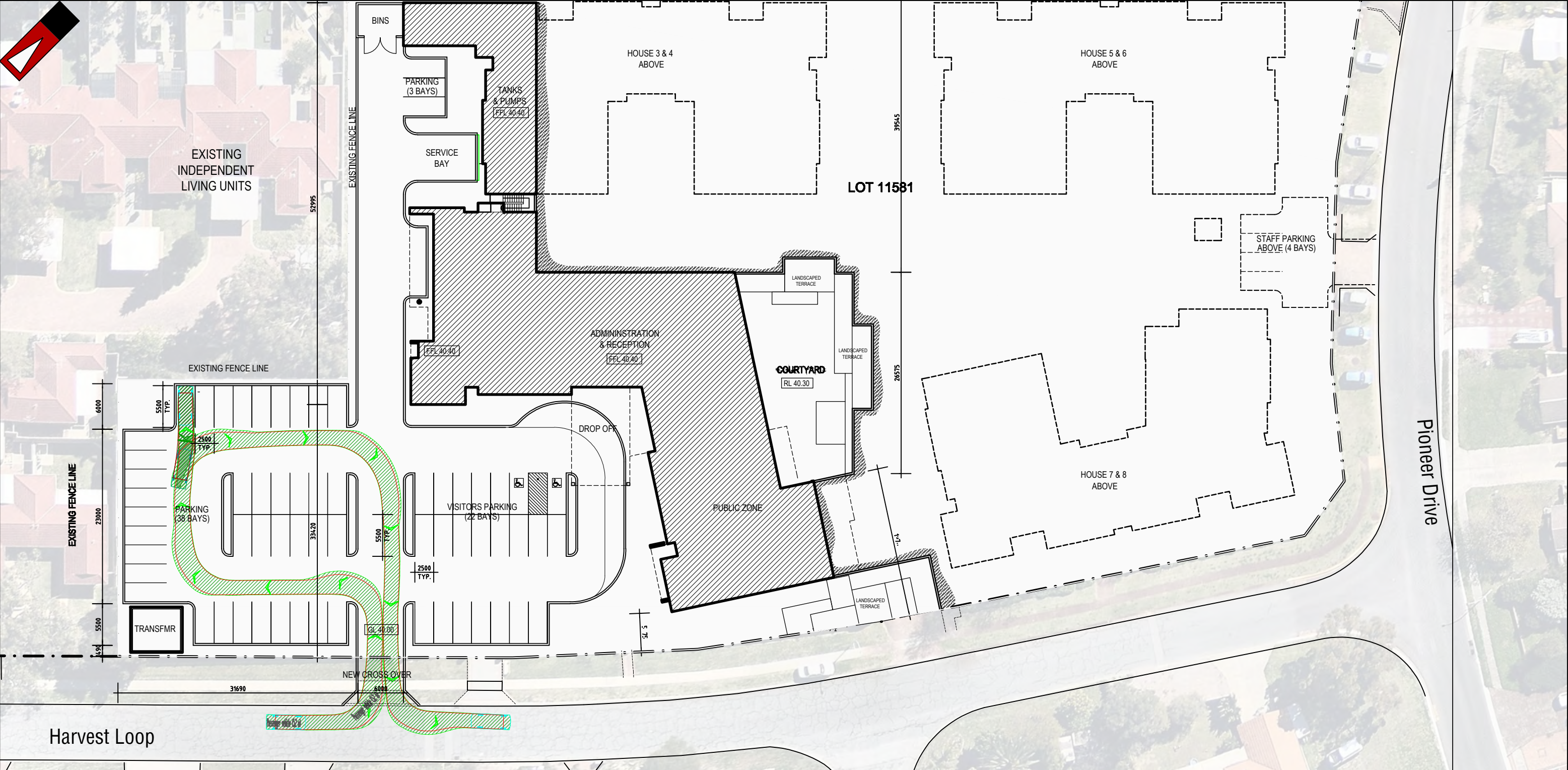
Quality ISO 9001

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			PROJECT: CORNER OF PIONEER DRIVE AND HARVEST LOOP, EDGEWATER	DRAWN BY: Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021
REV B	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: TRAFFIC FLOW DIAGRAM - PM PEAK	J.S. PH: 08 9441 2700 WEB: www.kctt.com.au
REV A	04-10-2017	ISSUED FOR REVIEW		
DRAFT	26-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S07	
No	DATE	AMENDMENT		

Appendix 3

Vehicle Turning Circle Plans



Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

Lot boundary

Wheel Path (Forward Vehicle Motion)

Vehicle Chassis Envelope (Forward Vehicle Motion)

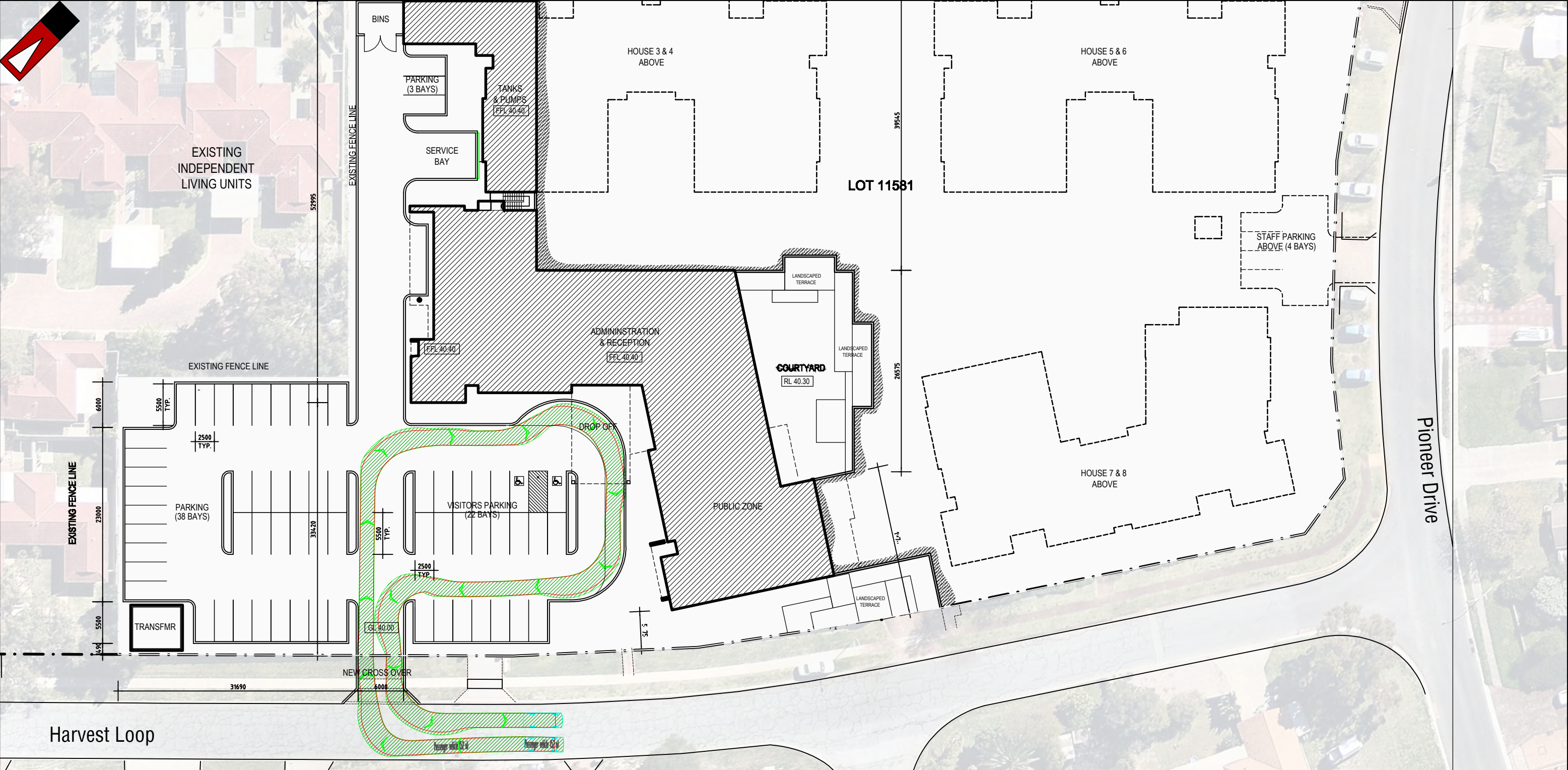
Certified System

Quality ISO 9001

SAI GLOBAL

LEGEND

			PROJECT: Mercy Place Edgewater	DRAWN BY:	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021 PH: 08 9441 2700 WEB: www.kctt.com.au	
C	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: Vehicle Turning Circle Plan - Passenger Vehicle (5.2m)	J.S.		
B	04-10-2017	PROPOSED LAYOUT AMENDED				
A	27-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S20			
NO	DATE	AMENDMENT				



Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

Lot boundary

Wheel Path (Forward Vehicle Motion)

Vehicle Chassis Envelope (Forward Vehicle Motion)

Certified System

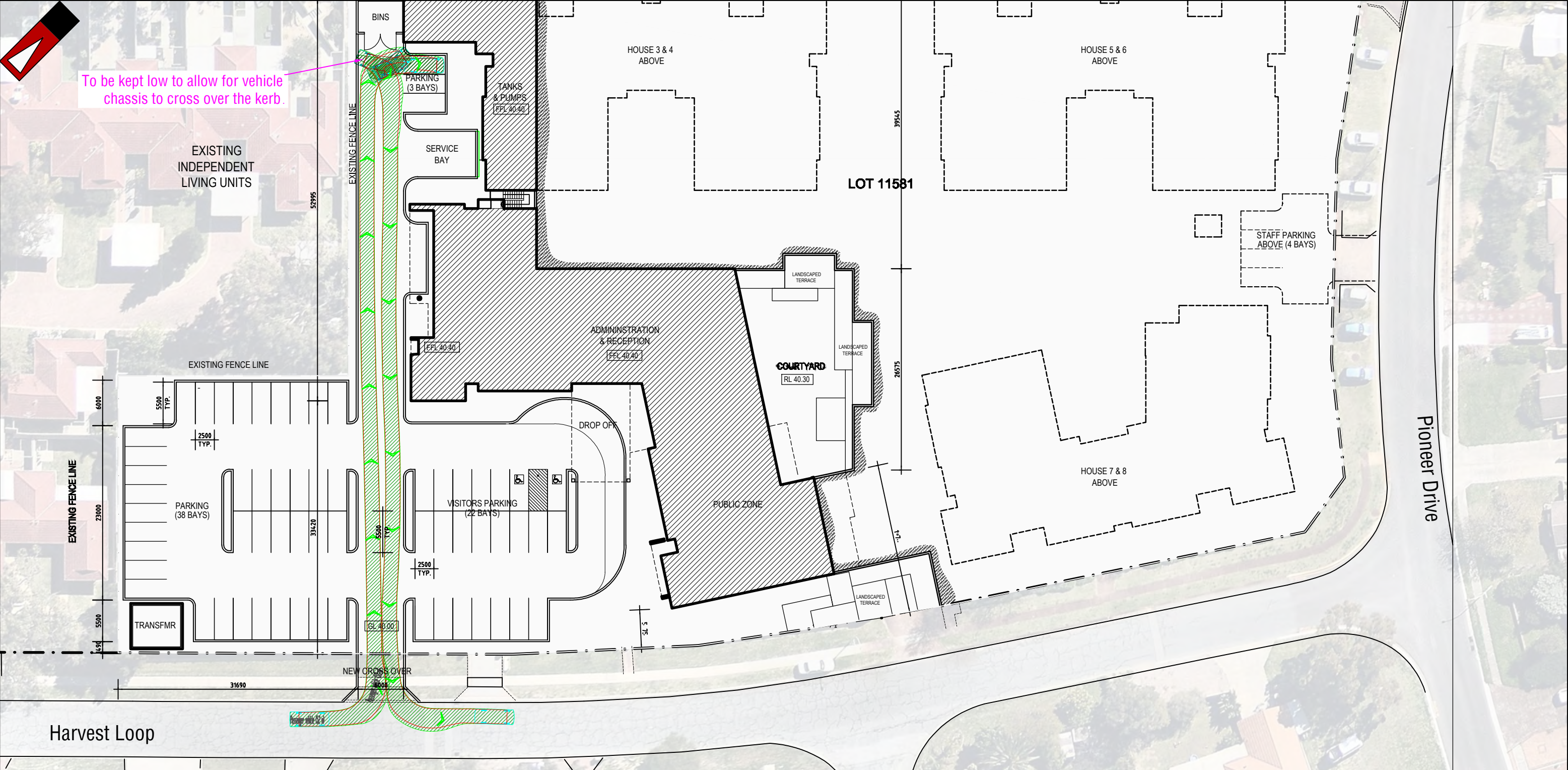
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SAI GLOBAL

LEGEND

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C	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: Vehicle Turning Circle Plan - Passenger Vehicle (5.2m)	J.S.	
B	04-10-2017	PROPOSED LAYOUT AMENDED			
A	27-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S21		
NO	DATE	AMENDMENT			





Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

Lot boundary

Wheel Path (Forward Vehicle Motion)

Vehicle Chassis Envelope (Forward Vehicle Motion)

Certified System

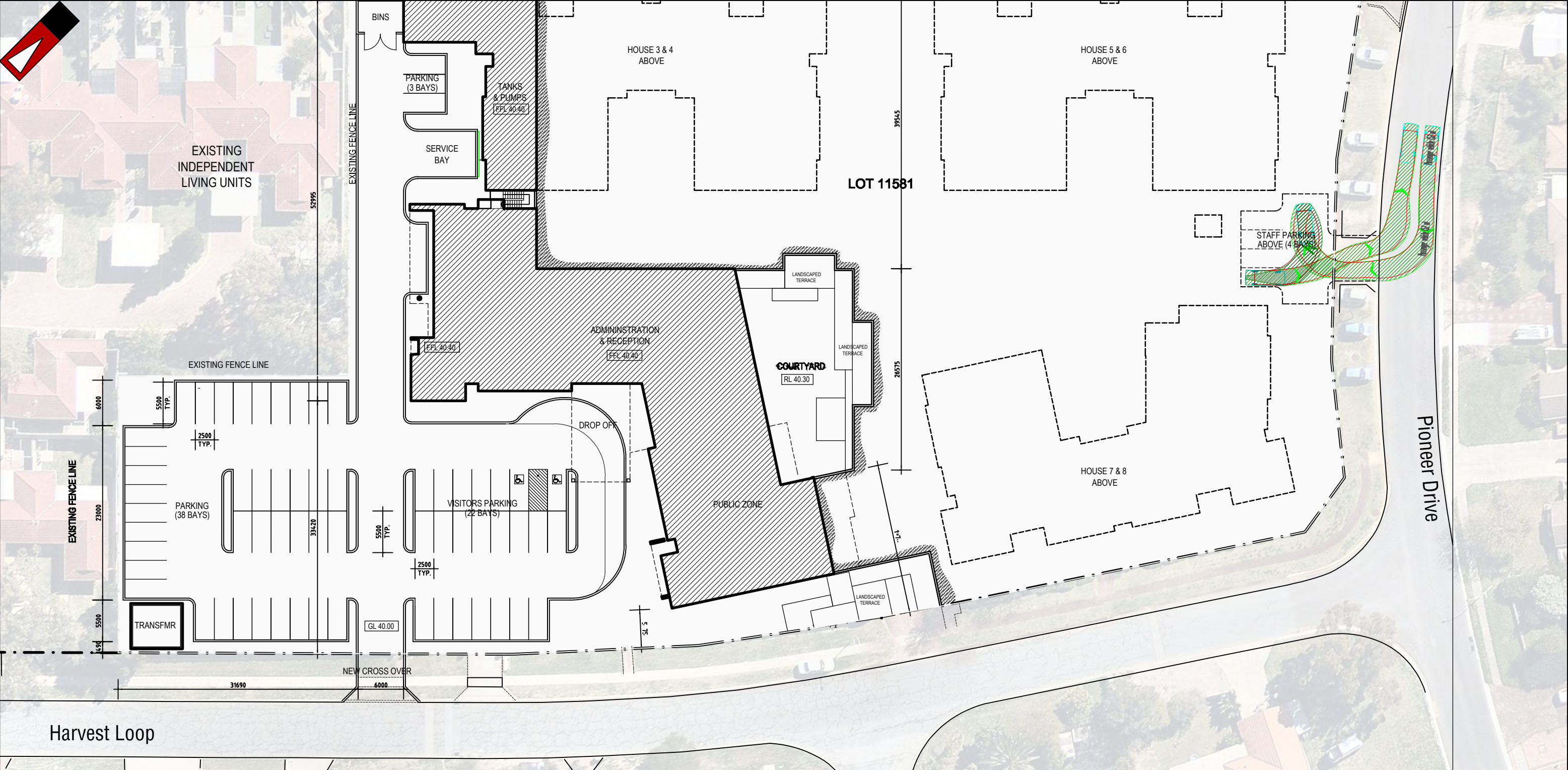
Quality ISO 9001

SAI GLOBAL

LEGEND

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C	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: Vehicle Turning Circle Plan - Passenger Vehicle (5.2m)	J.S.	
B	04-10-2017	PROPOSED LAYOUT AMENDED			
A	27-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S22		
NO	DATE	AMENDMENT			





Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

--- Lot boundary

— Wheel Path (Forward Vehicle Motion)

— Vehicle Chassis Envelope (Forward Vehicle Motion)

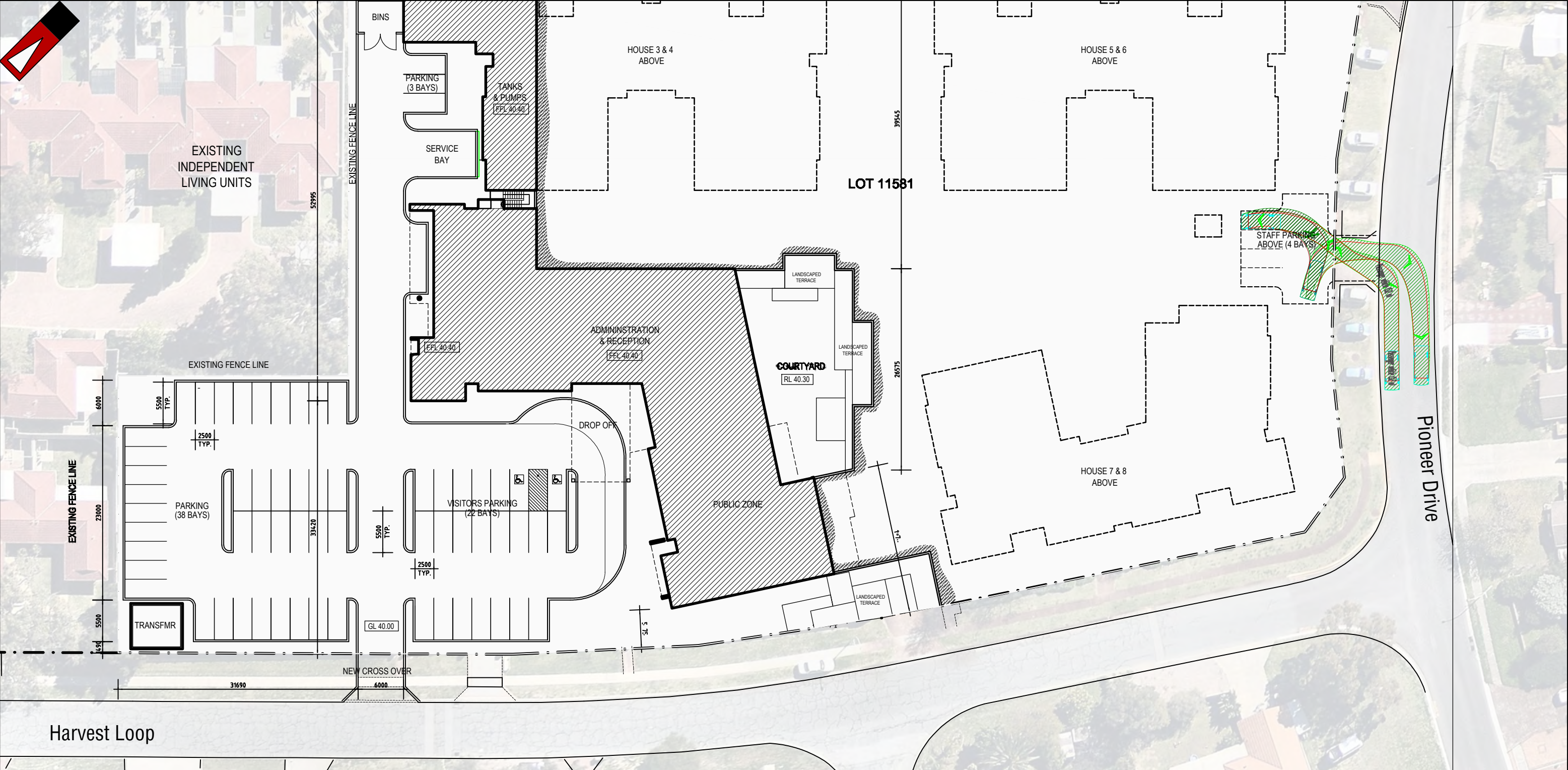
Certified System

Quality ISO 9001

SAI GLOBAL

LEGEND

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C	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: Vehicle Turning Circle Plan - Passenger Vehicle (5.2m)	J.S.		
B	04-10-2017	PROPOSED LAYOUT AMENDED				
A	27-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S23			
NO	DATE	AMENDMENT				



Passenger vehicle (5.2 m)
Overall Length 5.200m
Overall Width 1.940m
Overall Body Height 1.804m
Min Body Ground Clearance 0.295m
Track Width 1.840m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 6.300m

--- Lot boundary

— Wheel Path (Forward Vehicle Motion)

— Vehicle Chassis Envelope (Forward Vehicle Motion)

Certified System

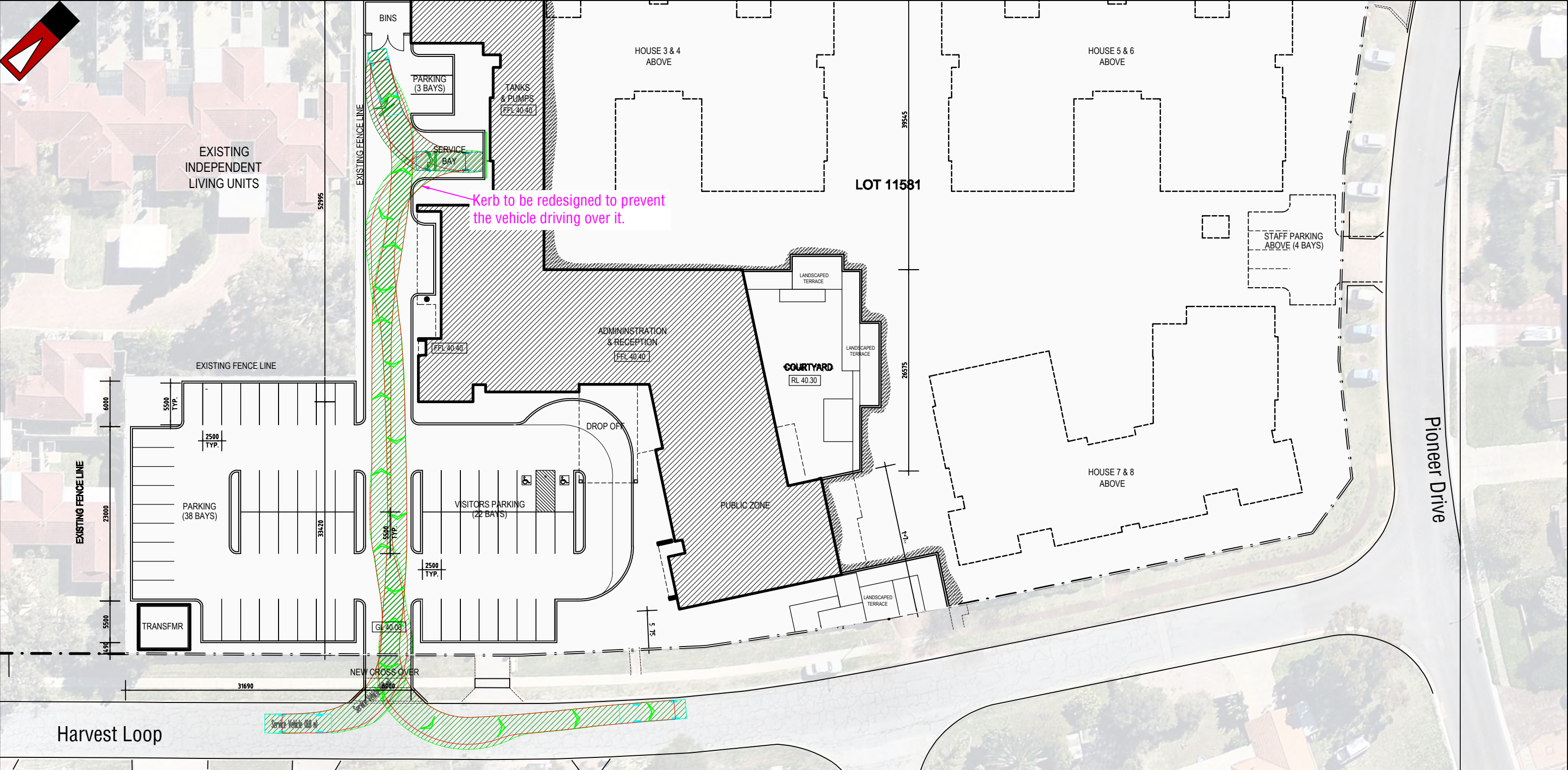
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SAI GLOBAL

LEGEND

			PROJECT: Mercy Place Edgewater	DRAWN BY:	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021 PH: 08 9441 2700 WEB: www.kctt.com.au
C	22-01-2018	PROPOSED LAYOUT AMENDED	TITLE: Vehicle Turning Circle Plan - Passenger Vehicle (5.2m)	J.S.	
B	04-10-2017	PROPOSED LAYOUT AMENDED			
A	27-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S24		
NO	DATE	AMENDMENT			





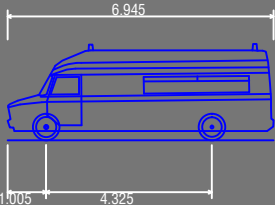
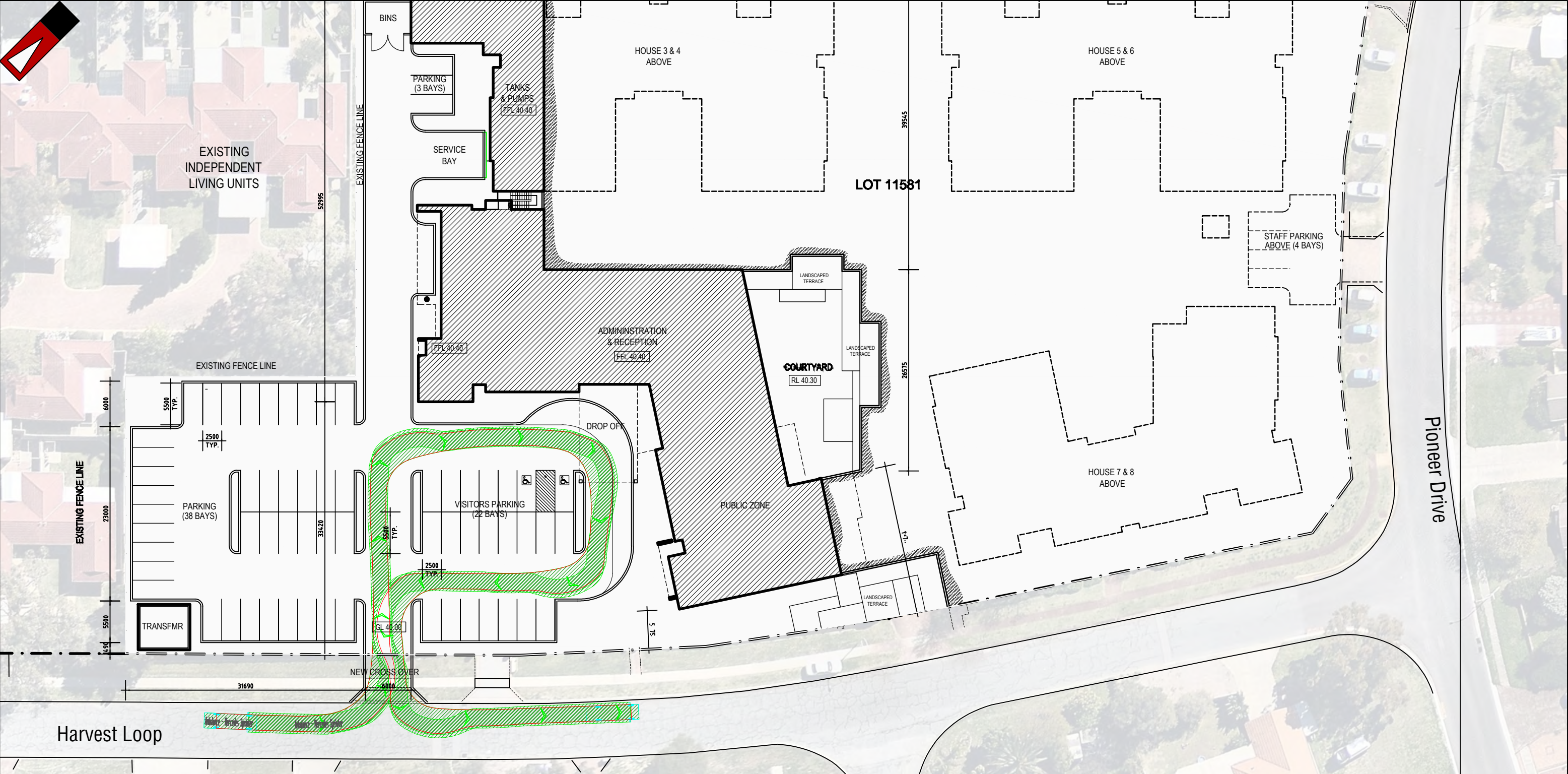
Service Vehicle (8.8 m)	
Overall Length	8.800m
Overall Width	2.500m
Overall Body Height	4.300m
Min Body Ground Clearance	0.427m
Track Width	2.500m
Lock to Lock Time	4.00s
Kerb to Kerb Turning Radius	12.500m

Lot boundary
Wheel Path (Forward Vehicle Motion)
Vehicle Chassis Envelope (Forward Vehicle Motion)

LEGEND

Certified System
Quality ISO 9001
SAI GLOBAL

D	22-01-2018	PROPOSED LAYOUT AMENDED	PROJECT: Mercy Place Edgewater	DRAWN BY: J.S.	<div>Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021</div> <div>PH: 08 9441 2700 WEB: www.kctt.com.au</div> <div>kctt</div>
C	04-10-2017	PROPOSED LAYOUT AMENDED	TITLE: Vehicle Turning Circle Plan - Service Vehicle (8.8m)		
B	28-09-2017	PROPOSED LAYOUT AMENDED			
A	27-09-2017	ISSUED FOR REVIEW	DRAWING NUMBER: KC00660.000_S25		
NO	DATE	AMENDMENT			



Ambulance - Mercedes Sprinter
Overall Length 6.945m
Overall Width 2.000m
Overall Body Height 2.518m
Min Body Ground Clearance 0.246m
Max Track Width 1.993m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7.700m

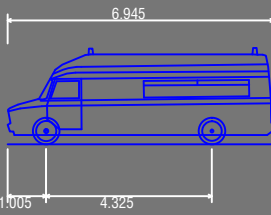
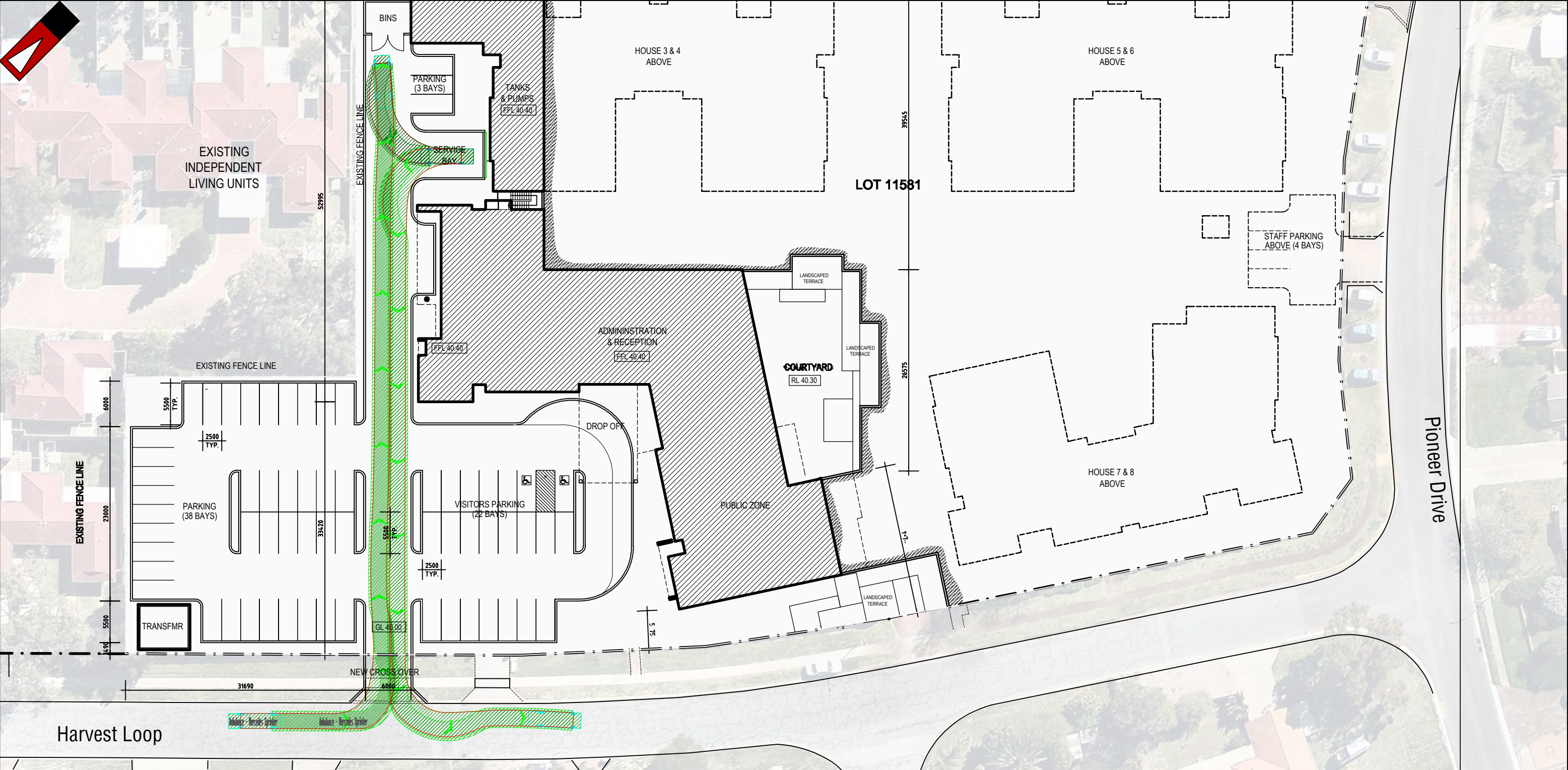
- Lot boundary
- Wheel Path (Forward Vehicle Motion)
- Vehicle Chasis Envelope (Forward Vehicle Motion)



LEGEND

			PROJECT: Mercy Place Edgewater	DRAWN BY:	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021 PH: 08 9441 2700 WEB: www.kctt.com.au
			TITLE: Vehicle Turning Circle Plan - Ambulance (6.945m)		
B	22-01-2018	PROPOSED LAYOUT AMENDED	DRAWING NUMBER: KC00660.000_S26	J.S.	
A	04-10-2017	ISSUED FOR REVIEW			
NO	DATE	AMENDMENT			





Ambulance - Mercedes Sprinter
Overall Length 6.945m
Overall Width 2.000m
Overall Body Height 2.518m
Min Body Ground Clearance 0.246m
Max Track Width 1.993m
Lock-to-lock time 4.00s
Curb to Curb Turning Radius 7.700m

- Lot boundary
- Wheel Path (Forward Vehicle Motion)
- Vehicle Chasis Envelope (Forward Vehicle Motion)



LEGEND

			PROJECT: Mercy Place Edgewater	DRAWN BY:	Civil & Traffic Engineering Consultants Suite 7 No 10 Whipple Street Balcatta WA 6021 PH: 08 9441 2700 WEB: www.kctt.com.au
			TITLE: Vehicle Turning Circle Plan - Ambulance (6.945m)		
B	22-01-2018	PROPOSED LAYOUT AMENDED	DRAWING NUMBER: KC00660.000_S27	J.S.	
A	04-10-2017	ISSUED FOR REVIEW			
NO	DATE	AMENDMENT			



Environmentally Sustainable Design – Checklist

Under the City's planning policy, *Environmentally Sustainable Design in the City of Joondalup*, the City encourages the integration of environmentally sustainable design principles into the construction of all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

Environmentally sustainable design is an approach that considers each building project from a 'whole-of-life' perspective, from the initial planning to eventual decommissioning. There are five fundamental principles of environmentally sustainable design, including: siting and structure design efficiency; energy efficiency; water efficiency; materials efficiency; and indoor air quality enhancement.

For detailed information on each of the items below, please refer to the *Your Home Technical Manual* at: www.yourhome.gov.au, and *Energy Smart Homes* at: www.clean.energy.wa.gov.au.

This checklist must be submitted with the planning application for all new residential, commercial and mixed-use buildings and redevelopments (excluding single and grouped dwellings, internal fit outs and minor extensions) in the City of Joondalup.

The City will seek to prioritise the assessment of your planning application and the associated building application if you can demonstrate that the development has been designed and assessed against a national recognised rating tool.

Please tick the boxes below that are applicable to your development.

Siting and structure design efficiency

Environmentally sustainable design seeks to affect siting and structure design efficiency through site selection, and passive solar design.

Does your development retain:

- ☐ existing vegetation; and/or
- ☐ natural landforms and topography

Does your development include:

- ☐ northerly orientation of daytime living/working areas with large windows, and minimal windows to the east and west
- ☐ passive shading of glass
- ☐ sufficient thermal mass in building materials for storing heat
- ☐ insulation and draught sealing
- ☐ floor plan zoning based on water and heating needs and the supply of hot water; and/or
- ☐ advanced glazing solutions

Energy efficiency

Environmentally sustainable design aims to reduce energy use through energy efficiency measures that can include the use of renewable energy and low energy technologies.

Do you intend to incorporate into your development:

- ☐ renewable energy technologies (e.g. photo-voltaic cells, wind generator system, etc); and/or
- ☐ low energy technologies (e.g. energy efficient lighting, energy efficient heating and cooling, etc); and/or
- ☐ natural and/or fan forced ventilation

Water efficiency

Environmentally sustainable design aims to reduce water use through effective water conservation measures and water recycling. This can include stormwater management, water reuse, rainwater tanks, and water efficient technologies.

Does your development include:

- ☐ water reuse system(s) (e.g. greywater reuse system); and/or
- ☐ rainwater tank(s)

Do you intend to incorporate into your development:

- ☐ water efficient technologies (e.g. dual-flush toilets, water efficient showerheads, etc)

Materials efficiency

Environmentally sustainable design aims to use materials efficiently in the construction of a building. Consideration is given to the lifecycle of materials and the processes adopted to extract, process and transport them to the site. Wherever possible, materials should be locally sourced and reused on-site.

Does your development make use of:

- ☐ recycled materials (e.g. recycled timber, recycled metal, etc)
- ☐ rapidly renewable materials (e.g. bamboo, cork, linoleum, etc); and/or
- ☐ recyclable materials (e.g. timber, glass, cork, etc)
- ☐ natural/living materials such as roof gardens and “green” or planted walls

Indoor air quality enhancement

Environmentally sustainable design aims to enhance the quality of air in buildings, by reducing volatile organic compounds (VOCs) and other air impurities such as microbial contaminants.

Do you intend to incorporate into your development:

- ☐ low-VOC products (e.g. paints, adhesives, carpet, etc)

‘Green’ Rating

Has your proposed development been designed and assessed against a nationally recognised “green” rating tool?

- ☐ Yes
- ☐ No

If yes, please indicate which tool was used and what rating your building will achieve:

If yes, please attach appropriate documentation to demonstrate this assessment.

If you have not incorporated or do not intend to incorporate any of the principles of environmentally sustainable design into your development, can you tell us why:

Is there anything else you wish to tell us about how you will be incorporating the principles of environmentally sustainable design into your development:

When you have checked off your checklist, sign below to verify you have included all the information necessary to determine your application.

Thank you for completing this checklist to ensure your application is processed as quickly as possible.

Applicant's Full Name: _____ Contact Number: _____

Applicant's Signature: _____ Date Submitted: _____

Accepting Officer's Signature: _____

Checklist Issued: March 2011