ORDINARY MEETING 6 MARCH 2024	5

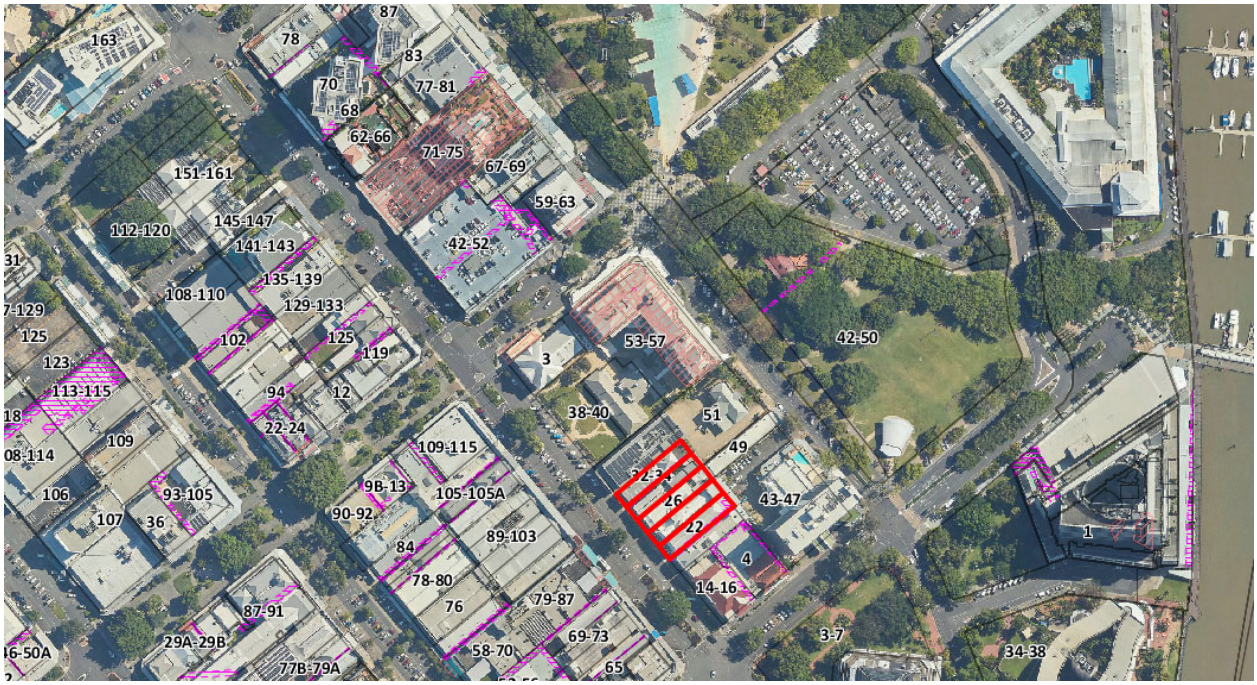
COMBINED DEVELOPMENT APPLICATION FOR A DEVELOPMENT PERMIT FOR A MATERIAL CHANGE OF USE FOR MULTIPLE DWELLING, SHORT-TERM ACCOMMODATION (75 UNITS), FOOD & DRINK OUTLET AND SHOP AND A DEVELOPMENT PERMIT FOR BUILDING WORK ASSESSABLE AGAINST THE PLANNING SCHEME FOR DEMOLITION WITHIN THE PLACES OF SIGNIFICANCE OVERLAY – 22, 24, 26, 28-30, AND 32-34 ABBOTT STREET, CAIRNS CITY – DIVISION 5

8/39/14 : #7333259

PROPOSAL:	COMBINED DEVELOPMENT APPLICATION FOR: 1. DEVELOPMENT PERMIT FOR A MATERIAL CHANGE OF USE FOR MULTIPLE DWELLING, SHORT-TERM ACCOMMODATION (75 UNITS), FOOD & DRINK OUTLET AND SHOPS; AND 2. DEVELOPMENT PERMIT FOR BUILDING WORKS ASSESSABLE AGAINST THE PLANNING SCHEME FOR DEMOLITION WITHIN THE PLACES OF SIGNIFICANCE OVERLAY.
LANDOWNER:	SKY COMMERCIAL PTY LTD
APPLICANT:	SKY COMMERCIAL PTY LTD C/- KELLY REASTON DEVELOPMENT & PROPERTY 51 SHERIDAN ST CAIRNS QLD 4870
INTERESTED PARTIES:	SKY COMMERCIAL PTY LTD KELLY REASTON DEVELOPMENT & PROPERTY SERVICES HUNT DESIGN LANDPLAN LANDSCAPE ARCHITECTURE CONVERGE HERITAGE + COMMUNITY LANGTREE CONSULTING ENGINEERS MRA ENVIRONMENTAL GHD DASH ARCHITECTS *Note: The identification of interested parties is provided on a best endeavours basis by Council Officers and may not be exhaustive.*

LOCATION OF SITE:	22, 24, 26, 28-30, & 32-34 ABBOTT STREET, CAIRNS CITY
PROPERTY:	LOTS 502, 503, & 504 ON C1981, AND LOTS 1 & 2 ON RP715691.
ZONE:	PRINCIPAL CENTRE ZONE
LOCAL PLAN:	CITY CENTRE LOCAL PLAN – PRECINCT 1: CITY CENTRE CORE
PLANNING SCHEME:	CAIRNSPLAN 2016 V3.1
REFERRAL AGENCIES:	STATE ASSESSMENT AND REFERRAL AGENCY
NUMBER OF SUBMITTERS:	ONE (1) PROPERLY MADE SUBMISSION
STATUTORY ASSESSMENT DEADLINE:	6 MARCH 2024
APPLICATION DATE:	14 SEPTEMBER 2023
DIVISION:	5
ATTACHMENTS:	1. APPROVED PLAN(S) & DOCUMENT(S) – MATERIAL CHANGE OF USE 2. APPROVED PLAN(S) & DOCUMENT(S) – BUILDING WORKS 3. NOTICE OF INTENTION TO COMMENCE USE 4. REFERRAL AGENCY RESPONSE 5. INFRASTRUCTURE CHARGES CALCULATIONS 6. THIRD PARTY ADVICE AGENCY RESPONSE

LOCALITY PLAN



RECOMMENDATION

That Council approves the development application for a Development Permit for a Material Change of Use for Multiple Dwelling, Short-Term Accommodation (75 Units), Food & Drink Outlet and Shops and a Development Permit for Building Works Assessable Against the Planning Scheme for Demolition within the Places of Significance Overlay over land described as 22, 24, 26, 28-30, 32-34 Abbott Street, Cairns City, located on land formally described as Lots 502, 503, & 504 on C1981, and Lots 1 & 2 on RP715691, subject to the following:

PART A: MATERIAL CHANGE OF USE

APPROVED DRAWING(S) AND / OR DOCUMENT(S)

The term 'approved drawing(s) and / or document(s)' or other similar expressions means:

Drawing or Document	Reference	Date
Development Application Cover Sheet	Drawing No. 0.1, Revision 02, Project No. POST001, prepared by Hunt Design	20 November 2023
Development Application Contents	Drawing No. 0.2, Revision 02, Project No. POST001, prepared by Hunt Design	20 November 2023
Site Context	Drawing No. 1.01, Revision 02, Project No. POST001, prepared by Hunt Design	20 November 2023

Site Plan Existing	**Drawing No. 1.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Site Plan Demolition	**Drawing 1.03, Revision 01, Project No. POST oo1, prepared by Hunt Design**	**13 September 2023**
Level 00	**Drawing No. 2.01, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 01 (Cairns Post)	**Drawing No. 2.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 02 (Carpark 1)	**Drawing No. 2.03, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 03 (Carpark 2)	**Drawing No.2.04, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 04 (Carpark 3)	**Drawing No. 2.05, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 05 (Pool Terrace)	**Drawing No. 2.06, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 06	**Drawing No. 2.07, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 07	**Drawing No. 2.08, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 08	**Drawing No. 2.09, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**

Level 09	**Drawing No. 2.10, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 10	**Drawing No. 2.11, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 11	**Drawing No. 2.12, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Level 12	**Drawing No. 2.13, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Roof Level	**Drawing No. 2.14, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Elevation 1 – South West	**Drawing No. 3.01, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Elevation 2 – North West	**Drawing No. 3.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Elevation 3 – North East	**Drawing No. 3.03, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Elevation 4 – South East	**Drawing No. 3.04, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Section A	**Drawing No. 4.01, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Section B	**Drawing No. 4.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**

Section C	**Drawing No. 4.03, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Section D	**Drawing No. 4.04, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Apartment Plans	**Drawing No. 5.01, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Analysis Area Gross Floor Area (GFA)	**Drawing No. 6.01, Revision 01, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Area Analysis Summary	**Drawing No. 6.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Shadow Diagrams – March 2023 Equinox	**Drawing No. 7.01, Revision 02, Project No. POST001, prepared by Hunt Deign**	**20 November 2023**
Shadow Diagrams – June 2023 Solstice	**Drawing No. 7.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Shadow Diagrams – September 2023 Equinox	**Drawing No. 7.03, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Shadow Diagrams – December 2023 (Solstice)	**Drawing No. 7.04, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Streetscape Perspective – Abbott Street	**Drawing No. 8.01, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Tower Perspective – Abbott Street	**Drawing No. 8.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**

Esplanade Perspective 1	**Drawing No. 8.03, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Esplanade Perspective 2	**Drawing No. 8.04, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Cover Sheet Locality Plan	**Drawing No. L0.00, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Level 00 Planting Concept	**Drawing No. L0.01, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Level 02 Planting Concept	**Drawing No. L0.02, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Level 03 Planting Concept	**Drawing No. L0.03, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Level 05 Planting Concept	**Drawing No. L0.04, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Level 06-12 Planting Concept	**Drawing No. L0.05, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Planting Strategy	**Drawing No. L1.01, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**

Landscape Elevations	**Drawing No. L2.01, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Landscape Elevations	**Drawing No. L2.02, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Soil Strategy	**Drawing No. L3.01, Revision 02, Project No. 2305-031, prepared by Landplan Landscape Architecture**	**17 November 2023**
Traffic Impact Assessment	**Reference: R-ARO184, Project No. 0997, prepared by Langtree Consulting Engineers**	**11 August 2023**

Assessment Manager Conditions

General Requirements		**Timing**
1.	**Approved Plan(s) and Document(s)** **The development is to be completed and carried out generally in accordance with the approved plan(s) and document(s) above, except where modified by the conditions of this Development Permit.**	**At all times.**
2.	**Maintain the Approved Development** **Maintain the approved development generally in accordance with the approved plan(s) and document(s), and any relevant approval required by these conditions of approval.**	**At all times.**
3.	**Currency Period** **This development approval, granted under the provisions of the *Planning Act 2016* (Qld), lapses six (6) years from the day the development approval takes effect, in accordance with the provisions of section 85 of the *Planning Act 2016* (Qld).**	**As stated.**
4.	**Notice of Intention to Commence Use** **Written notice must be given to Council that the development fully complies with this Development Permit.** **Return the attached "Notice of Intention to Commence Use" (attached at Attachment 3).**	**Prior to Commencement of Use.**

5.	**Amalgamation of Lots** **Amalgamate Lots 502, 503 & 504 on C1981 and Lots 1 & 2 on RP715691 into one (1) lot and register the Plan of Subdivision.**	**Prior to Commencement of Use.**
6.	**Street Numbering** **Provide clear and legible signage incorporating the street number for the benefit of the public. Signage and numbering must be installed on the premises prior to the commencement of use.**	**Prior to Commencement of Use.**
7.	**Podium** **All sides of the Podium must be articulated generally in accordance with the approved plans to ensure that any bulk can be further relieved through the use of patterns, textures, or use of different materials.** **A plan detailing proposed design and material palette must be submitted to Council for endorsement prior to the issue of a Development Permit for Building Work for the construction of the tower.**	**As stated.**
8.	**Water Supply and Sewerage Works External** **Undertake the following water supply and sewerage work external to the premises to connect the land to existing water supply and sewerage infrastructure:** **a. If necessary, augment existing water supply infrastructure to the extent necessary such that the development does not adversely affect the water supply to adjacent properties and such that a water service connection can be provided at the lot frontage;** **b. If necessary, augment existing sewerage network downstream of the site, to the extent required to accommodate the increased flows generated by the development; and** **c. Any AC or CICL water mains where located under any access crossovers and any road works must be replaced.** **All the above work must be designed and constructed in accordance with the *FNQROC Development Manual*.**	**In accordance with a Development Permit for Operational Work.**

9.	**Water Supply and Sewerage Works Internal** **Undertake the following water supply and sewerage works internal to the subject land:** **a. The development must be serviced by a single internal water and sewerage connection made clear of any buildings or structures;** **b. Water supply sub-metering must be designed and installed in accordance with the *Plumbing and Drainage Act 2018* and the *Water Supply (Safety and Reliability) Act 2008*. Smart meters are to align with Council's Smart Meter Program;** **c. Any redundant sewer property connection and water connection shall be decommissioned and removed;** **d. Fire fighting pumped connections must be provided with a break tank.** **Council does not guarantee a minimum service standard for fire fighting from Council's water network. It is the responsibility of the property owner to design the private fire system to ensure compliance with the relevant building codes and standards and install all necessary on-site pressure boosting and storage that may be required; and** **e. Any fire booster assembly, cabinet and water meters are to be located within the property.** **All the above works must be designed and constructed in accordance with the *FNQROC Development Manual*.** **All works must be carried out in accordance with the approved plans, to the requirements and satisfaction of the Chief Executive Officer prior to Commencement of Use.**	**As stated.**

10.	**Refuse Storage** **The development must be designed to be serviced by bulk bins.** **A bulk bin enclosure must be provided in accordance with Council's requirements.** **Details must be shown on the plan of work and must be approved by the Chief Executive Officer prior to the issue of an Operational Works Approval or Compliance Permit for Building Works.** **The bin enclosure must be constructed in accordance with the approved plans prior to the Commencement of Use.** **Note: Brochures on these requirements – 'Requirements for Refuse Storage' are available from Cairns Infrastructure and Assets.**	**As stated.**
11.	**Liquid Waste Disposal** **Trade waste discharge to sewer must meet the requirements of Cairns Infrastructure and Assets' Trade Waste Environmental Management Plan (TWEMP).** **Detailed Hydraulic Plan(s) must be provided accompanied by a report which demonstrates that the facility complies with the TWEMP and must be approved by Council prior to the issue of a Development Permit for Building Work.** **All measures for pre-treatment in accordance with the approved plan(s) must be installed prior to Commencement of Use.**	**As stated.**
12.	**Maximum Height** **All building and structures must not exceed 46.0m AHD.** **The Applicant/Developer/Landowner/Property Manager must ensure that all buildings, structures, aerials, lightning rods, antennae, poles, posts, trees, or other obstacles (at maximum height) remain under the Airport's Obstacle Limitation Surface which is 46.0 to 50.0 metres AHD over the site.**	**At all times.**

13.	**Certification of Building Height** **Provide certification to Council and the Cairns Airport from a licensed Surveyor or Building Certifier that the overall height of the "As Constructed roof" and associated structures are in accordance with Condition 12 of this Development Permit.**	**Prior to the issue of Certificate of Classification / Final Inspection Certificate.**
14.	**Certification of Construction Impacts** **Provide certification to Council and the Cairns Airport from a licensed Surveyor that the overall height of any construction equipment, including but not limited to cranes and other equipment, does not encroach into the Airport's Operational Airspace, which is 46.0 to 50.0 metres AHD over the site.** **Alternatively, provide to Council a copy of the requisite approvals documentation from Cairns Airport permitting temporary encroachment into the Airport's Operational Airspace.**	**Prior to the issue of a Development Permit for Building Work.**
15.	**External Works** **Undertake the following works external to the land at no cost to Council:** **a. Design and construct a dedicated left in left out only access crossover(s) and driveway(s) to Abbott Street in accordance with the location(s) shown on the Approved Plan(s) of development.** **The access crossover(s) and driveway(s) must be constructed in accordance with *FNQROC Development Manual Standard Drawings S1015 and S1110* to a commercial standard.** **b. Remove any redundant crossovers and reinstate the kerb and channel along the frontage of the site. Any sections showing ponding, significant cracking or the like shall be deemed as not fit for purpose and are to be replaced to the satisfaction of the Chief Executive Officer;** **c. Repair any damage to existing kerb and channel, footway, or roadway (including removal of concrete slurry from footways, roads, kerb and channel and stormwater gullies and drain lines) that may occur during works being carried out in association with the construction of the approved development.** **All the above works must be designed and constructed in accordance with the *FNQROC Development Manual***	**As stated.**

	and indicated in any application for Development Permit for Operational Works. All works must be carried out in accordance with the Approved Plan(s), to the requirements and satisfaction of the Chief Executive Officer.	
16.	**Traffic Impact Assessment** **Comply with and implement the recommendations of the Traffic Impact Assessment prepared by *Langtree Consulting R-AR0184 August 2023.***	**Prior to Commencement of Use.**
17.	**Car Parking Requirements** **The amount of car parking must be as per the Approved Plan(s), being:** **a. A minimum of 107 spaces, including four (4) accessible car parking spaces.** **b. A minimum of 16 spaces designated for use by non-residential activities and line marked or signed as such;** **c. A minimum of seven (7) spaces dedicated for use by visitors, staff, or services vehicles for the residential activities, and line marked or signed as such;** **d. Any tandem parking spaces:** **i. Shall be limited to resident parking only;** **ii. Are not to be provided for commercial, visitor, staff, or service use, nor included in the general pool of regulated parking; and** **iii. Must be allocated to a specific unit/s, be line marked or signed as such, and be assigned under the CMS accordingly.** **The car parking layout must comply with the *AS 2890.1:2004 Parking facilities – Off-street car parking* and be constructed in accordance with *Austroads* and good engineering design.** **The accessible off-street car parking must be designed in accordance with *AS 2890.6:2009 Parking facilities, Part 6: Off-Street parking for people with disabilities*, including parking bay dimensions and shared area.** **The vehicle access and parking design must be approved by a suitably qualified RPEQ.**	**Prior to Commencement of Use.**

18.	**Parking and Access Generally** **All parking, driveway, and vehicular manoeuvring areas must be imperviously sealed, drained, and line marked.**	**Prior to Commencement of Use.**
19.	**On-Street Parking** **The on-street car parking must be designed in accordance with *AS 2890.5:2020 Parking facilities On-street parking*, including parking bay dimensions, line marking and signage, etc. The parking design must be certified by a suitably qualified RPEQ Engineer.**	**Prior to Commencement of Use.**
20.	**Turning Area** **Space must be provided on site for vehicles to manoeuvre so that all design vehicle(s) associated with the approved use(s) can enter and exit in a forward direction.**	**At all times.**
21.	**Internal Manoeuvring** **All parking, queuing, loading, servicing, unloading, and vehicle manoeuvring areas associated with the approved use(s) must be undertaken on the land.**	**At all times.**
22.	**Speed Control** **The driveway serving the parking area must include a physical means of speed control at the exit point onto Abbott Street.**	**Prior to Commencement of Use.**
23.	**Bicycle Parking Provision** **Provide a minimum of 14 onsite bicycle parking spaces for the exclusive use of the approved development.** **Bicycle parking must be secure, sheltered, and accessible to potential users. All required bicycle spaces must be available for the permitted uses and be maintained.**	**Prior to Commencement of Use.**
24.	**Pedestrian Access** **The design of the building must be such that any ramping or step up into the property is wholly contained within the land and does not occur within the road reserve. No grade change for pedestrian access is permitted to occur within the road reserve.**	**Prior to Commencement of Use.**

25.	**Acid Sulfate Soils Management Plan** **Where identification of soils with a pyrite content in excess of the action levels nominated in the Queensland Acid Sulfate Soils Technical Manual (QASSTM) prepare, provide for approval, and comply with an Acid Sulfate Soils Management Plan.** **The Acid Sulfate Soils Management Plan must be prepared by a suitably qualified person.** **Construct all works in accordance with the recommendations of the Acid Sulfate Soils Management Plan.**	**Prior to Commencement of Work.** **AND** **As stated.**
26.	**Community Management Statement** **Any future Community Management Statement for the land must address the following matters:** **a. Responsibility for the management of and ongoing maintenance of the vertical landscape features and planter boxes including, but not limited to, green walls and façade planters as identified on the approved *Landscape Concept Design* prepared by *LandPlan*.** **b. An allocation must be made in the administration fund for the specific purpose of enabling maintenance and management activities of the landscape features referred to on the Landscape Maintenance and Management Plan required by Condition 30 of this Development Permit;** **c. Allocation of tandem parking spaces required by Condition 17 of this Development Permit.** **d. All parking spaces, except tandem spaces for private use allocation as per Item c, must be included within the common property.** **Any amendments to the Community Management Statement must not remove the above requirements for the life of the development.** **A copy of the Community Management Statement must be submitted to Council for review and endorsement prior to the Commencement of Use.**	**Prior to Commencement of Use.**

27.	**Detailed Landscaping Plan** **Provide a Detailed Landscaping Plan in accordance with Planning Scheme Policy – Landscaping and the FNQROC Development Manual, prepared by a suitably qualified Landscape Architect or Landscape Designer, to Council and obtain an approval from Council. The plans and specifications must provide:** **a. A landscaping design which is generally in accordance with that shown on the Landscape Concept Design (Dwg. No's., L0.00, L0.01, L0.02, L0.03, L0.04, L0.05, L1.01, L2.01, L2.02, L3.01, Rev 02 prepared by LandPlan);** **b. Location of all civil infrastructure such as water, sewer, stormwater, street lighting, proposed driveway locations, footpaths, irrigation, street trees and garden beds, and any other essential infrastructure, proposed to be contained with the public area of the footpath and road reserve to demonstrate the proposed design is a suitable fit for the area with no conflicts;** **c. Demonstration of vertical landscaping covering 15% of each façade of the building onsite;** **d. Location of trees to be removed;** **e. A planting schedule including species, quantity, and container size utilising plants that are not listed as local environmental weeds within the FNQROC Development Manual Cairns Regional Council Specific Requirements Appendix F Extended Environmental Weed List. The container supply size must be in accordance with FNQROC Development Manual D9.** **Note: The Genus known as Tarlmounia spp. (syn.Vernonia spp) is not supported. Tarlmounia elliptica (Syn. Vernonia elaeagnifolia) is listed as a Low-Level Environmental Weed and become prevalent within coastal areas in the LGA within the tidal waters. Tarlmounia elliptica is not accepted due the ease of propagation and regeneration from vegetative reproduction and risk of establishment within the coastal environment;** **f. A planting design of all proposed landscaped areas with details of the climatic conditions of the locality which will inform the species selection;** **g. Planting of the verge within street trees;** **h. Details and specifications for the design and location of the external planters.**	**Prior to the issue of the first Development Permit for Operational Work.**

	Note: The concept plans detail a street tree within a planter with a streetlight. The FNQROC Development Manual setback between a street tree and streetlight is 7.5m. The applicant may consider the installation of palms (other than Wodyetia bifurcata, Foxtail Palm) within an external planter, where street trees cannot be accommodated due to setback requirements; **i. Details and specifications for permanent irrigation for external landscaping designed to Council's Irrigation Standard. Contact Council to obtain the current standard for irrigation design and supply and obtain direction via PlanningAdmin@cairns.qld.gov.au;** **j. Details and specifications for the vertical and horizontal landscaping and trellises including relevant engineering specifications, potting media, trellising, irrigation, and drainage to be incorporated to provide the vertical landscape features;** **k. Details of the size and location of the planter boxes including engineering and management of the planter boxes, and any associated irrigation system;** **l. Footpath treatments to each frontage of the site which are consistent with those implemented as part of the City Centre Alive upgrade of Lake Street;** **m. Any landscaped areas adjoining parking and manoeuvring areas are protected from vehicle encroachment by a 150mm high vertical concrete kerb or similar;** **n. Any existing landscape treatments, either hardscape or softscape, street furniture, infrastructure or assets that are proposed to be removed, relocated or retained;** **o. Details of any fencing and retaining walls associated with the development; and** **p. Inclusion of any other relevant conditions included in this Development Permit.** **A copy of this Development Approval must be given to the Landscape Architect / Landscape Designer responsible for the preparation of the Detailed Landscape Plan.**	

28.	**Landscaping - External Works** **Prior to the issue of the first Development Permit for Operational Work and Commencement of Building Work obtain an Operational Work Development Permit for the following external work:** **a. Removal of the two existing *Cassia javanica*, Java Cassia and planting of the footpath with replacement semi mature verge street tree planting in accordance with the FNQROC Development Manual Standard Drawing S4210-CRC Urban Street Tree Planting, Design Manual D9 Landscaping and the FNQROC Development Manual Cairns Regional Council Specific Requirements;** **b. Any external planters generally in accordance with The FNQROC Development Manual Cairns Regional Council Specific Standard Drawings for Footpath Planters and located and sized with regard to overhead awnings and the setback requirements for street trees from infrastructure e.g., street lighting; and** **c. Permanent irrigation designed to Council's Irrigation Standard.** **Note: Contact Council to obtain the current standard for irrigation design and supply and obtain direction via PlanningAdmin@cairns.qld.gov.au.** **External Works must be completed at a Works Acceptance Inspection and maintained by the applicant/property owner to the satisfaction of Council until Final Works Acceptance.** **External Landscaping and Irrigation must be inspected by Council and achieve Works Acceptance in accordance with CP1 of the *FNQROC Development Manual – Construction Procedures*. Upon acceptance, the landscaping must be maintained and established by the applicant/property owner until Final Works Acceptance.**	**At a Works Acceptance;** **AND** **At a Final Works Acceptance.**

29.	**Internal Landscaping Inspection** **Internal Landscaping associated with the Development Permit for Material Change of Use must be inspected by Council at the time of landscaping completion.** **At all times, the property owner is responsible for the maintenance of the landscaping associated with the subject site and development.**	**Prior to the Commencement of Use;** **AND** **At all times.**
30.	**Landscape Maintenance / Management Plan** **Provide a Landscape Maintenance / Management Plan to detail the maintenance and/or management regimes proposed to be implemented to ensure the landscape features incorporated as part of the building design will be established and maintained for the life of the development. Landscape Maintenance/Management Plan must provide specifications/methodology to demonstrate the proposed maintenance and management regimes for all planters and vertical trellising and include details of the suitably qualified person(s) who will maintain the landscaping to ensure the landscape features on site can be maintained safely, for the life of the development. The Manual must include the following specifications/work methods:** **a. Number of and types of contractors required for landscaping maintenance;** **b. Frequency of maintenance servicing;** **c. Schedule of maintenance works, required equipment and consumables, and PPE and safety equipment;** **d. Plan for replacement of plants, potting medium materials or irrigation for the event that plants become over mature and unhealthy or species or materials/irrigation is unsuccessful because no longer suitable for the aspect or purpose;** **e. The person or entity committing to the landscaping maintenance who will ensure:** **i. The operation and management activities are adequate to protect public health, safety, and amenity, and prevent environmental harm;** **ii. The works or activity must not significantly detract from the capacity of the road to provide a vehicular and, where relevant, pedestrian thoroughfare;** **iii. The works or activity must not adversely affect the amenity of the area, residents, or the environment; and**	**Prior to the issue of the first Development Permit for Operational Work.** **AND** **Prior to the Commencement of Building Works.**

	iv. The person or entity is to ensure the person has public liability insurance. **f. Whether a Common Property Maintenance Arrangement is required within the Body Corporate Plan to allow for access to private property to maintain all proposed planter boxes from Level 6 upwards.**	
31.	**Secure Storage** **Each dwelling must be provided with a secure storage area that:** **a. Has a minimum area of 2.5m^2;** **b. Has a minimum height of 2 metres;** **b. Is weather proof; and** **c. Has immunity to the 1% AEP defined inundation event level for the land.**	**Prior to the commencement of Use;** **AND** **At all Times.**
32.	**Electricity Supply** **An underground electricity reticulation must be designed and provided to service the development in accordance with requirements Section D8.04 and D8.06 of the *FNQROC Development Manual*.** **Where Ergon Energy requires the installation of a substation to augment their network, a padmount type is to be incorporated within the development and positioned so that it does not detract from the appearance of the streetscape and must be clear of footpath areas. Details of the electrical substation positioning must be endorsed by the Chief Executive Officer.** **The Development Approval condition(s) relating to the supply of electricity must be provided to Ergon Energy with the application for power supply.**	**Prior to the Commencement of Use.**
33.	**Electrical Transformer** **A padmount transformer must be installed on site as required by the development's electricity supply requirements and positioned generally in accordance with the approved drawing(s).**	**Prior to the commencement of Use.**
34.	**Telecommunications Services** **The development must be connected to the telecommunications network in accordance with section D8.05 of the *FNQROC Development Manual*.**	**Prior to the commencement of Use.**

35.	**Lighting** **Lighting is to be designed and constructed by a suitably qualified person to ensure that it does not increase the risk of an aircraft incident and has regard to the *Manual of Standards Part 139—Aerodromes Chapter 9 Section 9.144 Lights – requirements for zones and Civil Aviation Regulations 1988- REG 94 Dangerous Lights.***	**At all times.**
36.	**Street Lighting** **The existing LED heritage style light pole located on the footpath outside the Cairns Post Building is to be retained.** **Council must be notified of any damage sustained during construction to any of Council's electrical and lighting infrastructure and have it repaired, replaced, or reinstated at no cost to Council.**	**Prior to the commencement of Use.**
37.	**Awning Lighting** **Provide lighting to the underside of all awnings that cantilever over the footpath.** **The lighting must illuminate continuously in hours of darkness and should be evenly placed to ensure that the entire awning is sufficiently lit, and black spots are avoided.**	**Prior to the commencement of Use.**
38.	**Air-Conditioning, Plant and Machinery Screens** **Air-Conditioning, Plant and Machinery units located above ground level and visible from external properties and the street must be screened from view with appropriate materials or landscaping.**	**Prior to the commencement of Use;** **AND** **At all Times.**
39.	**Minimum Fill and Floor Levels** **All finished floor levels of all habitable areas must be a minimum of 300mm above the defined inundation event, in accordance with the requirements of the CairnsPlan 2016 and the FNQROC Development Manual.** **Advice Note: Provide a minimum ground floor level of 3.6m AHD as shown on the Approved Plan(s).**	**Prior to Commencement of Use.**
40.	**Car Parking Levels** **Finished surface levels of car parking areas are to be constructed at a minimum of the 5% AEP defined inundation event level in accordance with the requirements of the CairnsPlan 2016.**	**Prior to Commencement of Use.**

41.	**Drainage Design** **Design all necessary drainage management and drainage works (internal and external to the land) to satisfactorily drain the subject land in accordance with section D4 of the FNQROC Development Manual and the Queensland Urban Drainage Manual.** **Detailed design drawings of all stormwater infrastructure required as a result of the development are to be provided to Council for endorsement.** **Once approved, all work must be carried out in accordance with the approved plan(s).**	**Prior to the issue of a Development Permit for Operational Work.**
42.	**Private Drainage Assets** **All drainage associated pipework contained within the lot boundaries of this development site must be private infrastructure and must not become an asset of Council.**	**At all times.**
43.	**Concentration of Stormwater** **Stormwater discharge must have a no worsening effect or ponding nuisances on downstream or upstream properties, associated with the following:** **a. Diversion of stormwater;** **b. Concentration of stormwater flows;** **c. Changes in other flow characteristics; and** **d. Changes that affect the future use of land.** **If a disparity exists between pre and post alteration flows, measures are to be implemented in order to have a no worsening effect.**	**At all times.**
44.	**Discharge of Stormwater** **Stormwater associated with development is discharged to:** **a. A lawful connection provided from the premises to Council's stormwater network; or** **b. Land under Local Government control that has a lawful drainage function immediately adjoining to the premises; or** **c. An easement for drainage purpose immediately adjoining to the premises; or** **d. Where the site cannot discharge to a, b or c, stormwater is discharged from the site in a manner that does not result in:** **i. Change to the location of stormwater discharge;**	**At all times.**

	ii. An increase to peak flow velocity or volume; or iii. A concentration in stormwater discharge.	
45.	**Damage to Infrastructure and Land** **Where any part of Council's existing infrastructure or land is damaged as a result of construction activities occurring on the land, including but not limited to; mobilisation of heavy construction equipment, stripping, grubbing and vegetation damage, notify Council immediately of the affected infrastructure or land and have it repaired, replaced, or reinstated at no cost to Council.**	**At all times;** **AND** **Prior to Commencement of Use.**
46.	**Storage of Machinery and Plant** **The storage of any machinery, material or plant during construction work must not cause a nuisance to surrounding properties.**	**At all times.**
47.	**Transportation of Material** **Transportation of fill or spoil to and from the land must not occur:** **a. Within peak traffic times;** **b. Before 7:00am or after 6:00pm Monday to Friday;** **c. Before 7:00am or after 1:00pm Saturday; or** **d. On Sunday or a Public Holiday.**	**As stated.**
48.	**Stockpiling of Material** **Soil used for filling or spoil from the excavation is not to be stockpiled in locations that can be viewed from adjoining premises and/or a road frontage for any longer than one (1) month from the commencement of work on the land.**	**As stated.**
49.	**Construction Management Plan** **A Construction Management Plan (CMP) must be prepared and submitted to Council.** **The CMP must address all activities/operations associated with the construction including:** **a. Hours of construction;** **b. Location(s) of construction access;** **c. Parking of vehicles (including construction site employees and delivery vehicles);** **d. Traffic management and control (including loading and unloading);** **e. On-site dust and noise management, so as to not cause a nuisance to the amenity of the surrounding area;**	**Prior to the commencement of Work;** **AND** **As stated.**

	f. Tree protection management; **g. Site safety and security after hours to prevent public entry; and** **h. Location and details of construction signage including any signage that is to be illuminated.** **The CMP must be provided to Council and made available to all onsite workers at all times. The CMP must be implemented at all times for the duration of approved work.**	

PART B – BUILDING WORKS

APPROVED DRAWING(S) AND / OR DOCUMENT(S)

The term 'approved drawing(s) and / or document(s)' or other similar expressions means:

Drawing or Document	Reference	Date
Site Plan Existing	**Drawing No. 1.02, Revision 02, Project No. POST001, prepared by Hunt Design**	**20 November 2023**
Site Plan Demolition	**Drawing 1.03, Revision 01, Project No. POST oo1, prepared by Hunt Design**	**13 September 2023**

Assessment Manager Conditions

General Requirements		Timing
1.	**Approved Plan(s) and Document(s)** **The development is to be completed and carried out generally in accordance with the approved plan(s) and document(s) above, except where modified by the conditions of this Development Permit.**	**At all times.**
2.	**Maintain the Approved Development** **Maintain the approved development generally in accordance with the approved plan(s) and document(s), and any relevant approval required by these conditions of approval.**	**At all times.**
3.	**Currency Period** **This development approval, granted under the provisions of the *Planning Act 2016* (Qld), lapses two (2) years from the day the development approval takes effect, in accordance with the provisions of section 85 of the *Planning Act 2016* (Qld).**	**As stated.**

4.	**Limitation of Building Works** **Building Works (Demolition) must not commence on site prior to the issue of a Development Permit for Building Works associated with the Material Change of Use for the land given effect under Part A of this Development Permit.**	**As stated.**
5.	**Conservation Management and Benefits Plan** **Provide a Conservation Management and Benefit Plan to Council for endorsement.** **The Plan must be prepared by a suitably qualified professional in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, and Planning Scheme Policy – Places of Significance, and, at a minimum, include:** **a. A description of the place/s and their heritage values;** **b. Detail the conservation works that are proposed, including methods employed to treat and protect these heritage elements throughout building works and the life of the development;** **b. Evidence of the condition of the building/s and their associated built heritage fabric;** **c. Identify any repairs to be undertaken and associated work methods;** **d. Annotated proposal drawings that indicate:** **i. The extent of conservation works proposed;** **ii. Any elements that would be re-used from existing places in new development, including how they would be handled and protected during demolition works, throughout the construction phase, and life of the development;** **e. A description of the conservation obligations and future needs, requirements, opportunities, and constraints to conserve the place;** **f. Specific management policies, specifying what needs to be done to maintain the significance of the place and respond to identified issues;** **g. An action plan identifying priorities, resources and timing;** **h. An implementation plan and monitoring plan;** **i. A statement identifying the benefits to the significance of the place for any works under items a – d above;** **j. A schedule that itemises the heritage elements for each place, noting their existing condition and proposed treatment; and** **k. Details of:** **i. the author/s, including qualifications,** **ii. the date of the management plan; and**	**Prior to the issue of a Development Permit for Building Works (Demolition).**

	iii. any expected revision date.	
6.	**Document Extent of Detrimental Impact of Significance** **Provide a Detrimental Impact Statement / Dilapidation Report to Council for endorsement that demonstrates the impact of the proposal on the heritage values of the four (4) places of local significance.** **The Report must be prepared by a suitably qualified professional and, at a minimum, include:** **a. Existing and demolition plans (for all levels) and external elevations, of the affected external walls (to demonstrate new openings or removal of façade layers, etc.) of the heritage places with sufficient detail to demonstrate impact to heritage fabric;** **b. Annotation of the heritage fabric as identified in the Heritage Report prepared by Dash Architects, the Cairns Post Building Conservation Management Plan prepared by Converge Heritage, and as outlined in the citations for the places under the Planning Scheme Policy - Places of Significance (referring to criteria, description, and history components);** **c. Plans of the areas of the buildings affected by the proposal with elements/areas labelled to indicate the relative levels of cultural heritage significance of the elements;** **d. Photographs of all areas of the buildings affected by the proposal, linked to plans to demonstrate the condition and significance of the areas;** **e. Impact assessment to discuss alternative options considered where works would have a detrimental impact, to include extents of demolition as well as changes to facilitate new use, such as raising floor levels and other changes; and** **f. Responses to relevant aspects of the Conservation Management Plan for the Cairns Post Building, for example responses to policies and any changes to the fabric assessment in the previously prepared Conservation Management Plan.**	**Prior to the issue of a Development Permit for Building Works (Demolition).**

7.	**Archival Record** **Provide an Archival Record to Council for endorsement.** **The Record must be prepared by a suitably qualified professional in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, the Queensland Government Guideline: Archival Recording of Heritage Places, and Planning Scheme Policy – Places of Significance. The Record, at a minimum, must include all relevant parts prescribed under Item (5) of section 3.5 – Guidelines for preparing an archival report of the Planning Scheme Policy – Places of Significance.**	**Prior to the issue of a Development Permit for Building Works (Demolition).**
8.	**Construction Management Plan – Heritage Record** **Prepare and provide Council with a detailed Heritage Record Construction Management Plan for endorsement. The Record must include, but is not limited to the following:** **a. List the building works and refer to the relevant plan(s) which shows the existing building and clearly shows the demolition works;** **b. An assessment of relevant risks of damage to heritage fabric of the places of local heritage significance by the development (i.e. vibration);** **c. Documentation of preliminary strategies to protect and manage heritage fabric during construction to ensure damage is avoided and treatments are compatible with the affected elements, particularly:** **i. vibration;** **ii. provision of temporary bracing;** **iii. protection of retained elements;** **iv. careful salvage, treatment, and storage of significant elements;** **d. Vibration Management Plan or similar documentation for consideration of construction measures that will be put in place to manage the risk of damage due to vibration. This must include advice from an appropriately experienced structural engineer on the construction methods and construction management strategies, with their consideration of the existing condition of the significant buildings (both on and adjoining the land) and an appropriate understanding of the geotechnical information for the sites.** **e. Preliminary documentation of strategies to manage heritage values while providing for modern building requirements (as would be required by the National Construction Code / Building Act 1975) such as:** **i. The sensitive integration of services for the**	**Prior to the issue of a Development Permit for Building Works (Demolition).**

	proposal within heritage fabric, avoiding visual and physical damage in their installation; ii. Structural upgrades; iii. Equal access provisions (i.e., *Disability Discrimination Act 1992*); iv. Roof / rainwater upgrades; and v. Energy efficiency. f. An Interpretation Plan that outlines the physical elements to be interpreted and associated interpretive installations to provide an understanding of their significance to users of the subject sites.	
9.	**Certification of Construction Impacts** **Provide certification to Council and the Cairns Airport from a licensed Surveyor that the overall height of the any construction equipment, including but not limited to cranes and other equipment, does not encroach into the Airport's Operational Airspace, which is 46.0 to 50.0 metres AHD over the site.** **Alternatively, provide to Council a copy of the requisite approvals documentation from Cairns Airport permitting temporary encroachment into the Airport's Operational Airspace.**	**Prior to issue of a Development Permit for Building Works.**
10.	**Water Supply and Sewerage Works Internal** **At the time of demolition, any redundant sewer and/or water connections must be capped. Council must be provided with written notice of the relevant affected connections within 20 business days of the capping of such connection(s) occurring.**	**As stated.**
11.	**Traffic Impact Assessment (TIA) – Building Work** **Provide a detailed Traffic Impact Assessment (TIA) for the proposed Building Works.** **The detailed TIA must assess the impacts of the proposed demolition works on the existing local road network and the need for any temporary upgrades / augmentations to accommodate the works. The TIA must include, but is not limited to the following matters:** **a. The proposed staging of the proposed partial demolition works and anticipated timing;** **b. The prediction of road traffic generated by the proposed partial demolition works, traffic distribution and travel patterns;** **c. Analysis of the impact of the proposed demolition related traffic on Councils local road network and intersections giving the necessary consideration to capacity, safety, and efficiency. The Applicant must**	**Prior to Commencement of Building Works (Demolition Works).**

	demonstrate that the proposed development can operate safely; **d. Analysis of the impact of the proposed demolition related traffic on Council's pedestrian and cycling networks giving the necessary consideration to capacity, safety and efficiency. The Applicant must demonstrate that the development can operate safely; and** **e. Identification of possible temporary upgrades / augmentations required to the existing road, cycling, and/or pedestrian network/s to maximise the safe and serviceable operation of the identified network, mitigate any identified impacts of the proposed demolition and the associated timing for such upgrades.** **The TIA must be prepared and certified by a suitably qualified and experienced Traffic Engineer and be prepared in accordance with Austroads guide to Traffic Management Part 12 and certified by a RPEQ in this field.** **The TIA must include appropriate discussion and data to support the recommendations. All assumptions made within the TIA must be documented and references detailed.**	
12.	**Traffic Management / Risk Management Assessment** **Conduct a Risk Management Assessment (RMA) of all safety risks likely to arise during the course of undertaking potential works on the road including the setting up, operating, changing, and dismantling of a traffic guidance scheme.** **This assessment must consider the general behaviour of road users, cyclists, and pedestrians. Where the RMA determines works will impact the normal operations of the Local Government Managed Areas and Roads, the Applicant must implement a Traffic Guidance Scheme and a copy of the plans must be submitted to Council prior to implementation of the Traffic Guidance Scheme.** ***Advice Note: Where the Local Government Road is required to be partially or fully closed, please note that additional permits and approvals may be required.*** ***Advice Note: The Traffic Impact Assessment and Risk Management Assessment should be prepared in conjunction with the Construction Management Plan required under Condition 19 of this Development Permit.***	**Prior to Commencement of Building Works (Demolition Works).**

13.	**Concentration of Stormwater** **Stormwater discharge must have a no worsening effect or ponding nuisances on downstream or upstream properties, associated with the following:** **a. Diversion of stormwater;** **b. Concentration of stormwater flows;** **c. Changes in other flow characteristics; and** **d. Changes that affect the future use of land.** **If a disparity exists between pre and post alteration flows, measures are to be implemented in order to have a no worsening effect.**	**At all times.**
14.	**Discharge of Stormwater** **Stormwater associated with development is discharged to:** **a. A lawful connection provided from the premises to Council's stormwater network; or** **b. Land under Local Government control that has a lawful drainage function immediately adjoining to the premises; or** **c. An easement for drainage purpose immediately adjoining to the premises; or** **d. Where the site cannot discharge to a, b or c, stormwater is discharged from the site in a manner that does not result in:** **i. Change to the location of stormwater discharge;** **ii. An increase to peak flow velocity or volume; or** **iii. A concentration in stormwater discharge.**	**At all times.**
15.	**Sediment and Erosion Control – Water Discharge** **Soil and water management measures must be installed/implemented prior to discharge of water from the land, such that no external stormwater flow from the land adversely affects surrounding or downstream properties (in accordance with the requirements of the *Environmental Protection Act 1994* (Qld), the FNQROC Development Manual and the International Erosion Control Association 2008 Guidelines).**	**At all times.**

16.	**Runoff Generally** **All reasonable and practicable measures must be taken to prevent pollution entering existing creeks, waterways, or drainage lines, as a result of silt run-off, oil and grease spills from any machinery. Wastewater as a result of cleaning equipment must not be discharged directly or in-directly to any watercourses, stormwater systems or private properties (in accordance with the requirements of the *Environmental Protection Act (1994)*, the FNQROC Development Manual and Best Practice Erosion & Sediment Control – IECA Australasia).**	**At all times.**
17.	**Sediment and Erosion Control Plan** **Prepare and provide to Council for approval an Erosion and Sediment Control Plan (ESCP) to manage the site during construction and the defect liability period until Final Works Acceptance. The submitted plan is to be substantially in accordance with the approved Erosion and Sediment Control Strategy, and must be in accordance with the following requirements:** **a. An Erosion and Sediment Control (ESC) Plan must be submitted to Council and endorsed by the Consulting Engineer;** **b. The ESC Plan must address Engineering Best Practice, the *Environment Protection Act 1994* (Qld) and Clauses CP1.05, CP1.13 and D5.10 of the FNQROC Development Manual. The ESC Plan must be relevant to all phases of the construction and be updated where necessary as works progresses;** **c. During the construction period, the Consulting Engineer must randomly audit and inspect the ESC measures for compliance with the Engineer endorsed Contractor's ESC Plan, derived from the Engineers ESC Strategy (ss per FNQROC CP1 Appendix A);** **d. It is the Contractor's responsibility to ensure that the ESC Plan is updated and amended to reflect any changes in the construction methodology. All such amendments must be approved by the Engineer and presented to Council;** **e. During construction, the Contractor must implement a suitable dust management strategy to minimise dust nuisance on adjacent properties. Details of the dust management strategy must be incorporated into the Erosion and Sediment Control Strategy and be noted on the Contractor's ESC plan;** **f. The developer must be held responsible for any rectification works required to clean up dust, pollutants and sediments that may leave the site as a result of**	**Prior to Commencement of Building Works (Demolition Works).**

	construction activities; **g. The developer or their representative must be responsible for communicating with third parties affected by any dust, pollutants or sediment leaving the site as a result of any construction activity that is associated with the project site; and** **h. Upon completion of earthworks and prior to Works Acceptance, all exposed surfaces are to be treated (i.e., drill seeding, hydro mulching) to prevent erosion. Temporary ESC measures must remain in place during construction and until the site is stabilised to prevent and sediment entering the adjacent stormwater systems or properties.** **The Erosion and Sediment Control (ESC) measures must be installed and maintained for the duration of the works in accordance with the approved Plan until Final Works Acceptance.**	
18.	**Damage to Infrastructure and Land** **Where any part of Council's existing infrastructure or land is damaged as a result of construction activities occurring on the land, including but not limited to; mobilisation of heavy construction equipment, stripping, grubbing and vegetation damage, notify Council immediately of the affected infrastructure or land and have it repaired, replaced, or reinstated at no cost to Council.**	**At all times;** **AND** **Prior to Commencement of Use.**
19.	**Construction Management Plan** **A Construction Management Plan must be prepared and submitted to Council.** **The Construction Management Plan must address all activities/operations associated with the construction including:** **a. Hours of construction;** **b. Location(s) of construction access;** **c. Parking of vehicles (including construction site employees and delivery vehicles);** **d. Traffic management and control (including loading and unloading);** **e. On-site dust and noise management, so as to not cause a nuisance to the amenity of the surrounding area;** **f. Tree protection management;** **g. Site safety and security after hours to prevent public entry; and** **h. Location and details of construction signage including any signage that is to be illuminated.** **The CMP must be provided to Council and made available to**	**Prior to Commencement of Building Works (Demolition Works).**

	all onsite workers at all times. The CMP must be implemented at all times for the duration of approved work.	
20.	**Storage of Machinery and Plant** **The storage of any machinery, material or plant during construction work must not cause a nuisance to surrounding properties.**	**At all times.**
21.	**Transportation of Material** **Transportation of fill or spoil to and from the land must not occur:** **a. Within peak traffic times;** **b. Before 7:00am or after 6:00pm Monday to Friday;** **c. Before 7:00am or after 1:00pm Saturday; or** **d. On Sunday or a Public Holiday.**	**As stated.**
22.	**Stockpiling of Material** **Soil used for filling or spoil from the excavation is not to be stockpiled in locations that can be viewed from adjoining premises and/or a road frontage for any longer than one (1) month from the commencement of work on the land.**	**As stated.**

PART C: INFRASTRUCTURE CHARGES

1. That an Infrastructure Charges Notice is issued for the development.

PART D: REFERRAL AGENCY CONDITIONS & REQUIREMENTS

Referral Agency	Referral Agency Reference	Date	Council Electronic Reference
State Assessment Referral Agency	2309-36986 SRA	11 December 2023	#7320240

Refer to Attachment 3: Referral Agency Requirements. (Please note that these conditions / requirements may be superseded by subsequent negotiations with the relevant referral agencies).

ADVICE

1.	**Planning Laws** **Information relating to the *Planning Act 2016* (Qld), *Planning Regulation 2017* (Qld) and Development Assessment Rules is located on the Queensland Government's planning website.**

2.	**Further Approvals Required to Carry out the Development** **The following further approvals are required prior to carrying out the development generally in accordance with the approved plan(s) and drawings:** **a. Development Permit for Building Works;** **b. Development Permit for Operational Works; and** **c. Development Permit for Plumbing Works.**
3.	**Definitions** **All terms used in this development approval have those definitions as defined under the *Planning Act 2016* (Qld) and *Planning Regulation 2017* (Qld) (as at the date of the approval), Queensland Development Code and CairnsPlan 2016.** **To the extent of any inconsistency, the order of precedence of the above instruments is as follows:** ***a.* *Planning Act 2016* (Qld);** ***b.* *Planning Regulation 2017* (Qld);** **c. Queensland Development Code;** **d. CairnsPlan 2016; and** **e. FNQROC Development Manual.**
4.	**FNQROC Development Manual** **Access to FNQROC Development Manual, Local Laws, CairnsPlan 2016 and other referenced planning scheme policies are located on Council's website – www.cairns.qld.gov.au.**
5.	**Infrastructure Charges Notice** **A charge levied for the supply of trunk infrastructure is payable to Council in accordance with Council's Infrastructure Charges Resolution No. 2 of 2021 and the Infrastructure Charges Notice, a copy of which is attached for reference purposes only.** **The original Infrastructure Charges Notice will be provided under cover of a separate letter.** **The amount in the Infrastructure Charges Notice has been calculated according to Council's Infrastructure Charges Resolution.** **Please note that this Decision Notice and the Infrastructure Charges Notice are stand-alone documents. The *Planning Act 2016* (Qld) confers rights to make representations and appeal in relation to a Decision Notice and an Infrastructure Charges Notice separately.**

	The amount in the Infrastructure Charges Notice is subject to index adjustments and may differ at the time of payment. Please contact Council's Development Assessment Team for review of the charge amount prior to payment. **The time when payment is due is contained within the Infrastructure Charges Notice.**
6.	**Environmental Nuisance** **Construction or operational activities, including but not limited to, the operation of mechanical plant and equipment, must not cause an 'environmental nuisance' within the meaning of the *Environmental Protection Act 1994* (Qld) to any sensitive receptor as stated within Schedule 1 of the Environmental Protection (Noise) Policy 2019 (Qld).** **Noise from air-conditioning units, swimming and spa pool filters, service equipment or other mechanical equipment must not emanate from the subject land to a degree that would in the opinion of an Authorised Person (officer) of Council, create an environmental nuisance having regard to the provisions of Chapter 8 Part 3B of the *Environmental Protection Act 1994* (Qld).**
7.	**Cyclone Watch Site Management** **All building site managers must take all action necessary to ensure building materials and/or machinery on construction sites are secured immediately following the first cyclone watch and that relevant emergency telephone contacts are provided to Council Officers, prior to commencement of works.**
8.	**Connections to, Alteration or Realignment of Council Infrastructure** **Where development works require the connection to, alteration, removal or realignment of Council infrastructure or impact on other public utility infrastructure (e.g. telecommunications, electricity and gas), obtain the necessary approvals from the relevant public utility authority prior to works commencing.** **All connections or disconnection of water infrastructure must be undertaken by Council at the Applicant's cost.** **Connection to, alteration, removal or realignment of Council infrastructure includes (but is not limited to) fire hydrants, water service meters, sewer maintenance hole covers, stormwater drainage, reinstatement of maintenance hole covers, stormwater drainage, crossovers, footpaths, road pavement, kerb and channel, kerb ramps, medians, traffic islands, road furniture, signage and line-marking.**

9.	**Building Works Near Sewer Mains** **Any building works located over or near an existing sewer is subject to a Plumbing Application for Permission to Build over/and or Adjacent to Sewer Mains unless the works are not referrable under the Queensland Development Code MP1.4. The design of the building and footings over or near the sewer are to comply with the performance criteria in section MP.1.4 of the Queensland Development Code where relevant.**
10.	**Bushfire** **The Building Certifier is responsible for assessing whether the proposed development meets the relevant construction requirements in accordance with AS 3959-2009 Construction of buildings in bushfire-prone areas.**
11.	**Dial Before You Dig** **Undertake a 'Dial Before You Dig' search and all information is to be verified and services located on site. Council accepts no responsibility for damaged assets as a result of these works. All damaged Council infrastructure is to be returned/replaced to an as-new state before works acceptance is issued.**
12.	**Building Work** **This approval does not approve or authorise the construction of building work. A Development Permit for Building Work must be obtained in order for construction to commence.**
13.	**Future Compliance** **This approval does not negate the requirement for compliance of any future use with CairnsPlan 2016 or any future in force planning schemes, all other relevant Local Laws and other statutory requirements.**
14.	**Cultural Heritage** **Aboriginal cultural heritage is protected under the *Aboriginal Cultural Heritage Act 2003* (Qld).** **Under the Act, a person who carries out an activity must take all reasonable and practicable measures to ensure that the activity is properly managed to avoid or minimise harm to Aboriginal cultural heritage.** **The Duty of Care Guidelines provide further guidance on identifying and protecting Aboriginal cultural heritage and can be accessed at the following webpage – https://www.qld.gov.au/firstnations/environment-land-use-native-title/cultural-heritage/cultural-heritage-duty-of-care.**

15.	**Road Closures and Works on a Local Government Road** **Road Closures and Works on a Local Government Road require further approvals from Cairns Regional Council that are not covered by this Permit. An Application for a Temporary Road Closure is required where an activity on Council managed road or footpath occurs and where the activity will create an interference with the normal flow of traffic or pedestrian movement. An activity pertains to construction works undertaken within the road reserve. Applicants should allow additional time before planned works commence to obtain the required approvals.**

LAND USE DEFINITIONS*

In accordance with Schedule 24 of the *Planning Regulation* 2017 (Qld) and CairnsPlan 2016, the approved land use of Food & Drink Outlet, Multiple Dwelling, Shops, and Short-Term Accommodation are defined as:

Food and Drink Outlet "means the use of premises for—

(a) preparing and selling food and drink for consumption on or off the premises; or

(b) providing liquor for consumption on the premises, if the use is ancillary to the use in paragraph (a)."

Multiple Dwelling "multiple dwelling means a residential use of premises involving 3 or more dwellings, whether attached or detached."

Shop "means the use of premises for—

(a) displaying, selling or hiring goods; or

(b) providing personal services or betting to the public.

Short-term Accommodation —

"(a) means the use of premises for—

(i) providing accommodation of less than 3 consecutive months to tourists or travellers; or

(ii) a manager's residence, office, or recreation facilities for the exclusive use of guests, if the use is ancillary to the use in subparagraph (i); but

(b) does not include a hotel, nature-based tourism, resort complex or tourist park."

***These definitions are provided for convenience only. This Development Permit is limited to the specifications, facts and circumstances as set out in the application submitted to Council and is subject to the abovementioned conditions of approval and the requirements of Council's Planning Scheme and the FNQROC Development Manual.**

EXECUTIVE SUMMARY

Council is in receipt of a combined Development Application situated at 22, 24, 26, 28-30, & 32-34 Abbott Street, Cairns City, formally described as Lots 1 & 2 on RP715691 and Lots 502, 503, & 504 on C1981 for:

1. Development Permit for Material Change of Use for Multiple Dwelling, Short-Term Accommodation (75 Units), Food and Drink Outlet and Shop; and
2. Development Permit for Building Work Assessable Against the Planning Scheme for Full and Partial Demolition within the Places of Significance Overlay.

The Building Works component comprises:

- The partial demolition of three (3) local places of significance, for the removal of all parts of each structure while preserving the façade for the following places:
  - *JJ Opals* over Lot 1 on RP715691;
  - *Evert House* over Lot 502 on C1981; and
  - *The Cairns Post Building* over Lots 503 & 504 on C1981.
- The complete demolition of all existing structure/s recognised as a local place of significance, being the City Liquor Store, which includes an existing shop and original stables at the rear located over Lot 2 on RP715691. The works incorporate the restoration, reconstruction, and conservation works to support their adaptive reuse; and
- Retention, protection, enhancement, and adaptive reuse of three (3) of the four (4) facades for the local places of significance for JJ Opals, Evert House and The Cairns Post Building.

The Material Change of Use component incorporates:

- Construction of a mixed use thirteen (13) storey tower that comprises:
  - Commercial activities on the ground floor, including:
    - A purpose-built Food and Drink Outlet on the JJ Opals site that incorporates a laneway linking to an external courtyard and connects to Council's Gallery Precinct;
    - Two (2) retail / commercial tenancies on the Cairns Post Building site.
  - Vehicular access from Abbott Street over the City Liquor Store site, directing all vehicles to the rear of the site for access to one-hundred and twenty-seven (127) off-street parking spaces, including four (4) accessible spaces, over floors 2 - 4, which is sleeved behind the existing significant façades;
  - Seventy-five (75) apartments over floors 5 – 12, with a mixture of 1, 2, & 3-bedroom offerings;

- All services are contained within the rear of the tower on the ground floor, with provisions made available for services vehicles to enter and exit the site via a truck turn table;
- Pool and pool terrace, BBQ area, resident gym and yoga terrace on floor 5; and
- Additional resident facilities on floor 2.

The subject site is located within the Principal Centre Zone and the City Centre Local Plan Area of the CairnsPlan 2016 v3.1 and is affected by the following Overlays:

- Acid sulfate soils;
- Airport environs;
- Flood and inundation hazard;
- Places of significance; and
- Transport network.

The Building Works are Impact Assessable, with the proposed Material Change of Use subject to Code Assessment within the Principal Centre Zone of the CairnsPlan 2016 v3.1.

The application was referred to the State Assessment Referral Agency (**SARA**) for matters relating to development on or adjoining a Queensland Heritage Place. SARA provided a Referral Agency Response for the application on 11 December 2023, which requires conditions to be attached to any development approval (Council Reference: #7320240). A copy of the Referral Agency's response is attached in **Attachment 3**.

The application was referred to the Cairns Airport as a Third Party Advice Agency for matters relating to the safety and continued operation of the airports operational air space. Cairns Airport provided a response to the application on 1 November 2023, with recommendations seeking conditions relating to height and lighting safety applied to any Development Permit (Council Reference: #7297046). A copy of the Third Party Advice Agency Response is attached as **Attachment 4**. Conditions to this effect have been imposed on the Development Permit.

The application has been assessed in accordance with the legislative framework for both Code and Impact assessment, including the *Planning Act 2016* (Qld), and its associated instruments, including: the *Planning Regulation 2017* (Qld) and the Development Assessment Rules; along with the applicable benchmarks contained in CairnsPlan 2016 v3.1.

On balance, Officers consider that the development has demonstrated compliance with the relevant benchmarks, and accordingly both aspects (Part A and Part B, respectively) of this development application are recommended for approval, subject to reasonable and relevant conditions.

TOWN PLANNING CONSIDERATIONS

Background

The land comprises four (4) existing structures that hold significance in the local historical, cultural heritage and aesthetic (architectural) fabric of Cairns. These structures are designated as a Local Place of Significance, with statements of significance captured within the corresponding Planning Scheme Policy (**PSP**), as they display one (1) or more of the following characteristics:

- The place or area is important in demonstrating the evolution or pattern of the local government's area's history (Category A);
- The place or area demonstrates rare, uncommon, or endangered aspects of the local governments area's cultural heritage (Category B); and/or
- The place or area is important because of its aesthetic significance to the local community (Category E).

The significant structures identified on the land are:

The 'City Liquor Store' – 28 - 30 Abbott Street, Cairns

This structure was built in 1908 and holds local historical and cultural heritage significance. The PSP identifies the sites cultural heritage significance as:

"…the shop and stable building at the rear, built in c.1905, are of historic local historic significance for their contribution to the historic streetscape of Abbot Street. Such small-scale shops have only survived because of their masonry construction resisting fires and cyclones. Only a small number of these early buildings survive in the city area and are of importance for their streetscape contribution and the scale of building which portrays conditions of building in the early 20th century. ***The survival of the red brick stable building at the rear is rare at the local level*** *(*emphasis added)*."*

The 'Cairns Post Building' – 22 - 24 Abbott Street, Cairns

This structure was built in 1908 and holds local historical and aesthetic significance. The PSP identifies the sites cultural heritage significance as:

"The 'Cairns Post' is a long-running newspaper which was first established in 1881 and has been continuously published as the 'Cairns Post' since 1908. It has also been located at this site since 1908. The newspaper has had a great social impact on the lives and attitudes of Cairns residents and those throughout the region. The building was one of the earliest buildings in the town designed in a classical style and demonstrated the local community's confidence in the growth of Cairns as an important regional centre during the pre-war and interwar periods."

And

"The design of the first phase of the building was an accomplished composition in the Classical style by the architect Harvey Draper. The substantial extensions of 1924 by the architect Richard Hill continued the original architectural treatment but diminished the quality of the original design which had been in an almost strict adherence to an academic classical approach to the appearance of the building. This gave the composition a vertical appearance as opposed to the horizontal composition of the later Hill & Taylor design."

The 'JJ Opals' structure – 32-34 Abbott Street, Cairns

This structure was built in 1910 and holds local historical significance. The PSP identifies the sites cultural heritage significance as:

"The place is of local significance as a brick shop of the early 20th century. Such small-scale shops have only survived because of their masonry construction resisting fires and cyclones. Only a small number of these early buildings survive in the city area and are of importance for their streetscape contribution and the scale of building which portrays conditions of building in the early 20th century."

The 'Evert House' structure – 26 Abbott Street, Cairns

This structure was built in 1925 holds local historical significance. The PSP identifies the sites cultural heritage significance as:

"The building has historic significance at the local level for its contribution to the historic streetscape of Abbott Street. It was initially established as a single-storey solicitor's office in 1905, and extended by the architect Richard Hill in 1925 to its current form."

Given the land's location within the Cairns CBD, the structures have supported a variety of permitted developments over the years, typically being for professional offices or smaller retail shops.

Most recently, Development Permit 8/7/3521 was granted under delegation on 20 May 2016 for the establishment of a Bar (3 Wolves) within the existing JJ Opals building. Following this, the *Wolf Lane Gin Distillery* was established as a permitted use at the rear of the City Liquor Store site (within the existing red brick stable structure) in 2020. Development Permit 8/7/1726 was granted under delegation on 28 February 2020 for a Bar to be operated in conjunction with the Gin Distillery (Council Reference: #5114316, #5916224 and #6316130)

The Cairns Post newspaper ceased operation from the Cairns Post Building in 2022, with the property remaining vacant. This vacancy has extended into the neighbouring property, Evert House, where the newspaper operations once occupied the rear of the site.

Site and Surround

The subject presents as five (5) developed inner-city parcels, with a collective area of 2,536m^2.

The site is nestled amongst a range of existing commercial, residential and tourist activities that collectively contribute to the role and function of the Cairns CBD. The site is also in proximity to a range of recreation services, including the Lagoon, Fogarty Park, ANZAC Park, Trinity Inlet and is directly connected to the Cairns Gallery Precinct.

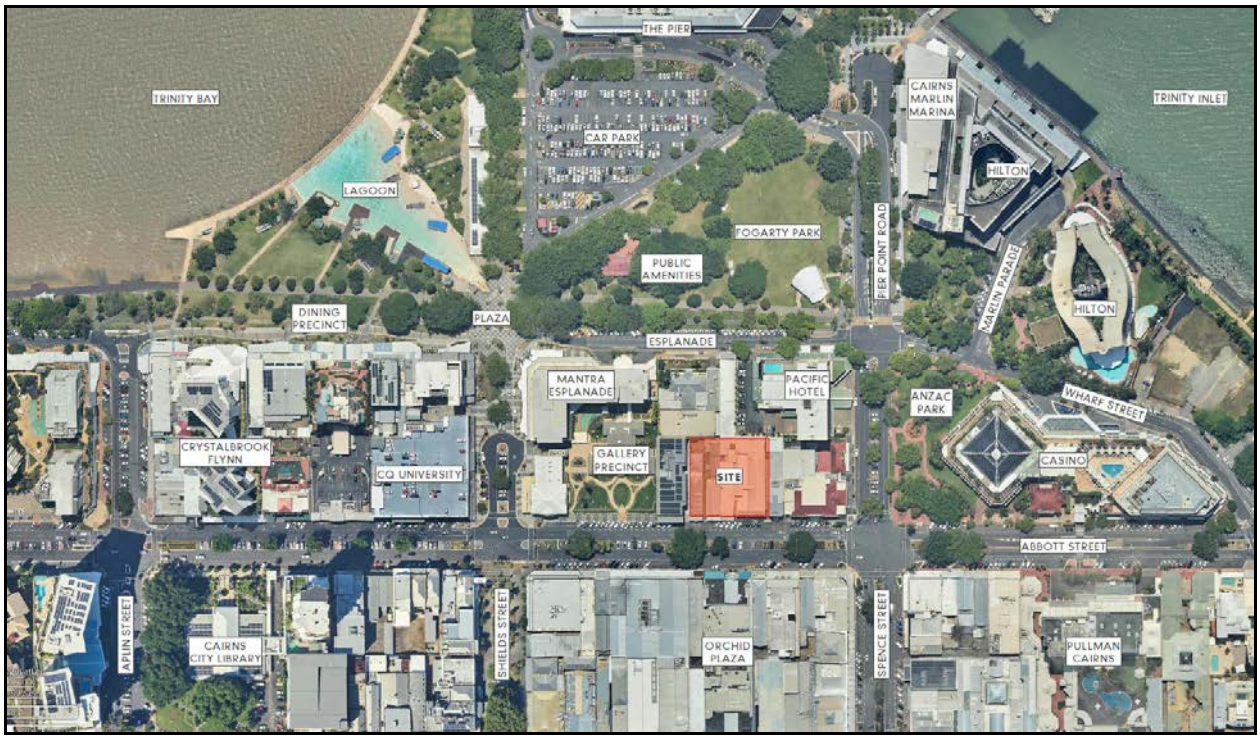


Figure 1: Site and Surrounds
(Plan No. 1.01 Revision 2 Project No. POST001, prepared by Hunt Design dated 20 November 2023).

Proposal

The proposal incorporates two (2) phases of the development, which includes:

1. Demolition works of / within four (4) Places of Significance (of which are detailed earlier in this report); and

2. Establishment of a mixed-use tower complex that includes the following:

Proposal	
Use(s) proposed	**Multiple Dwelling and Short-term Accommodation Tower:** ● 13 storeys ● 75 self-contained apartments – unit configuration: - 15 x 1 bed apartments; - 44 x 2 bed apartments; and - 16 x 3 bed apartments; ● Resident facilities including: - Pool and associated Pool Deck; - Yoga & Pilates Terrace; and - Gym. **Shop:** ● Situated behind façade for The Cairns Post Building; ● 485m^2 GFA; ● Two (2) x ground floor tenancies with mezzanine; and ● Pedestrian access from sites frontage only. **Food & Drink Outlet:** ● 319m^2 GFA single tenancy; ● Situated behind façade for the JJ Opals building; ● Mixture of indoor and outdoor dining options; and ● Retention of laneway design and alfresco courtyard at the rear of the property, providing connection to the Gallery Precinct.
Site Cover	100%
Vehicle Parking Spaces	127 off street parking spaces, including: ● four (4) accessible spaces; and ● seven (7) spaces dedicated for use by visitors, staff, or service vehicles.
Other Parking	14 bicycle and scooter spaces. Note: each apartment includes private storage that is sufficient to accommodate storage for one (1) bicycle, if required.

Site Description

Street Address	Common Name	Site Area	Existing Use	Road Frontage	Topography
22-24 Abbott Street, Cairns	The Cairns Post Building	1012m^2	Office	20.184m	Generally flat an impacted by flood inundation
26 Abbott Street, Cairns	Evert Hours	506m^2	Shop & Office	10.092m	
28-30 Abbott Street, Cairns	City Liquor Store	509m^2	Shop, Distillery, & Bar	10.092m	

32-34 Abbott Street, Cairns	JJ Opals	509m^2	Shop & Bar (*3 Wolves*)	10.092m	

Materials Assessed in the Application

The applicant provided the following materials during the assessment process:

- Planning Assessment Report prepared by *Kelly Reaston Development & Property Services* (Council Reference: #7271397), including the following technical inputs:
  - Architects Report and Plans of development, prepared by *Hunt Design*;
  - Landscaping Plans, prepared by *Landplan Landscape Architecture*;
  - Engineering Services Report prepared by *Langtree Consulting Engineers*;
  - Traffic Impact Assessment prepared by *Langtree Consulting Engineers*;
  - Heritage Impact Statement prepared by *Dash Architects*;
  - Traffic Impact Assessment prepared by *Langtree Consulting Engineers*;

- The Applicant's formal Response to Council's Information Request, prepared by *Kelly Reaston Development & Property Services* (Council Reference: #7308060), including the following technical inputs:

  - Updated suite of Plans of development, prepared by *Hunt Design*;
  - Update suite of Landscaping Plans, prepared by *Landplan Landscape Architecture*;
  - Updated Technical Memorandum for Traffic Impact Assessment prepared by *Langtree Consulting Engineers*; and
  - Waste Management Plan prepared by *MRA Environmental*.
- Referral Agency Response from *SARA*;
- Third Party Advice Agency Response from the *Cairns Airport*; and
- Submissions made to the application.

These materials have been considered in the assessment of the application.

LEGISLATIVE FRAMEWORK

Statutory Planning Considerations

State Planning Policy	The State Planning Policy (SPP) contains the State Interest Policies and Assessment Benchmarks which are applicable to the development. The subject site is affected by the following State Interests: • MSES – Wildlife habitat (endangered or vulnerable) • Flood hazard area – Local Government flood mapping area • Obstacle limitation surface area The CairnsPlan 2016 advances the SPP except for erosion prone areas and the coastal management district, and therefore all the relevant State interests have been appropriately reflected in CairnsPlan 2016.

FNQ Regional Plan 2009-2031	The subject site is within the FNQ Regional Plan 2009-2031 designation - Urban Footprint. The Regional Plan has been appropriately integrated and reflected through the CairnsPlan 2016.

Matters Prescribed by Regulation

Schedule 9 of the Planning Regulation 2017 (Qld)	The proposed building work is made assessable under the CairnsPlan 2016 Planning Scheme in accordance with section 1 as the proposed demolition works are not an accepted form of development. The development does not require detailed assessment under Part E of the SPP as the development does not include any strategic ports or aviation facilities. The development does not trigger referral to the State as the development and/or land are not impacted by a Coastal Building Line, is not located within declared fish habitat area, nor located adjacent or in proximity to a future or current state transport corridor. Division 2, Table 7 allows a Local Government to require security to be held for building works. Council has not sought to apply a condition to this Permit for a security to be held as part of the proposed works. All other relevant building relevant provisions are considered to be suitably captured and managed by the Planning Scheme.
Schedule 10 of the Planning Regulation 2017 (Qld)	The application was referred to the State Assessment and Referral Agency (SARA) for matters relating to development on or adjoining a Queensland heritage place. SARA provided a Referral Agency Response for the application on 11 December 2023, which requires conditions to be attached to any development approval (Council Reference: #7320240). A copy of the Referral Agency Response is attached in **Attachment 4**.
Schedule 12A of the *Planning Regulation 2017* (Qld)	Not applicable. The development proposal is not for reconfiguring a lot creating a new subdivision.

LOCAL CATEGORISING INSTRUMENT

The CairnsPlan 2016 Planning Scheme v3.1

Strategic Framework Assessment

Part of the development is subject to Impact Assessment and therefore requires assessment against the Strategic Framework of the *CairnsPlan 2016*, in accordance with section 45 (5) of the *Planning Act 2016* (Qld). These matters relate solely to the proposed Building Works.

Strategic Framework	
3.3 Settlement Pattern Theme	
Strategic Outcome	**Assessment**
Strategic Outcome 3.3.1 (1)	Strategic Outcome 3.3.1 (1) states: *"The region grows and evolves in a way that:* *(a) promotes a diverse and thriving economy;* *(b) creates comfortable, safe, connected, diverse and healthy living environments;* *(c) provides a range of housing choices;* *(d) maintains the hierarchy of centres;* *(e) consolidates existing urban areas;* *(f) avoids putting people and property at risk from natural hazards;* *(g) provides a range of community services and sport and recreational opportunities;* *(h) conserves the natural environment, ecological processes and biodiversity values;* *(i) retains rural land for agricultural uses;* *(j) supports the timely, cost effective and efficient provision of infrastructure;* *(k) co-locates compatible land uses;* *(l) achieves a high standard of amenity;* *(m) maintains and enhances the scenic amenity, tropical character and identity of the region."* **Comment:** The Buildings Works directly impact four (4) existing Places of local significance. The overall development, however, assists in site renewal and promotes a diverse and thriving economy by further expanding business opportunities associated with the site. The distinctive site setting achieves a high standard of amenity and enhances the identity of the region by providing adaptive reuse of three (3) locally significant sites. All other outcomes sought under the element are considered not applicable.

3.3.2 Element – Centres and Centre Activities	
Specific Outcome	**Assessment**
Specific Outcome 3.3.2.1 (1)	Strategic Outcome 3.3.2.1 (1) states: *"Centres are concentrations of activity that may comprise of retail, business and employment, administration, research, residential, education, and health and community services consistent with the identified role and function of the centre."* **Comment:** Not applicable. However, Officers note that the demolition facilitates this aspect of the Strategic Framework through providing opportunities to adaptively reuse the land. Generally applicable to items 2 through 5.
Specific Outcome 3.3.2.1 (6)	Strategic Outcome 3.3.2.1 (6) states: "Development within centres is designed to enable the flexible reuse of buildings that are able to respond to changing community, retail and business needs." **Comment:** The commercial tenancies are of a larger and open plan design that will accommodate a variety of commercial activities. The residential component accommodates both permanent and short-term options, with the unit offerings designed to accommodate both when needed.
Specific Outcome 3.3.2.1 (9)	Strategic Outcome 3.3.2.1 (9) states: *"Development in existing and new centres establish high quality environments and is designed to draw on the positive characteristics of the surrounding area with a focus on creating or reinforcing security, vitality and a sense of place."* **Comment:** The proposed Building Works will facilitate the redevelopment of the land that will allow the land to establish a mixed commercial and residential product that not only seeks to retain part of and frame the historically significant elements of the land, but also offer a contemporary structure that can accommodate a variety of land use activities that will compliment and reinforce the CBD as a Principal Centre.
3.3.9 Element – Built Form, Design and City Image	
Specific Outcome	**Assessment**
Specific Outcome 3.3.9.1 (1)	Strategic Outcome 3.3.9.1 (1) states: *"Urban design and built form in the region creates an attractive, tropical, cohesive, positive and memorable identity and reflects the qualities of good urban places and tropical urbanism."* **Comment:** The site is impacted by the Places of Significance Overlay. The Building Works facilitates the establishment of a development that creates an attractive, tropical, cohesive, positive, and memorable product that reflects the qualities of good urban places and tropical urbanism.

Specific Outcome 3.3.9.1 (3)	Strategic Outcome 3.3.9.1 (3) states: *"Development within the Cairns city centre addresses and activates the street frontages with a street canopy providing shade and weather protection for pedestrians and a place for social interaction."* **Comment:** The retention of the three (3) facades seeks to maintain their unique presence within the street, while the redevelopment works bind them creating opportunities for a variety of commercial investments in the CBD. The two (2) existing awnings associated with the *JJ Opals* and *Evert House* structures will be retained and reinstated to their original design/construction. It is noted that the *Cairns Post Building* retains the recesses behind the colonnade, providing opportunities for pedestrian refuge from the elements, if required. The development further creates a space for pedestrians through retaining the 'Wolf Lane' laneway, provides for inter-block connections through to Council's Gallery Precinct and offers activities that promote social interaction.
Strategic Outcome 3.3.9.1 (5)	Strategic Outcome 3.3.9.1 (5) states: *"Development respects and complements the character and history of the region's many communities and promotes community pride and sense of place."* **Comment:** The site is included within the Places of Significance Overlay. The demolition works have an overall negative impact on the heritage values of the site. However, the Applicant seeks to retain the heritage fabric of the place through retaining three (3) of the four (4) facades, where the structure will continue to convey their role in defining the pattern of evolution of the LGA's history and its aesthetic (architectural) significance to the local community. Conditions have been applied to this Development Permit to ensure the proper documentation is provided for the demolition of the rear stables over the *Liquor Store* site; along with a strategy to protect and adaptively its building materials (i.e., red bricks) to provide a veneer façade to generate visual interest and offer an alternate avenue to interpret the sites historical significance. The celebration of the heritage aspects in the proposed redevelopment complements the character and history of the Cairns CBD and ensures it is celebrated now and into the future. The adaptive reuse of the site promotes community pride and a sense of place by ensuring the buildings are maintained in a manner that celebrates their contribution to the streetscape positively, as opposed to being left derelict.
Strategic Outcome 3.3.9.1 (8)	Strategic Outcome 3.3.9.1 (8) states: *"Streetscapes, housing and building design are responsive to the environment, climate, site constraints and local character."* **Comment:** As above in response to Strategic Outcome 3.3.9.1 (5).

3.3.10 Element – Place of Significance and Neighbourhood Character	
Specific Outcome	**Assessment**
Strategic Outcome 3.3.10.1 (1)	Strategic Outcome 3.3.10.1 (1) states: *"Development avoids or mitigates adverse impacts on the cultural significance of a State heritage place or area."* **Comment:** The development will not impact on the adjoining State heritage place (original *Mulgrave Shire Council Chambers* structure).
Strategic Outcome 3.3.10.1 (2)	Strategic Outcome 3.3.10.1 (2) states: *"Places of local significance are conserved for their cultural significance, tourism value and importance to the history and identity of the region. The adaptive re-use of places of local significance is facilitated where the use is compatible with the significance of the site."* **Comment:** Refer to response to Specific Outcomes 3.3.9.1 (1), 3.3.9.1 (3) and 3.3.9.1 (5).
3.3.11 Element – Community Health and Wellbeing	
Specific Outcome	**Assessment**
Strategic Outcome 3.3.11.1 (9)	Strategic Outcome 3.3.11.1 (9) states: *"Future planning of the region takes into account social planning considerations including changing community characteristics, trends, issues and needs."* **Comment:** Overall, the proposed development provides for a product desired by the Cairns community and responds to the growing need for permanent residence opportunities within and the revitalisation of the CBD.
3.5.1 Economy Theme	
Specific Outcome	**Assessment**
Strategic Outcome 3.3.5.1 (1-3)	Strategic Outcome 3.3.5.1 (1-3) states: *"(1) The region is recognised as Far North Queensland's key economic centre providing major industrial, agricultural, maritime, aviation, defence, health, education, commercial, retail, recreational and entertainment facilities and opportunities.* *(2) Due to the quality of the natural environment and extent and availability of productive agricultural land, tourism and primary production remain the key economic drivers for the region. However, the region's economy will become more diversified, improving business and employment opportunities and providing resilience against future adverse economic, social and environmental conditions which may impact the region.* *(3) Economic benefits and opportunities are maximised through the promotion of appropriate land uses, minimisation of land use conflicts and the protection of significant infrastructure."* **Comment:** While not directly related to the Building Work, these activities directly result in the opportunity to redevelopment and adaptively reuse the land. Therefore, the overall development is

	considered to assists in site renewal and ability to promote and contribute to a diverse and thriving economy by further expanding business opportunities associated with the site.
3.5.2 Element – Strong and Diverse Economy	
Specific Outcome	**Assessment**
Strategic Outcome 3.5.2.1 (1)	Strategic Outcome 3.5.2.1 (1) states: *"Existing economic activities continue to be facilitated in and around existing allocated areas and where possible are consolidated or co-located with similar or complementary activities."* **Comment:** The Building Works provide for the adaptive reuse of the land to establish activities anticipated and promoted by the Planning Scheme for the Principal Centre Zone. The redevelopment of the land consolidates and offers for a more flexible product that can move and mould with the local economy. The development comprises a mixture of activities that also support and are supported by other similar and complimentary activities adjacent to the site and throughout the Cairns CBD.
Strategic Outcome 3.5.2.1 (2)	Strategic Outcome 3.5.2.1 (2) states: *"Development of buildings and spaces within the higher order centres incorporates adaptable and multi-use design principles to respond to changing market needs."* **Comment:** As above in response to Strategic Outcome 3.5.2.1 (1).
Strategic Outcome 3.5.2.1 (5)	Strategic Outcome 3.5.2.1 (5) states: *"Development that contributes to diversifying the economy is facilitated in locations where it is:* *(a) compatible with the scale and character of the surrounds and does not adversely impact on the natural environment or supply of agricultural land;* *(b) highly accessible;* *(c) designed to avoid areas that are vulnerable to natural hazards;* *(d) supported by infrastructure necessary to meet the demand of the activity."* **Comment:** As above in response to Strategic Outcome 3.5.2.1 (1).
3.5.3 Element – Tourism	
Specific Outcome	**Assessment**
Strategic Outcome 3.5.3.1 (1)	Strategic Outcome 3.5.3.1 (1) states: *"The Cairns region is a national and international tourist destination that provides a diverse range of tourist accommodation, attractions and experiences that respond to the changing needs and expectations of the tourism industry."* **Comment:** The Building Work will facilitate the redevelopment of the land that will offer a range of accommodation offerings, which can be used for tourist accommodation. The site will remain an attraction as the development will seek to retain three (3) of the four (4) places of significance, ensuring the historical significance of the site remains celebrated within the streetscape.

Strategic Outcome 3.5.3.1 (2)	Strategic Outcome 3.5.3.1 (2) states: *"Tourist accommodation is provided in highly accessible locations and meets the varying needs of visitors to the region."* **Comment:** As above in response to Strategic Outcome 3.5.3.1 (1).
Strategic Outcome 3.5.3.1 (4)	Strategic Outcome 3.5.3.1 (4) states: *"Tourism development and associated infrastructure is established where it:* *(a) responds to a new, emerging or innovative tourism trend that will enhance visitor experiences;* *(b) conserves the region's areas of environmental significance;* *(c) is complementary to and compatible with other land uses;* *(d) maintains or enhances the economic vitality of the region and the region's centres, provides local employment opportunities and contributes to local economic diversification;* *(e) does not diminish the quality or extent rural land and extractive resource areas;* *(f) does not compromise the operation of agricultural activities on rural land;* *(g) complements and enhances the scenic amenity and character of the local setting;* *(h) maintains a high level of amenity for nearby residents;* *(i) promotes a positive image for the region."* **Comment:** The Building Work will facilitate the redevelopment of the land that will allow the land to adaptively respond to these market needs; specifically, items (c), (d), (g), and (j).

Relevant Assessment Benchmarks of CairnsPlan 2016

CairnsPlan 2016 Assessment Benchmarks	
Assessment Benchmark	**Assessment Comments**
Principal Zone Code	**The development achieves full compliance with this Zone Code.** The proposal advances the Purpose and Overall Outcomes through providing for a range of commercial and residential activities that assist in activating the core of the urban area within the Cairns CBD and the LGA more broadly. The development seeks to revitalise existing commercial / retail opportunities on the land, while providing for the introduction of residential activities that directly contributes to increasing residential densities within the Cairns CBD. The proposal also advances the Overall Outcomes of the Zone through providing opportunities to extend and blend public and private space through the use of a laneway and alfresco courtyard that connects Abbott Street to the new Gallery Precinct. Further the design features incorporate Tropical Urbanism design principles to create a point of interest within the streetscape and along the skyline, while contemplating and protecting the heritage buildings on the ground plane to stand proud as a foundation of the tower structure.

City Centre Local Plan Code	**Generally Complies. Conditioned to comply with PO4, AO6.1, PO11 – PO16, AO24.1, and PO37.** The land captures the following elements of the Local Plan: ● Precinct 1 – City Centre Core; ● 80% active frontage with Night-time entertainment activities; ● Network of green streets, pedestrian arcade connections; and ● Limited access streets. The proposal reinforces the Purpose of the Local Plan as the development encourages the highest intensity of urban form accommodating a mix of retail, commercial, employment, residential activities within the Cairns urban area. The podium and tower design are situated above the existing heritage structures present in the land to both protect and respect the intrinsic values of the built form. The existing heritage elements are juxtaposed with a modern tower design that incorporates tropical urbanism design features to: ● Reinforce the rainforest in the city ethos; ● Generate visual interest; ● Accommodate a mix of uses to facilitate an active street frontage; ● Activate and provide for a comfortable pedestrian realm; ● Provide for uses and built form that includes and interacts with the street (i.e., laneway to Alfresco Courtyard and to Galley Precinct); and ● Accommodate higher residential densities. The development is considered to advance the Purpose with the partial demolition of sections of heritage buildings and the adaptive reuse, restoration, and conservation of the remainder. Conditions have been applied to this Development Permit to manage the protection, restoration, conservation, and reuse of the heritage elements on the land throughout the life of the project (i.e., throughout demolition and construction works, as well as through the re-use of the land). The development will not impact the operational aspects of the Cairns Airport and Port of Cairns. Conditions have been applied to this Development Permit to ensure compliance with PO4 and AO6.1, namely that: ● The development respects and protects the heritage values on the land; ● Height limited is maintained at the corresponding OLS; ● Adopts appropriate Tropical Urbanism principles to manage bulk of the structure, such as height and articulation of any plane of elevation, through providing articulation and relief on the façade of the tower and at the podium level; ● Landscaping of podium, tower, and streetscape; ● Vehicle parking; ● Street numbering; and ● Flood and storm tide immunity. Where the development departs from the desired design outcomes of the relevant Acceptance Outcomes (AO), compliance with the corresponding Performance Outcome (PO) is realised when considering the existing structures and heritage

	fabric on the site that is south to be partially retain throughout the redevelopment and reuse of the land.
Acid Sulfate Soils Overlay Code	**Conditioned to comply with PO1, PO2, & PO3.** The proposed foundations for the tower structure will be driven piles. Accordingly, conditions have been applied to this Development Permit for an Acid Sulfate Soil Investigation and management plan (where required) to be provided prior to the issue of a Development Permit for Building Works to achieve compliance with this Code.
Airport Environs Overlay Code	**Complies and conditioned to comply with AO1.1-AO1.3.** Conditions have been applied to this Development Permit to ensure compliance with AO1.1, AO1.2, & AO1.3; namely matters relating to managing height in relation to the OLS, specifically that the building itself, any construction activities (including the use of temporary equipment/machinery, such as cranes), and landscaping treatments do not protrude into the OLS. Overall, it is not anticipated that the proposed development will adversely impact upon the safety, efficiency, and/or operational integrity of the Cairns Airport and associated aviation facilities.
Flood and Inundation Hazard Overlay Code	**Complies. Conditioned to comply with PO1.2** Conditions have been applied to this Development Permit, specifically relating to the Material Change of Use, to ensure compliance with AO1.2 for the finished floor levels for development and car parking areas in accordance with the requirements of Table 8.2.7.3.b, plus 300mm freeboard for all non-parking areas. Overall, the application material has satisfactorily demonstrated that the development can achieve the required level of immunity to ensure the safety of people and property and minimise disruption, etc after an inundation event. All transitions are able to occur in the site and that there is no adverse change in the profile of for a flood or storm tide hazard even and its behaviour over the land and any upstream or adjacent properties. The development will continue to ensure that all captured water is directed to a lawful point of discharge.
Places of Significance Overlay Code	**Conditioned to achieve compliance with the Code's Purpose Statement, PO3, & AO4.1-4.3.** To ensure compliance with the code's Purpose Statement, including Overall Outcomes and relevant Performance Outcomes, and for further details on how the development will compliment and the significance of the Place is appropriately conserved and interpreted throughout the development, Officers have imposed conditions on this Development Permit for matters relating to managing: ● The preparation and endorsement of a *Conservation Management and Benefit Plan* in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, and *Planning Scheme Policy – Places of Significance;* ● The preparation and endorsement of a *Detrimental Impact Statement / Dilapidation Report* that demonstrates the impact of the proposal on the heritage values of the four (4) places of local significance; ● The preparation and endorsement of an Archival Record in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, he Queensland Government Guideline: Archival Recording of Heritage Places, and *Planning Scheme Policy – Places of Significance*; and ● The preparation and endorsement of a C*onstruction Management Plan – Heritage Record* to demonstrate how all heritage elements being retained on the site will be protected through all phases of construction. Officers acknowledge the design ethos that underpin the development proposal,

	restoring parts of the historic building fabric to celebrate the historical significance of the land and allow them to continue to be enjoyed by future generations, rather than continue to decay into a state of disrepair. The contemporary style of the development is considered to be consistent with the Cairns CBD setting, with the juxtaposition of architectural styles lending itself to celebrate the architectural character and appearance of the existing structures on the land.
Transport Network Overlay Code	**Complies and conditioned to comply with AO1.2** The application material was supported by a Traffic Impact Assessment (TIA), which has been endorsed as part of the conditions of approval relating to the Material Change of Use component. Conditions have been applied to the Building Works component of this Development Permit to ensure compliance with AO1.2, specifically for matters relating to safety and efficiency of transport network during construction activities over the land. The condition requires the Applicant to provide a detailed TIA to, at a minimum, assess the impacts of the proposed demolition works on the existing local road network and the need for any temporary upgrades / augmentations to accommodate the works. Overall, the development is consistent with the role and function of the existing local traffic network.
Multiple Dwelling and Short-Term Accommodation Code	**Generally complies and conditioned to comply with PO12, PO14, & PO15.** Conditions have been applied to this Development Permit to ensure compliance with PO12, PO14, & PO15 for matters relating to safety lighting (under awning lighting), placement and screening of mechanical plant, and secure storage for each dwelling. The design of the private balconies for all unit types departs from the desired outcomes for private outdoor living areas. However, the development demonstrates compliance with the corresponding Performance Outcome (PO10) when considering the design of the outdoor living space/s as a whole, including the overall area provided and its connection to internal living spaces. The accommodation tower provides for only 9.38% (or 238.09m^2) in lieu of the required 35% (or 887.60m^2). The development demonstrates compliance with the corresponding Performance Outcome (PO11) when considering the use of the land in context of the site and its surrounds, specifically opportunities for residents directly access existing recreational facilities within the immediate area.
Centre Design Code	**Complies and conditioned to comply with AO2.1** Conditions have been applied to this Development Permit to ensure compliance with AO2.1 for matters relating to managing the screening of building plant and equipment. The development complies with the design outcomes sought by the *Planning Scheme Policy – Crime Prevention Through Environmental Design*. The development departs from the Code's desired outcomes for façade design, street activation and pedestrian amenity managed under AO10.2 & AO10.4. However, the development demonstrates compliance with the corresponding Performance Outcome, PO10, when considering the heritage elements being retained on the land.

Environmental Performance Code	**Complies and conditioned to comply with PO1 and AO5.2.** Conditions have been applied to this Development Permit to ensure compliance with PO1 and AO5.2; namely matters relating to managing: ● The design, installation, and use of lighting; and ● design and management of on-site refuse facilities.
Excavation and Filling Code	**Not applicable.** There are no excavation and/or filling works proposed or required under either stage to give effect to the development. Note: the development includes the use of piles to support the proposed residential tower. These are not considered to be defined as excavation and/or filling works, with the impacts manged under works relating to structures covered by the Places of Significance Overlay Code.
Infrastructure Works Code	**Complies and conditioned to comply with AO3.1, PO4, PO4, PO6, PO7, PO9, and PO16** Conditions have been applied to this Development Permit to ensure compliance with AO1.3, PO4, PO6, PO7, PO9, & PO16; namely for matters relating to managing: ● The placement of padmount electricity infrastructure; ● External works for the provision of new vehicular access and removal of any redundant crossovers; ● Control of stormwater and discharge to a lawful point of discharge; ● Connection to Council's reticulated water supply network; ● Connection to Council's waterway system; ● Any potential damage to infrastructure; and ● Construction activities, including the preparation and provision of a Traffic Management Plan to be submitted to Council for endorsement to manage any potential impacts on the local traffic network that may be a result on any of the construction activities on the site.
Landscaping Code	**Complies and conditioned to comply with relevant parts of the City Centre Local Plan Code.** The Applicant has provided a concept landscape design as part of the application material, which has been designed in accordance with the City Centre Local Plan Code, where landscaping inputs are required to be designed and provided in accordance with Planning Scheme Policy – Tropical Urbanism. A condition has been applied to this Development Permit to ensure landscaping inputs comply with the Local Plan Code and the Planning Scheme Policy.

Parking and Access	**Complies and conditioned to comply with AO1.1** The proposal generates a parking requirement of 107 spaces. The development provides for a total of 131 spaces, including 4 accessible parking spaces, which results in a surplus of 24 off-street parking spaces. Conditions have been applied to this Development Permit, specifically relating to the Material Change of Use component, to ensure compliance with AO1.1, AO1.2, AO1.3, AO3.4, AO3.5, AO3.6, PO4, AO5.1 in seeking to manage the following matters: ● Minimum off-street, accessible, and parking requirements. ● Manage breakdown of parking requirements (i.e., delineation between resident, accommodate, staff, etc. parking) ● Managing site access and design ● Parking design and safety; and ● Manage the proposed changes to on street works.
Vegetation Management	**Complies.** The site does not contain any significant vegetation.

Assessment against the Outcomes of the Relevant Benchmarks

Where non-compliant with an Acceptable Outcome of a relevant benchmark, a performance-based assessment has been undertaken, as detailed below.

Assessment Benchmark	Performance-based assessment
7.2.2 City Centre Local Plan Code	
Performance Outcome PO7 / Acceptable Outcome AO7.2	Acceptable Outcome AO7.2 states: *"Podiums are not more than:* *(a) 9 metres and 2 storeys above the height of the existing footpath level, where within 15 metres of a street frontage;* *(b) 11 metres in height above the height of the existing ground level where greater than 15 metres from the street frontage."* The podium varies in height and design and this part of the tower development has been designed to "float" above the existing places of significance being retained on the land. The development does not comply as the podium design presents an overall height of 16m above the existing footpath level. To clarify, the Podium design presents the following setbacks and height arrangements: ● Front (western): 0m to existing structure/s, siting a maximum height of 7.0m - 8.9m; and 6 - 10m for a height of 10.7m, siting a maximum height of 16m. ● Side (northern): 0m for a height of 16m.

	● Side (southern): 1.4m for the first two (2) storeys (or approx. 6.37m), then 0m setback for levels 2-5 (or approx. 10.7m). ● Rear (eastern): 0m for 16m (excluding 5.5m x 11m recess above the Alfresco Dining Area at the rear of the *JJ Opals* site and the step in for the first two (2) levels along the southern side boundary). Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO7 states: *"The design and siting of buildings and structures at podium level:* *(a) contributes to the desired amenity and character of the streetscape and local plan area;* *(b) contributes to the safety, character, amenity and vitality of the streetscape;* *(c) ensures continuity at ground level;* *(d) maintains a human scale."* The development demonstrates compliance with PO7 as ● The retained facades for each of the existing places of significance contributes to maintaining the existing amenity and character of the street scape as well as provides continuity at the ground level and is sympathetic to the human scale; ● The podium and tower façades are articulated to provide architectural relief; and ● The podium incorporates landscaping elements at different levels to soften the built form. In addition to this, conditions have been imposed to articulate the façade generally in accordance with the approved plans to ensure that any bulk can be further relieved through the use of patterns, textures, or use of different materials.
Performance Outcome PO8 / Acceptable Outcome AO8.1	Acceptable Outcome AO8.1 states: *"Where the part of the buildings or structures are greater than 9 metres above the height of the existing footpath level, for that part of the building or structure, they are set back:* *(a) 10 metres from all street frontages, other than the Esplanade or Sub-precinct 1a – Shields Street;* *(b) 15 metres from the Esplanade, and Subprecinct 1a – Shield Street;* *(c) 1/6 of the height of the building or 4 metres, whichever is the greater from the side boundaries;* *(d) 10 metres from the rear boundary."* In conjunction with parts of the podium that extend beyond nine (9) metres above the existing footpath, the development does not comply as the proposed tower is setback as follows:

Aspect	Required Setback	Proposed Setback	Difference
Front (western)	10.0m	6.0m	-4.0m
Side (northern)	7.26m	4.0m	-3.26m

	<table><tr><td>Side (southern)</td><td>7.26m</td><td>4.0m</td><td>-3.26m</td></tr><tr><td>Rear (eastern):</td><td>10.0m</td><td>4.0m</td><td>-6.0m</td></tr></table> Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO8 states: *"Development achieves adequate separation between buildings and structures on the same site or adjoining sites to:* *(a) maintain privacy and amenity for residents and occupants;* *(b) maximise the availability of light and ventilation to the development, adjoining sites and public places;* *(c) avoid a visually over bearing built form;* *(d) maintain view lines and vistas to the mountains and the ocean along streets, between developments and from public places."* The development demonstrates compliance with PO8 as the tower design incorporates extensive landscaping throughout with the intent of being an exemplar of tropical urbanism. The landscape planting will assist in maintaining privacy and amenity for residents whilst visually softening built form and generating visual interest. Privacy and amenity of future residents are protected as there are no are no other surrounding towering developments that would overlook into the development. Additionally, the tower does not obscure any view lines or vistas to the mountainous backdrop of Cairns or the ocean from existing public places.
Performance Outcome PO9 / Acceptable Outcome AO9.1	Acceptable Outcome AO9.1 states: *"The maximum width of any tower elevation, in any plane, is 40 metres."* The development departs from these desired design outcomes as the tower has an approximate width of 42 metres. Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO9 states: *"Development is designed and sited to ensure that:* *(a) buildings are consistent with the site and surrounds, moderate in width and avoid a visually overbearing built form;* *(b) development does not result in the appearance of a wall of buildings when viewed from streets and public places;* *(c) view lines and vistas are maintained to the mountains and the ocean along streets, between developments and from public places;* *(d) privacy and amenity for residents and occupants on the site and adjoining sites is maintained;* *(d) the availability of light and ventilation to development, adjoining sites and public places is maximised."* The development demonstrates compliance with PO8 as the tower design incorporates extensive landscaping throughout with the intent of being an exemplar of tropical urbanism. The landscape planting will assist in maintaining privacy and amenity for residents whilst visually softening built form and generating visual interest.

<table>
<tr><th colspan="2">8.2.13 Places of Significance Overlay Code</th></tr>
<tr><td>Performance Outcome PO1</td><td>
Performance Outcome PO1 states:

“Development does not result in the demolition or removal of a place of local significance.”

The development does not comply with this PO as the proposal includes:

● The complete demolition of an identified existing place of local significance, being the City Liquor Store (28-30 Abbott Street); and

● The partial demolition of three (3) identified existing places of local significance, being the Cairns Post Building (22-24 Abbott Street), Evert House (26 Abbott Street), and JJ Opals (32-34 Abbott Street), with only the facades sought to be retained.

Where the development does not comply with a Performance Outcome, assessment is required against the Purpose of the Code.
<table>
<tr><th>The Purpose and Overall Outcomes of the Code states:</th><th>Assessment Comments</th></tr>
<tr><td>“(1) The purpose of the Places of significance overlay code is to ensure places of significance are conserved and development is complementary to the cultural significance of the place.</td><td>Refer to commentary below against Overall Outcomes to demonstrate compliance with this item.</td></tr>
<tr><td colspan="2">(2) The purpose of the code will be achieved through the following overall outcomes:</td></tr>
<tr><td>(a) development is complementary to the cultural significance of the place of local significance;</td><td>Complies with Overall Outcome.

The Town Planning – Background section of this report identifies as the existing places of significance hold values relating to:
1. The evolution or pattern of the local government’s area’s history (Category A); and / or
2. Demonstrating rare, uncommon, or endangered aspects of the local governments area’s cultural heritage (Category B); and / or
3. Aesthetic significance to the local community (Category E).

The retention of the three (3) façades for the Cairns Post Building, Evert House, and JJ Opals structures is considered to achieve items 1 and 3 above as Officers consider that these parts of the structure/s are still able to convey the story that underpins the fabric of their heritage. Accordingly, the development retains critical heritage elements to the streetscape and the design will frame and compliment the heritage values of the site to ensure</td></tr>
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</td></tr>
</table>

		that the historical narrative of these structures remains within the local streetscape. The development has partially demonstrated that its outcomes may be complementary to item 2 above with respect to the existing stables structure at the rear of the *City Liquor Store* site. The development seeks to carefully dismantle the existing stables and use the materials throughout the development, particularly the use of the red brick as a façade veneer to carpark entry and along one (1) side of the proposed laneway. The application material has not yet identified how this adaptive reuse of the built fabric will honour the significance of the place. Conditions have been applied to this Development Permit to manage compliance with the Outcome – see below.
	(b) the adaptive reuse of a place of local significance is encouraged so that the cultural significance is retained;	**Complies with Overall Outcome.** The proposed development seeks to reuse a place of local significance to the extent that is viable. The size and other site constraints leave no option but to demolish a portion of the site (the rear stables on the *City Liquor Store Site*). As outlined above in response to Item (a) adaptively reuse the building fabric of the existing rear stables. Conditions have been applied to this Permit to manage compliance with the Outcome – see below.
	(c) the fabric and setting of a place of local significance is conserved and any changes are managed, documented and interpreted;	**Conditioned to comply with Overall Outcome.** Conditions have been applied to this Permit to manage compliance with the Outcome – see below.
	(d) development does not result in the demolition or removal of a place of local significance, unless there is no prudent and feasible alternative to the demolition or removal. In considering whether there is no prudent and feasible alternative to the demolition or removal of a place of local significance, the Council will have regard to: *(i) safety, health, structural and economic considerations;*	**Complies with Overall Outcome.** The application material has satisfactorily demonstrated that there is no prudent or feasible alternative to demolition to achieve the highest and best use for the land as anticipated by the Planning Scheme. Officers note that where able, portions of the identified structures are retained to the greatest extent possible and seeks to incorporate the identified heritage value of the site to the streetscape. The development will result in the loss of one (1) building

	(ii) any other matters the Council considers relevant;	which is necessitated by the vehicular access location noting that this is the only lawful (and most easily gained) access point is from Abbott Street.
	(e) development does not have a detrimental impact on archaeological values;"	**Not applicable.** The land is not identified as holding any archaeological values.
	To ensure compliance with the above and for further details on how the development will compliment and the significance of the place is appropriately conserved and interpreted throughout the development, Officers have sought to imposed conditions on the Development Permit for matters relating to managing: ● The preparation and endorsement of a *Conservation Management and Benefit Plan* in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, and *Planning Scheme Policy – Places of Significance;* ● The preparation and endorsement of a *Detrimental Impact Statement / Dilapidation Report* that demonstrates the impact of the proposal on the heritage values of the four (4) places of local significance; ● The preparation and endorsement of an Archival Record in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, he Queensland Government Guideline: Archival Recording of Heritage Places, and *Planning Scheme Policy – Places of Significance*; and ● The preparation and endorsement of a C*onstruction Management Plan – Heritage Record* to demonstrate how all heritage elements being retained on the site will be protected through all phases of construction.	
Performance Outcome PO2	Performance Outcome PO2 states: *"Development is compatible with the conservation and management of the cultural significance of the place."* The application material includes a Heritage Impact Assessment Report prepared by *Dash Architects*, which primarily focused on the impact of the proposed works on the subject site. A comprehensive Conservation and/or Management plan was not provided. Where the development does not comply with a Performance Outcome, assessment is required against the Purpose of the Code. See comments and recommended conditions in response to PO1 above.	
Acceptable Outcome AO3.1	Acceptable AO3.1 states: *"Development does not alter, remove or conceal significant features of a place of local significance*." While the Heritage Impact Statement acknowledges that the development proposal will have a detrimental impact on some elements of the heritage fabric, the retention of the facades and the intent to adaptively reuse, restore, reconstruct, and conserve these portions of the structure will preserve the Places ability to continue to: ● Demonstrate the evolution or pattern of the local government's area's history; and ● Symbolise aesthetic significance to the local community. Where concern rests relate solely to the complete removal of the red brick stables at the rear of the *City Liquor Store* site and how the works may impact on its significance and whether or not this significance can be retained and showcased through the adaptive reuse of its materials throughout the new structure.	

	Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO3 states: *"Development conserves the features and values of a place of local significance that contribute to its cultural significance."* Development has been conditioned to provide the following to documentation to council for endorsement to clearly demonstrate how the heritage fabric will be protected throughout construction and repurposes throughout the development; as well as exhibit how the identified values will be expressed through the new built form: ● A *Conservation Management and Benefit Plan* in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, and *Planning Scheme Policy – Places of Significance;* ● A *Detrimental Impact Statement / Dilapidation Report* that demonstrates the impact of the proposal on the heritage values of the four (4) places of local significance; ● An Archival Record in accordance with *ICOMOS Burra Charter 1999* and associated guidelines, he Queensland Government Guideline: Archival Recording of Heritage Places, and *Planning Scheme Policy – Places of Significance*; and ● a C*onstruction Management Plan – Heritage Record* to demonstrate how all heritage elements being retained on the site will be protected through all phases of construction. As outlined in response to PO1 above, this will also resolve to achieve compliance with the Code's Purpose statements.
Acceptable Outcome AO4.1, 4.2, & 4.3	Acceptable Outcome AO4.1 states: *"Development is compatible with a conservation management plan prepared in accordance with the Australia ICOMOS Charter for Places of Cultural Heritage Significance."* Acceptable Outcome AO4.2 states: *"An archival record is prepared to document the changes."* Acceptable Outcome AO4.3 states: *"Development includes interpretation that explains the cultural significance of the place and the changes."* This documentation has not been provided as part of the application material. Conditions have been applied to this Development Permit for these documents to be prepared in accordance with *Planning Scheme Policy – Places of Significance* and to be provided to Council for endorsement prior to a Development Permit for Building Works issued for the development.

Acceptable Outcome AO5.1 & 5.2	Acceptable Outcome AO5.1 states: *"The scale, location and design of the development are compatible with the character, setting and appearance of the place of local significance."* Acceptable Outcome AO5.2 states: *"The development is unobtrusive and cannot readily be seen from surrounding streets or other public places."* The development departs from the outcomes sought by both AO5.1 and 5.2 as the style of the development is not compatible with the architectural character or appearance of the Places. Additionally, the development can be seen from the site's frontage, streets, and other public places. The development is considered to be consistent with the setting of the land given the sites prominent location within the Carns CBD and the pattern of development within its surrounds. Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO5 states: *"Development does not adversely affect the character, setting or appearance of the place of local significance, including removal of vegetation that contributes to the cultural heritage significance of the place."* Officers understand that the design ethos are underpinned by the desire to frame the retained components of each of the three (3) structures (being the facades and the red brick material from the *Stables*) and restore the façades to their original form in aim to celebrate the historical significance of the land and allow them to continue to be enjoyed by future generations, rather than continue to decay into a state of disrepair. While the contemporary style of the structure is not in keeping with the character and appearance of the existing structures on the land, Officers acknowledge that the juxtaposition of architectural styles lends itself to be sympathetic with, celebrate, and frame the historical styles within the streetscape. In this, Officers consider that the development achieves compliance with PO5, and no further conditions are required to be applied to this Development Permit to achieve the required outcomes.
9.2.17 Multiple Dwelling and Shot-Term Accommodation Code	
Performance Outcome 10 / Acceptable Outcome 10.1	Acceptable Outcome AO10.1 states: *"Each dwelling, has a private and functional outdoor living area:* *(a) that has a minimum dimension of not less than 3 metres;* *(b) that is directly accessed from internal living spaces (not bedrooms)."* The development does not comply with this Acceptable Outcomes as the design of the outdoor private areas for each unit type includes a dimension that is less than 3.0 metres. Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO10 states: *"Development provides a functional private outdoor living area for each dwelling."* In considering the design of the private outdoor living areas wholistically, the development can demonstrate compliance with PO10 as the design provides for a spacious and functional outdoor living area that connects to and compliments internal living spaces. The proposed private outdoor living areas include the

<table>
<tr><td></td><td>following design particulars:
<table>
<tr><th>Unit Type</th><th>Area</th><th>Smallest Dimension</th><th>Longest Dimension</th></tr>
<tr><td>1 Bed Type A</td><td>18.62m^2</td><td>1.45m</td><td>7.50m</td></tr>
<tr><td>2 Bed Type A</td><td>44.50m^2</td><td>1.35m</td><td>11.80m</td></tr>
<tr><td>2 Bed Type B</td><td>24.54m^2
(Split between two (2) areas of 20.43m^2 & 4.11m^2)</td><td>1.55m</td><td>7.50m</td></tr>
<tr><td>3 Bed Type A</td><td>58.37m^2</td><td>1.35m</td><td>19.70m</td></tr>
</table></td></tr>
<tr><td>Performance Outcome 11 / Acceptable Outcome 11.1</td><td>Acceptable Outcome AO11.1 states:

“Development involving:

(a) 6 dwellings or more not less than 35% of the site area is provided as communal recreational area; or

(b) 5 dwellings or less no acceptable outcomes are provided.”

Based on this AO, the development is required to provide a communal recreational area of 887.60m^2. The development departs from the Outcome as a total of 238.09m^2 (or 9.38%) communal recreation space has been provided as part of the development proposal, which comprises:

● 166.3m^2 on Level 5, including pool, pool terrace, BBQ, Gym, and Yoga / Pilates Terrace; and

● 71.79m^2 of additional resident facilities on level 2

Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome.

Performance Outcome PO11 states:

“Development provides accessible and functional communal recreation area for the benefit of residents.”

In considering the development in the context of its site and surrounds, the development is considered to provide sufficient onsite recreation facilities for residents as there exists several opportunities for residents to engage in other types of recreational activities in close proximity to the land. This includes the Cairns foreshore, direct access to the adjacent Galley Precinct, the Cairns Library, Cairns Performance Arts Centre, and Munro Martin Parklands.</td></tr>
<tr><td colspan="2">9.3.1 Centre Design Code</td></tr>
<tr><td>Performance Outcome 10 / Acceptable Outcome 10.2 & 10.4</td><td>Acceptable Outcome AO10.2 states:

“Where a building has frontage to a public street or other public or semi-public space, an active frontage is provided which includes a minimum of 50% of the facade consisting of transparent or semi-transparent windows and glazed doors.”

Acceptable Outcome AO10.4 states:

“Where buildings are constructed up to the road alignment, a cantilever awning is to be provided over the footpath, to the full frontage of the site, with a setback of 1 metre from the face of the kerb, and:

(a) with a maximum height of 3 metres from the footpath level to the underside of the awning; or</td></tr>
</table>

	(b) at a height consistent with, or stepping up/down to, the awning structures on buildings on adjacent sites." The development does not comply with these Acceptable Outcomes as: ● Only one (1) of the three (3) facades presents a 50% or greater level of transparency; and ● Awning is only provided to two (2) of three (3) structures. Where the development does not comply with an Acceptable Outcome/s, assessment is required against the corresponding Performance Outcome. Performance Outcome PO10 states: *"Development results in an active streetscape that:* *(a) contributes to a high level of amenity for patrons and pedestrians;* *(b) facilitates interactions between the public and private realm through active frontages."* The development proposal seeks to retain the existing façade for three (3) listed local Places of significance, being the *Cairns Post Building*, *JJ Opals*, and *Evert House*. Of the three (3) structures, only: ● Only the *JJ Opals* structure presents a highly transparent façade; and ● Two (2) structures, the *JJ Opals* and *Evert House* buildings, present an existing cantilevered that will be retained and upgraded as part of the development. In proportioning weight in accordance with section 1.5 of the Planning Scheme, assessment of this application favours the retention (in part) of these heritage structures rather than lose any significance in the fabric of the built form over adopting standard principles of activation. Additionally, the development proposal demonstrates compliance with PO10 as the redevelopment of the site and reintroduction of new commercial opportunities on the land that can support anticipated activities, such as Shops and Food and Drink Outlets, that will draw patrons in from the street. The development includes / retains the laneway design and feel down past the existing *JJ Opals* structure, which provides opportunities for external dining, leads to an Alfresco Courtyard, and has a direct connection to the future *Gallery Precinct*. The laneway allows for a blur between the public and private realms as it allows for interactions between the Abbott Streetscape, the Alfresco Courtyard, and the Gallery Precinct beyond. The existing awnings are considered to be fit for purpose. Officers note that the original Cairns Post Building is setback from its frontage, with the main entry to the structure stepped behind the colonnades that dominate its façade. If required, this space can act as a refuge or an inter-block break between the above awnings and the next awning over the footpath of the *Gallera (former Howard Smith Building)* building at 18-20 Abbott Street, Cairns (Lot 505 on C1981). In considering the heritage elements that underpin this assessment, Officers note that the aesthetic significance of the recognised Places of Significance also positively contributes to the amenity of the streetscape.

RELEVANT MATTERS

The development is subject to both Impact and Code Assessment. In accordance with section 45 of the *Planning Act 2016* (Qld), it is confirmed that there are no other relevant matters to consider as part of the assessment of either part of this development application.

PUBLIC NOTIFICATION

In accordance with Impact Assessment procedures outlined in *Part 4: Public Notification* of the *Development Assessment Rules*, the development was publicly notified for fifteen (15) business days, with the following actions being carried out:

- Publish a notice at least once in the newspaper circulating generally in the locality (on 24 November 2023);
- Place a notice on the land in the way prescribed under the regulation (placed on 24 November 2023 and maintained on the land to 18 December 2023); and
- Give a notice to the owners of all lots adjoining the premises (on 24 November 2023).

A Notice of Compliance was received on 19 December 2023 (Council Reference: #7324400). One (1) properly made submissions was received during the Public Notification period in support of the development proposal.

MATTERS RAISED IN SUBMISSIONS FOR IMPACT ASSESSABLE DEVELOPMENT

The following matters were raised in properly made submissions.

Issue	How matter was dealt with
Vibration of earth as part of construction activities and impacts on neighbouring properties.	A condition has been applied to Part B of this Development Permit which manages the proposed Building Works for the Applicant to provide a Construction Management Plan – Heritage Record, which includes a Vibration Management Plan (VMP). The VMP is to include an assessment of the risks associated with and generated by any vibrations for both the site and adjoining places of significance and provides strategies to avoid, mitigate, or manage (as order of preference) these impacts. Officers also note that the Referral Agency Response also includes a condition for a vibration assessment and mitigation report to be provided for the adjoining state place of significance.
Potential for the construction activities to block frontage of neighbouring properties, and in doing so, limiting pedestrian and/or vehicular access.	A condition has been applied to Part B of this Development Permit which manages the proposed Building Works for the Applicant to provide a Construction Management Plan prior to the commencement of Building Works (Demolition) on the land, which includes particulars to manage site access and egress during construction, road and gantry treatments, traffic control and pedestrian access, construction parking, and onsite toolboxes, etc. In a response to the submission, the Applicant acknowledged the potential impact on the adjoining property at 36 Abbott Street, Cairns (Lot 2 on RP744972) and that this property will be considered as part of the development of this Plan.

Overshadowing and impact on solar panels of neighbouring properties.	The shadow diagrams provided by the Applicant illustrate that greatest impact of shadowing of the adjoining property at 36 Abbott Street, Cairns is during the peak of the Solstice event at 9am on 22 December, with approx. 70% of the structure in shade. It is understood that the time at when the solar panels have low efficiency due to a low sun angle. There is minimal shading by midday, with no shading during the afternoon. The diagrams satisfactorily indicate that any adjustment to the side and or rear setbacks of the proposed tower structure to that which is entirely compliant with the Acceptable Outcome will result in only a minor or in some cases negligible change to the shadow profile as any tower will create shadows during the early part of the day. For most of the year, the neighbouring property experiences minimal shadow as the orientation of the two (2) buildings relative to one (1) another and the trajectory of the sun's movement during the day.
Setback to side southern boundary and impact on the neighbouring property in accessing natural light and ventilation.	Officers note in the Principal Centre Zone, a podium (as part of a tower structure) can present a 0m setback to side and rear boundaries. The intent behind this is to ensure the site has the best opportunity to provide for a variety of land use activities at the highest possible density. The ground floor of the existing structure at 36 Abbott Street, Cairns presents a 2.7-3.5m setback to the side boundary adjoining the subject land, with the proceeding floors presenting a setback less than 1.0m and a complete 0m setback for the roof structure over the parking area at the rear of the site. Officers note that these setbacks are sufficient to allow access to the same level of natural light and ventilation, noting that the podium is not considered to further limit access to these elements over and above that permitted by the existing 2nd storey structure over Lot 1 (the *JJ Opals* site). Additionally, in review of the approved plans for 36 Abbott Street, Cairns, Officers note that the existing structure will capture a majority of its natural light and ventilation from its front (western) and northern side boundary; as well as through the lightwell incorporated into its eastern side façade.
Encourage Council to pursue an alternate building design to better showcase exemplary building design and tropical urbanism.	In assessing the development, Officers are limited in influencing design outcomes to that prescribed under the planning scheme, which usually relates to height, setback, orientation, articulation, landscaping inputs, etc. In this, the proposed design has satisfactorily demonstrated compliance with the relevant assessment benchmarks, including compliance with *Planning Scheme Policy – Tropical Urbanism*.

INFRASTRUCTURE CHARGES

Council's *Infrastructure Charges Resolution No. 2 of 2021* identifies that an Infrastructure Charge is levied for the development. The applicable charge has been calculated in accordance with the Resolution and section 120 of the *Planning Act 2016* (Qld).

The subject land supports various activities, which contributes to the existing demand available for consideration as available credits for the development proposal to determine additional demand on Council's infrastructure network. Accordingly, the table below outlines the existing activities and their use particulars to confirm how the existing credits for the land have been calculated.

Street Adress	Common Name	Lot and Plan	Approved Use	Existing Use Area	Existing Impervious Area
32-34 Abbott Street, Cairns	*JJ Opals*	Lot 1 RP715691	Shop	150m^2	509m^2 (site area)
			Bar (3 Wolves)	180m^2	
28-30 Abbott Street, Cairns	*City Liquor Store*	Lot 2 RP715691	Shop	298m^2	509m^2 (site area)
			Bar	52m^2	
26 Abbott Street, Cairns	*Evert Hours*	Lot 502 C1981	Shop	153m^2	506 m^2 (site area)
			Office	1,847m^2	
22-24 Abbott Street, Cairns	*The Cairns Post Building*	Lot 503 & 504 C1981	Office		1012m^2 (site area)
			TOTALS:	**2,680m^2**	**2,536m^2**

A copy of the calculation is contained in **Attachment 5**.

LOCAL GOVERNMENT INFRASTRUCTURE PLAN (LGIP)

The development does not require the delivery of trunk infrastructure identified within the Local Government Infrastructure Plan to facilitate the development.

REASONS FOR DECISION

The reasons for this decision are:

1. The proposed development has been assessed in accordance with the provisions of the CairnsPlan 2016 v3.1 and is considered to comply with the relevant Assessment Benchmarks of the applicable codes.
2. In assessing the proposed development, conditions have been imposed to ensure compliance with the assessment benchmarks of the CairnsPlan 2016 v3.1.
3. The proposed development is consistent with the Purpose and Overall Outcomes sought for the Principal Centre Zone and the City Centre Local Planning Area in that the development seeks to provide for the highest intensity and large variety of uses and activities to support the continued role and function of the Centre in the hierarchy of Centres.
4. Conditions have been applied to this Development Permit to manage impacts on the operational airspace and protect the safe and efficient function of the Cairns Airport.
5. Conditions have been applied to this Development Permit for the development to achieve the requisite level of flood and/or inundation hazard immunity.
6. Conditions have been applied to this Development Permit for the Building Works portion of the development to achieve compliance with the Purpose and Overall Outcomes of the Places of Significance Code.

7. The Material Change of Use portion of this development to achieves compliance with the relevant assessment benchmarks of the Places of Significance Code as the design outcomes seek to be sympathetic towards, celebrate, and frame the historical architectural significance of the land and allow them to continue to be enjoyed by future generations.
8. The proposed Material Change of Use portion of the development is consistent with the role and function of the local transport network.
9. Conditions have been applied to this Development Permit for the proposed Building Works to submit further material to demonstrate that the local traffic network will not be adversely impacted throughout the entire proposed demolition activities being undertaken on the land or recommend temporary improvements to accommodate any identified impacts.
10. Conditions have been applied to this Permit for the development proposal to achieve outcomes expressed under *Planning Scheme Policy – Crime Prevention Through Environmental Design*.
11. The application material has demonstrated that the proposed development can be connected to all essential services and infrastructure.
12. Conditions have been applied to this Development Permit for the development to be landscaped in accordance with the approved landscape plans prepared by *LandPlan Landscape Architecture*.
13. Conditions have been applied to this Development Permit to ensure the development provides sufficient parking, in accordance with the requirements of the Parking and Access Code.

RISK MANAGEMENT

Council Finance and the Local Economy

The development is to occur on privately owned land and all costs are the responsibility of the Developer.

Community and Cultural Heritage

The CairnsPlan 2016 Planning Scheme sets out framework to ensure appropriate development occurs. The framework is reflected within the Strategic Framework, Overlay, Local Plan, Zone, Land Use, and Development Codes of which this development application has been assessed against.

As outlined above, the land is included within the Local Place of Significance Overlay Code, where the land comprises four (4) structures that hold local significance. The proposal incudes the complete removal of one (1) of these structures and the part removal of three (3) structures, with their facades to be retained, protected, enhanced, and adaptively reused as part of the future redevelopment of the land. The proposed tower development frames these heritage values in an endeavour to maintain and continue the historical significance of the site/s.

Natural Environment

The CairnsPlan 2016 Planning Scheme sets out framework to ensure appropriate development occurs. The framework is reflected within the Strategic Framework, Overlay, Local Plan, Zone, Land Use, and Development Codes of which this development application has been assessed against.

ATTACHMENTS

1. APPROVED PLAN(S) & DOCUMENT(S) – MATERIAL CHANGE OF USE
2. APPROVED PLAN(S) & DOCUMENT(S) – BUILDING WORKS
3. NOTICE OF INTENTION TO COMMENCE USE
4. REFERRAL AGENCY RESPONSE
5. INFRASTRUCTURE CHARGES CALCULATIONS
6. THIRD PARTY ADVICE AGENCY RESPONSE

Claire Simmons
Executive Manager Development & Planning

Ed Johnson
Director Planning, Growth & Sustainability

ATTACHMENT 1: APPROVED PLAN(S) & DOCUMENT(S) – MATERIAL CHANGE OF USE

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

DEVELOPMENT APPLICATION
COVER SHEET

PROJECT NO.	POST001
DRAWING NO.	0.1
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

TRANSMITTAL

SUBSET	DRG No.	DRAWING NAME	REV ID	CHANGE ID'S	ISSUE DATE	STATUS
1 SITE						
	1.01	SITE CONTEXT	00		20/11/2023	DA
	1.02	SITE PLAN EXISTING	00		20/11/2023	DA
2 PLANS						
	2.01	LEVEL 00	00		20/11/2023	DA
	2.02	LEVEL 01 (CARING POST)	00		20/11/2023	DA
	2.03	LEVEL 02 (CARPARK 1)	00		20/11/2023	DA
	2.04	LEVEL 03 (CARPARK 2)	00		20/11/2023	DA
	2.05	LEVEL 04 (CARPARK 3)	00		20/11/2023	DA
	2.06	LEVEL 05 (POOL TERRACE)	00		20/11/2023	DA
	2.07	LEVEL 06	00		20/11/2023	DA
	2.08	LEVEL 07	00		20/11/2023	DA
	2.09	LEVEL 08	00		20/11/2023	DA
	2.10	LEVEL 09	00		20/11/2023	DA
	2.11	LEVEL 10	00		20/11/2023	DA
	2.12	LEVEL 11	00		20/11/2023	DA
	2.13	LEVEL 12	00		20/11/2023	DA
	2.14	ROOF LEVEL	00		20/11/2023	DA
3 ELEVATIONS						
	3.01	ELEVATION 1 - SOUTH WEST	00		20/11/2023	DA
	3.02	ELEVATION 2 - NORTH WEST	00		20/11/2023	DA
	3.03	ELEVATION 3 - NORTH EAST	00		20/11/2023	DA
	3.04	ELEVATION 4 - SOUTH EAST	00		20/11/2023	DA
4 SECTIONS						
	4.01	SECTION A	00		20/11/2023	DA
	4.02	SECTION B	00		20/11/2023	DA
	4.03	SECTION C	00		20/11/2023	DA
	4.04	SECTION D	00		20/11/2023	DA
5 APARTMENT PLANS						
	5.01	APARTMENT PLANS	00		20/11/2023	DA
6 AREA ANALYSIS						
	6.01	GROSS FLOOR AREA (GFA)	00		20/11/2023	DA
	6.02	SUMMARY	00		20/11/2023	DA
7 SHADOW DIAGRAMS						
	7.01	SHADOW DIAGRAMS - MARCH 2023 EQUINOX	00		20/11/2023	DA
	7.02	SHADOW DIAGRAMS - JUNE 2023 SOLSTICE	00		20/11/2023	DA
	7.03	SHADOW DIAGRAMS - SEPTEMBER 2023 EQUIN...	00		20/11/2023	DA
	7.04	SHADOW DIAGRAMS - DECEMBER 2023 (SOLST...	00		20/11/2023	DA
8 VISUALISATIONS						
	8.01	STREETSCAPE PERSPECTIVE - ABBOTT STREET	00		20/11/2023	DA
	8.02	TOWER PERSPECTIVE - ABBOTT STREET	00		20/11/2023	DA
	8.03	ESPLANDE PERSPECTIVE 1	00		20/11/2023	DA
	8.04	ESPLANDE PERSPECTIVE 2	00		20/11/2023	DA
DA02 DEVELOPMENT APPLICATION						
	0.1	COVER SHEET	00		20/11/2023	DA
	0.2	CONTENTS	00		20/11/2023	DA

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

DEVELOPMENT APPLICATION
CONTENTS

PROJECT NO.	POST001
DRAWING NO.	0.2
REVISION NO.	02
DATE	20/11/2023

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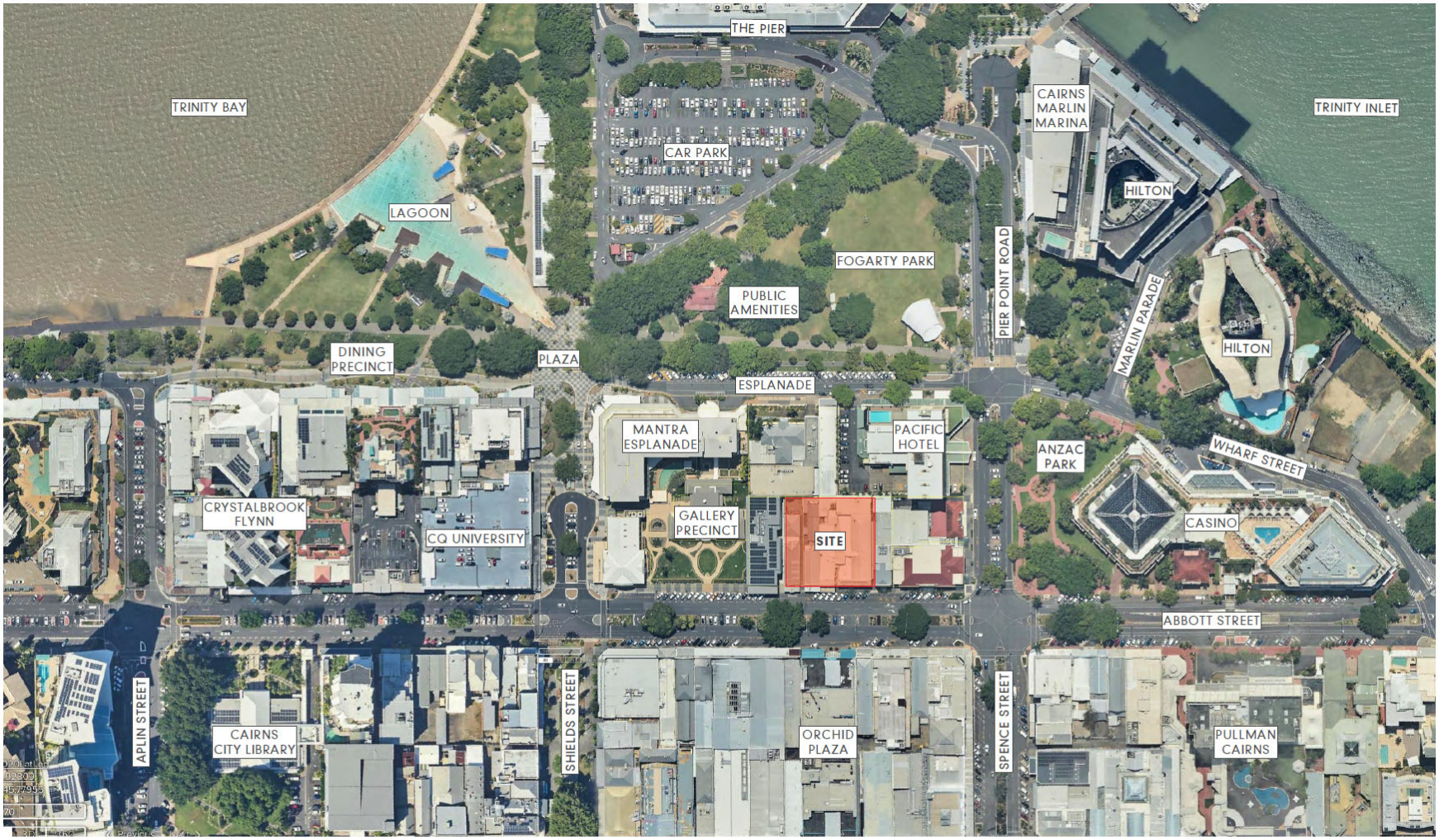


SITE CONTEXT
SCALE 1:1000

CAIRNS POST DEVELOPMENT

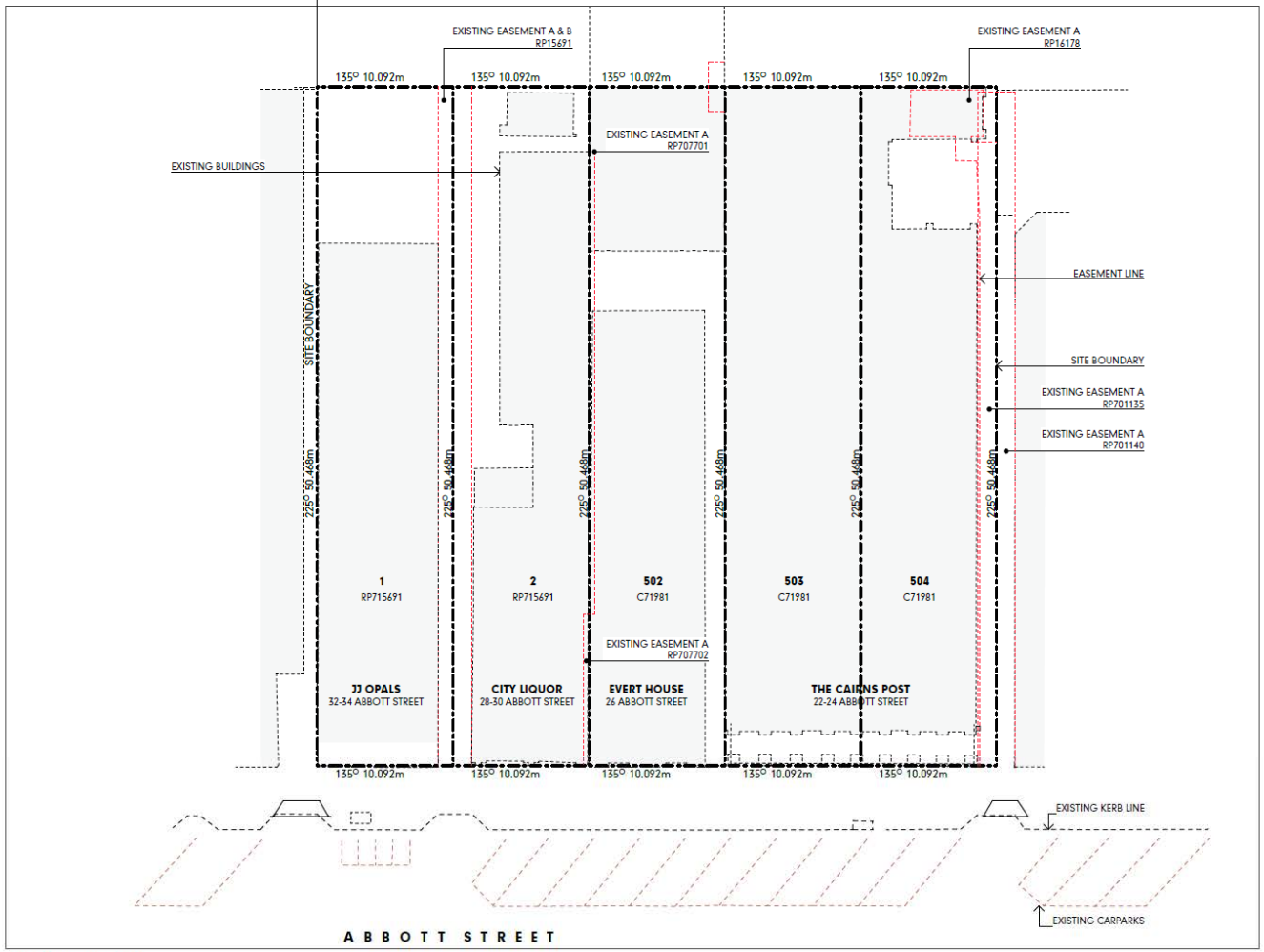
APARTMENT BUILDING
FOR : ASV

DA

SITE
SITE CONTEXT

PROJECT NO.	POST001
DRAWING NO.	1.01
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



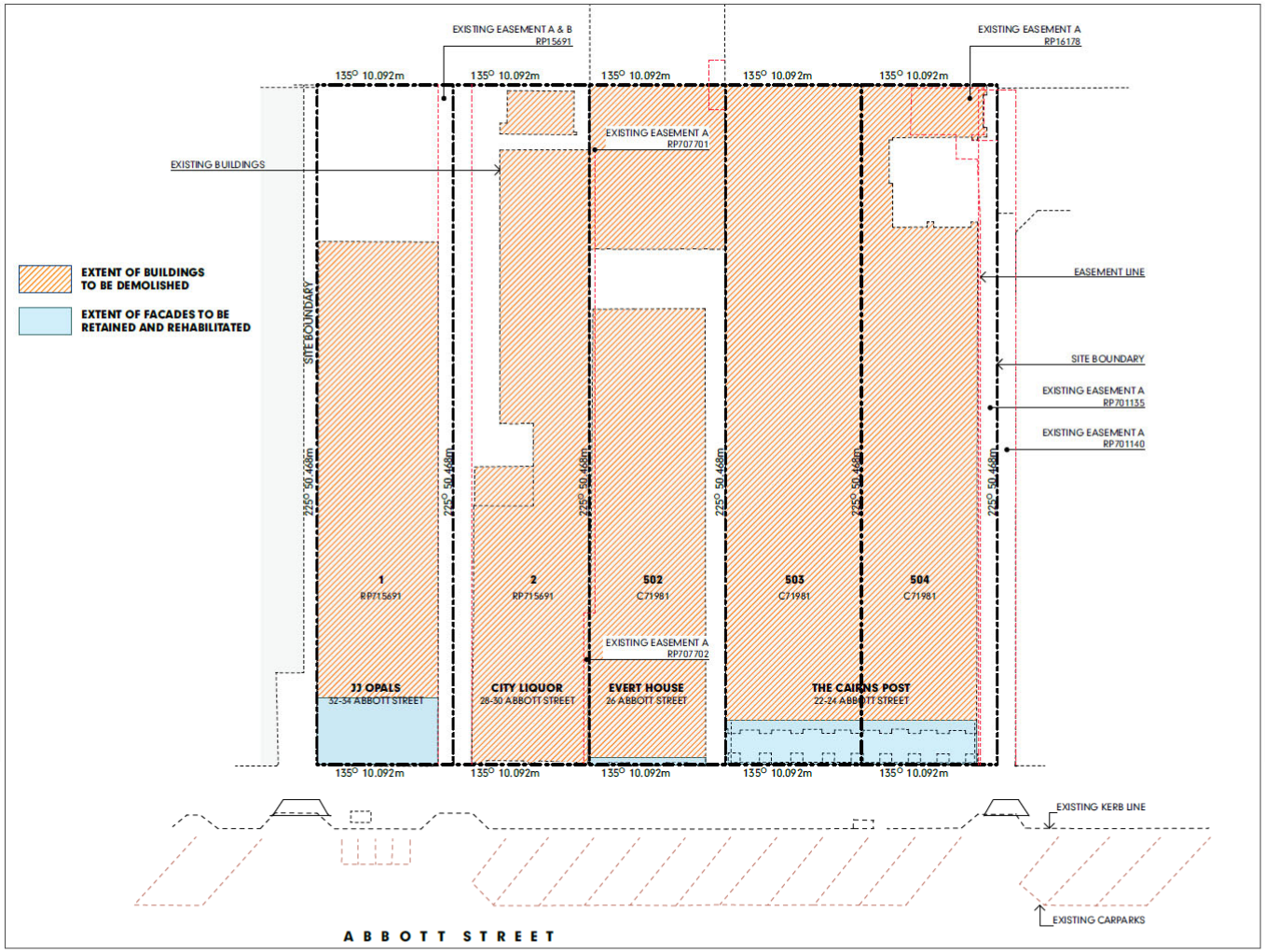
EXISTING SITE PLAN
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
SITE
SITE PLAN EXISTING

PROJECT NO.	POST001
DRAWING NO.	1.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



SITE PLAN - DEMOLITION
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DEVELOPMENT APPLICATION
SITE
SITE PLAN DEMOLITION

PROJECT NO.	POST001
DRAWING NO.	1.03
REVISION NO.	01
DATE	13/9/2023

HUNT DESIGN

LEVEL 00 (Q100+300)
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 00

ZONE CATEGORY	ZONE NAME	AREA	QTY
ADMIN+OFFICE			
	MANAGERS OFFICE	14	1
AMENITIES			
	AMENITIES	90	6
ELECTRICAL PLANT			
	CHAMBER SUBSTATION	52	1
FIRE STAIRS			
	FCC	16	1
	FIRE STAIR	6	1
	FIRE STAIR 1	10	1
	FIRE STAIRS	27	1
FOOD + BEVERAGES (F+B)			
	F&B	319	1
	RESIDENTIAL LOBBY	148	1
HYDRAULIC PLANT			
	HYDRANT	3	1
	WATER METER	3	1
LIFTS			
	LIFT	12	4
	LIFTS	17	1
PATHS			
	LANEWAY	195	1
RETAIL			
	RETAIL 1A	107	1
	RETAIL 1B	131	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	BACK OF HOUSE	67	1
	BIN WASH	9	1
	LOADING	15	1
	REFUSE	49	1
	SERVICE	14	1
	STORES	40	1
VEHICLE CIRCULATION			
	TRUCK TURN TABLE	95	1
	VEHICLE CIRCULATION	458	1

CAIRNS POST DEVELOPMENT

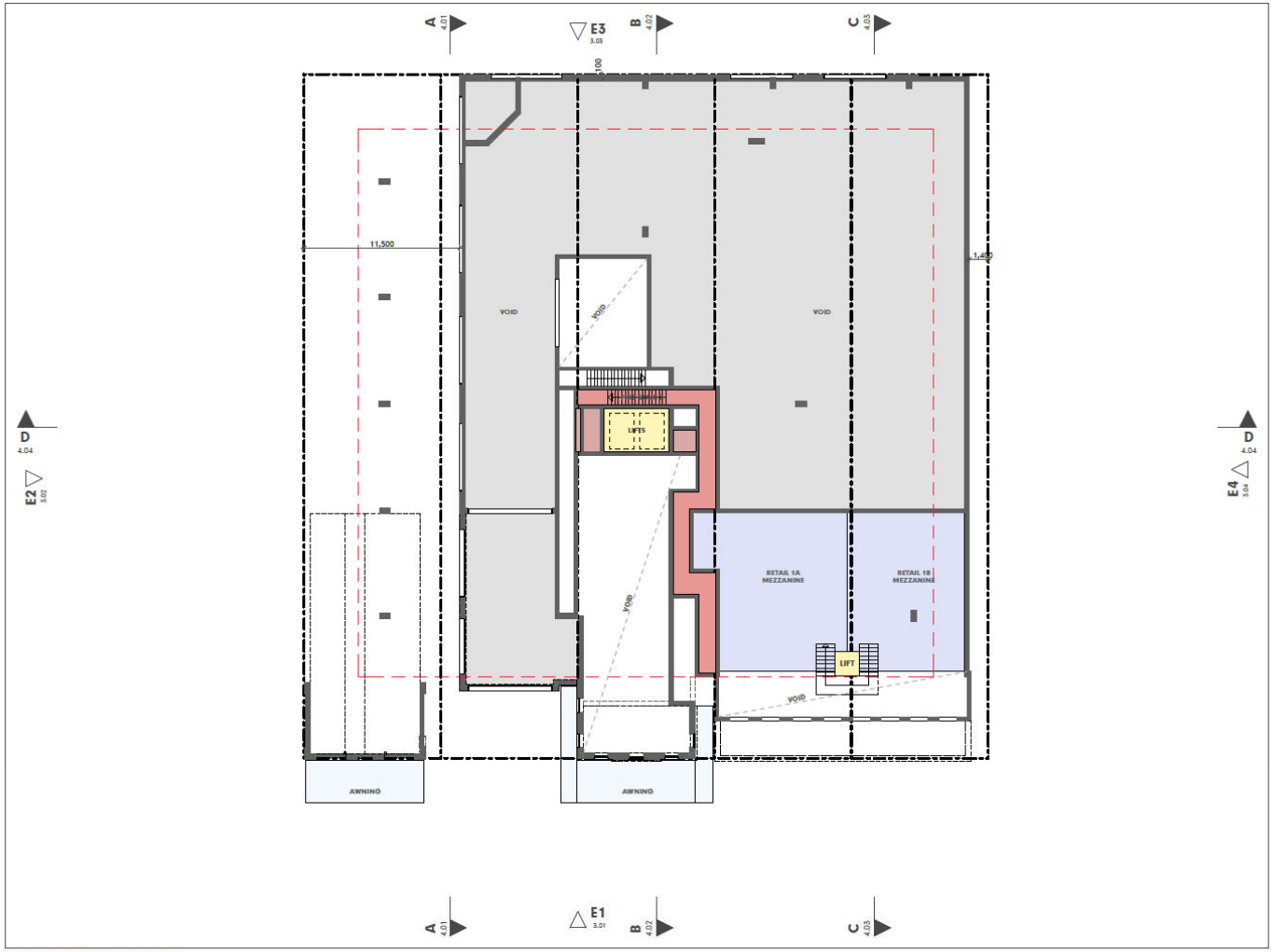
APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 00

PROJECT NO. POST001
DRAWING NO. 2.01
REVISION NO. 02
DATE 20/11/2023

HUNT DESIGN



LEVEL 01 (CAIRNS POST)
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 01

ZONE CATEGORY	ZONE NAME	AREA	QTY
FIRE STAIRS			
	FIRE STAIR 2	41	1
LIFTS			
	LIFT	3	1
	LIFTS	15	1
RETAIL			
	RETAIL 1A MEZZANINE	118	1
	RETAIL 1B MEZZANINE	101	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	3	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
PLANS
LEVEL 01 (CARINS POST)

PROJECT NO.	POST001
DRAWING NO.	2.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

LEVEL 02 (CARPARK 1)
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 01			
ZONE CATEGORY	ZONE NAME	AREA	QTY
FIRE STAIRS			
	FIRE STAIR 2	41	1
LIFTS			
	LIFT	3	1
	LIFTS	15	1
RETAIL			
	RETAIL 1A MEZZANINE	118	1
	RETAIL 1B MEZZANINE	101	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	3	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 02 (CARPARK 1)

PROJECT NO.	POST001
DRAWING NO.	2.03
REVISION NO.	02
DATE	20/11/2023

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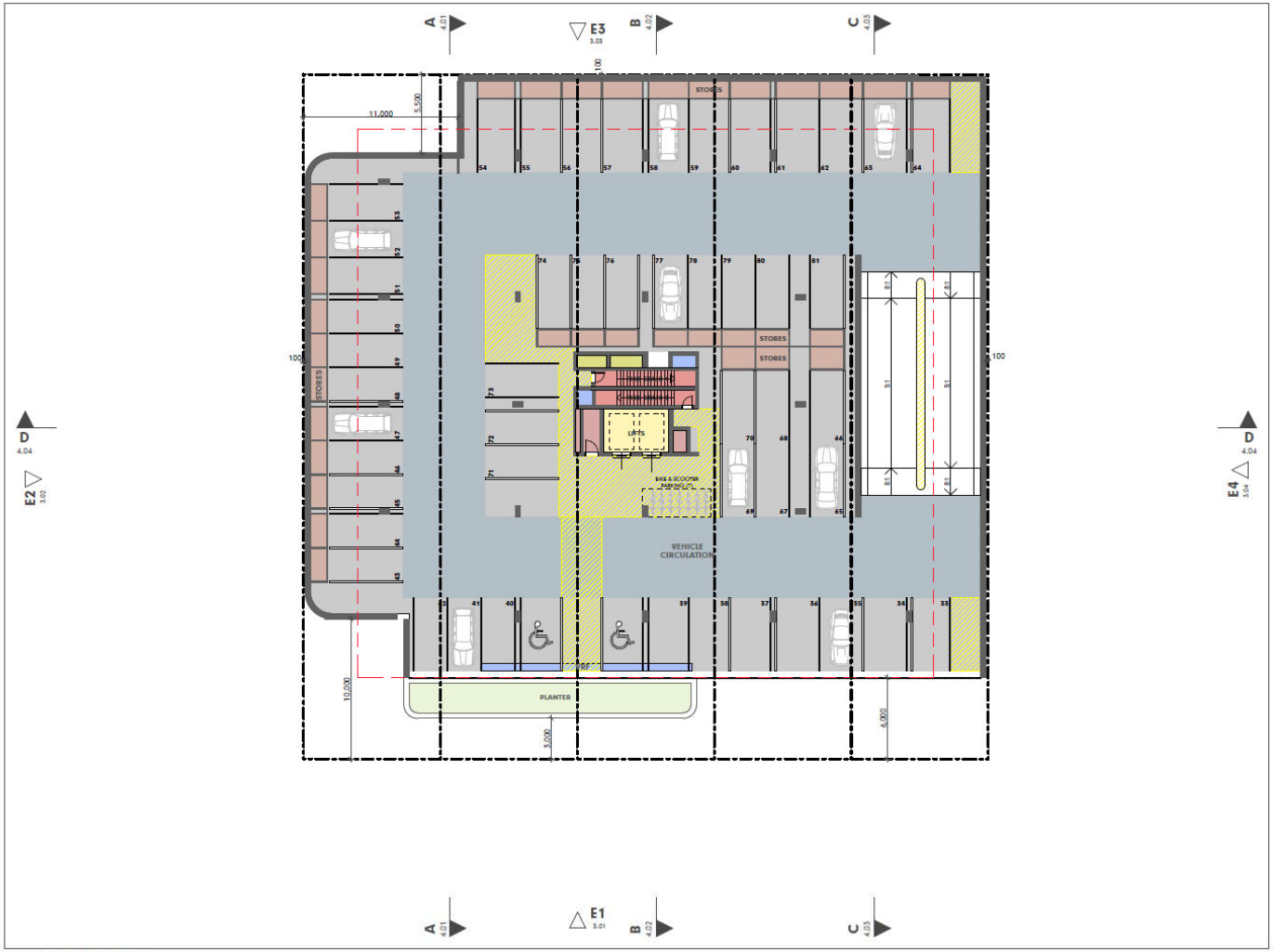


INTERNAL AREA CALCULATIONS - LEVEL 03			
ZONE CATEGORY	ZONE NAME	AREA	QTY
CAR PARKING SPACES			
	CAR PARKING	1,854	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	STAIR PRESSURISATION	3	2
	VRF	9	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	STORES	108	14
VEHICLE CIRCULATION			
	VEHICLE CIRCULATION	657	1

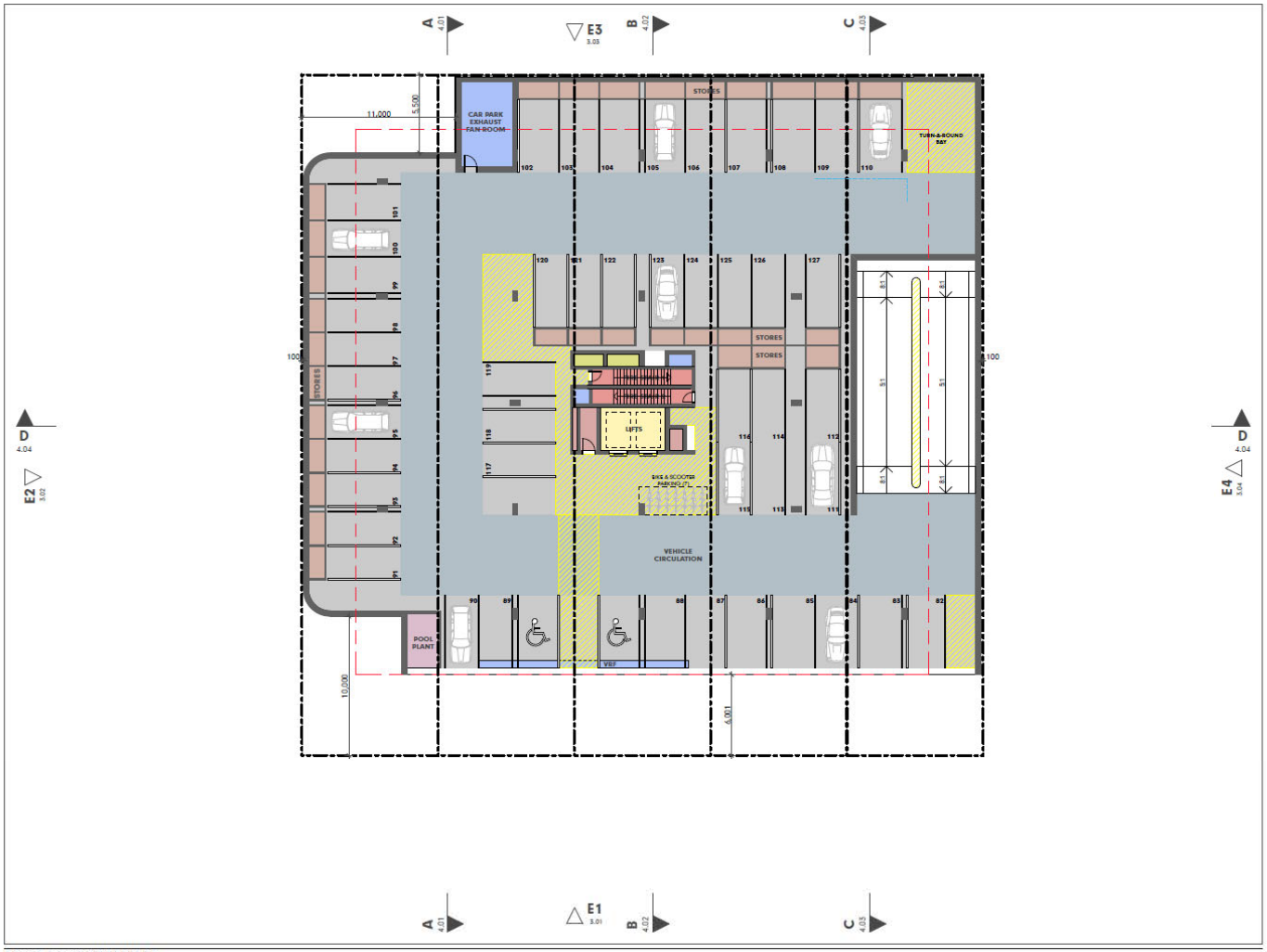
LEVEL 03 (CARPARK 2)
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
PLANS
LEVEL 03 (CARPARK 2)

PROJECT NO. POST001
DRAWING NO. 2.04
REVISION NO. 02
DATE 20/11/2023

HUNT DESIGN



LEVEL 04 (CARPARK 3)
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 04

ZONE CATEGORY	ZONE NAME	AREA	QTY
CAR PARKING SPACES			
	CAR PARKING	1,799	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
HYDRAULIC PLANT			
	POOL PLANT	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	CAR PARK EXHAUST FAN ROOM	25	1
	STAIR PRESSURISATION	3	2
	VRF	9	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	STORES	101	12
VEHICLE CIRCULATION			
	VEHICLE CIRCULATION	647	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 04 (CARPARK 3)

PROJECT NO.	POST001
DRAWING NO.	2.05
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

LEVEL 05 (POOL TERRACE)
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 05

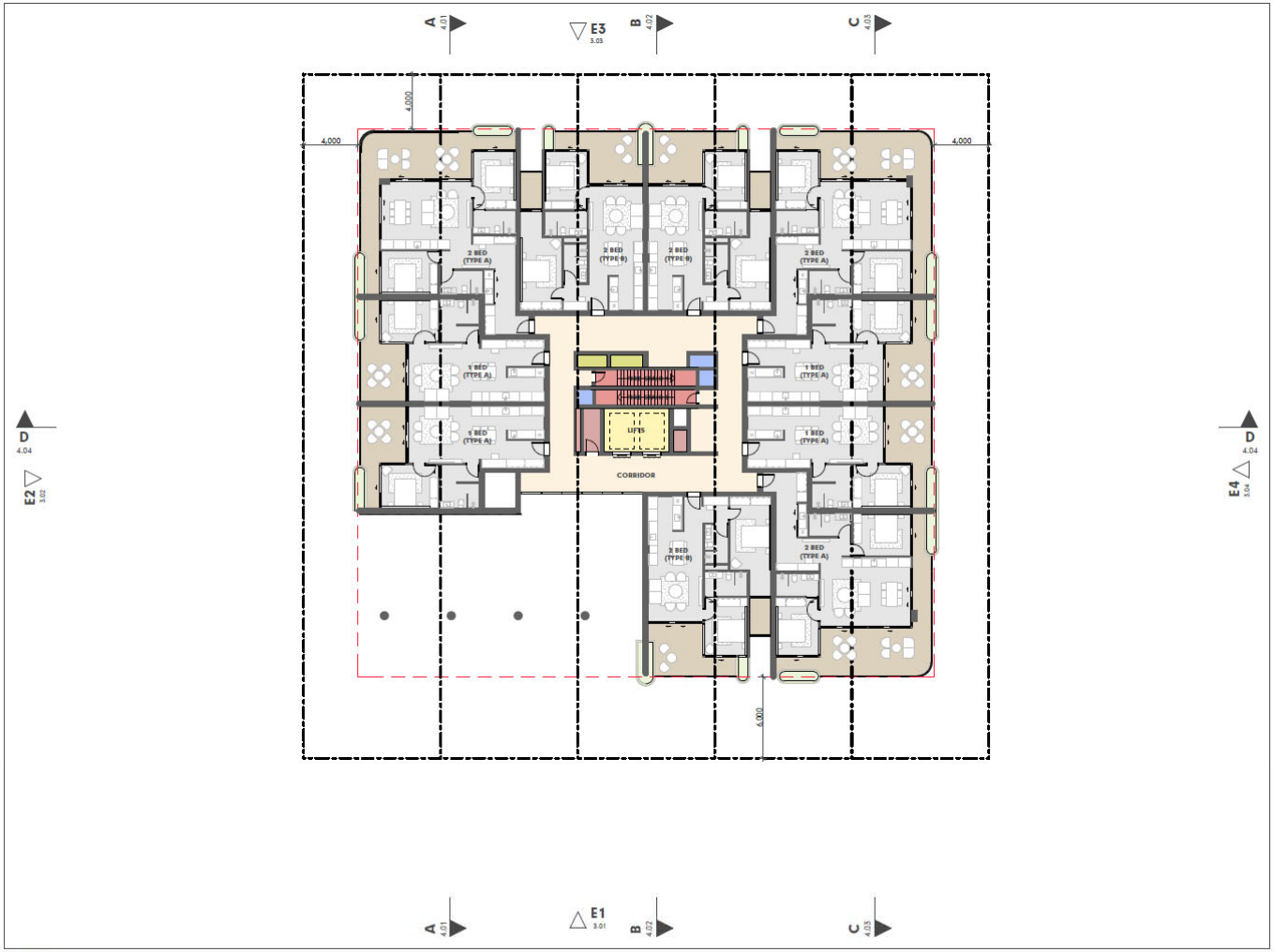
ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	201	3
	2 BED (TYPE A)	292	3
	2 BED (TYPE B)	261	3
AMENITIES			
	AMENITIES	27	1
CIRCULATION			
	LOBBY	123	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFESTYLE			
	GYM	55	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURIGATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
PLANS
LEVEL 05 (POOL TERRACE)

PROJECT NO.	POST001
DRAWING NO.	2.06
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



LEVEL 06
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 06			
ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	268	4
	2 BED (TYPE A)	292	3
	2 BED (TYPE B)	261	3
CIRCULATION			
	CORRIDOR	123	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 06

PROJECT NO.	POST001
DRAWING NO.	2.07
REVISION NO.	02
DATE	20/11/2023

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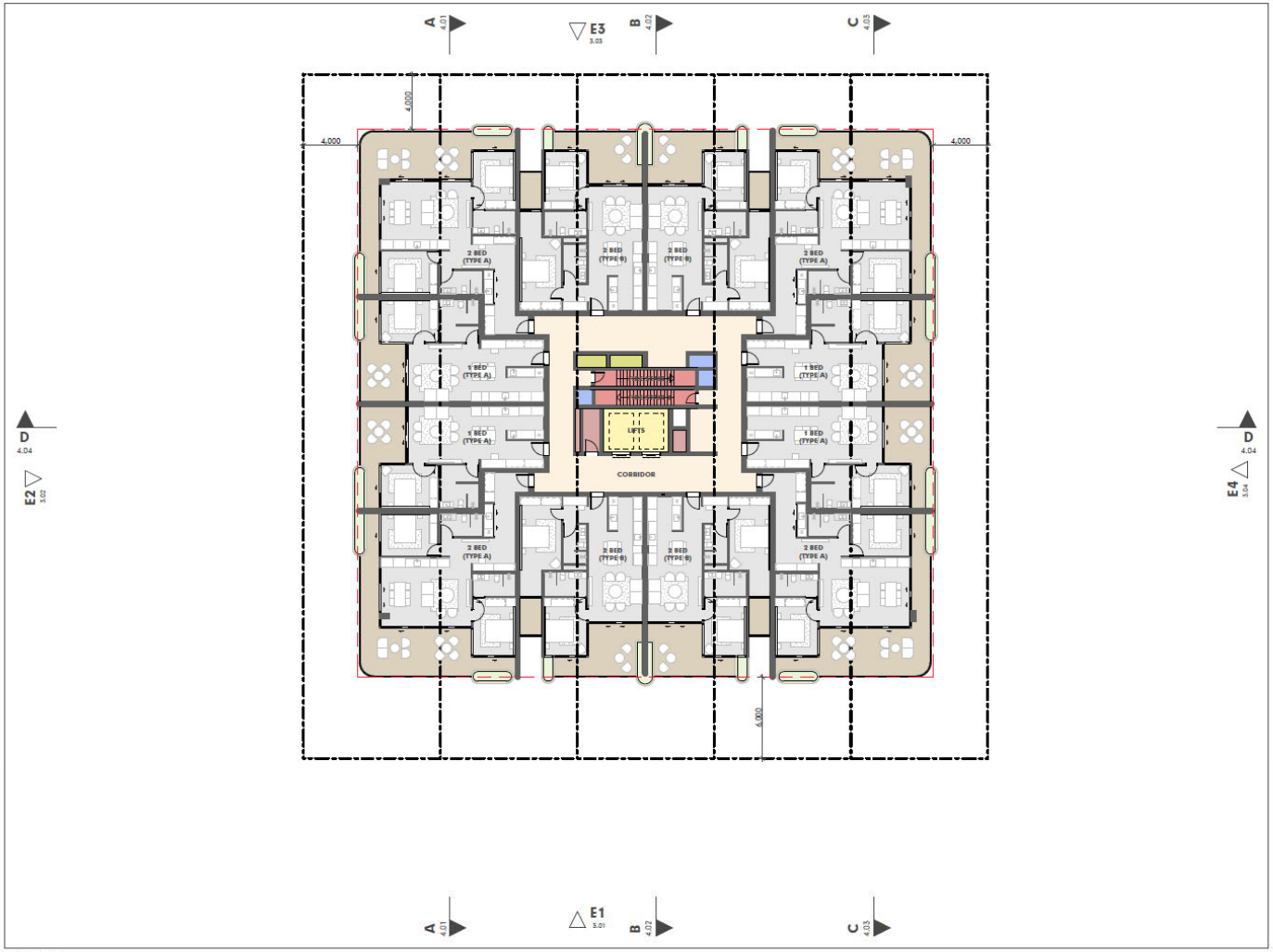


LEVEL 07
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 07			
ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	268	4
	2 BED (TYPE A)	389	4
	2 BED (TYPE B)	348	4
CIRCULATION			
	CORRIDOR	122	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
	WIP ECP	0	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

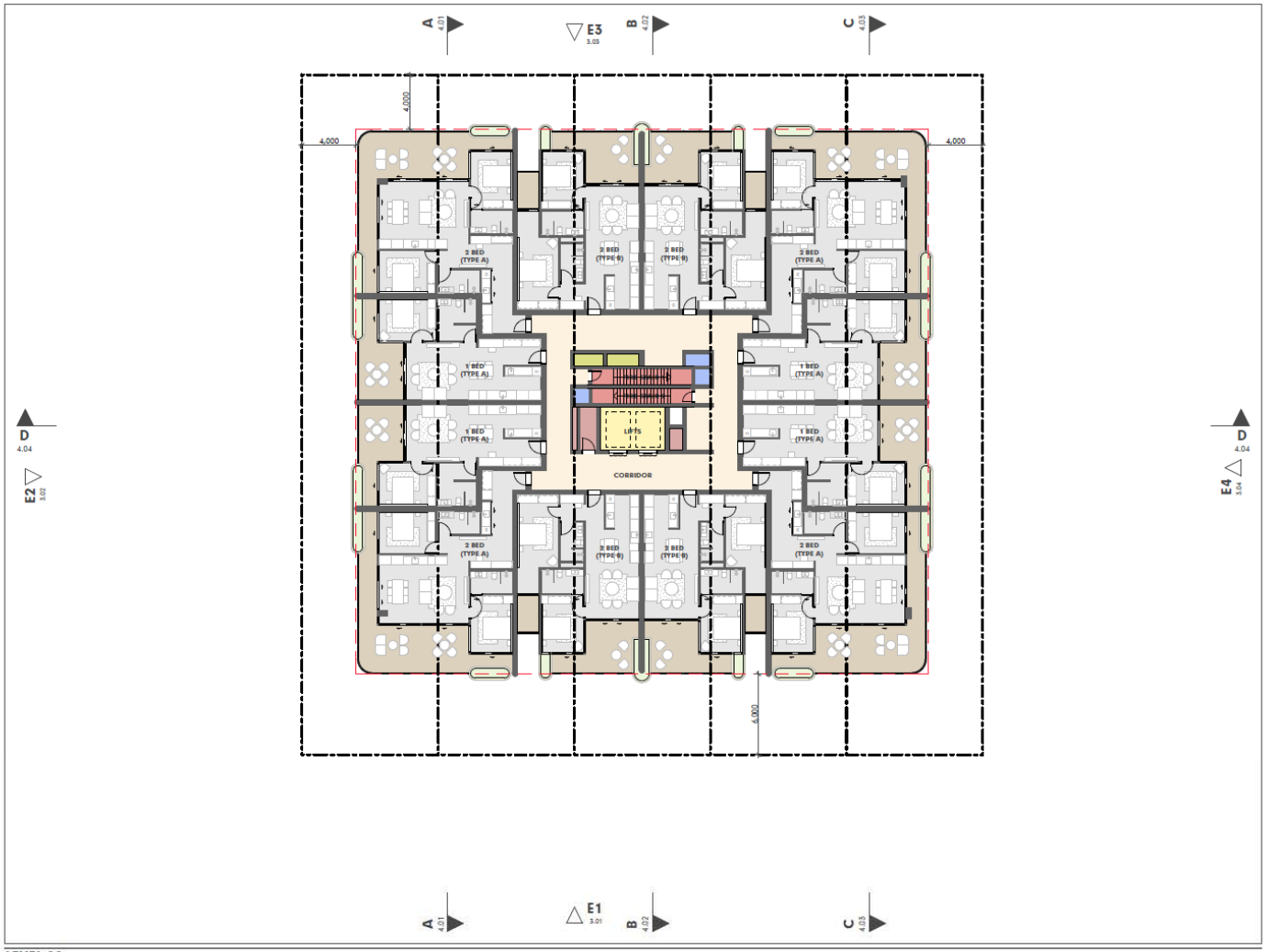
APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 07

PROJECT NO.	POST001
DRAWING NO.	2.08
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



LEVEL 08
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 08

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	268	4
	2 BED (TYPE A)	389	4
	2 BED (TYPE B)	348	4
CIRCULATION			
	CORRIDOR	122	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
PLANS
LEVEL 08

PROJECT NO. POST001
DRAWING NO. 2.09
REVISION NO. 02
DATE 20/11/2023

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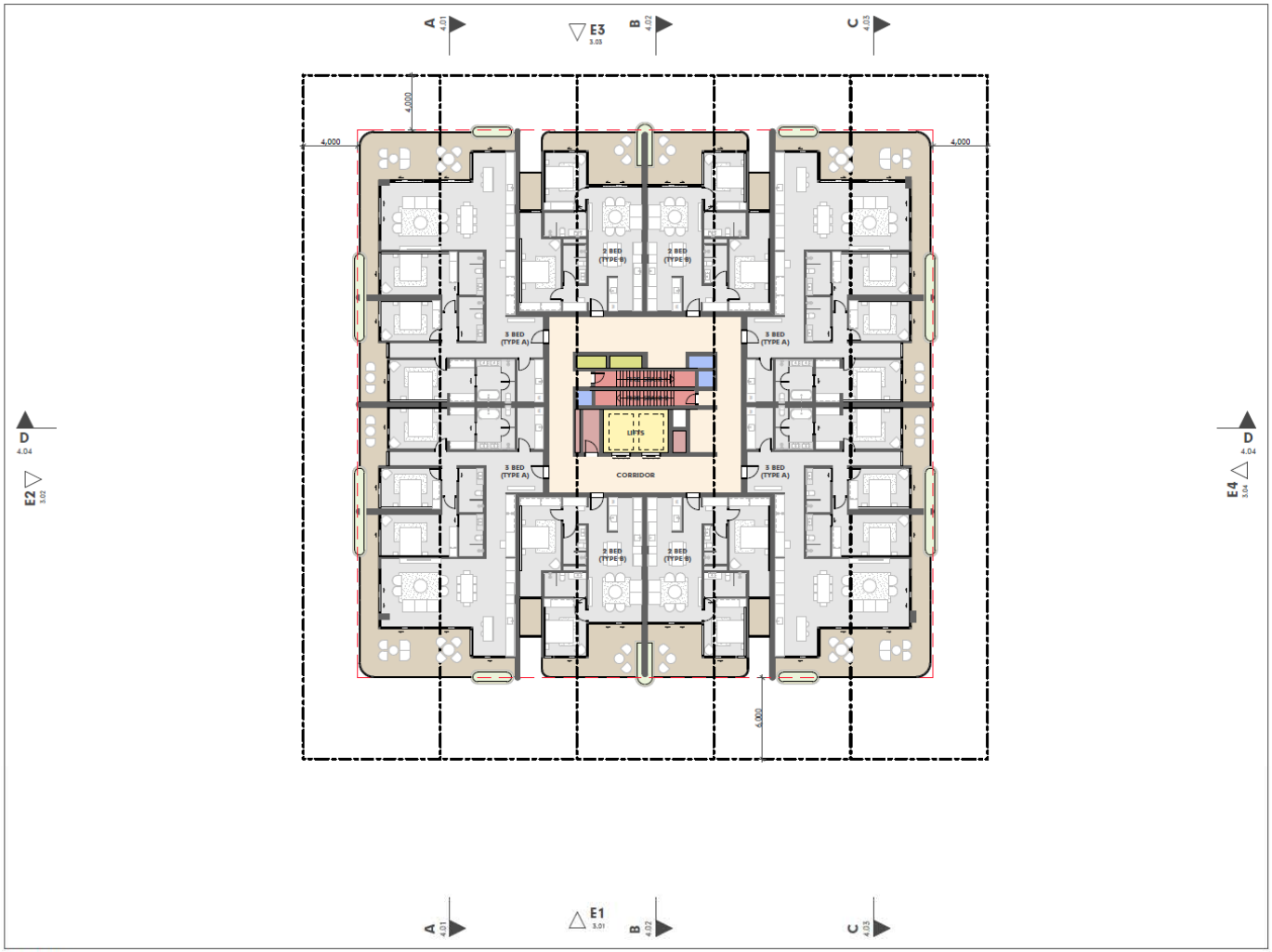


LEVEL 09
SCALE1:150

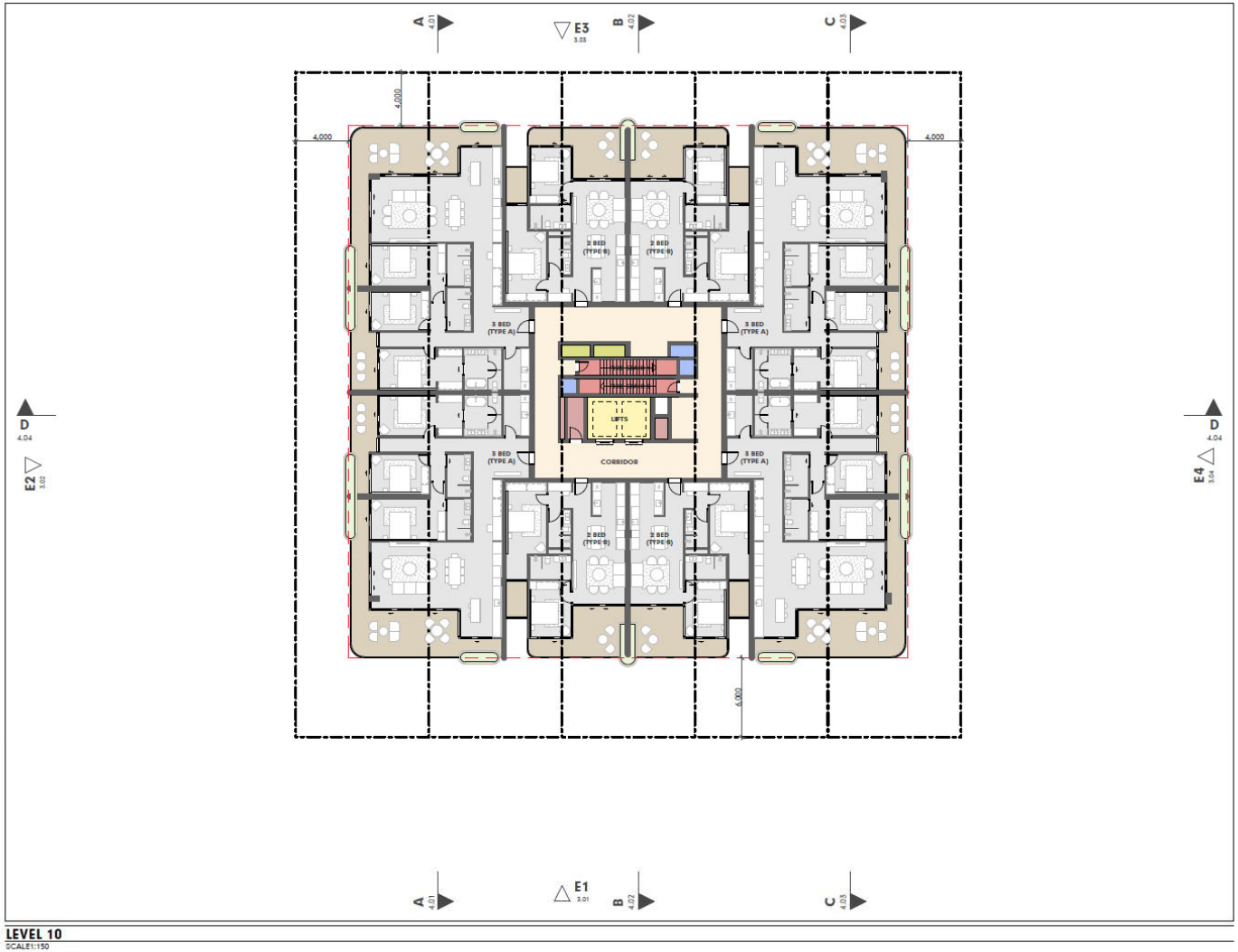
INTERNAL AREA CALCULATIONS - LEVEL 09			
ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	116	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
PLANS
LEVEL 09

PROJECT NO.	POST001
DRAWING NO.	2.10
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



LEVEL 10
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 10

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	116	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURIGATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

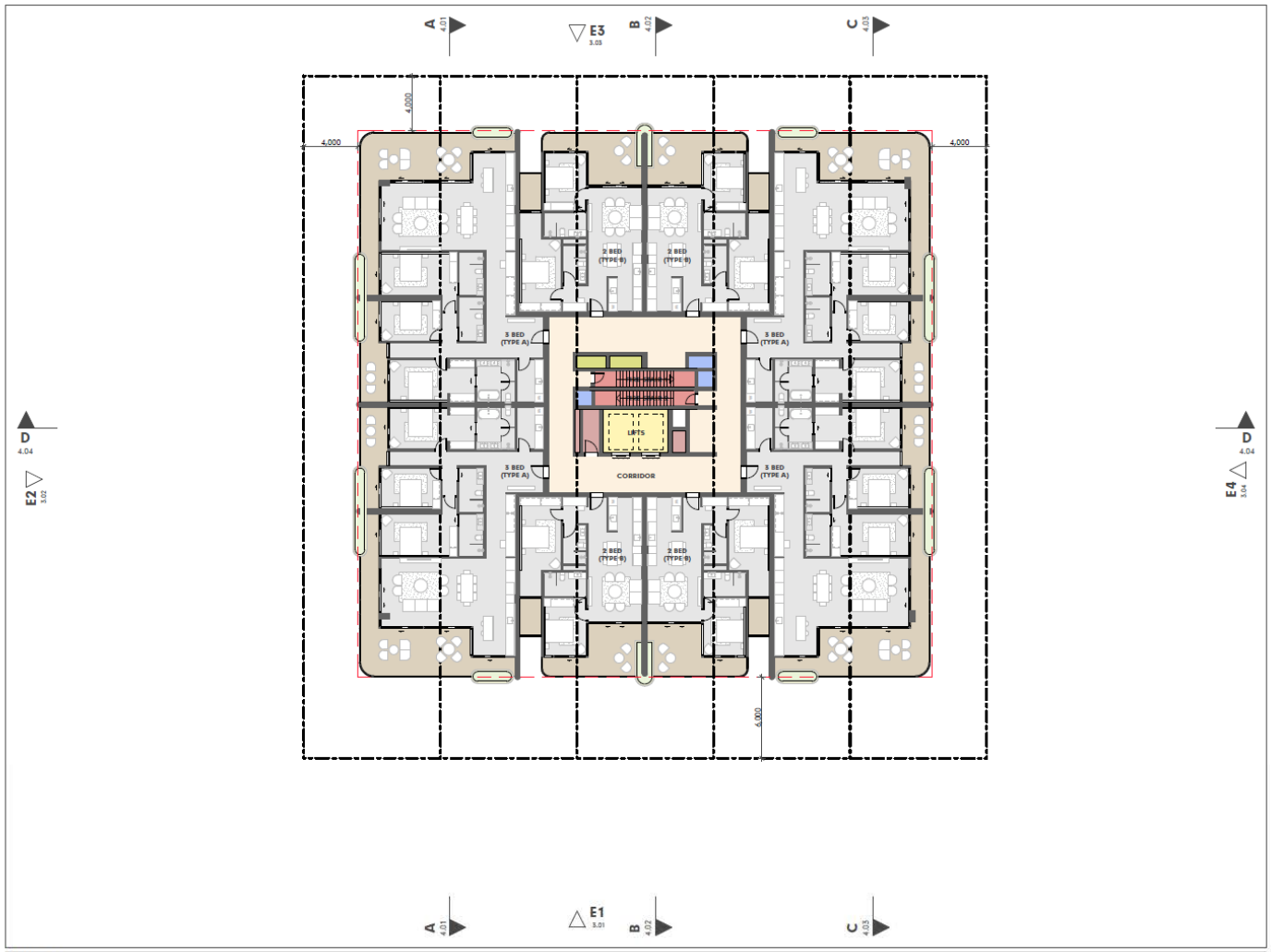
APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 10

PROJECT NO. POST001
DRAWING NO. 2.11
REVISION NO. 02
DATE 20/11/2023

HUNT DESIGN



LEVEL 11
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 11

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	116	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

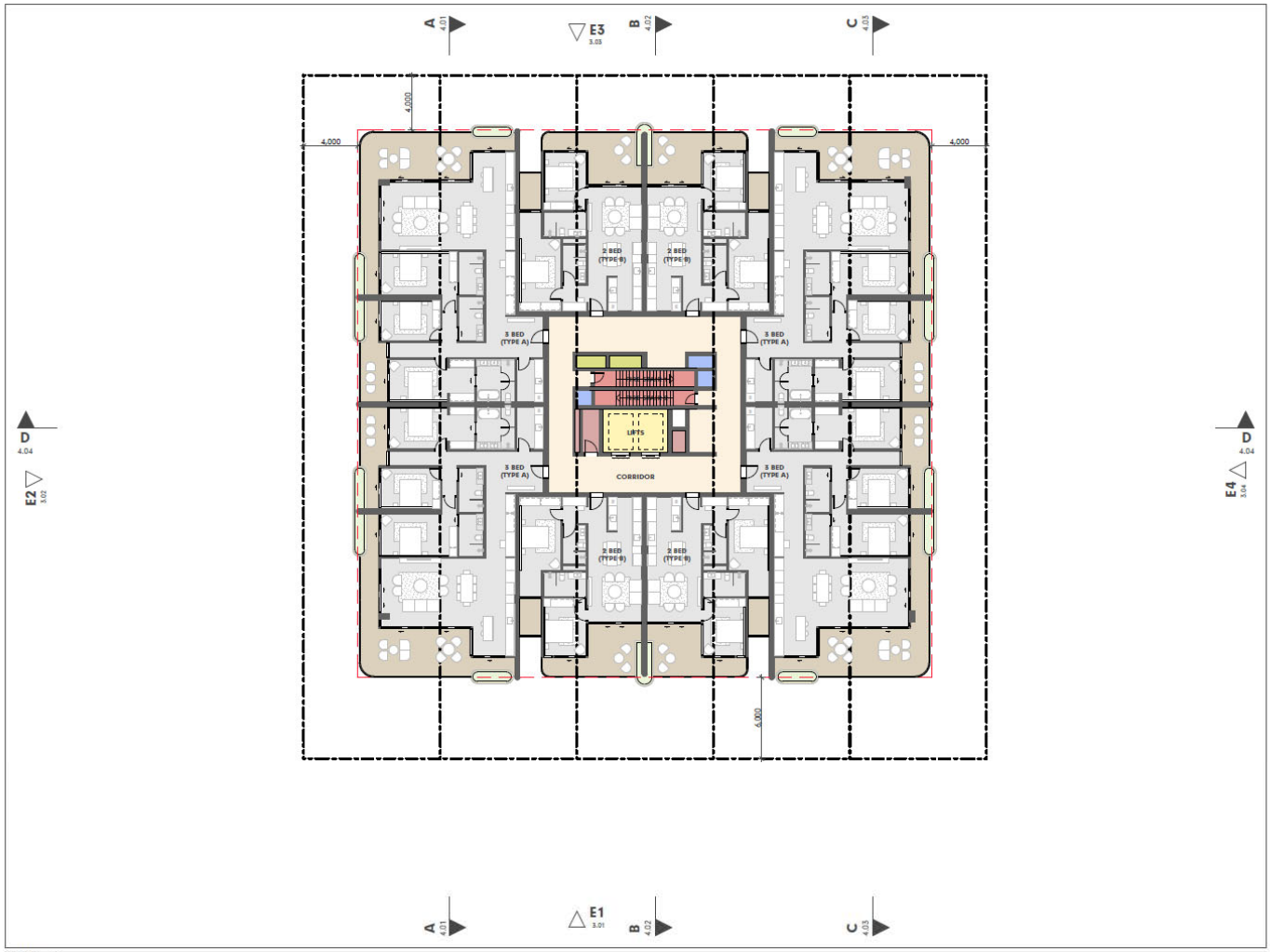
APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 11

PROJECT NO. POST001
DRAWING NO. 2.12
REVISION NO. 02
DATE 20/11/2023

HUNT DESIGN



LEVEL 12
SCALE1:150

INTERNAL AREA CALCULATIONS - LEVEL 12

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	116	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

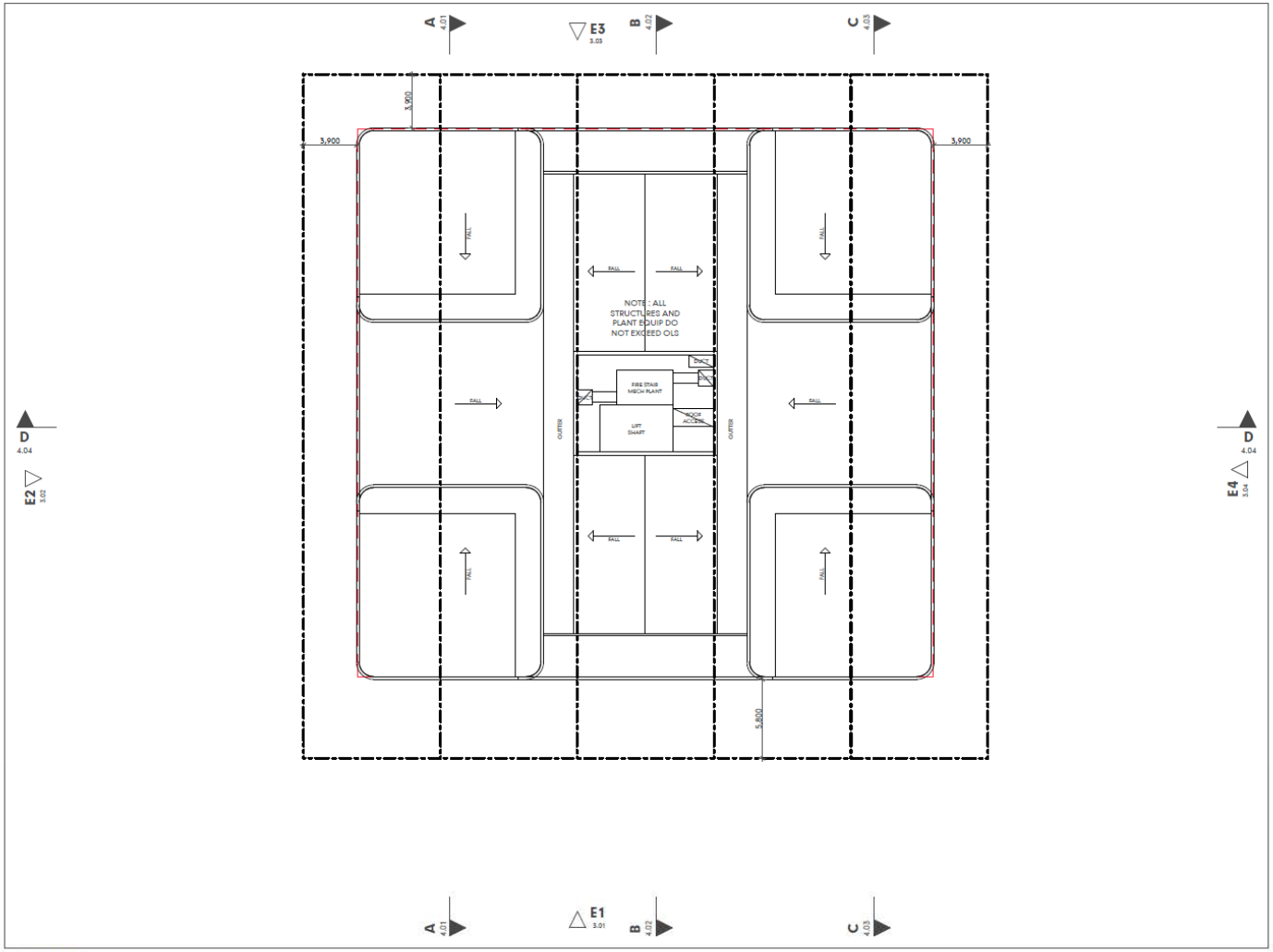
APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 12

PROJECT NO. POST001
DRAWING NO. 2.13
REVISION NO. 02
DATE 20/11/2023

HUNT DESIGN



ROOF LEVEL
SCALE1:150

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

PLANS
ROOF LEVEL

PROJECT NO.	POST001
DRAWING NO.	2.14
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

SOUTH WEST ELEVATION E1
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
ELEVATIONS
ELEVATION 1 - SOUTH WEST

PROJECT NO.	POST001
DRAWING NO.	3.01
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

NORTH WEST ELEVATION E2
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
ELEVATIONS
ELEVATION 2 - NORTH WEST

PROJECT NO.	POST001
DRAWING NO.	3.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

NORTH EAST ELEVATION E3
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
ELEVATIONS
ELEVATION 3 - NORTH EAST

PROJECT NO.	POST001
DRAWING NO.	3.03
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

SOUTH EAST ELEVATION **E4**
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
ELEVATIONS
ELEVATION 4 - SOUTH EAST

PROJECT NO.	POST001
DRAWING NO.	3.04
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

SECTION A
SCALE1:150

A

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
SECTIONS
SECTION A

PROJECT NO.	POST001
DRAWING NO.	4.01
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

SECTION B
SCALE1:150

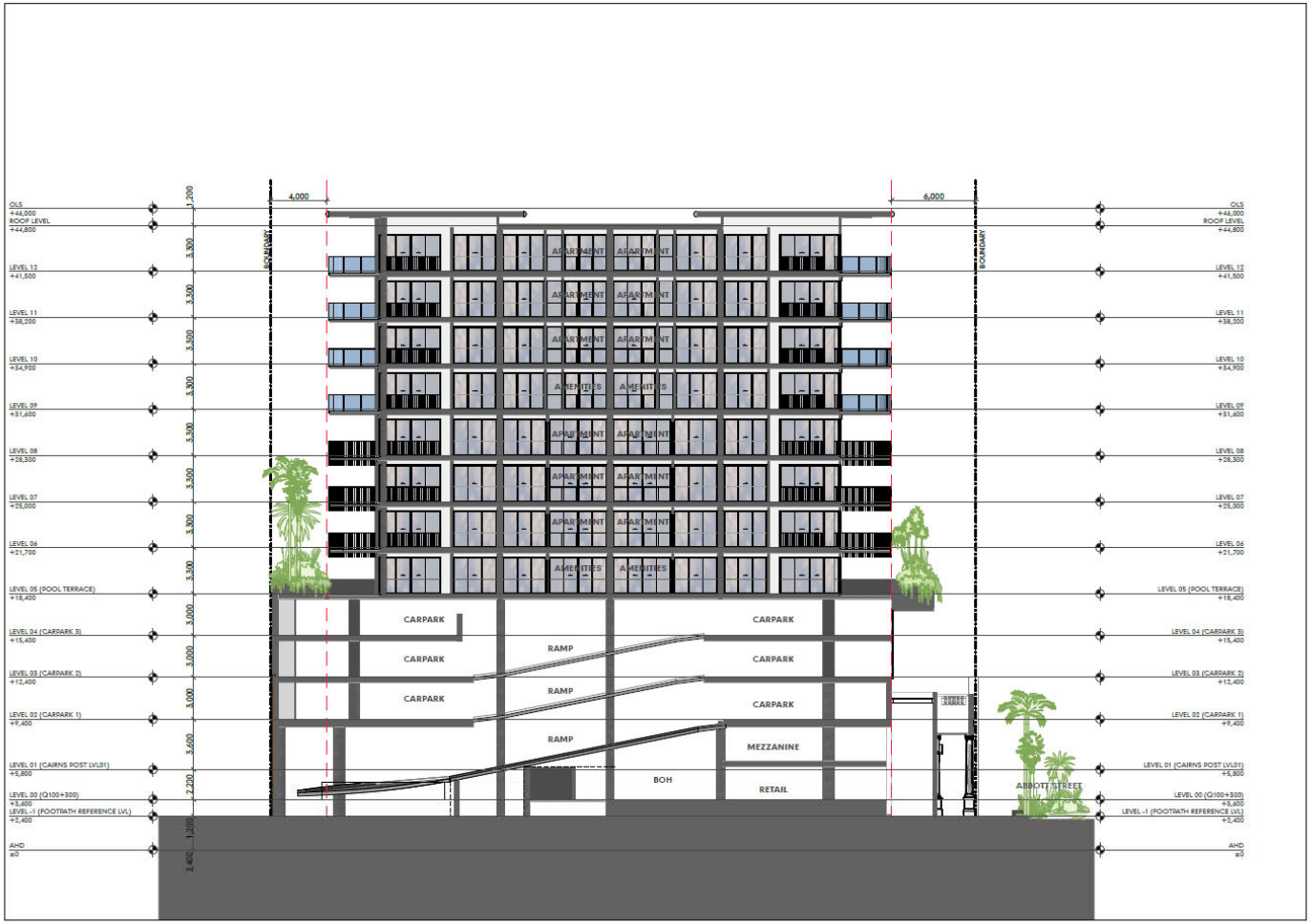
B

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
SECTIONS
SECTION B

PROJECT NO.	POST001
DRAWING NO.	4.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



SECTION C
SCALE1:150

C

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
SECTIONS
SECTION C

PROJECT NO.	POST001
DRAWING NO.	4.03
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

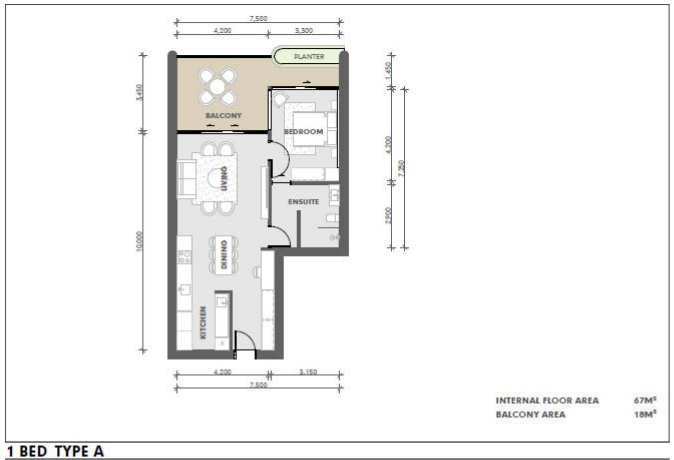
SECTION D D
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

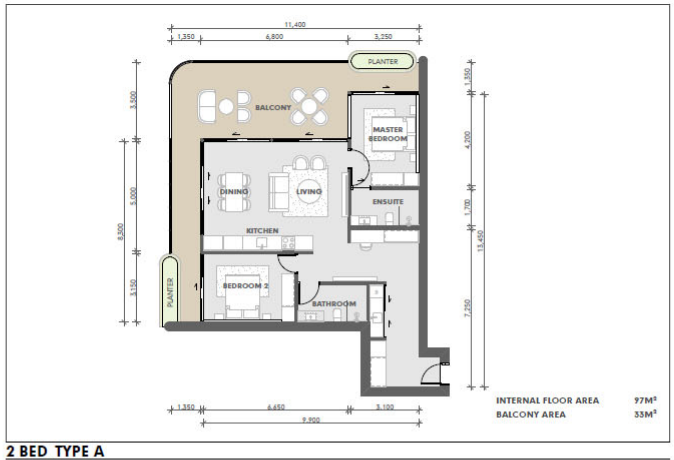
DA
SECTIONS
SECTION D

PROJECT NO.	POST001
DRAWING NO.	4.04
REVISION NO.	02
DATE	20/11/2023

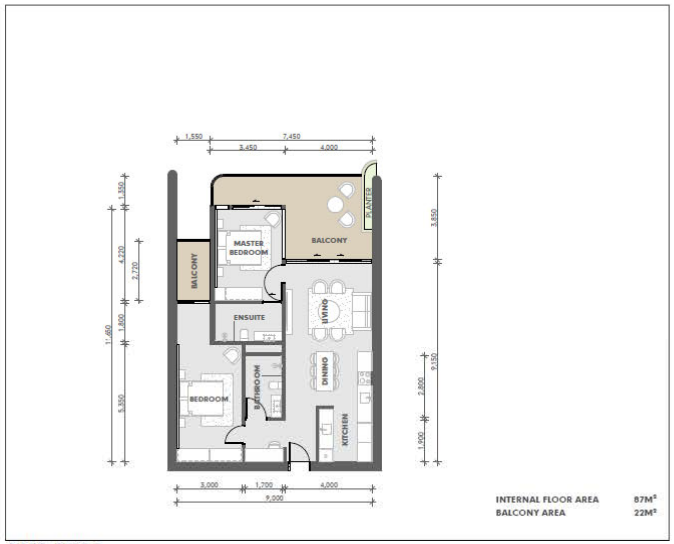
HUNT DESIGN



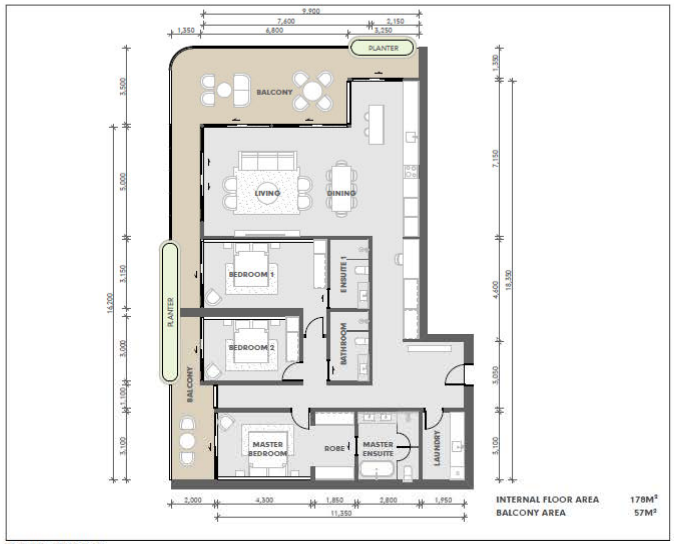
1 BED TYPE A
SCALE1:100



2 BED TYPE A
SCALE1:100



2 BED TYPE B
SCALE1:100



3 BED TYPE A
SCALE1:100

CAIRNS POST DEVELOPMENT

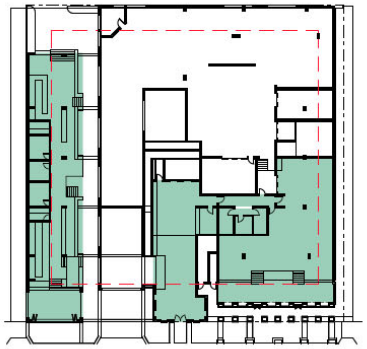
APARTMENT BUILDING
FOR : ASV

DA

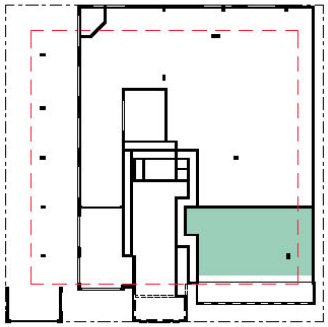
APARTMENT PLANS
APARTMENT PLANS

PROJECT NO.	POST001
DRAWING NO.	5.01
REVISION NO.	02
DATE	20/11/2023

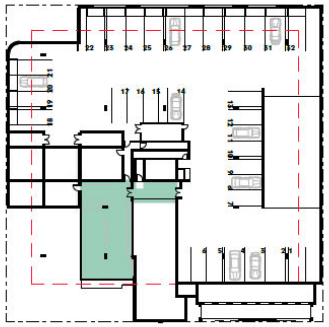
HUNT DESIGN



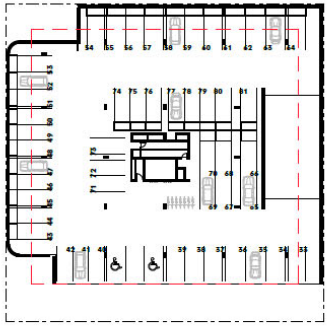
LEVEL 00 (Q100+300)



LEVEL 01 (CAIRNS POST LVL01)

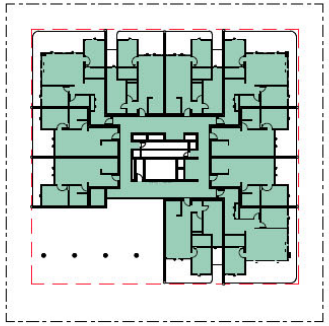


LEVEL 02 (CARPARK 1)

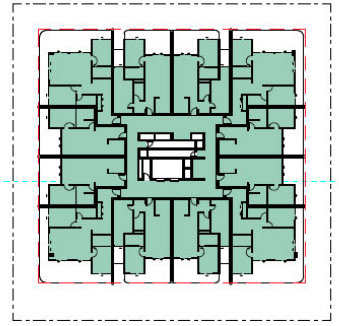


LEVELS 03 & 04 (CARPARK 2 & 3)

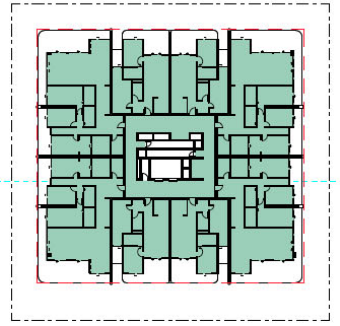
LEVEL 05 (POOL TERRACE)



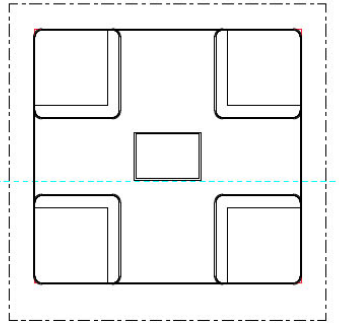
LEVEL 06



LEVELS 07 & 08



LEVELS 09, 10, 11 & 12



ROOF LEVEL

GROSS FLOOR AREA (GFA)

STORY	ZONE NAME	AREA
LEVEL 00 (Q100+300)		
	GFA	955
LEVEL 01 (CAIRNS POST LVL01)		
	GFA	216
LEVEL 02 (CARPARK 1)		
	GFA	158
LEVEL 05 (POOL TERRACE)		
	GFA	1,073
LEVEL 06		
	GFA	1,053
LEVEL 07		
	GFA	1,241
LEVEL 08		
	GFA	1,241
LEVEL 09		
	GFA	1,265
LEVEL 10		
	GFA	1,265
LEVEL 11		
	GFA	1,265
LEVEL 12		
	GFA	1,265
		10,996 m²

BALCONIES & TERRACES

STORY	ZONE NAME	AREA
LEVEL 05 (POOL TERRACE)		
	1 BED_TYPE A_BALCONY	56
	2 BED_TYPE A_BALCONY	133
	2 BED_TYPE B_BALCONY	87
	POOL TERRACE	186
LEVEL 06		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	132
	2 BED (TYPE B) BALCONY	69
LEVEL 07		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 08		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 09		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 10		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 11		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 12		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
		2,707 m²

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

AREA ANALYSIS
GROSS FLOOR AREA (GFA)

PROJECT NO. POST001
DRAWING NO. 6.01
REVISION NO. 01
DATE 20/11/2023

HUNT DESIGN

INTERNAL AREA ANALYSIS

ZONE	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	1,006	15
	2 BED (TYPE A)	1,361	14
	2 BED (TYPE B)	2,612	30
	3 BED (TYPE A)	2,842	16
ADMIN+OFFICE			
	MANAGERS OFFICE	14	1
AMENITIES			
	AMENITIES	137	8
CAR PARKING SPACES			
	CAR PARKING	4,899	3
CIRCULATION			
	CORRIDOR	830	7
	LOBBY	123	1
ELECTRICAL PLANT			
	CHAMBER SUBSTATION	52	1
	COMMS RISER	18	10
	ELEC METERS	20	10
	MAIN COMMS ROOM	14	1
	MAIN SWITCH ROOM	17	1
FIRE STAIRS			
	FCC	16	1
	FIRE STAIR	6	1
	FIRE STAIR 1	113	13
	FIRE STAIR 2	144	13
	FIRE STAIRS	27	1
	WIP ECP	0	1
FOOD + BEVERAGES (F+B)			
	F&B	319	1
	RESIDENTIAL LOBBY	148	1
HYDRAULIC PLANT			
	FIRE PUMP ROOM	33	1
	HYDRANT	3	1
	POOL PLANT	9	1
	WATER METER	3	1
	WATER PUMPS	12	1

INTERNAL AREA ANALYSIS

ZONE	ZONE NAME	AREA	QTY
	WATER TANK 1	27	1
	WATER TANK 2	26	1
LIFESTYLE			
	GYM	55	1
	RESIDENT FACILITIES	146	1
LIFTS			
	LIFT	15	5
	LIFTS	202	13
MECHANICAL PLANT			
	CAR PARK EXHAUST FAN ROOM	25	1
	LOBBY RELIEF SHAFT	12	8
	MECH PLANT	20	1
	STAIR PRESSURISATION	25	20
	VRF	19	2
PATHS			
	LANEWAY	195	1
RETAIL			
	RETAIL 1A	107	1
	RETAIL 1A MEZZANINE	118	1
	RETAIL 1B	131	1
	RETAIL 1B MEZZANINE	101	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	14	13
	WASTE CHUTE	22	13
	WATER METERS	54	14
STORES			
	BACK OF HOUSE	67	1
	BIN WASH	9	1
	LOADING	15	1
	REFUSE	49	1
	SERVICE	14	1
	STORES	301	34
VEHICLE CIRCULATION			
	TRUCK TURN TABLE	95	1
	VEHICLE CIRCULATION	2,356	5
		18,995 m²	

BALCONIES & TERRACES

STORY	ZONE NAME	AREA
LEVEL 05 (POOL TERRACE)		
	1 BED_TYPE A_BALCONY	56
	2 BED_TYPE A_BALCONY	133
	2 BED_TYPE B_BALCONY	87
	POOL TERRACE	186
LEVEL 06		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	132
	2 BED (TYPE B) BALCONY	69
LEVEL 07		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 08		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 09		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 10		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 11		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 12		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
		2,707 m²

TOWN PLANNING ANALYSIS

LOT NUMBER	ADDRESS	AREA
LOT 1 ON RP715691	(32-34 ABBOTT STREET)	509.4M²
LOT 2 ON RP715691	(28-30 ABBOTT STREET)	509.4M²
LOT 502 ON C1981	(26 ABBOTT STREET)	509.4M²
LOT 503 ON C1981	(22-24 ABBOTT STREET)	509.4M²
LOT 504 ON C1981	(22-24 ABBOTT STREET)	509.4M²

TOTAL SITE AREA - 2547M²

AUTHORITY: CAIRNS REGIONAL COUNCIL

ZONING: PRINCIPAL CENTRE ZONE

PROPOSAL: MIXED USE DEVELOPMENT

GFA - 11,025M²

75 APARTMENTS TOTAL

15 - 1 BED APARTMENTS

44 - 2 BED APARTMENTS

16 - 3 BED APARTMENTS

127 TOTAL CARPARKING SPACES (+4 ACCESSIBLE SPACES)

LEVEL 2 - 32 SPACES

LEVEL 3 - 49 SPACES (+2 ACCESSIBLE SPACES)

LEVEL 3 - 46 SPACES (+2 ACCESSIBLE SPACES)

14 TOTAL BIKE & SCOOTER SPACES

APARTMENT STORAGE ENCLOSURES LOCATED AT CARPARK LEVELS ARE A MINIMUM OF 1.2M x 2.5M INTERNALLY (3m2)

CAIRNS POST DEVELOPMENT

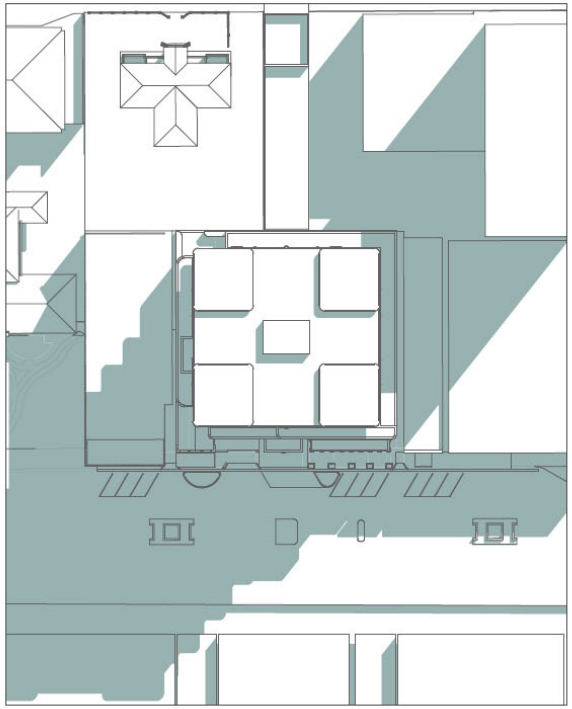
APARTMENT BUILDING
FOR : ASV

DA

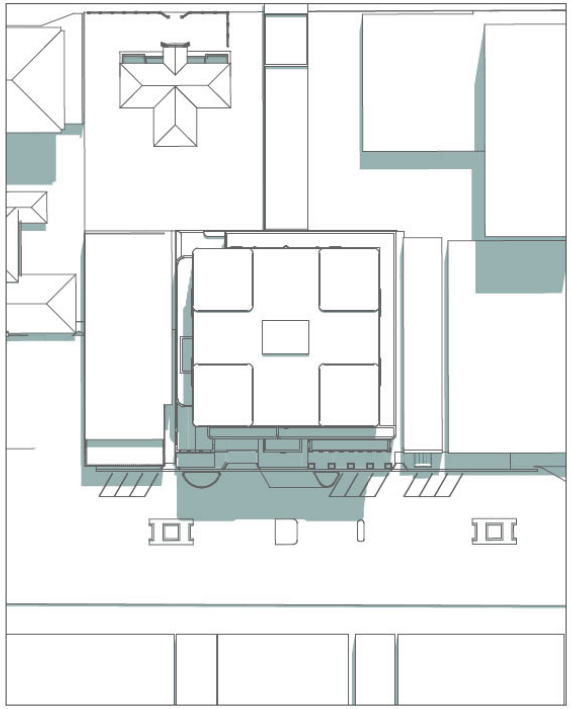
AREA ANALYSIS
SUMMARY

PROJECT NO. POST001
DRAWING NO. 6.02
REVISION NO. 02
DATE 20/11/2023

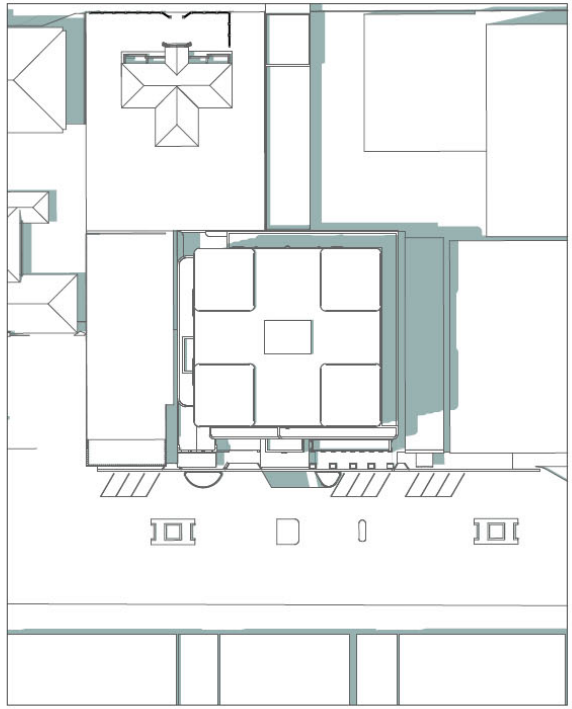
HUNT DESIGN



MARCH 20TH (EQUINOX) - 9AM
SCALE1:500



MARCH 20TH (EQUINOX) - 12PM
SCALE1:500



MARCH 20TH (EQUINOX) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

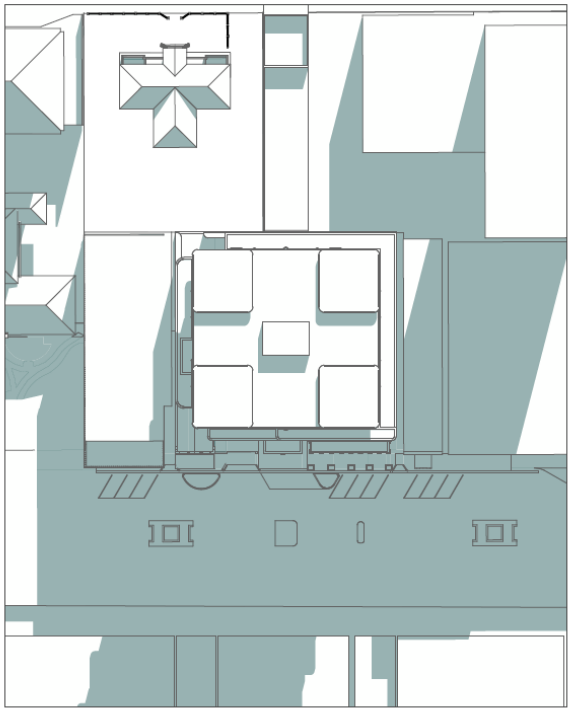
APARTMENT BUILDING
FOR : ASV

DA

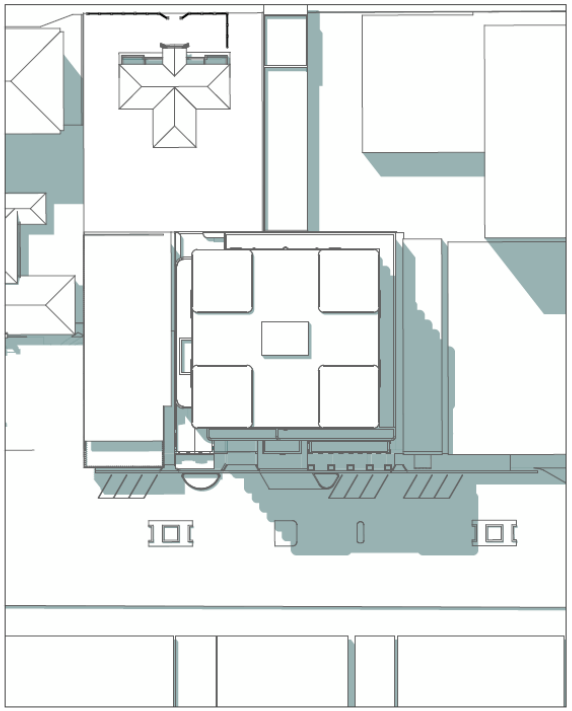
SHADOW DIAGRAMS
SHADOW DIAGRAMS - MARCH 2023 EQUINOX

PROJECT NO.	POST001
DRAWING NO.	7.01
REVISION NO.	02
DATE	20/11/2023

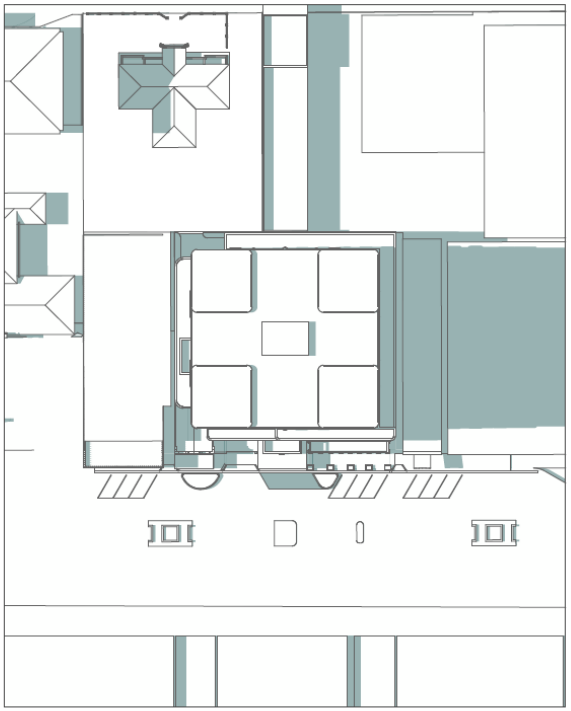
HUNT DESIGN



JUNE 22ND (SOLSTICE) - 9AM
SCALE1:500



JUNE 22ND (SOLSTICE) - 12PM
SCALE1:500



JUNE 22ND (SOLSTICE) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

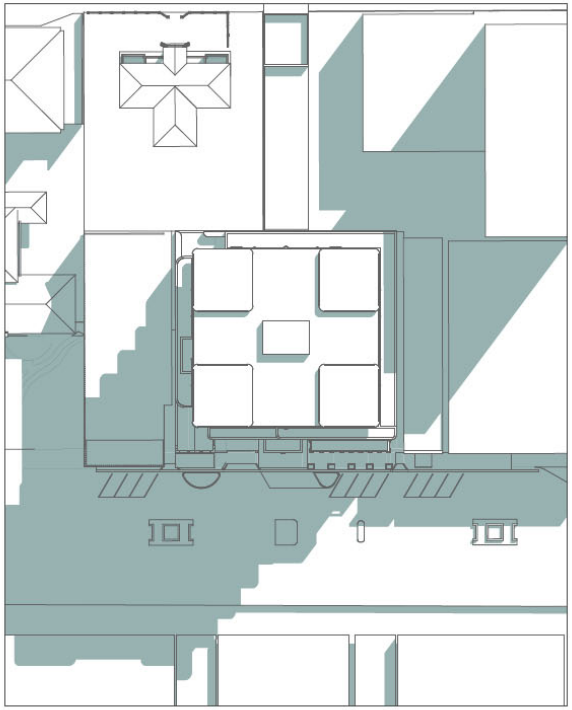
APARTMENT BUILDING
FOR : ASV

DA

SHADOW DIAGRAMS
SHADOW DIAGRAMS - JUNE 2023 SOLSTICE

PROJECT NO.	POST001
DRAWING NO.	7.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



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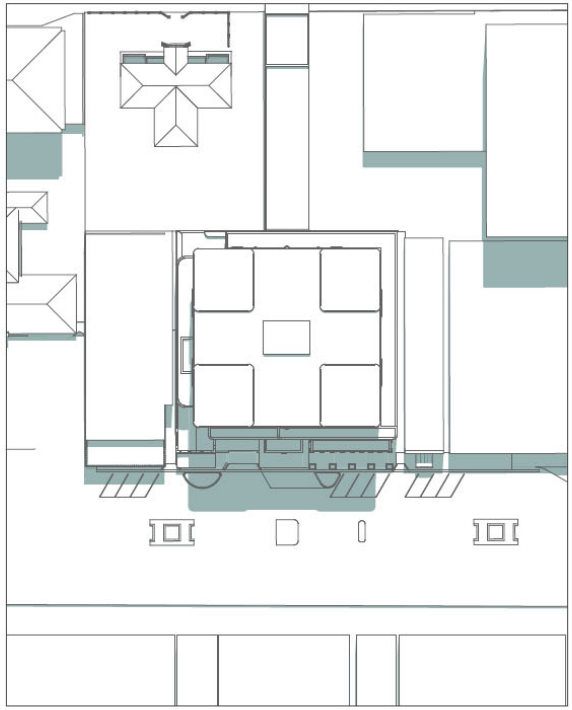

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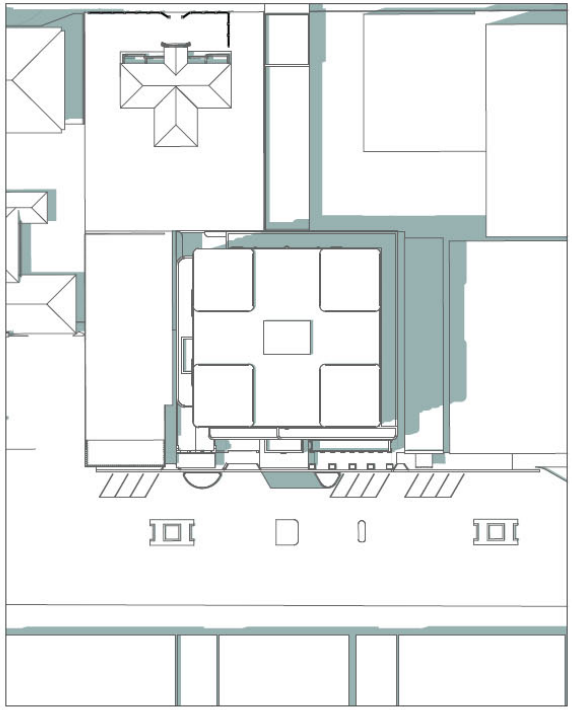

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SCALE1:500

CAIRNS POST DEVELOPMENT

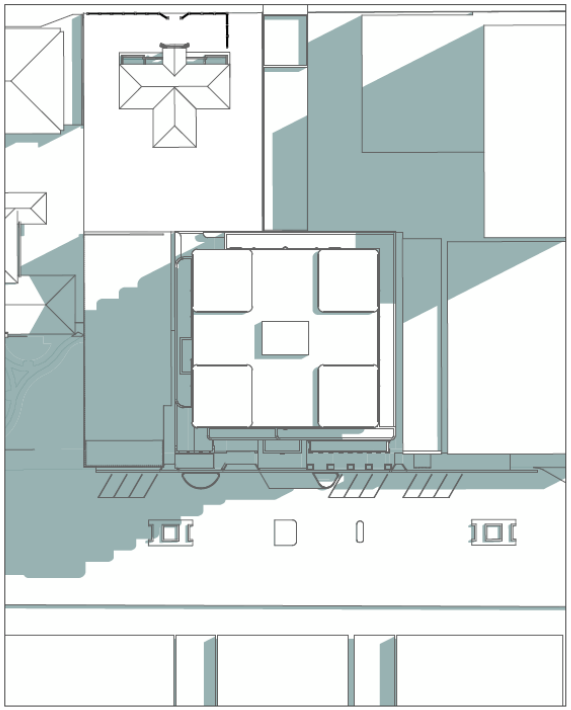
APARTMENT BUILDING
FOR : ASV

DA

SHADOW DIAGRAMS
SHADOW DIAGRAMS - SEPTEMBER 2023 EQUINOX

PROJECT NO.	POST001
DRAWING NO.	7.03
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



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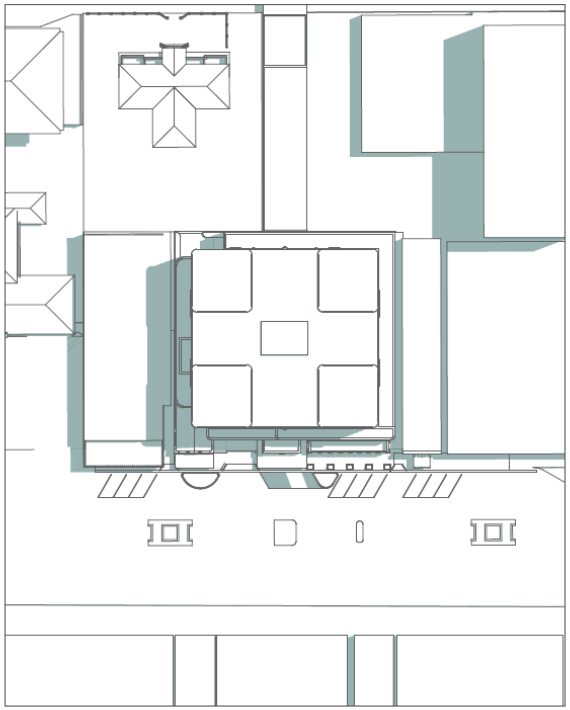

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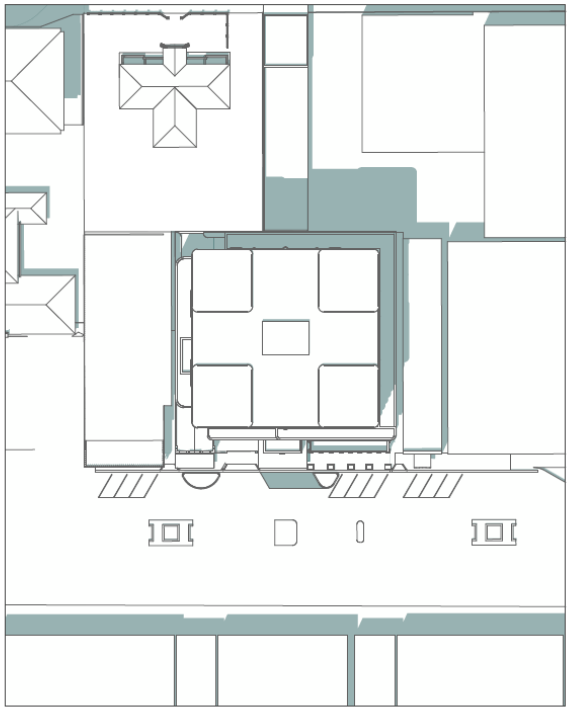


DECEMBER 22ND (SOLSTICE) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

SHADOW DIAGRAMS
SHADOW DIAGRAMS - DECEMBER 2023 (SOLSTICE)

PROJECT NO.	POST001
DRAWING NO.	7.04
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

ABBOTT STREET STREETSCAPE PERSPECTIVE

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

VISUALISATIONS
STREETSCAPE PERSPECTIVE - ABBOTT STREET

PROJECT NO.	POST001
DRAWING NO.	8.01
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

ABBOTT STREET STREETSCAPE PERSPECTIVE

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

VISUALISATIONS
TOWER PERSPECTIVE - ABBOTT STREET

PROJECT NO.	POST001
DRAWING NO.	8.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

ESPLANADE STREETSCAPE - BEFORE

ESPLANADE STREETSCAPE - AFTER

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

VISUALISATIONS
ESPLANDE PERSPECTIVE 1

PROJECT NO.	POST001
DRAWING NO.	8.03
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

ESPLANADE STREETSCAPE - BEFORE

ESPLANADE STREETSCAPE - AFTER

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

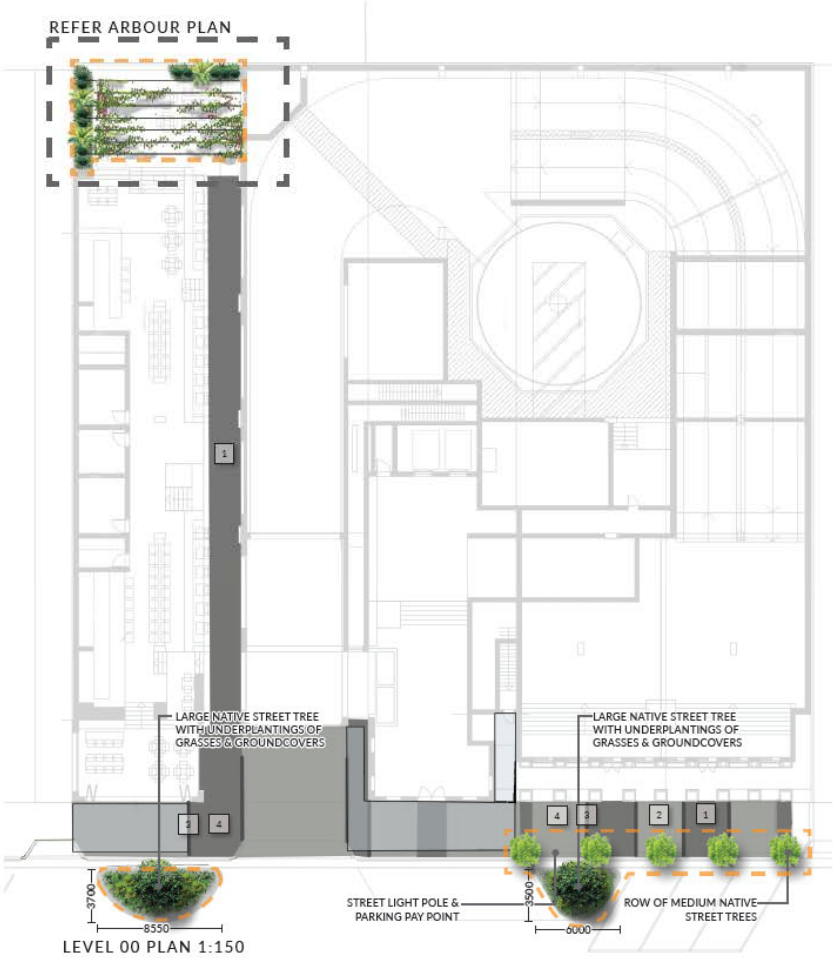
VISUALISATIONS
ESPLANDE PERSPECTIVE 2

PROJECT NO.	POST001
DRAWING NO.	8.04
REVISION NO.	02
DATE	20/11/2023

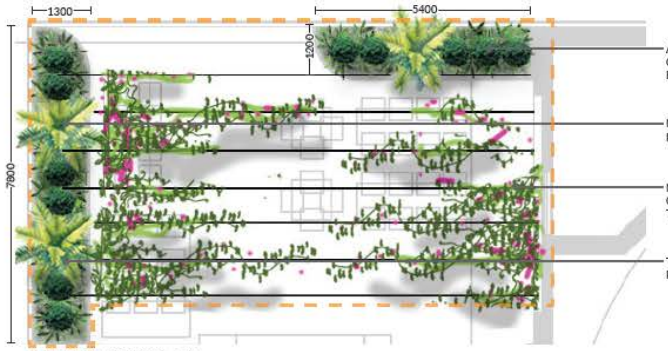
HUNT DESIGN


REDEVELOPMENT CAIRNS POST SITE
CAIRNS LAGOON
FOGARTY PARK
ABBOTT STREET
SITE
LANDPLAN
LANDSCAPE ARCHITECTURE
NORHART DEVELOPMENTS
REDEVELOPMENT CAIRNS POST SITE
COVERSHEET LOCALITY PLAN
AS SHOWN
C.M.
S.M.
17/11/2023
2305-031
L0.00
02

LEVEL 00



LEVEL 00 PLAN 1:150



ARBOUR PLAN 1:50

ABBOTT STREET SOUTH ELEVATION N.T.S

LEGEND

1. PT1 COLOURED CONCRETE TO COUNCIL STANDARDS
2. PT2 COLOURED CONCRETE TO COUNCIL STANDARDS
3. PT3 PORPHYRY COBBLE STONE
4. PT4 SANDBLASED TEXT IN PAVEMENT

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY

rev. no	description	date	drawn
02	REVISED FOR APPROVAL	17/11/2023	C.M.
01	PRELIMINARY	07/08/2023	C.M.

LANDPLAN
LANDSCAPE ARCHITECTURE

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client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LEVEL 00 PLANTING CONCEPT

scale: AS SHOWN (AT A1 SIZE SHEET)

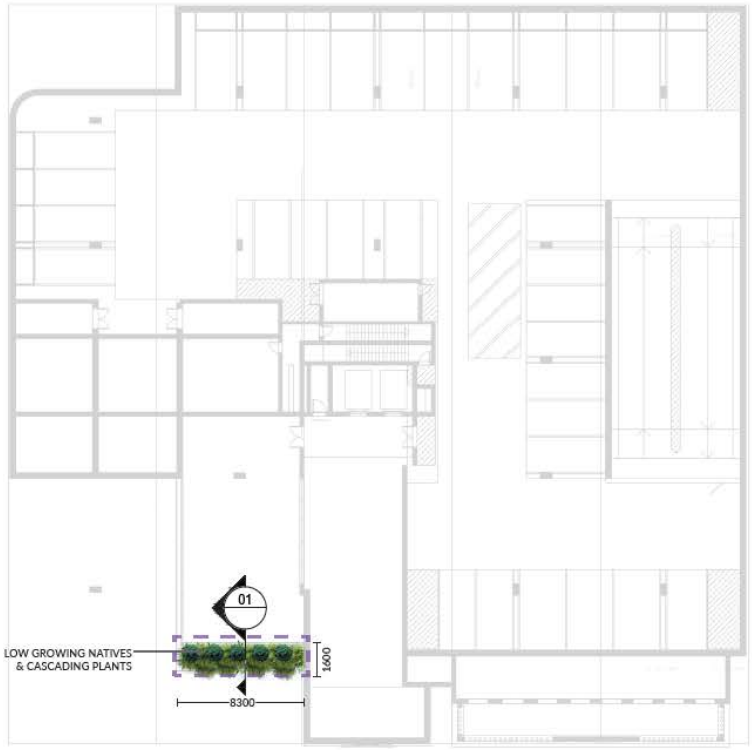
drawn: C.M. | approved: S.M. | date: 17/11/2023

project number: 2305-031

drawing number: L0.01 | rev: 02

northpoint

LEVEL 02



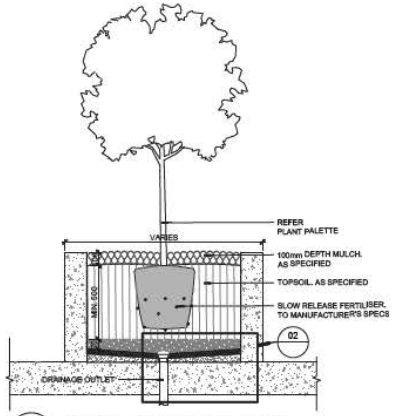
LEVEL 02 PLAN 1:150

ABBOTT STREET

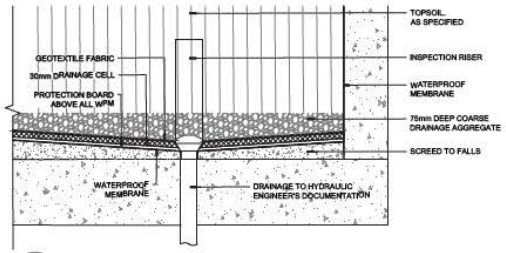
SOUTH WEST ELEVATION N.T.S

LEGEND

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY



01 TYPICAL TERRACE PLANTER
SCALE 1:20



02 TERRACE PLANTER DRAINAGE PROFILE
SCALE 1:10

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LANDPLAN
LANDSCAPE ARCHITECTURE

client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LEVEL 02 PLANTING CONCEPT

scale: AS SHOWN (AT A1 SIZE SHEET)

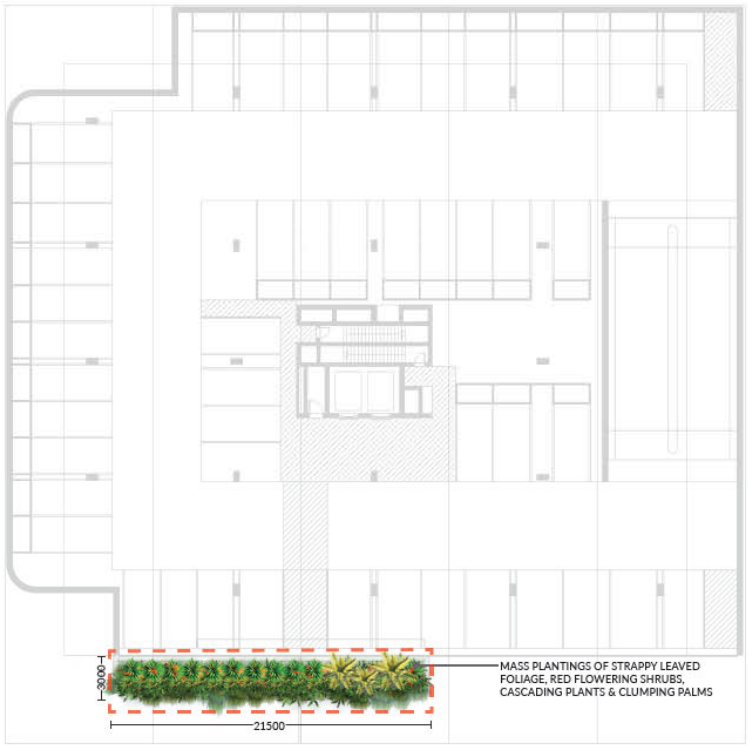
drawn	approved	date
C.M.	S.M.	17/11/2023

project number: 2305-031

drawing number: L0.02

rev: 02

LEVEL 03



LEVEL 03 PLAN 1:150

ABBOTT STREET

ABBOTT STREET NORTH ELEVATION N.T.S

LEGEND

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY

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LANDPLAN
LANDSCAPE ARCHITECTURE

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client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LEVEL 03 PLANTING CONCEPT

scale: AS SHOWN (AT A1 SIZE SHEET)

drawn	approved	date
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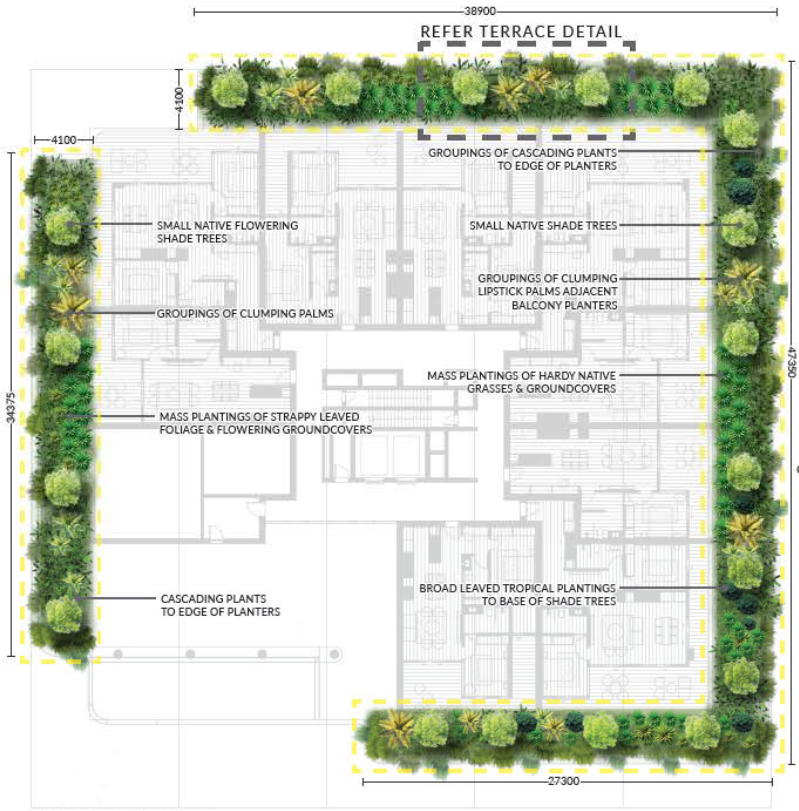
project number: 2305-031

drawing number: L0.03

rev: 02

LEVEL 05



LEVEL 05 PLAN 1:150

ABBOTT STREET

TERRACE GARDEN DETAIL 1:50

BACK SOUTH ELEVATION N.T.S

LEGEND

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY

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LANDPLAN
LANDSCAPE ARCHITECTURE

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client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LEVEL 05 PLANTING CONCEPT

scale: AS SHOWN (AT A1 SIZE SHEET)

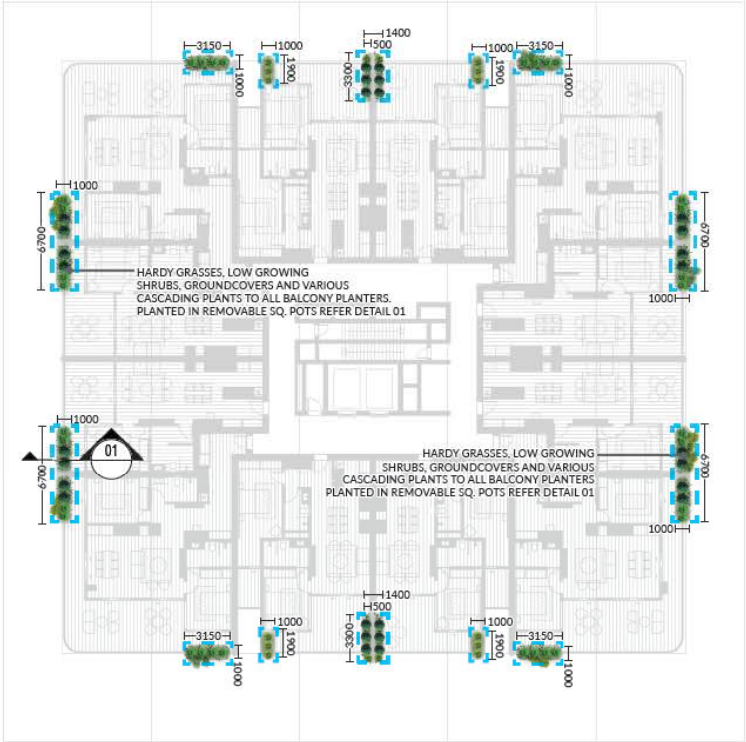
drawn	approved	date
C.M.	S.M.	17/11/2023

project number: 2305-031

drawing number: L0.04

rev: 02

LEVEL 06-12

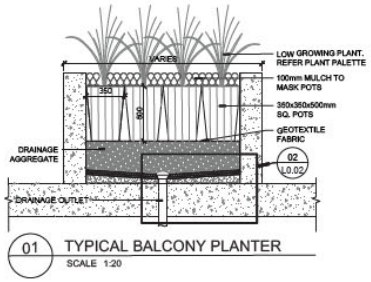


LEVEL 6-12 PLAN 1:150

NORTH WEST ELEVATION N.T.S

LEGEND

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY



01 TYPICAL BALCONY PLANTER
SCALE 1:20

rev. no	description	date	drawn
02	REVISED FOR APPROVAL	17/11/2023	C.M.
01	PRELIMINARY	07/09/2023	C.M.

LANDPLAN
LANDSCAPE ARCHITECTURE

client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LEVEL 06-12 PLANTING CONCEPT

scale: AS SHOWN (AT A1 SIZE SHEET)

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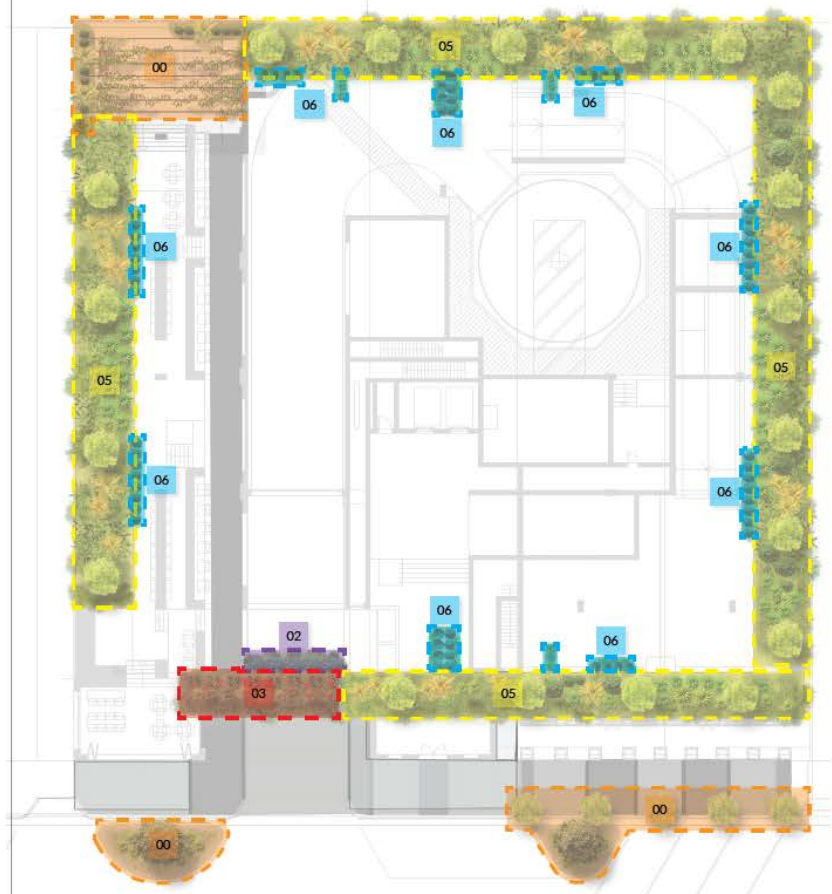
project number: 2305-031

drawing number: L0.05

rev: 02



PLANTING STRATEGY PLAN 1:150

00 LEVEL 00 - PLANTING PALETTE

Framing the building with prominent scale & visually striking foilage

Asplenium australasicum
Blechnum gibbum
Buckinghamia celsissima
Cupaniopsis anacardioides
Leptospermum madidum
Calathea zebrina
Gardenia psidioides
Gardenia radicans
Ixora spp.
Licuala ramsayi
Lomandra longifolia 'Tanika'
Tecomanthe hillii
Philodendron selloum
Philodendron xanadu

02 LEVEL 02 - PLANTING PALETTE

Green facade - Low growing natives & cascade plantings overhead building driveway entrance

Dianella brevipedunculata
Carpobrotus glaucescens
Juniperus conferta
Syzygium australe 'Baby Boomer'
Vernonia elliptica

03 LEVEL 03 - PLANTING PALETTE

Feature terrace garden overhead building entry with featuring flowering plants and cascading forms

Cyrtostachys renda
Etlingera elatior
Hibiscus spp.
Hymenocallis speciosa
Justicia brandegeena
Lomandra longifolia 'Tanika'
Russelia equisetiformis

05 LEVEL 05 - PLANTING PALETTE

Large wrap around terrace gardens featuring native shade trees, clumping palms and mass plantings of tropical foliage and grasses

Atratocarpus fitzalanii
Casuarina glauca 'Cousin It'
Costus spp.
Cyrtostachys renda
Ficus microcarpa 'Green Island'
Liriope muscari
Lomandra longifolia 'Tanika'
Philodendron selloum
Philodendron xanadu
Sedum spp.
Syzygium wilsonii

06 LEVEL 06-12 - PLANTING PALETTE

Pockets of vertical greening to the top of the tower

Costus spp.
Cuphea hyssopifolia
Dianella spp.
Gardenia psidioides
Ixora spp.
Lomandra hystrix
Neomarica spp.
Peperomia spp.
Philodendron xanadu
Phyllanthus multiflorus
Russelia equisetiformus
Syzygium spp.
Zamioculcas zamiifolia

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LANDPLAN
LANDSCAPE ARCHITECTURE

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client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: PLANTING STRATEGY

scale: AS SHOWN (AT A1 SIZE SHEET)

drawn	approved	date
C.M.	S.M.	17/11/2023

project number: 2305-031

drawing number: L1.01

rev: 02

northpoint

NORTH EAST ELEVATION N.T.S

SOUTH WEST ELEVATION N.T.S

LEGEND

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY

rev. no	description	date	drawn
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LANDPLAN
LANDSCAPE ARCHITECTURE

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client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LANDSCAPE ELEVATIONS

drawn	approved	date
C.M.	S.M.	17/11/2023

project number: 2305-031

drawing number	rev
L2.01	02

SOUTH EAST ELEVATION N.T.S

NORTH WEST ELEVATION N.T.S

LEGEND

- LEVEL 00 PLANTING. REFER PLANTING STRATEGY
- LEVEL 02 PLANTING. REFER PLANTING STRATEGY
- LEVEL 03 PLANTING. REFER PLANTING STRATEGY
- LEVEL 05 PLANTING. REFER PLANTING STRATEGY
- LEVEL 06 PLANTING. REFER PLANTING STRATEGY

rev. no	description	date	drawn
02	REVISED FOR APPROVAL	17/11/2023	C.M.
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LANDPLAN
LANDSCAPE ARCHITECTURE

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client: NORHART DEVELOPMENTS

project: REDEVELOPMENT CAIRNS POST SITE

title: LANDSCAPE ELEVATIONS

drawn	approved	date
C.M.	S.M.	17/11/2023

project number: 2305-031

drawing number: L2.02 | rev: 02

SOIL, MULCH & FERTILISER SPECIFICATIONS

TOPSOIL MIXES:

MIX 1 - LEVEL 00 & TOP OF STREET TREES
Amended site topsoil: Used in top MIN. 500mm of planting beds and tree pits. Consists of (mixed thoroughly and evenly) 50% site topsoil and 50% premium quality imported topsoil to AS 4419 with a pH as close to 6.5, but no less than 6.2 or greater than 7.2 as defined by clause 5.6 (a). Electrical conductivity when tested
in accordance with AS 4419 appendix D, is to not exceed 1.2 dS/m. An approved prolonged release fertiliser having an NPK ratio 6:2:3 or as required is to be incorporated to manufactures directions.

MIX 2 - LEVEL 02 - 05 & 06+ REMOVABLE POTS.
Podium media with 50% drainage: Consists of (mixed thoroughly and evenly) 25% scoria, 25% Chillagoe perlite, 50% premium quality imported topsoil to AS 4419 with a pH as close to 6.5, but no less than 6.2 or greater than 7.2 as defined by clause 5.6 (a). Electrical conductivity when tested in accordance with AS 4419 appendix D, to not exceed 1.2 dS/m. An approved prolonged release fertiliser having an NPK ratio 6:2:3 or as required is to be incorporated to manufactures directions.

MIX 3 - BASE OF STREET TREES
Low organic soil (amended site topsoil with 2-5% organic matter) used at the base of tree pits: Consists of (mixed thoroughly and evenly) 80% site topsoil and 20% scoria. To AS 4419 with a pH as close to 6.5, but no less than 6.2 or greater than 7.2 as defined by clause 5.6 (a). Electrical conductivity when tested in accordance with AS 4419 appendix D, to not exceed 1.2 dS/m.

SUBSOIL PREPARATION:

GRADING
General Planting Areas
Allowance to be made for general grading of subgrade and fill placed by Contractor in order to define planting beds on grade.
Excavate to bring the subsoil to at least 600mm below finished design levels. Shape the subsoil to fall to subsoil drains where applicable. Stockpile topsoil (darker top layer of soil to 300mm deep) for amendment and reuse on site.
Note: Where general planting areas occur within the root zone/drip line of existing trees, no excavation is to occur. Remove weeds by hand or by using approved chemical methods.
CULTIVATION
General Planting Areas
Contractor is to cultivate subgrade to a minimum depth of 150mm. Stockpiled topsoil is to be amended and during cultivation, thoroughly mix in any materials required to be incorporated in the subsoil.
Do not disturb services or tree roots; if necessary cultivate these areas by hand. Cultivate manually within 300mm of paths or structures.
Remove stones exceeding 25mm, clods of earth exceeding 50mm, and any weeds, rubbish or other deleterious material brought to the surface during cultivation. Trim the surface to the required design levels after cultivation.
Apply additives after ripping or cultivation.

TOPSOIL PREPARATION:

Amend stockpiled topsoil to conform with specifications noted below prior to spreading back on site to meet nominated depths and spot levels. To allow for settling in turf and garden areas, spread soil to a slightly higher level.
CULTIVATION
Prior to spreading of imported topsoil, all areas to be planted shall have weeds eradicated then be cultivated to the minimum depth of 150mm.
DISPOSAL OF SOIL
All debris resulting from site clearance and excavated material surplus to fill and topsoil requirements, except as specified, shall be removed from site as unless otherwise specified or directed by the Superintendent. Surplus topsoil shall be stockpiled on site for use in other areas of the school. The contractor shall be responsible for the safe and harmless disposal of surplus excavated material away from the site.
FINISHING / GRADING & MOUNDING
Trim batters in cut and fill areas to achieve smooth flowing grades, marrying in with existing levels. Trim ridges and fill depressions as necessary to produce a free draining surface.
Ensure accurate formation of grades and cross-falls leading to catch drains and field gullies, enabling areas to dry quickly and surplus surface water to reach drainage system. Grades shall fall away from buildings at a minimum gradient of 1:100 (1m in 100m) toward drainage outlets and gully pits if existing or indicated on drawings. All intersection of planes shall be rounded and gradual with generous curves. After topsoil placement, lightly compact so that the surface is smooth and free of lumps at the required levels ready for mulching and planting. Once compacted the ground surface is to be self draining.
Do not place filling against concrete until the concrete has been cured for 14 days. Protect the works during compaction from damage due to compaction operations. Construct mounds by compacting clean fill lightly and uniformly in 150mm layers. Progressively tamp backfilling to avoid later subsidence, and thoroughly water to prevent voids. Rake over lightly to allow for topsoil. Avoid differential subsidence. Construct changes in grade over a minimum width of 500mm to smooth, gradual and rounded profiles. Prevent excess compaction by constructional plant.

PLACING TOPSOIL:

Spread the topsoil on the prepared subsoil and grade evenly, making the necessary allowances to permit the required finished levels and contours may be achieved after light compaction. Where diesel oil, cement or other phytotoxic material has been spilt on the subsoil or topsoil, excavate the contaminated soil, dispose of it off the site, and replace it with site soil or imported topsoil to restore design levels. Feather edges into adjoining undisturbed ground.
Compact lightly and uniformly in 150mm layers. Avoid differential subsidence and excess compaction and produce a finished topsoil surface, which has the following characteristics:

- Finished to design levels.
- Smooth and free from stones or lumps of soil.
- Graded to drain freely, without ponding, to catchment points.
- Graded evenly into adjoining ground surfaces.
- Ready for planting.

Spread topsoil to the following typical depths:

- Planting areas: excavate to depth 600mm: spread topsoil to depth of 500mm (to allow for 100mm organic mulch)

Spread surplus topsoil on designated areas on site, if any; otherwise, dispose off site.

ORGANIC MULCH:

100mm depth Teatree mulch to AS 4454.
A mulch sample is to be provided to the Superintendent for approval prior to ordering material.
Mulch is to be free of deleterious and extraneous matter such as soil, weeds and sticks. Use organic mulches which are free of stones. All organic mulches shall be weathered for a minimum of 12 weeks prior to delivery and spreading on-site. Standard: To AS 4454.
APPLICATION
Place mulch to the required minimum consistent depth of 100mm, clear of plant stems, and rake to an even surface flush with the surrounding finished levels.
LOCATION
Supply and spread mulch to all planting bed areas (on grade) and to all podium planters as shown on the drawings.
Following the inspection by the Superintendent of the prepared and profiled garden areas, spread mulch to the required depth, clear of plant stems, and rake to an even surface flush with the surrounding finished levels.
Spread mulch so that after settling, it is smooth and evenly graded between design surface levels.

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LANDPLAN
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client: NORHART DEVELOPMENTS
project: REDEVELOPMENT CAIRNS POST SITE
title: SOIL STRATEGY

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LANGTREE
Consulting Engineers

TRAFFIC IMPACT ASSESSMENT

22-34 ABBOTT ST, CAIRNS

NORHART DEVELOPMENTS

LANGTREE CONSULTING

Project No.: 0997

Reference No.: R-AR0184

Date: 11/08/2023

Controlled Copy No.: 1

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Revision Record:

Rev	Review Date	Description	Prepared	Checked	Approved
A	11/09/2023	Issued for Client Comment	Aidan Reinaudo	Brett Langtree	Brett Langtree

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1.0 INTRODUCTION

Langtree Consulting has been engaged by Norhart Developments to undertake a Traffic Impact Assessment (TIA) in support of a development application for a proposed apartment complex. The proposed development is located at 22-34 Abbott Street, Cairns and is described as Lot 1 and 2 on RP715691 and Lot 502, 503 and 504 on C1981.

This report outlines the following:

- Background information for the subject site and proposed development of the site;
- Determination of existing traffic conditions and post-development traffic conditions; including traffic generation and distribution;
- Assessment of the impact post-development traffic
- Investigation of safety issues associated with or arising from the proposed development; and
- Recommendations and mitigation measures.

2.0 BACKGROUND

2.1 SITE LOCATION

The subject site is located on Lot 1 and 2 on RP715691 and Lot 502, 503 and 504 on C1981 at 22-34 Abbott Street, Cairns (referred to as subject site hereon in). The subject site has an area of approximately 2500m^2 and is located within the Cairns city centre. Refer to **Figure 1** for the site locality. The site is bound by Abbott Street to the southwest and commercial buildings to the north, east and south.

Figure 1: Site Locality (Source: QGlobe)

3.0 EXISTING CONDITIONS

3.1 LAND USE AND ZONING

The subject site currently consists of the Cairns Post Office and four (4) other commercial buildings.

In accordance with Cairns Regional Council (CRC), Cairns Plan Interactive Mapping, the subject site is currently zoned as principal centre. Refer to **Figure 2** below.

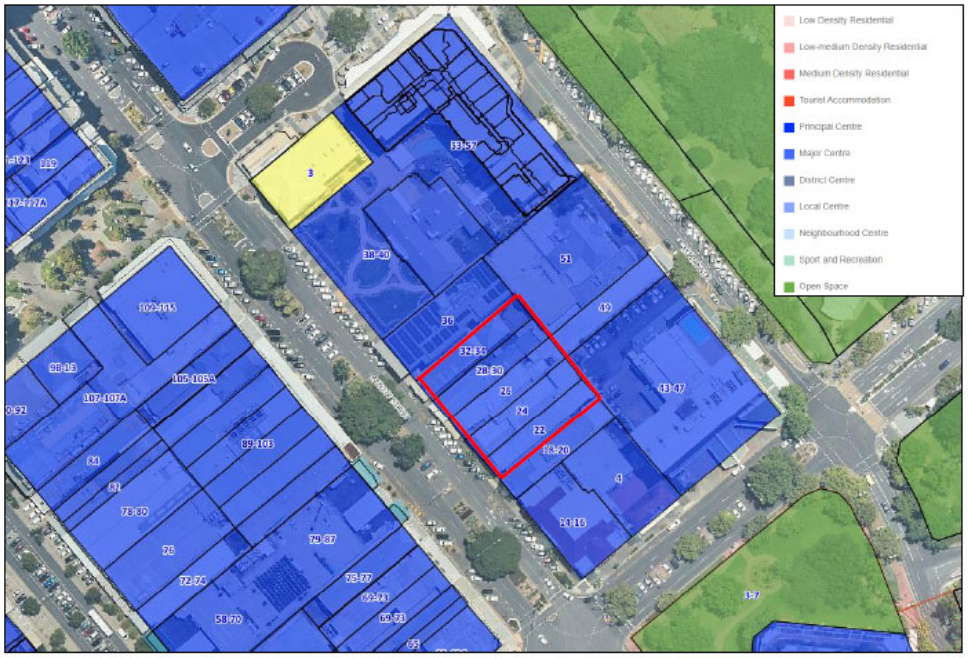


Figure 2: Subject Site Zoning (Source: CRC Cairns Plan Interactive Mapping)

3.2 SITE ACCESS

The site currently has two (2) access points, both on Abbott Street. Refer to **Figure 3** for the access location and **Figure 4** and **Figure 5** for the access from street view.

Figure 3: Site Access Location (Source: QGlobe)

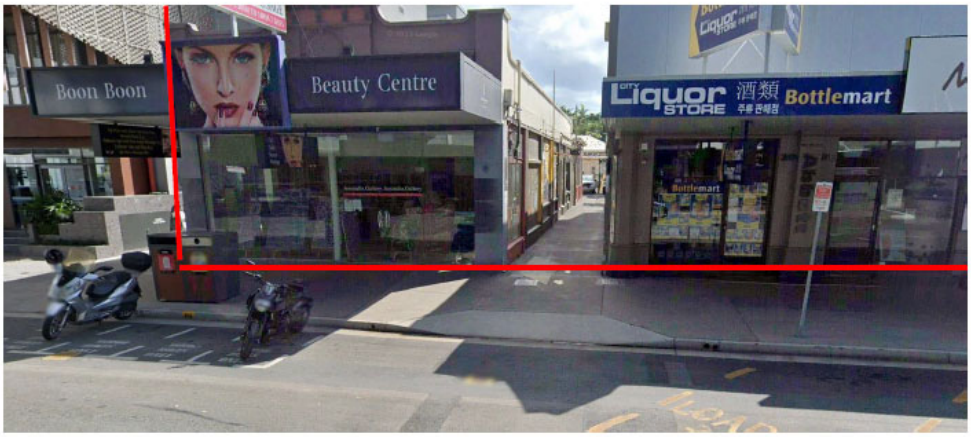


Figure 4: Existing Access 1 Street View (Source: Google Maps Street View)

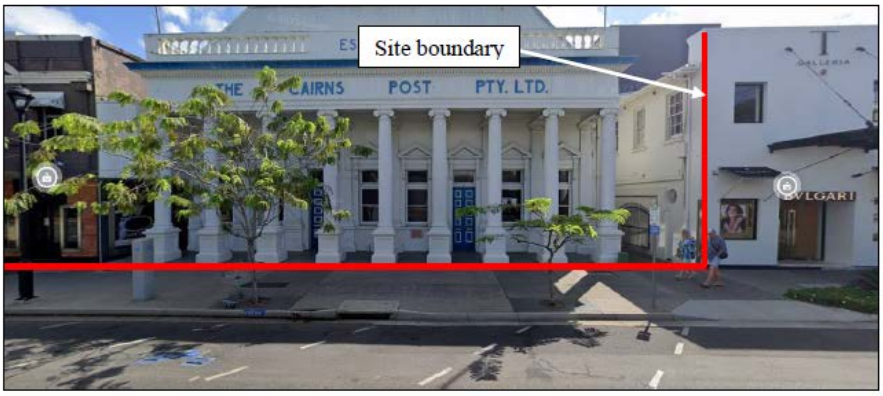


Figure 5: Existing Access 2 Street View (Source: Google Maps Street View)

4.0 SURROUNDING ROAD NETWORKS

4.1 KEY ROADS

The key roads in the proximity of the subject site are summarised in **Table 1** below.

Table 1: Key Roads Summary

Road Name	Jurisdiction	Hierarchy	Speed Limit
Abbott Street	CRC	Sub arterial Road - CBD	40km/h
Spence Street	CRC	Sub arterial Road - CBD	40km/h
Shields Street	CRC	Local Road	40km/h
Aplin Street	CRC	Collector Road - CBD	40km/h

4.2 KEY INTERSECTIONS

Table 2 and **Figure 6** provides a summary of the key intersections within the proximity of the subject site.

Table 2: Key Intersection Summary

ID	Name	Jurisdiction	Control
Intersection 1	Abbott St / Spence St	CRC	Signalised (traffic lights)
Intersection 2	Abbott St / Sheilds St	CRC	Signalised (traffic lights)
Intersection 3	Abbott St / Aplin St	CRC	Signalised (traffic lights)

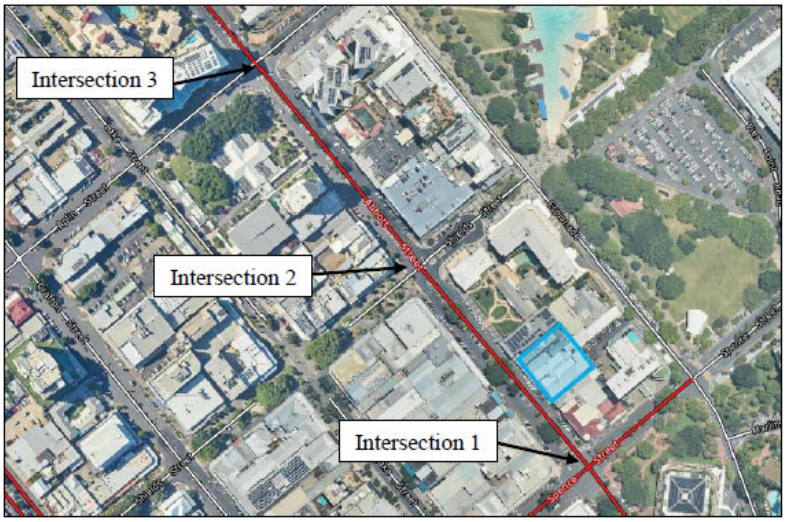


Figure 6: Surrounding Road Network (Source: QGlobe)

4.3 CRASH HISTORY

Queensland Globe was used to investigate the crash history in the vicinity of the key roads and accesses/intersection. All reported road crash locations within the last 10 years and within 150m of the subject site have been reviewed. Refer to **Figure 7** for the crash sites and to **Table 3** for the crash data summary.

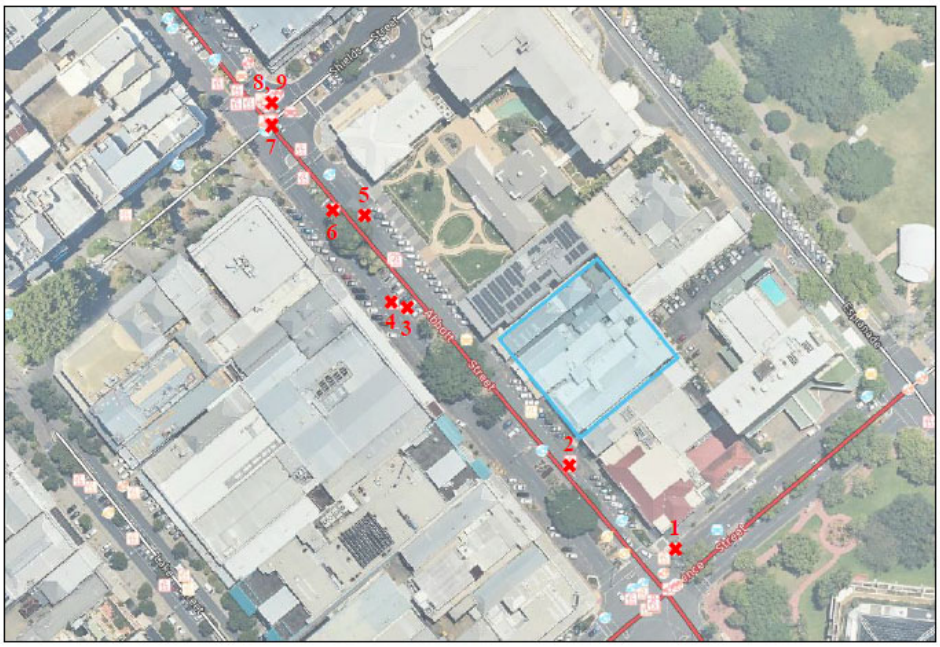


Figure 7: Crash Locations (Source: QGlobe)

Table 3: Crash Data Summary

Location	Year	Severity	Crash Type (DCA Code)	Crash Nature	Crash Description
1	2016	Hospitalisation	Multi-Vehicle (305)	Sideswipe	Daylight, clear, sealed dry, intersection-cross, vehs same direction: lane sideswipe
2	2016	Hospitalisation	Hit pedestrian (4)	Hit pedestrian	Daylight, clear, sealed dry, straight, predestrian: play; work; stand; lie on C'way
3	2015	Hospitalisation	Multi-Vehicle (308)	Angle	Daylight, clear, sealed dry, straight, vehs same direction: right turn sideswipe
4	2018	Hospitalisation	Hit pedestrian (0)	Hit pedestrian	Daylight, clear, sealed dry, straight, pedestrian: hit other
5	2020	Hospitalisation	Single Vehicle (705)	Fall from vehicle	Daylight, clear, sealed dry, straight, off path straight: out of control on C'way
6	2014	Hospitalisation	Multi-Vehicle (100)	Angle	Darkness-lighted, clear, sealed dry, straight, vehs adjacent approach: other
7	2013	Medical treatment	Multi-Vehicle (101)	Angle	Daylight, clear, sealed dry, intersection-cross, vehs adjacent approach: thru-thru
8	2013	Hospitalisation	Single Vehicle (705)	Fall from vehicle	Daylight, clear, sealed dry, intersection-cross, off path straight: out of control on C'way
9	2016	Hospitalisation	Multi-Vehicle (202)	Angle	Darkness-lighted, clear, sealed dry, intersection-cross, vehs adjacent approach: thru-right

5.0 BACKGROUND TRAFFIC

5.1 TRAFFIC DATA

5.1.1 *Traffic Sites*

The background traffic data was requested for CRC. CRC have provided traffic data for sites summarised in **Table 4** below. The sites have been labelled for as 'a' and 'b' for the different directions.

Table 4. Site Description

Site Label	Street	Suburb	Road Segment
1a	Abbott Street (North)	Cairns City	Between Spence Street and Shields Street
1b	Abbott Street (South)	Cairns City	Between Spence Street and Shields Street
2a	Abbott Street (North)	Cairns City	Between Florence Street and Aplin Street
2b	Abbott Street (South)	Cairns City	Between Florence Street and Aplin Street
3a	Abbott Street (North)	Cairns City	Between Aplin Street and Shields Street
3b	Abbott Street (South)	Cairns City	Between Aplin Street and Shields Street
4a	Aplin Street (East)	Cairns City	Between Lake Street and Grafton Street
4b	Aplin Street (West)	Cairns City	Between Lake Street and Grafton Street
5a	Aplin Street (East)	Cairns City	Between Esplanade and Abbott Street (at no.2)
5b	Aplin Street (West)	Cairns City	Between Esplanade and Abbott Street (at no.2)
6	Spence Street	Cairns City	Between Lake and Grafton St (at no. 28)

5.1.2 *Traffic Growth Rate*

No growth data was provided by CRC. A growth rate of 1% was adopted as the area is fully developed.

5.1.3 *Heavy Vehicles (HV%)*

The heavy vehicle percentage (HV%) was provided by CRC and is summarised in **Table 5** below.

Table 5. Abbott St, Aplin St and Spence St Heavy Vehicle Percentage

STREET	SUBURB	ROAD SEGMENT	Class +4% (Heavy)
Abbott Street (North)	Cairns City	Between Spence Street and Shields Street	15.21%
Abbott Street (South)	Cairns City	Between Spence Street and Shields Street	9.60%
Abbott Street (North)	Cairns City	Between Florence Street and Aplin Street	22.10%
Abbott Street (South)	Cairns City	Between Florence Street and Aplin Street	9.17%
Abbott Street (North)	Cairns City	Between Aplin Street and Shields Street	27.84%
Abbott Street (South)	Cairns City	Between Aplin Street and Shields Street	25.45%
Aplin Street East	Cairns City	Between Lake Street and Grafton Street	6.43%
Aplin Street West	Cairns City	Between Lake Street and Grafton Street	4.64%
Aplin Street East	Cairns City	Between Esplanade and Abbott Street (at no.2)	3.65%
Aplin Street West	Cairns City	Between Esplanade and Abbott Street (at no.2)	4.08%
Spence Street	Cairns City	Between Lake and Grafton St (at no. 28)	6.65%

5.1.4 *Peak Hour Traffic and Distribution*

The peak hour traffic volumes for the for Abbott Street, Aplin Street and Spence Street for the sites shown in **Table 4** were provided by CRC. The data provided was for 2021 and 2022 as shown in **Table 6**. Using the provided data and a 1% growth rate the traffic data was calculated for 2024 and 2034. Refer to **Table 6** below for a summary of the peak hour traffic data for each site.

Table 6. Background Traffic Peak Hour Data Summary

Site Label	Year of Count	AM Peak Volume	PM Peak Volume	2024 AM Peak Volume	2024 PM Peak Volume	2034 AM Peak Volume	2034 PM Peak Volume
1a	2021	317	359	327	370	372	421
1b	2021	264	276	272	284	310	323
2a	2021	256	331	264	341	301	388
2b	2021	343	404	353	416	402	474
3a	2021	332	414	342	426	390	485
3b	2021	306	343	315	353	359	402
4a	2022	112	110	114	112	129	126
4b	2022	148	144	151	147	170	166
5a	2022	103	217	105	221	118	249
5b	2022	29	102	30	104	33	117
6	2022	863	1019	880	1039	992	1171

5.2 INTERSECTION DATA

5.2.1 *Abbott Street/Aplin Street Intersection*

The data provided by CRC only had the total traffic on the road for the peak hour heading towards/away from the intersection. As such the percentage of traffic turning at each intersection leg was assumed. Please note that the number of traffic turning onto each leg was made equal to the traffic number travelling away from the intersection data provided by CRC. Refer to **Figure 8** for the traffic percentage summary.

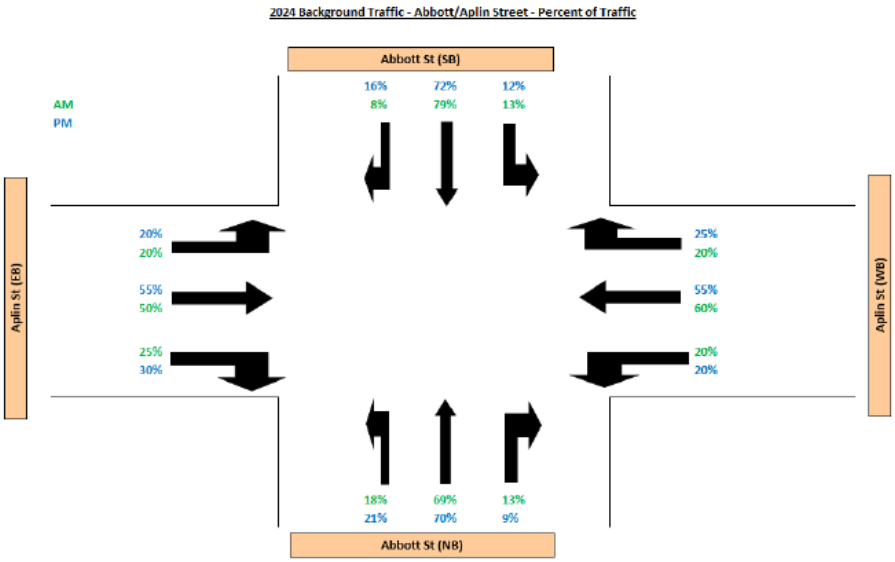


Figure 8: Abbott/Aplin Street Percentage of Traffic Summary

Using the data 2024 data from **Table 6** and the percentage data from **Figure 8** the movement data for each leg of the intersection is summarised in **Figure 9**. Refer to **Figure 10** for the 2034 background traffic data.

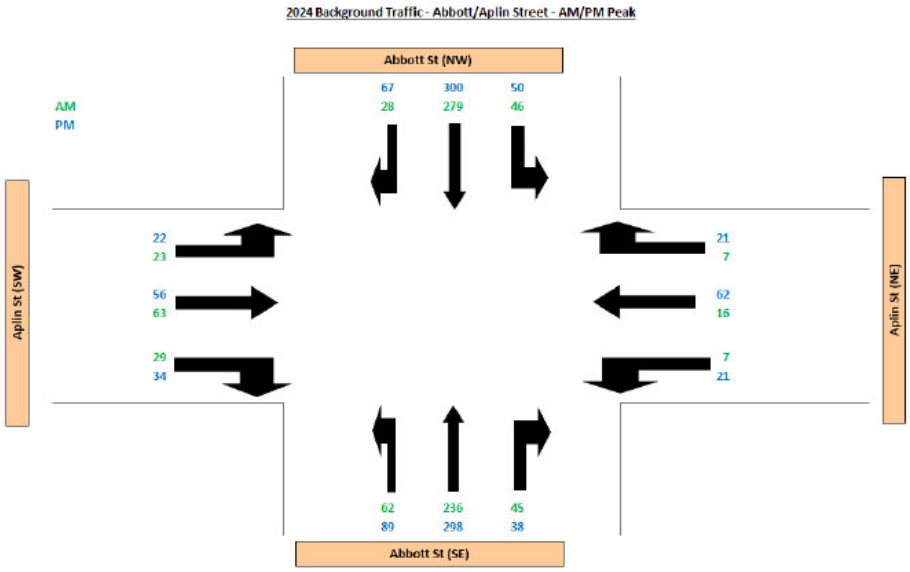


Figure 9: 2024 Background Traffic AM and PM Peak Hour Traffic Distribution for the Abbott/Aplin Street Intersection

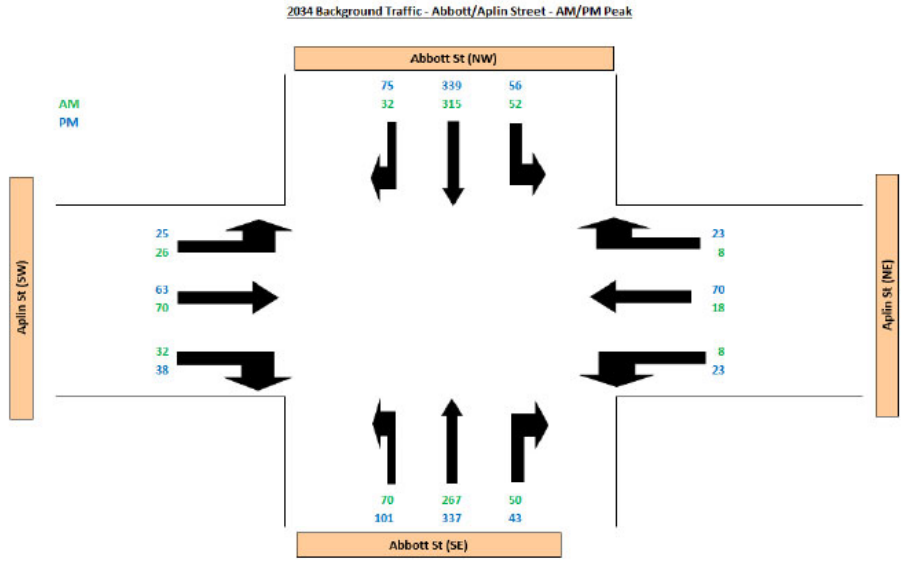


Figure 10: 2034 Background Traffic AM and PM Peak Hour Traffic Distribution for the Abbott/Aplin Street Intersection

5.2.2 *Abbott Street/Sheilds Street Intersection*

The Abbott Street/Sheilds Street intersection peak hour data was calculated using the same method as the Abbott Street/Aplin Street intersection data. Refer to **Figure 11** for the traffic percentage summary. No traffic data was provided for Sheilds Street. As Sheilds Street is a small dead end street with this intersection being the only access point, traffic was added to the left and right out to equal the Sites 1b and 3a provided by CRC. Refer to **Figure 12** and **Figure 13** for the 2024 and 2034 respectively background traffic data summary.

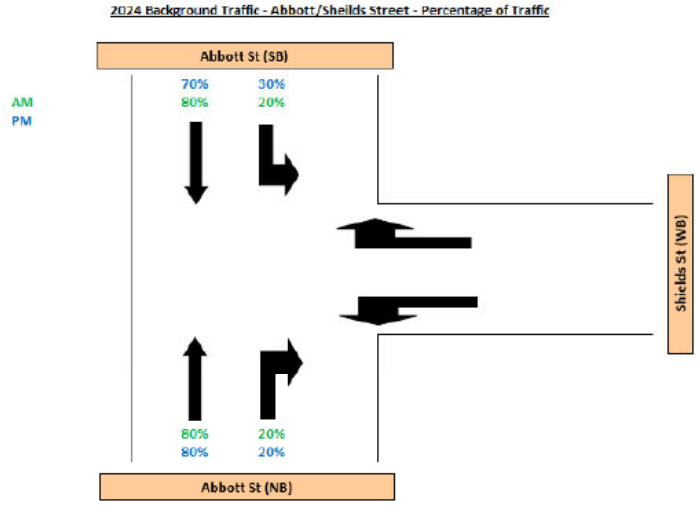


Figure 11: Abbott/Sheilds Street Percentage of Traffic Summary

As seen in **Figure 12** the traffic turning from Sheilds Street onto Abbott Street is quite high especially for the right out. This is possibly due to carparking and U-turn facilities along the street which the vehicles area more likely to use instead of turning onto Sheilds Street. As a worst case scenario all the additional traffic was assumed to be turning into/out of Sheilds Street.

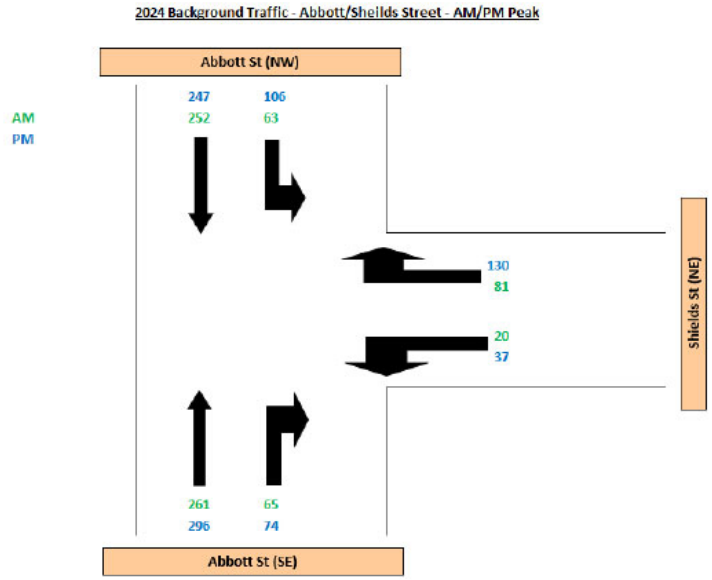


Figure 12: 2024 Background Traffic AM and PM Peak Hour Traffic Distribution for the Abbott/Sheilds Street Intersection

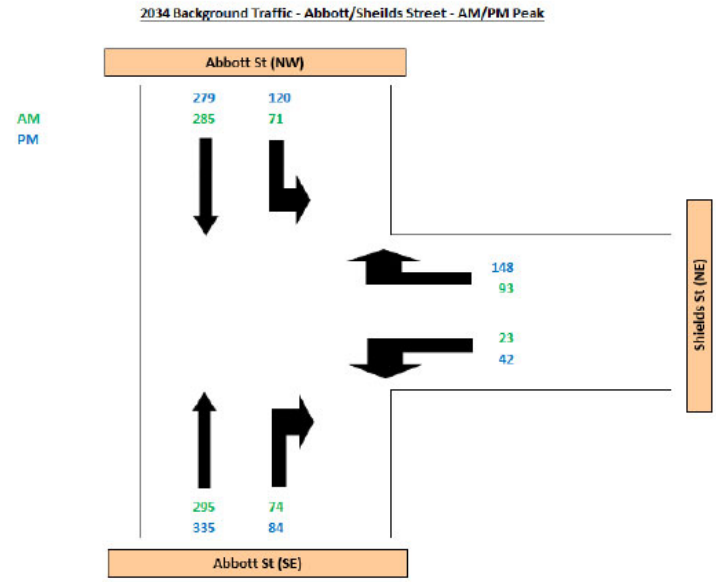


Figure 13: 2034 Background Traffic AM and PM Peak Hour Traffic Distribution for the Abbott/Sheilds Street Intersection

5.2.3 *Spence Street/Abbott Street Intersection*

The Spence Street/Abbott Street intersection was calculated using the same method that the Aplin Street/Abbott Street intersection used. For Spence Street only an overall peak hour traffic was provided by CRC, therefore this traffic was split by having 50% of the provided peak hour traffic split in each direction. No traffic data was provided for Abbott Street between Spence Street and Wharf Street and no traffic data was provided for Spence Street between Abbot Street and The Esplanade. As such this traffic data was calculated to the best of our ability using the available traffic data. Refer to **Figure 14** for the traffic percentage split summary.

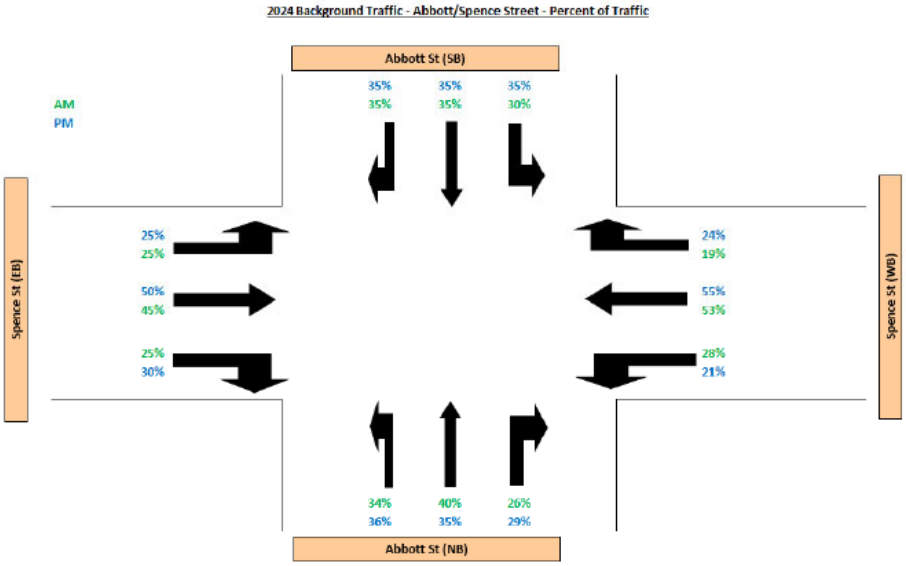


Figure 14: Abbott/Spence Street Percentage of Traffic Summary

Using the data provided in **Table 6** and the percentage split data in **Figure 14** the movement data was calculated for 2024 and 2034 and is summarised in **Figure 15** and **Figure 16** respectively.

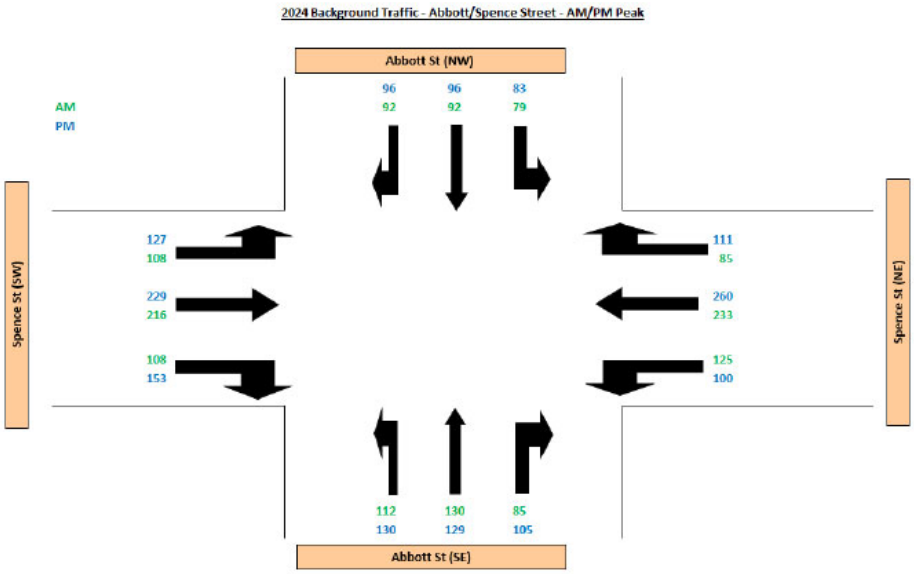


Figure 15: 2024 Background Traffic AM and PM Peak Hour Traffic Distribution for the Abbott/Spence Street Intersection

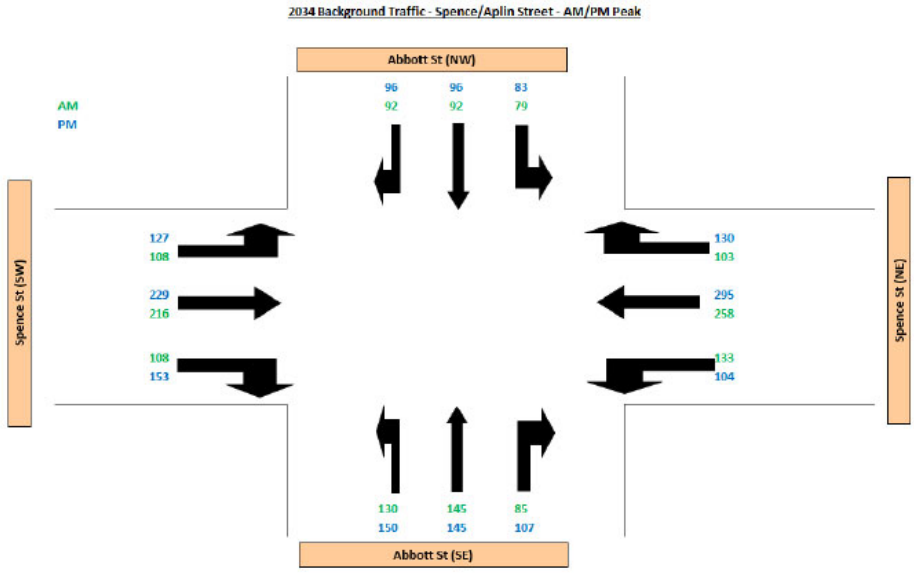


Figure 16: 2034 Background Traffic AM and PM Peak Hour Traffic Distribution for the Abbott/Spence Street Intersection

6.0 PROPOSED DEVELOPMENT

The proposed development is to construct an apartment building on the site. The apartment building consists of 12 levels which are as follows:

- Level 00 (ground) – residential lobby, two (2) retail shops and a food and beverage area;
- Level 1 – Cairns Post
- Level 2 to 4 – carparking;
- Level 5 – pool terrace; and
- Level 6 to 12 – residential apartments.

A total of 79 apartments are proposed, consist of 1, 2 and 3 bed apartments as follows:

- 1 bed – 16;
- 2 bed – 46;
- 3 bed – 17;

Refer to **Appendix A** for the development plans.

The proposed development has two (2) side accesses and one (1) main access, all of which are accessed via Abbott Street. The main access leads to the three (3) carpark levels for resident parking and refuse and loading area, whilst the two (2) accesses on the side are primarily for deliveries and maintenance.

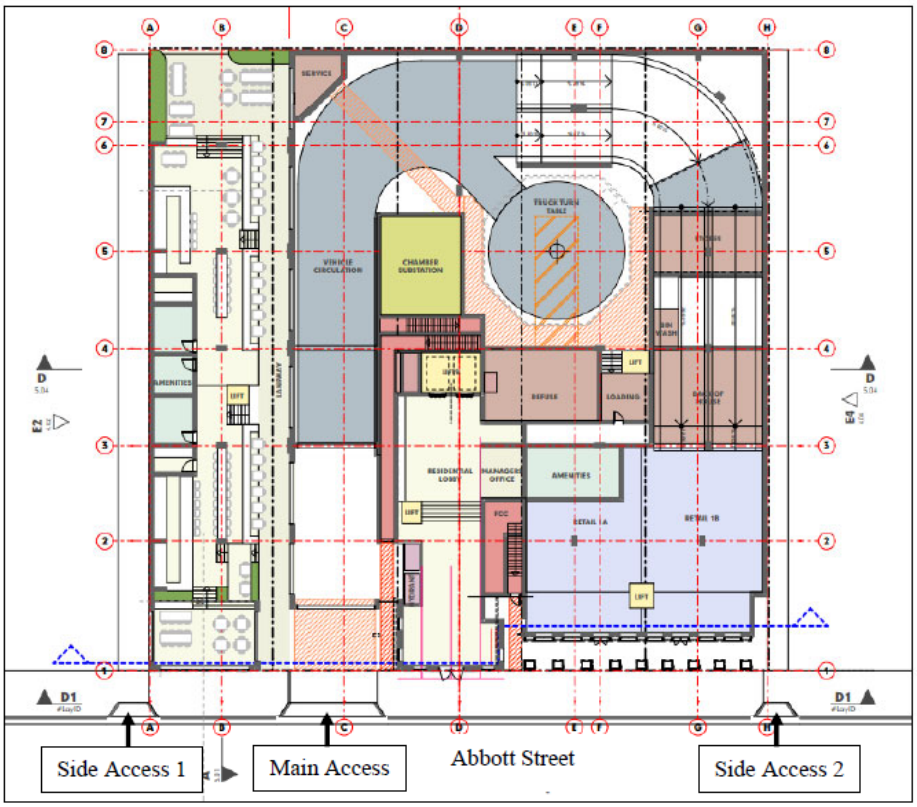


Figure 17: Proposed development ground floor

The site has a truck turn table which allows trucks (e.g. rubbish trucks) to enter the site and park on the turn table which will spin the vehicle around and allows them to exit the site.

6.1 DEVELOPMENT TRAFFIC

RMS's Guide to Traffic Generating Developments (2013), has been used to determine the trip generation for the site. From the guide it is noted that Sydney urban area rates are much lower than regional rates. As a worst-case and based on the development's locality and likely behaviour regional rates have been adopted. The traffic generation based on varying units is summarised in **Table 7** below.

Table 7: High density residential flat dwelling Trip Generation (Source: RMS Guide to Traffic Generating Developments)

Description	Rate	Units	Trip Generation
AM vehicle trips per unit	0.53	79 units	41.87 trips
AM vehicle trips per car space	0.35	125 spaces	43.75 trips
AM vehicle trips per bedroom	0.21	159 bedrooms	33.39 trips
PM vehicle trips per unit	0.32	79 units	25.28 trips
PM vehicle trips per car space	0.26	125 spaces	32.5 trips
PM vehicle trips per bedroom	0.15	159 bedrooms	23.85 trips

From the above, the worst-case traffic is generated based on the number of car parking spaces. The adopted AM peak hour trip generation is 44 trips and 33 trips in the PM. Additionally, from parking rate assessment (refer to **Section 11**), it is assumed that all parking spaces allocated on site shall be attributed to residents. Parking for retail and food and beverage areas will be accommodated by on-street parking.

The site can only be accessed from Abbott Street southbound as there are median parking bays separating the lanes. Therefore, all traffic must enter/exit from Abbot Street and travel southbound. Peak hour trip distribution has been assumed to be 80% departing and 20% arriving for the AM and vice versa for PM.

Refer to **Table 8** for the summary of the development traffic movements.

Table 8: Summary of Development Traffic Movements

AM Peak Hour Traffic (veh/hr)	AM Peak (veh/hr)		PM Peak Hour Traffic (veh/hr)	PM Peak (veh/hr)	
	In	Out		In	Out
44	9	35	33	26	7

It is assumed that all development traffic is split equally between Spence/Abbott Street and Aplin/Abbott Street. It has also been assumed that traffic is equally split between each leg of the Spence/Abbott Street intersection and Aplin/Abbott Street intersections. All traffic arriving from Spence/Abbot Street intersection will utilise the U-turn facility before they reach the Sheilds/Abbott Street intersection and all traffic departing the development will use U-turn facilities to head towards Shields/Abbott Street. Refer to **Figure 18**, **Figure 19**, **Figure 20** and **Figure 21** for the development traffic splits at each intersection.

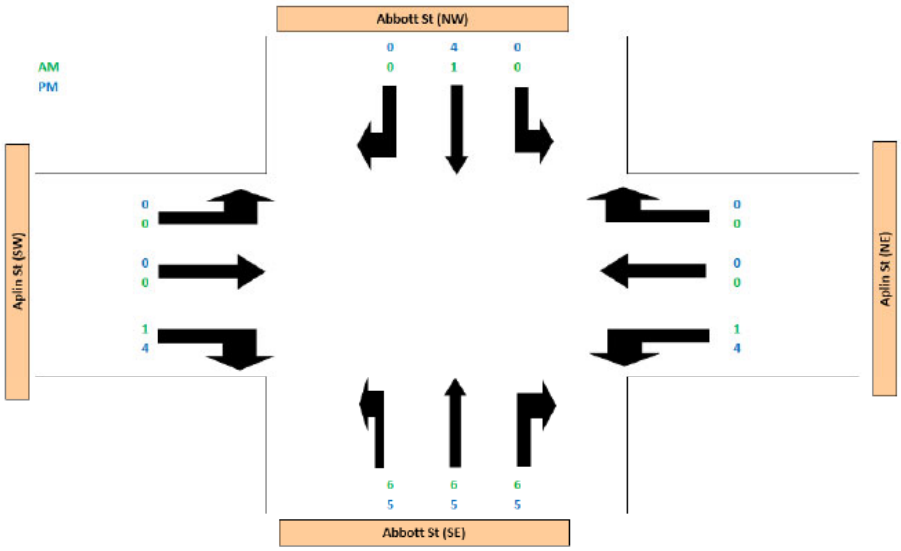


Figure 18: Development Traffic at the Abbott/Aplin Street Intersection

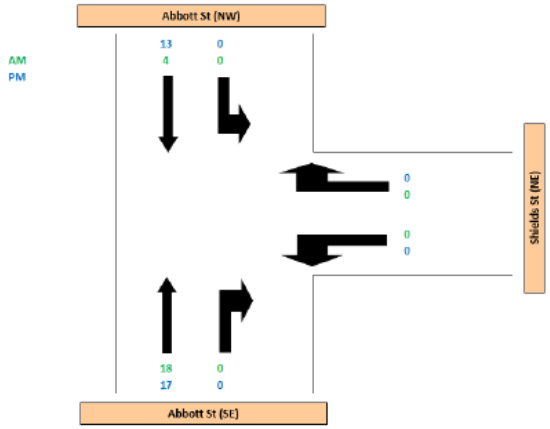


Figure 19: Development Traffic at the Abbott/Sheilds Street Intersection

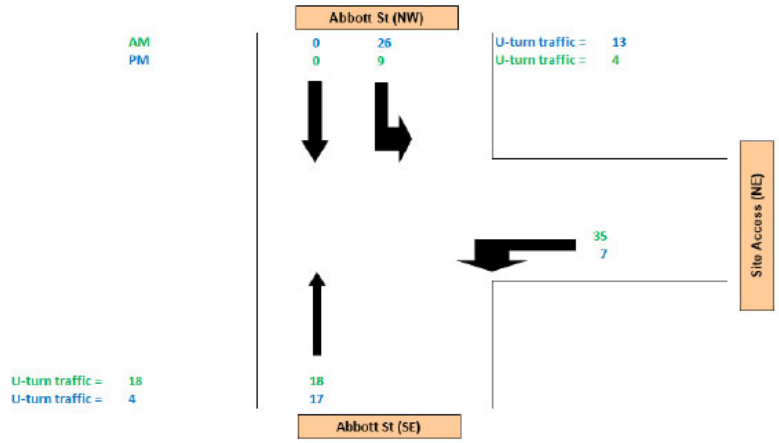


Figure 20: Development Traffic at the Abbott/Access Intersection

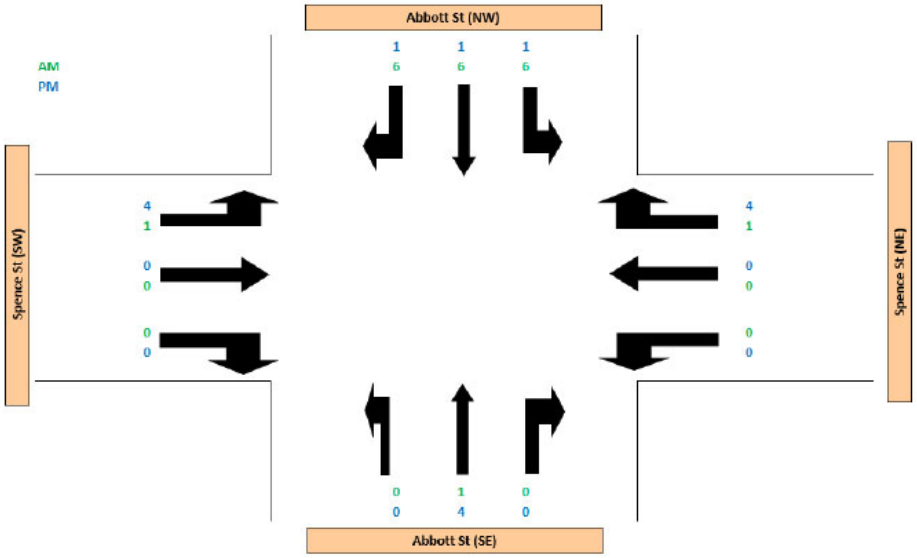


Figure 21: Development Traffic at the Abbott/Spence Street Intersection

7.0 BACKGROUND AND DEVELOPMENT TRAFFIC COMBINED

The 2024 and 2034 peak hour background traffic was combined with the development traffic to give the overall traffic distribution of the site. Refer to **Figure 22**, **Figure 23**, **Figure 24** and **Figure 25** for the 2024 traffic distributions and **Figure 26**, **Figure 27**, **Figure 28** and **Figure 29** for the 2034 summary.

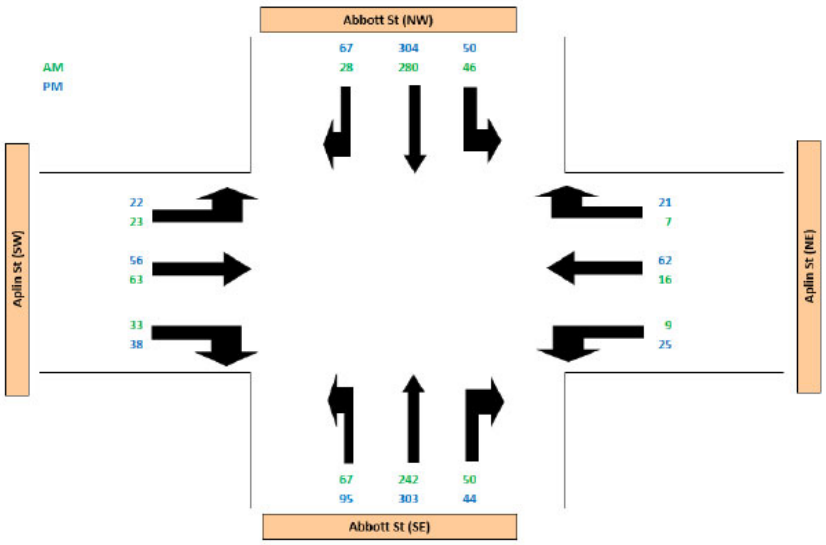


Figure 22: 2024 Background + Development Traffic for AM & PM Peaks for Abbott/Aplin Street Intersection

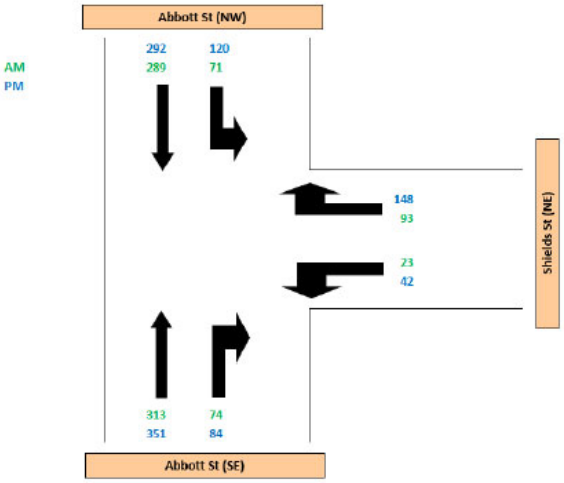


Figure 23: 2024 Background + Development Traffic for AM & PM Peaks for Abbott/Sheilds Street Intersection

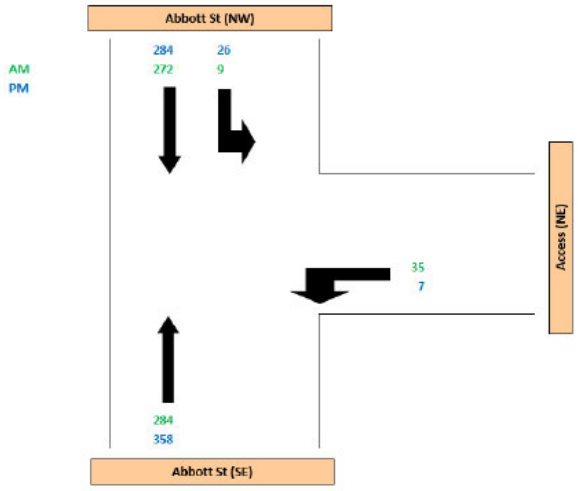


Figure 24: Development Traffic at the Abbott/Access Intersection

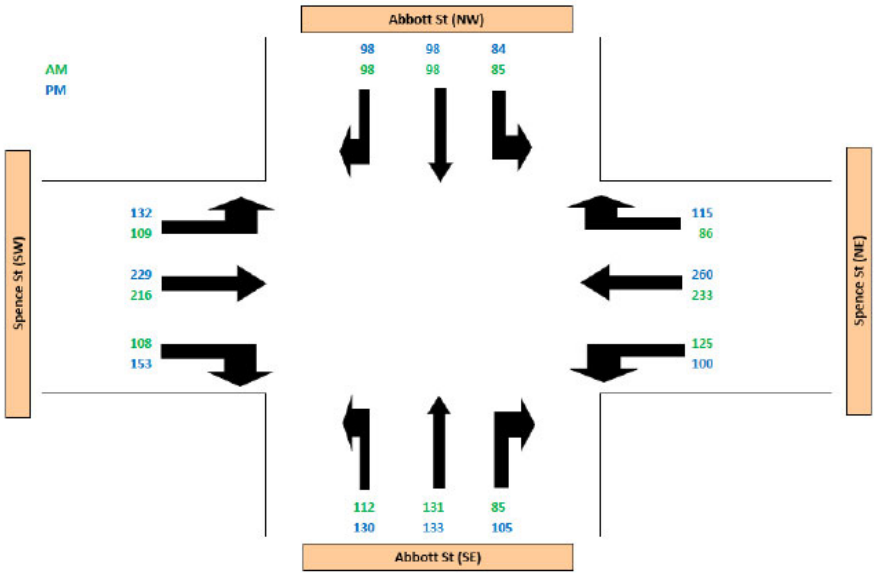


Figure 25: 2024 Background + Development Traffic for AM & PM Peaks for Abbott/Spence Street Intersection

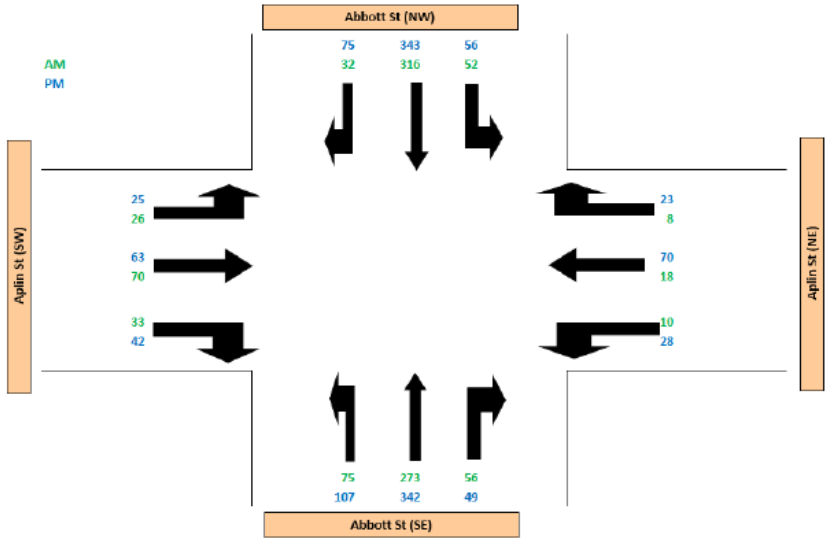


Figure 26: 2034 Background + Development Traffic for AM & PM Peaks for Abbott/Aplin Street Intersection

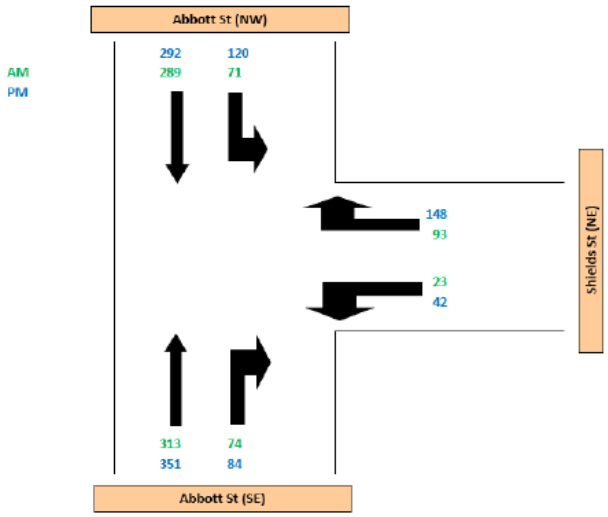


Figure 27: 2034 Background + Development Traffic for AM & PM Peaks for Abbott/Aplin Street Intersection

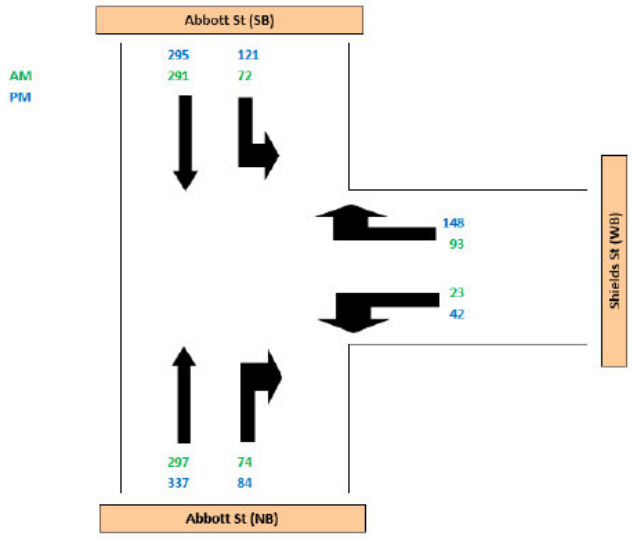


Figure 28: 2034 Background + Development Traffic for AM & PM Peaks for Abbott/Access Intersection

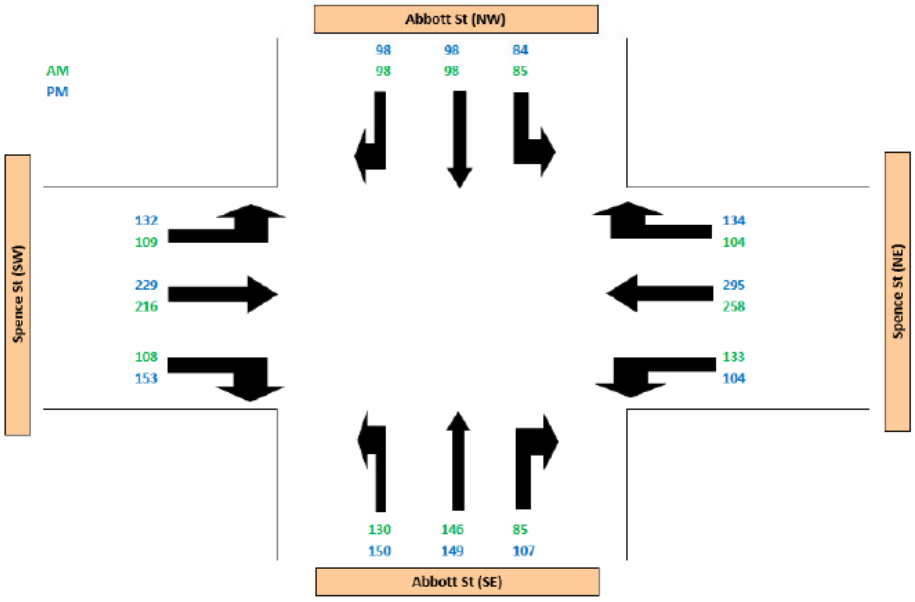


Figure 29: 2034 Background + Development Traffic for AM & PM Peaks for Abbott/Spence Street Intersection

8.0 IMPACT ASSESSMENT AND MITIGATION

8.1 SIDRA INTERSECTION ANALYSIS

It is proposed to measure the operational performance of the intersection using SIDRA 7.0 software package. SIDRA is a computer package used to describe the capability and operational performance of an intersection in terms of the parameters as defined below:

- Degree of Saturation (DoS) – is the ratio of demand flow (or number of vehicles) to the physical capacity of the intersection or approach and is usually represented by a value that lies between zero and one. A DoS in excess of 1.0 indicates that the intersection will operate above capacity and that long delays and congestion will occur;
- Average Delay – is usually defined as the difference in time between interrupted and uninterrupted travel times through an intersection;
- Queue Length – is the 95th percentile back of queue length. This is the length to the back of the queue for a particular approach which 95% of all observed queue lengths fall below; and
- Level of Service (LOS) – an index of the operational performance of traffic on traffic lane, approach, intersection, route or network, based on measures such as delay, degree of saturation, density, speed, congestion coefficient, speed efficiency or travel time index during a given flow period. This provides a quantitative stratification of a performance measure or measures that represent the quality of service, measured on an A to F scale, with LOS A representing the best operating conditions from the traveller's perspective and LOS F the worst.

8.1.1 Intersection Performance Assessment Criteria

The two key performance measurements adopted to assess the intersection operational conditions were Degree of Saturation (DoS) and Level of Service (LOS).

In general, the intersection capacity DoS, where it is considered that the operation of the intersection is constrained, are:

- 0.80 (80%) for un-signalised intersections;
- 0.85 (85%) for roundabouts; and
- 0.90 (90%) for signalised intersections.

The typical LOS, its characteristics and rating are defined in ***Table 9***.

Table 9: Summary of traffic movements

LOS	Description	Rating
A	Free, unrestrictive flow	Very good
B	Mostly free flow, few disruptions	Very good
C	Stable flow	Good
D	Mostly stable flow, some delays	Acceptable
E	Congested	Bad
F	Forced flow	Bad

8.2 INTERSECTION PERFORMANCE

The SIDRA movement results for 2024 and 2034 AM and PM background and post-development for all key intersections are summarised in **Table 10** to **Table 13**. Refer to **Appendix C** for the SIDRA outputs. From the results whilst the development will increase the degree of saturation and delay at key intersections, the increase is insignificant and the level of service of the intersections in the base year and at the 10 year horizon (2034) will be unchanged compared to the without development case.

Table 10: SIDRA 2024 AM Background Movement Summary

Intersection	Approach	Movement	2024 AM Background			2024 AM Background + Dev		
			DoS	Delay (s)	LOS	DoS	Delay (s)	LOS
Abbott Street/ Aplin Street	Abbott St (SE)	Left Turn	0.234	31.8	C	0.247	32.7	C
		Through	0.234	22.1	C	0.247	22.8	C
		Right Turn	0.234	22.6	C	0.247	22.7	C
		Overall	0.234	23.9	C	0.247	24.6	C
	Aplin St (NE)	Left Turn	0.025	26.7	C	0.026	26.7	C
		Through	0.025	21.2	C	0.026	21.2	C
		Right Turn	0.025	26.9	C	0.026	26.9	C
		Overall	0.025	23.8	C	0.026	24.0	C
	Abbott St (NW)	Left Turn	0.197	20.9	C	0.198	20.9	C
		Through	0.197	15.2	B	0.198	15.2	B
		Right Turn	0.070	26.3	C	0.072	26.4	C
		Overall	0.197	16.8	B	0.198	16.8	B
	Aplin St (SW)	Left Turn	0.064	25.9	C	0.065	26.0	C
		Through	0.064	21.6	C	0.065	21.6	C
		Right Turn	0.058	26.1	C	0.065	26.2	C
		Overall	0.064	23.6	C	0.066	23.7	C
		All Vehicles	**0.234**	**20.9**	**C**	**0.247**	**21.3**	**C**
Abbott Street/	Abbott St (SE)	Left Turn	0.247	20.3	C	0.299	20.7	C
		Through	0.247	16.5	B	0.299	17.1	B

Sheilds Street		Right Turn	0.247	23.8	C	0.299	25.0	C
		Overall	0.247	18.0	B	0.299	18.6	B
	Shields St (NE)	Left Turn	0.222	36.5	D	0.255	36.8	D
		Through	0.222	32.6	C	0.255	32.9	C
		Right Turn	0.222	36.4	D	0.255	36.8	D
		Overall	0.222	36.4	D	0.255	36.8	D
	Abbott St (NW)	Left Turn	0.195	32.0	C	0.223	32.0	C
		Through	0.195	25.0	C	0.223	24.8	C
		Right Turn	0.195	29.5	C	0.223	29.3	C
		Overall	0.195	26.4	C	0.223	26.3	C
	Sheilds St (SW)	Left Turn	0.028	54.8	D	0.028	54.8	D
		Through	0.028	50.8	D	0.028	50.5	D
		Right Turn	0.028	54.8	D	0.028	54.8	D
		Overall	0.028	53.4	D	0.028	53.4	D
		All Vehicles	**0.339**	**25.8**	**C**	**0.299**	**24.3**	**C**
Abbott St/ Access	Abbott St (SE)	Through	15.2	0.079	A	0.085	0	A
		Right Turn	0	0.079	A	0.085	4.1	A
		Overall	15.2	0.079	N/A	0.085	0	N/A
	Access (NE)	Left Turn	0	0.004	A	0.066	3.3	A
		Right Turn	0	0.004	A	0.066	6.5	A
		Overall	0	0.004	A	0.066	3.4	A
	Abbott St (NW)	Left Turn	0	0.087	A	0.093	4.7	A
		Through	9.6	0.087	A	0.093	0	A
		Overall	12.3	0.087	N/A	0.093	0.2	N/A
		All Vehicles	**0.130**	**0.8**	**N/A**	0.093	**0.3**	**N/A**
Abbott Street/ Spence Street	Abbott St (SE)	Left Turn	0.299	29.7	C	0.302	29.0	C
		Through	0.299	25.7	C	0.302	25.4	C
		Right Turn	0.299	35.2	D	0.302	36.2	D
		Overall	0.299	29.5	C	0.302	29.2	C
	Spence St (NE)	Left Turn	0.323	20.4	C	0.334	21.1	C
		Through	0.323	18.6	B	0.334	19.4	B
		Right Turn	0.323	26.5	C	0.334	28.1	C
		Overall	0.323	20.6	C	0.334	21.6	C
	Abbott St (NW)	Left Turn	0.265	35.2	D	0.276	33.9	C
		Through	0.265	32.1	C	0.276	30.8	C
		Right Turn	0.279	44.7	D	0.302	46.1	D
		Overall	0.279	37.5	D	0.302	37.1	D
	Spence St (NE)	Left Turn	0.339	21.0	C	0.345	21.7	C
		Through	0.339	17.7	B	0.345	18.4	B
		Right Turn	0.339	28.7	C	0.345	28.8	C
		Overall	0.339	21.3	C	0.345	21.8	C
		All Vehicles	0.339	25.8	C	0.345	26.3	C

Table 11: SIDRA 2024 PM Background Movement Summary

Intersection	Approach	Movement	2024 PM Background			2024 PM Background + Dev		
			DoS	Delay (s)	LOS	DoS	Delay (s)	LOS
Abbott Street/ Aplin Street	Abbott St (SE)	Left Turn	0.281	31.9	C	0.296	32.6	C
		Through	0.281	20.8	C	0.296	21.2	C
		Right Turn	0.281	21.4	C	0.296	21.2	C
		Overall	0.281	23.2	C	0.296	23.7	C
	Aplin St (NE)	Left Turn	0.084	27.4	C	0.087	27.5	C
		Through	0.084	21.9	C	0.087	21.9	C
		Right Turn	0.084	27.6	C	0.087	27.6	C
		Overall	0.084	24.2	C	0.087	24.3	C
	Abbott St (NW)	Left Turn	0.228	21.1	C	0.232	21.2	C
		Through	0.228	15.3	B	0.232	15.3	B
		Right Turn	0.192	29.2	C	0.198	29.3	C
		Overall	0.228	18.2	B	0.232	18.3	B
	Aplin St (SW)	Left Turn	0.059	25.9	C	0.059	25.9	C
		Through	0.059	21.6	C	0.059	21.6	C
		Right Turn	0.074	27.7	C	0.083	27.8	C
		Overall	0.074	24.3	C	0.083	24.4	C
		All Vehicles	**0.281**	**21.5**	**C**	**0.296**	**21.7**	**C**
Abbott Street/ Sheilds Street	Abbott St (SE)	Left Turn	0.285	20.4	C	0.344	21.1	C
		Through	0.285	16.8	B	0.344	17.5	B
		Right Turn	0.285	0	C	0.344	26.3	C
		Overall	0.285	18.4	B	0.344	19.2	B
	Shields St (NE)	Left Turn	0.366	38.0	D	0.416	38.6	D
		Through	0.366	34.1	C	0.416	34.7	C
		Right Turn	0.366	38.0	D	0.416	38.5	D
		Overall	0.366	38.0	D	0.416	38.5	D
	Abbott St (NW)	Left Turn	0.217	31.2	C	0.253	31.0	C
		Through	0.217	24.4	C	0.253	23.0	C
		Right Turn	0.217	29.3	C	0.253	27.4	C
		Overall	0.217	26.4	C	0.253	25.3	C
	Sheilds St (SW)	Left Turn	0.028	54.8	D	0.028	54.8	D
		Through	0.028	50.5	D	0.028	50.5	D
		Right Turn	0.028	54.8	D	0.028	54.8	D
		Overall	0.028	53.4	D	0.028	53.4	D
		All Vehicles	**0.366**	**25.4**	**C**	**0.416**	**25.3**	**C**
Abbott St/ Access	Abbott St (SE)	Through	0.102	0.0	A	0.110	0	A
		Right Turn	0.102	4.2	A	0.110	4.3	A
		Overall	0.102	0.0	N/A	0.110	0	N/A
	Access (NE)	Left Turn	0.004	3.3	A	0.016	3.3	A
		Right Turn	0.004	6.9	A	0.016	7.3	A

		Overall	0.004	5.1	A	0.016	3.8	A
	Abbott St (NW)	Left Turn	0.093	4.7	A	0.103	4.7	A
		Through	0.093	0.0	A	0.103	0.0	A
		Overall	0.093	0.0	N/A	0.103	0.4	N/A
		All Vehicles	**0.102**	**0.0**	**N/A**	**0.110**	**0.2**	**N/A**
Abbott Street/ Spence Street	Abbott St (SE)	Left Turn	0.338	30.1	C	0.343	30.2	C
		Through	0.338	25.8	C	0.343	25.8	C
		Right Turn	0.338	35.7	D	0.343	35.8	D
		Overall	0.338	30.2	C	0.343	30.2	C
	Spence St (NE)	Left Turn	0.366	20.9	C	0.374	21.0	C
		Through	0.366	18.2	B	0.374	18.1	B
		Right Turn	0.366	28.6	C	0.374	29.4	C
		Overall	0.366	21.2	C	0.374	21.5	C
	Abbott St (NW)	Left Turn	0.277	30.6	C	0.282	31.3	C
		Through	0.277	27.5	C	0.282	28.2	C
		Right Turn	0.302	45.9	D	0.311	46.7	D
		Overall	0.302	34.8	C	0.311	35.6	C
	Spence St (NE)	Left Turn	0.409	21.8	C	0.415	21.8	C
		Through	0.409	17.4	B	0.415	17.5	B
		Right Turn	0.421	30.5	C	0.429	31.4	C
		Overall	0.421	22.5	C	0.429	22.7	C
		All Vehicles	**0.421**	**25.9**	**C**	**0.429**	**26.2**	**C**

Table 12: SIDRA 2034 AM Background + Development Movement Summary

Intersection	Approach	Movement	2034 AM Background			2034 AM Background + Dev		
			DoS	Delay (s)	LOS	DoS	Delay (s)	LOS
Abbott Street/ Aplin Street	Abbott St (SE)	Left Turn	0.268	32.6	C	0.282	32.8	C
		Through	0.268	22.8	C	0.282	23.4	C
		Right Turn	0.268	22.9	C	0.282	23.7	C
		Overall	0.268	24.6	C	0.282	25.2	C
	Aplin St (NE)	Left Turn	0.028	26.8	C	0.030	26.8	C
		Through	0.028	21.2	C	0.030	21.3	C
		Right Turn	0.028	26.9	C	0.030	26.9	C
		Overall	0.028	23.9	C	0.030	24.1	C
	Abbott St (NW)	Left Turn	0.227	21.1	C	0.227	21.1	C
		Through	0.227	15.4	B	0.227	15.4	B
		Right Turn	0.086	27.2	C	0.089	28.0	C
		Overall	0.227	17.1	B	0.227	17.2	B
	Aplin St (SW)	Left Turn	0.074	26.1	C	0.075	26.1	C
		Through	0.074	21.7	C	0.075	21.7	C
		Right Turn	0.064	26.1	C	0.066	26.2	C
		Overall	0..074	23.7	C	0.075	23.7	C
		All Vehicles	**0.268**	**21.3**	**C**	**0.282**	**21.6**	**C**
Abbott Street/ Sheilds Street	Abbott St (SE)	Left Turn	0.287	20.8	C	0.299	21.0	C
		Through	0.287	17.2	B	0.299	17.3	B
		Right Turn	0.287	25.6	C	0.299	25.0	C
		Overall	0.287	18.9	B	0.299	18.8	B
	Shields St (NE)	Left Turn	0.255	36.8	D	0.255	36.8	D
		Through	0.255	32.9	C	0.255	32.9	C
		Right Turn	0.255	36.8	D	0.255	36.8	D
		Overall	0.255	36.8	D	0.255	36.8	D
	Abbott St (NW)	Left Turn	0.221	32.5	C	0.223	32.3	C
		Through	0.221	25.4	C	0.223	25.3	C
		Right Turn	0.221	29.9	C	0.223	29.8	C
		Overall	0.221	26.9	C	0.223	26.7	C
	Sheilds St (SW)	Left Turn	0.028	54.8	D	0.028	54.8	D
		Through	0.028	50.5	D	0.028	50.5	D
		Right Turn	0.028	54.8	D	0.028	54.8	D
		Overall	0.028	53.4	D	0.028	53.4	D
		All Vehicles	**0.287**	**24.8**	**C**	**0.299**	**24.6**	**C**
Abbott St/ Access	Abbott St (SE)	Through	0.115	0.0	A	0.120	0.0	A
		Right Turn	0.115	4.3	A	0.120	4.4	A
		Overall	0.115	0.0	N/A	0.120	0.0	N/A
	Access (NE)	Left Turn	0.005	3.3	A	0.068	3.4	A
		Right Turn	0.005	7.6	A	0.068	8.4	A

		Overall	0.005	5.5	A	0.068	3.6	A
	Abbott St (NW)	Left Turn	0.099	4.7	A	0.105	4.7	A
		Through	0.099	1.1	N/A	0.105	0.0	N/A
		Overall	0.099	0.0	N/A	0.105	0.1	N/A
		All Vehicles	0.115	0.0	N/A	0.120	0.2	N/A
Abbott Street/ Spence Street	Abbott St (SE)	Left Turn	0.324	30.0	C	0.328	30.0	C
		Through	0.324	26.2	C	0.328	26.4	C
		Right Turn	0.324	34.7	C	0.328	35.5	C
		Overall	0.324	29.6	C	0.328	29.9	C
	Spence St (NE)	Left Turn	0.400	21.3	C	0.366	20.9	C
		Through	0.400	18.5	B	0.366	18.7	B
		Right Turn	0.400	28.3	C	0.366	27.1	C
		Overall	0.400	21.6	C	0.366	21.1	C
	Abbott St (NW)	Left Turn	0.265	35.2	D	0.283	31.8	C
		Through	0.265	32.1	C	0.283	28.7	C
		Right Turn	0.289	45.0	D	0.313	45.7	D
		Overall	0.289	37.5	D	0.313	35.6	D
	Spence St (NE)	Left Turn	0.343	21.0	C	0.339	21.0	C
		Through	0.343	17.6	B	0.339	17.6	B
		Right Turn	0.343	28.8	C	0.339	28.0	C
		Overall	0.343	21.3	C	0.339	21.1	C
		All Vehicles	0.400	26.0	C	0.366	25.7	C

Table 13: SIDRA 2034 PM Background + Development Movement Summary

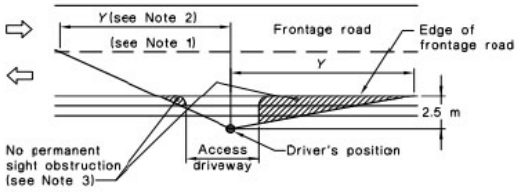
Intersection	Approach	Movement	2034 PM Background			2024 PM Background + Dev		
			DoS	Delay (s)	LOS	DoS	Delay (s)	LOS
Abbott Street/ Aplin Street	Abbott St (SE)	Left Turn	0.433	42.2	D	0.454	42.2	D
		Through	0.433	28.4	C	0.454	29.3	C
		Right Turn	0.433	25.5	C	0.454	26.9	C
		Overall	0.433	31.0	C	0.454	31.9	C
	Aplin St (NE)	Left Turn	0.071	19.7	B	0.074	19.8	B
		Through	0.071	14.2	B	0.074	14.2	B
		Right Turn	0.071	19.8	B	0.074	19.9	B
		Overall	0.071	16.4	B	0.074	16.6	B
	Abbott St (NW)	Left Turn	0.355	30.4	C	0.361	30.4	C
		Through	0.355	24.2	C	0.361	24.2	C
		Right Turn	0.417	43.0	D	0.432	43.2	D
		Overall	0.417	27.9	C	0.432	28.0	C
	Aplin St (SW)	Left Turn	0.050	18.3	B	0.050	18.3	B
		Through	0.050	14.0	B	0.050	14.0	B
		Right Turn	0.065	19.1	B	0.072	19.2	B
		Overall	0.064	16.4	B	0.072	16.5	B
		All Vehicles	**0.433**	**26.8**	**C**	**0.454**	**27.2**	**C**
Abbott Street/ Sheilds Street	Abbott St (SE)	Left Turn	0.345	21.1	C	0.367	21.3	C
		Through	0.345	17.7	B	0.367	18.0	B
		Right Turn	0.345	26.3	C	0.367	26.5	C
		Overall	0.345	19.4	B	0.367	19.7	B
	Shields St (NE)	Left Turn	0.416	38.6	D	0.416	38.6	D
		Through	0.416	34.7	C	0.416	34.7	C
		Right Turn	0.416	38.5	D	0.416	38.5	D
		Overall	0.416	38.5	D	0.416	38.5	D
	Abbott St (NW)	Left Turn	0.245	32.2	C	0.253	31.8	C
		Through	0.245	25.1	C	0.253	24.7	C
		Right Turn	0.245	29.9	C	0.253	29.4	C
		Overall	0.245	27.3	C	0.253	26.8	C
	Sheilds St (SW)	Left Turn	0.029	54.9	D	0.029	55.0	D
		Through	0.029	50.6	D	0.029	50.6	D
		Right Turn	0.029	54.9	D	0.029	54.9	D
		Overall	0.029	53.5	D	0.029	53.5	D
		All Vehicles	**0.416**	**26.2**	**C**	**0.416**	**26.0**	**C**
Abbott St/ Access	Abbott St (SE)	Through	0.115	0.0	A	0.121	0.0	A
		Right Turn	0.115	4.4	A	0.121	4.6	A
		Overall	0.115	0.0	N/A	0.121	0.0	N/A
	Access (NE)	Left Turn	0.005	3.4	A	0.016	3.4	A
		Right Turn	0.005	7.7	A	0.016	8.2	A

		Overall	0.005	5.5	N/A	0.016	4.0	N/A
	Abbott St (NW)	Left Turn	0.106	4.7	A	0.115	4.7	A
		Through	0.106	0.0	A	0.115	0.0	A
		Overall	0.106	0.0	N/A	0.115	0.4	N/A
		All Vehicles	**0.115**	**0.0**	**N/A**	**0.121**	**0.2**	**N/A**
Abbott Street/ Spence Street	Abbott St (SE)	Left Turn	0.369	30.5	C	0.383	30.5	C
		Through	0.369	26.6	C	0.383	26.6	C
		Right Turn	0.369	36.0	D	0.383	36.1	D
		Overall	0.369	30.5	C	0.383	30.6	C
	Spence St (NE)	Left Turn	0.415	21.4	C	0.422	21.5	C
		Through	0.415	18.5	B	0.422	18.5	B
		Right Turn	0.415	29.2	C	0.422	30.1	C
		Overall	0.415	21.7	C	0.422	22.0	C
	Abbott St (NW)	Left Turn	0.277	30.4	C	0.282	30.6	C
		Through	0.277	27.4	C	0.282	27.5	C
		Right Turn	0.321	46.9	D	0.330	46.7	D
		Overall	0.321	35.1	D	0.330	35.2	D
	Spence St (NE)	Left Turn	0.409	21.8	C	0.415	21.8	C
		Through	0.409	17.4	B	0.415	17.5	B
		Right Turn	0.445	31.6	C	0.448	31.7	C
		Overall	0.445	22.8	C	0.448	22.8	C
		All Vehicles	**0.0445**	**26.2**	**C**	**0.448**	**26.4**	**C**

9.0 SIGHT DISTANCE ASSESSMENT

9.1 SIGHT DISTANCE

A sight distance check has been conducted for the main access driveway in accordance with AS2890.1 Figure 3.2. As seen below in **Figure 30** a minimum stopping sight distance of 35m is required for a 40km/h frontage speed limit. From **Figure 31** it can be seen that there is sufficient sight distance from the proposed main access.



Frontage road speed (Note 4) km/h	Distance (Y) along frontage road m		
	Access driveways other than domestic (Note 5)		Domestic property access (Note 6)
	Desirable 5 s gap	Minimum SSD	
40	55	35	30
50	69	45	40
60	83	65	55
70	97	85	70
80	111	105	95
90	125	130	Use values from 2nd and 3rd columns
100	139	160	
110	153	190	

NOTES:

1 Centre-line or centre of road (undivided road), or right hand edge of right hand through lane (divided road).

2 A check to the left is not required at a divided road where the median is wide enough to shelter a vehicle leaving the driveway.

3 Parking on this side of the frontage road may need to be restricted on either side of the driveway so that the sight distance required by the above table to an approaching vehicle is not obstructed.

4 This is the posted or general speed limit unless the 85th percentile speed is more than 5 km/h above the limit in which case the tabulated speed nearest the 85th percentile shall be adopted.

5 The values in the table apply only to left turn and right turn manoeuvres into two-way roads up to four lanes wide and one-way streets regardless of width, either for a 5 s gap, desirable at lower frontage road speeds, or minimum stopping sight distance based on 2 s reaction time.

Crossing manoeuvres (e.g. from an access opposite the steam of a T-junction) over four lanes or more, and turning manoeuvres into a six lane two-way road would require longer gaps unless there was a median wide enough to store a vehicle and allow a two stage manoeuvre.

6 These distances are based on stopping sight distances with reaction time of 1.5 s for traffic approaching along the frontage road and are applicable to a frontage road speed of up to 80 km/h only. Wherever practicable sight distance provided at domestic property accesses should meet the values given in the second or third columns of the Table.

7 When checking sight distance the driver's eye height and the height of the object (approaching vehicle) are to be taken as 1.15 m above the road surface.

FIGURE 3.2 SIGHT DISTANCE REQUIREMENTS AT ACCESS DRIVEWAYS

Figure 30: Figure 3.2 Extract from AS2890.1 - Sight distance requirements

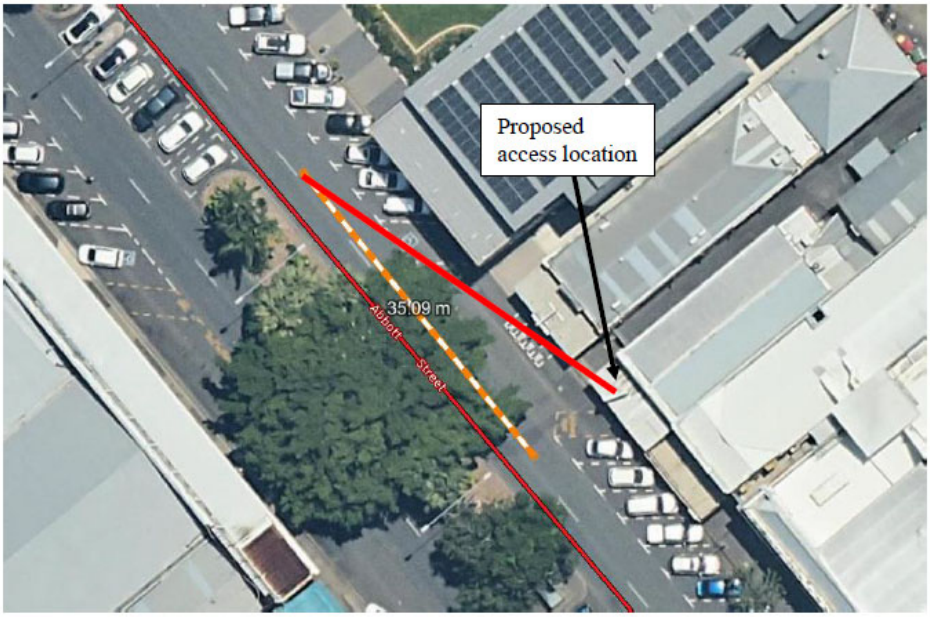


Figure 31: Available sight distance

10.0 VEHICLE SWEPT PATHS

The vehicle swept paths have been check for a B99 and a medium rigid vehicle (MRV) entering/exiting the site.

10.1 B99 SWEPT PATH

Refer to **Figure 32** for B99 swept paths entering and existing the site. From the Figure it can be there is sufficient space to accommodate swept path of a B99 vehicle. It is noted that at least 2 parking spaces are required to accommodate the new main access location.

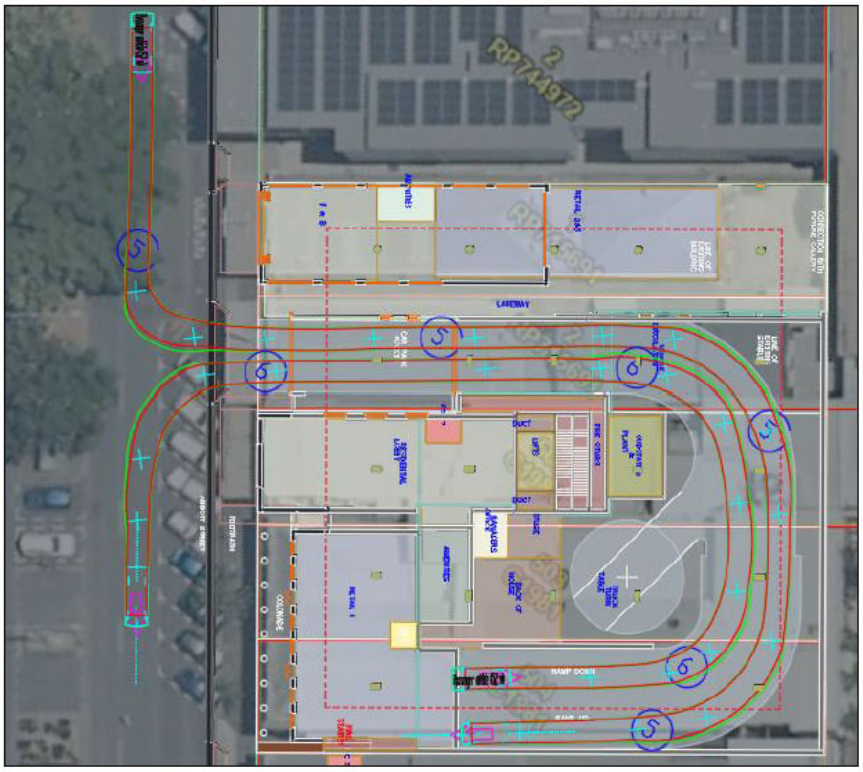


Figure 32: Site Swept Paths for cars entering/exiting the site

10.2 MEDIUM RIGID VEHICLE SWEPT PATH

Swept paths for a MRV entering and departing the refuse and loading area are shown in **Figure 33** and **Figure 34**. It is noted that when entering the site the heavy vehicle would need to pass the centre of the access. As such, MRV's must wait for any vehicles departing the site to leave before entering. Based on the relatively low occurrence of MRV's entering the site (which would generally be limited to rubbish collection and deliveries for retail spaces, and occur outside of peak hours) and low internal traffic volumes, this is not anticipated to cause an issue as a waiting MRV would hold any upstream traffic allowing all vehicles to depart before entering. Site volume for any given hour is 44 trips or less. As such, exiting volume at a given time would be one or two vehicles which would cause very minimal distribution to traffic.

Additionally, it is noted that when departing the refuse/loading area MRV must re-enter traffic coming down from upper floor parking with little to no sight distance and must cross into the approaching traffic lane to be able to exist the refuse/loading area. To improve safety the following recommendations should be implemented:

- two mirrors are installed on the first corner to assist vehicles departing the refuse/loading area.
- the wall separating the refuse/loading area and traffic coming down from the upper level is constructed as a low wall so that vehicles coming down from the first level are able to see vehicles in the refuse/loading area and vice versa.
- Width of the separating wall is reduced by least 0.6m in length to provide clearance to MRV's and allow for driver error when entering the area.

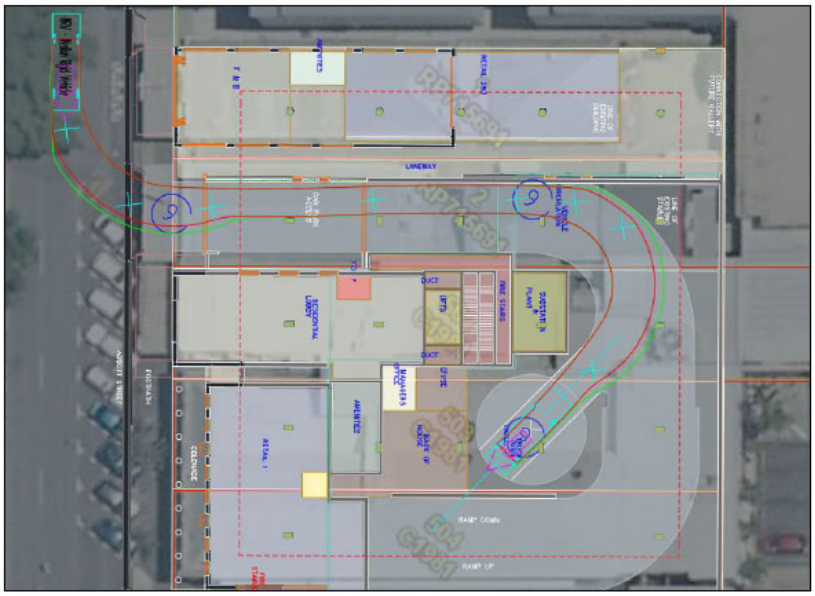


Figure 33: Site swept path for MRV entering the site

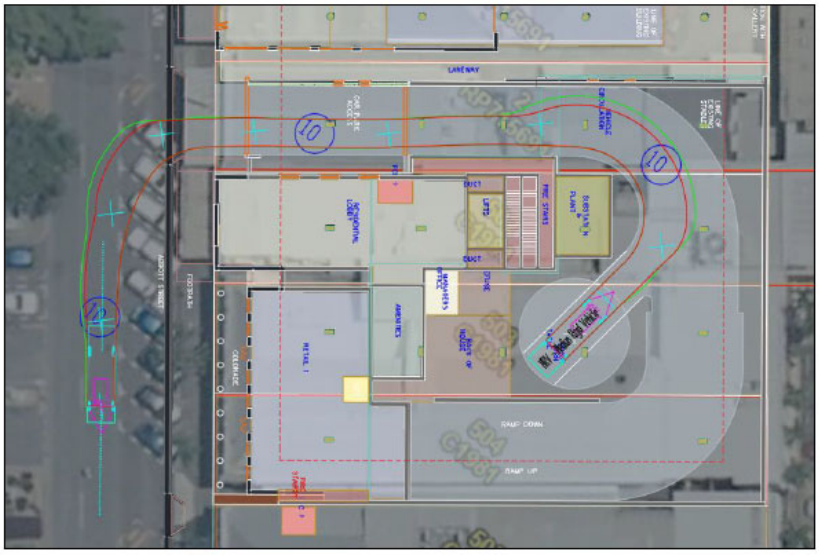


Figure 34: Site swept path for MRV exiting the site

11.0 PARKING ASSESSMENT

In accordance with the CRC, Cairns Plan, dwelling unit parking rate is 1.5 spaces per one (1) and two (2) bedroom unit or 2 spaces per three (3) bedroom unit.

Unit type	Number of	Rate	Required no. of parking spaces
1 bed	16	1.5	24
2 bed	46	1.5	69
3 bed	17	2	34
Total	79	**Total**	127

From preliminary building plans, there are currently 125 parking spaces including 4 accessible parking spaces. Thus, there is a shortfall of 2 parking spaces. Given the location of proposed development and ample street parking fronting the building and in the surrounding area it is suggested that the 2 parking space short fall is accepted.

12.0 SUMMARY

This report has assessed the impact of the traffic generated by the proposed development on the existing road network including at key intersections and accesses. Consideration has been given to operational performance and road safety.

The impact of the proposed development on the road network has been analysed using procedures set out in Austroads, Australian Standard AS2890, Parking facilities and in TMR's Guide to Traffic Impact Assessment. Assessment has found that there is no significant worsening of the operational performance of the surrounding road network as a result of the proposed development. No intersection upgrades have been deemed necessary.

It is noted, however, from preliminary building plans, there are currently 125 parking spaces including 4 accessible parking spaces. The required number of car parks is 127 parking spaces. Given the location of proposed development and ample street parking fronting the building and in the surrounding area it is suggested that the 2 parking space short fall is accepted.

With regards to MRV's, MRV's must wait for any vehicles departing the site to leave before entering. Based on the relatively low occurrence of MRV's entering the site (which would generally be limited to rubbish collection and deliveries for retail spaces and occur outside of peak hours) and low internal traffic volumes, this is not anticipated to cause an issue as a waiting MRV would hold any upstream traffic allowing all vehicles to depart before entering. Site volume for any given hour is 44 trips or less. As such, exiting volume at a given time would be one or two vehicles which would cause very minimal distribution to traffic.

Additionally, it is noted that when departing the refuse/loading area MRV must re-enter traffic coming down from upper floor parking with little to no sight distance and must cross into the approaching traffic lane to be able to exist the refuse/loading area. To improve safety the following recommendations should be implemented:

- two mirrors are installed on the first corner to assist vehicles departing the refuse/loading area.
- the wall separating the refuse/loading area and traffic coming down from the upper level is constructed as a low wall so that vehicles coming down from the first level are able to see vehicles in the refuse/loading area and vice versa.

- Width of the separating wall is reduced by least 0.6m in length to provide clearance to MRV's and allow for driver error when entering the area.

In conclusion, the proposed development accesses have been found to be adequate and no significant adverse impact on the operational performance or safety of the surrounding road network has been identified. No other mitigation measures other than those mentioned above have been deemed necessary.

13.0 TRAFFIC IMPACT ASSESSMENT CERTIFICATION

This report has been prepared under the direction of Brett Langtree (RPEQ No 11932), a civil engineer with over 25 years' experience in the planning, design and implementation of urban residential, industrial and commercial land development and the provision of infrastructure services to urban communities and the preparation of traffic impact assessments for developments.

.....

Brett Langtree – Principal Civil Engineer (RPEQ No 11932), Langtree Consulting

Date: 11 September 2024

APPENDIX A

DEVELOPMENT PLANS

CAIRNS POST DEVELOPMENT
26-36 ABBOTT STREET CAIRNS QLD 4870

ASV

POST001

WIP

HUNT DESIGN

TRANSMITTAL

SUBSET	DRG No.	DRAWING NAME	REV ID	CHANGE ID'S	ISSUE DATE	STATUS
1 SITE						
	1.01	SITE CONTEXT			-	PRELIMINARY
	1.02	SITE PLAN 1000 TRIA			-	PRELIMINARY
2 PLANS						
	2.01	LEVEL 00			-	PRELIMINARY
	2.02	LEVEL 01 (CARPARK POP)			-	PRELIMINARY
	2.03	LEVEL 02 (CARPARK 1)			-	PRELIMINARY
	2.04	LEVEL 03 (CARPARK 2)			-	PRELIMINARY
	2.05	LEVEL 04 (CARPARK 3)			-	PRELIMINARY
	2.06	LEVEL 05 (ROOF TERRACE)			-	PRELIMINARY
	2.07	LEVEL 06			-	PRELIMINARY
	2.08	LEVEL 07			-	PRELIMINARY
	2.09	LEVEL 08			-	PRELIMINARY
	2.10	LEVEL 09			-	PRELIMINARY
	2.11	LEVEL 10			-	PRELIMINARY
	2.12	LEVEL 11			-	PRELIMINARY
	2.13	LEVEL 12			-	PRELIMINARY
	2.14	ROOF PLAN			-	PRELIMINARY
3 ELEVATIONS						
	3.01	ELEVATION 1 - SOUTH WEST			-	PRELIMINARY
	3.02	ELEVATION 2 - NORTH WEST			-	PRELIMINARY
	3.03	ELEVATION 3 - NORTH EAST			-	PRELIMINARY
	3.04	ELEVATION 4 - SOUTH EAST			-	PRELIMINARY
4 SECTIONS						
	4.01	SECTION A			-	PRELIMINARY
	4.02	SECTION B			-	PRELIMINARY
	4.03	SECTION C			-	PRELIMINARY
	4.04	SECTION D			-	PRELIMINARY
5 APARTMENT PLANS						
	5.01	APARTMENT PLANS			-	PRELIMINARY
6 AREA ANALYSIS						
	6.01	GROSS FLOOR AREA (GFA)			-	PRELIMINARY
	6.02	SUMMARY			-	PRELIMINARY
7 SHADOW DIAGRAMS						
	7.01	SHADOW DIAGRAMS - MARCH 21ST EQUINOX			-	PRELIMINARY
	7.02	SHADOW DIAGRAMS - JUNE 21ST SOLSTICE			-	PRELIMINARY
	7.03	SHADOW DIAGRAMS - SEPTEMBER 21ST EQUIN.			-	PRELIMINARY
	7.04	SHADOW DIAGRAMS - DECEMBER 21ST SOLST.			-	PRELIMINARY
8 VISUALISATIONS						
	8.01	STREETSCAPE PERSPECTIVE - ABBOTT STREET			-	PRELIMINARY
	8.02	TOWER PERSPECTIVE - ABBOTT STREET			-	PRELIMINARY
DA01 SCHEMATIC DESIGN + DA						
		COVER SHEET			-	
		CONTENTS			-	

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

SCHEMATIC DESIGN + DA
CONTENTS

DRAFT - WIP

PROJECT NO. POST001
DRAWING NO.
REVISION NO. 01
DATE 1/9/2023

HUNT DESIGN

SITE CONTEXT
SCALE 1:1000

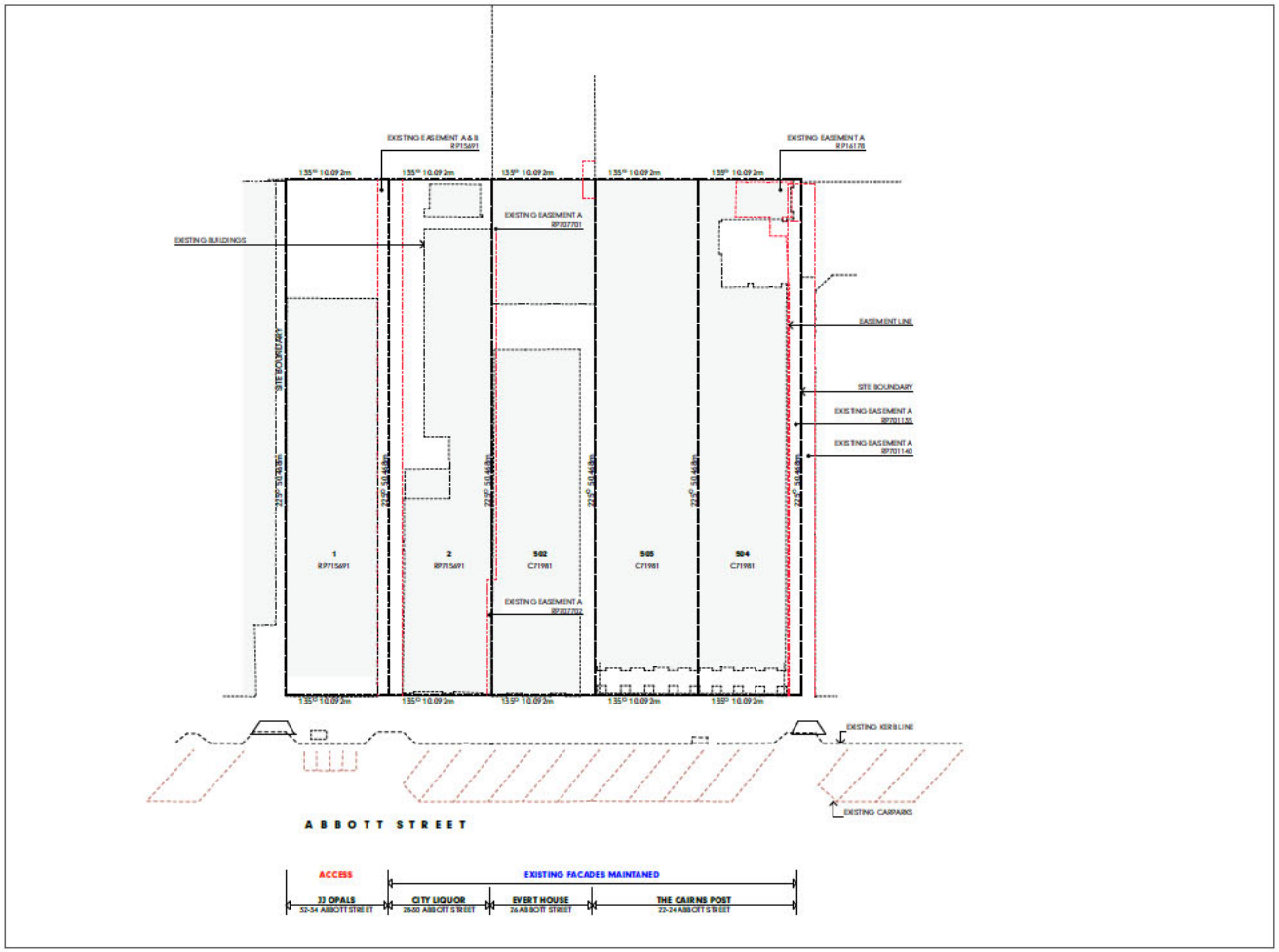
CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
SITE
SITE CONTEXT

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	1.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



EXISTING SITE PLAN
SCALE 1:200

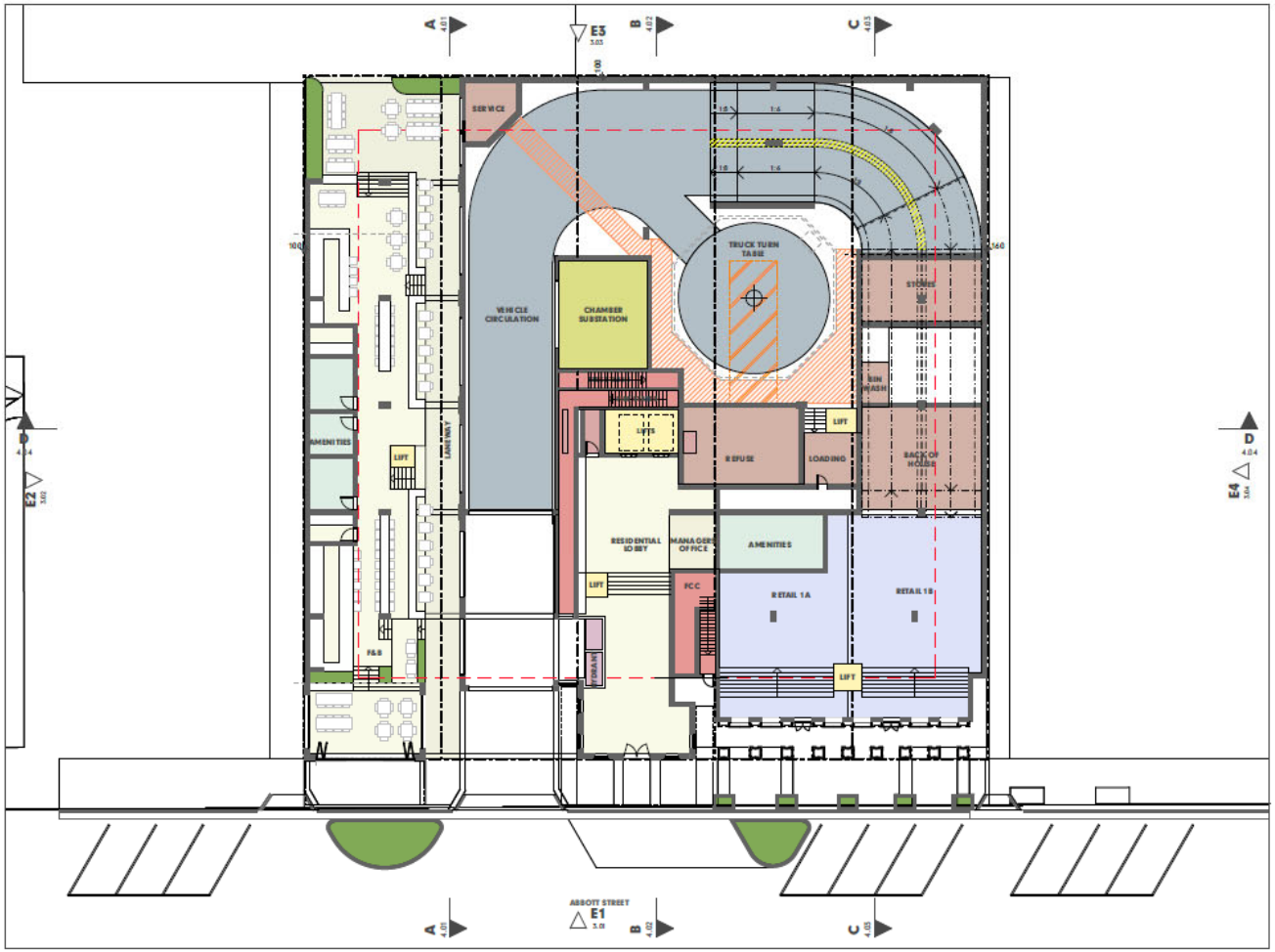
CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
SITE
SITE PLAN EXISTING

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	1.02
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



LEVEL 00 (Q100+300)
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 00

ZONE CATEGORY	ZONE NAME	AREA	QTY
ADMIN + OFFICE			
	MANAGERS OFFICE	14	1
AMENITIES			
	AMENITIES	90	6
ELECTRICAL PLANT			
	CHAMBER SUBSTATION	52	1
FIRE STAIRS			
	FCC	16	1
	FIRE STAIR	6	1
	FIRE STAIR 1	10	1
	FIRE STAIRS	27	1
FOOD + BEVERAGES (F+B)			
	F&B	320	1
	RESIDENTIAL LOBBY	148	1
HYDRAULIC PLANT			
	HYDRANT	3	1
	WATER METER	3	1
LIFTS			
	LIFT	14	4
	LIFTS	17	1
PATHS			
	LANEWAY	195	1
RETAIL			
	RETAIL 1A	107	1
	RETAIL 1B	145	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	BACK OF HOUSE	67	1
	BIN WASH	6	1
	LOADING	15	1
	REFUSE	49	1
	SERVICE	14	1
	STORES	40	1
VEHICLE CIRCULATION			
	TRUCK TURN TABLE	95	1
	VEHICLE CIRCULATION	467	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

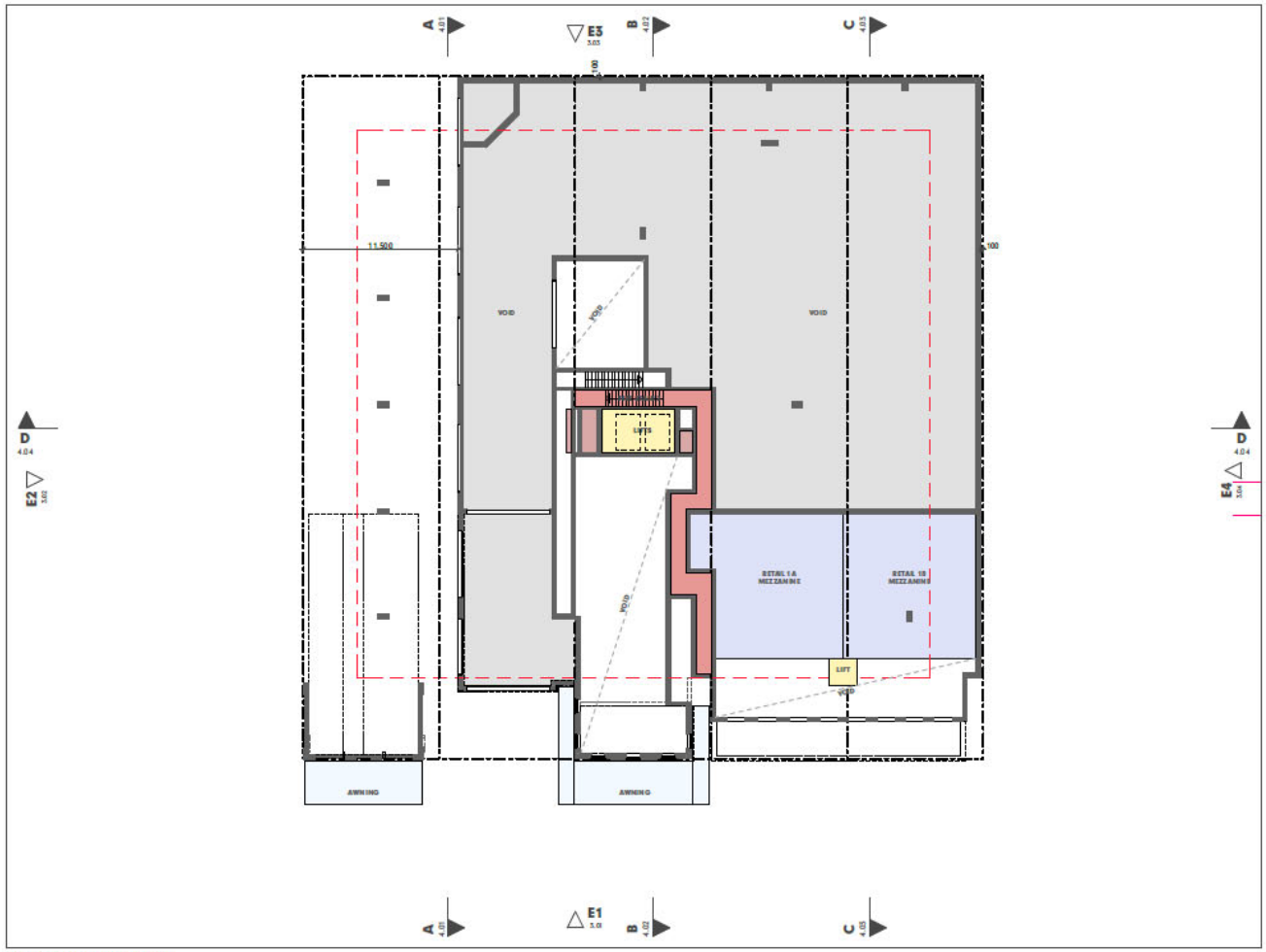
PRELIMINARY

PLANS
LEVEL 00

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



LEVEL 01 (CAIRNS POST)
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 01

ZONE CATEGORY	ZONE NAME	AREA	QTY
FIRE STAIRS			
	FIRE STAIR 2	41	1
LIFTS			
	LIFT	4	1
	LIFTS	17	1
RETAIL			
	RETAIL 1A MEZZANINE	109	1
	RETAIL 1B MEZZANINE	105	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

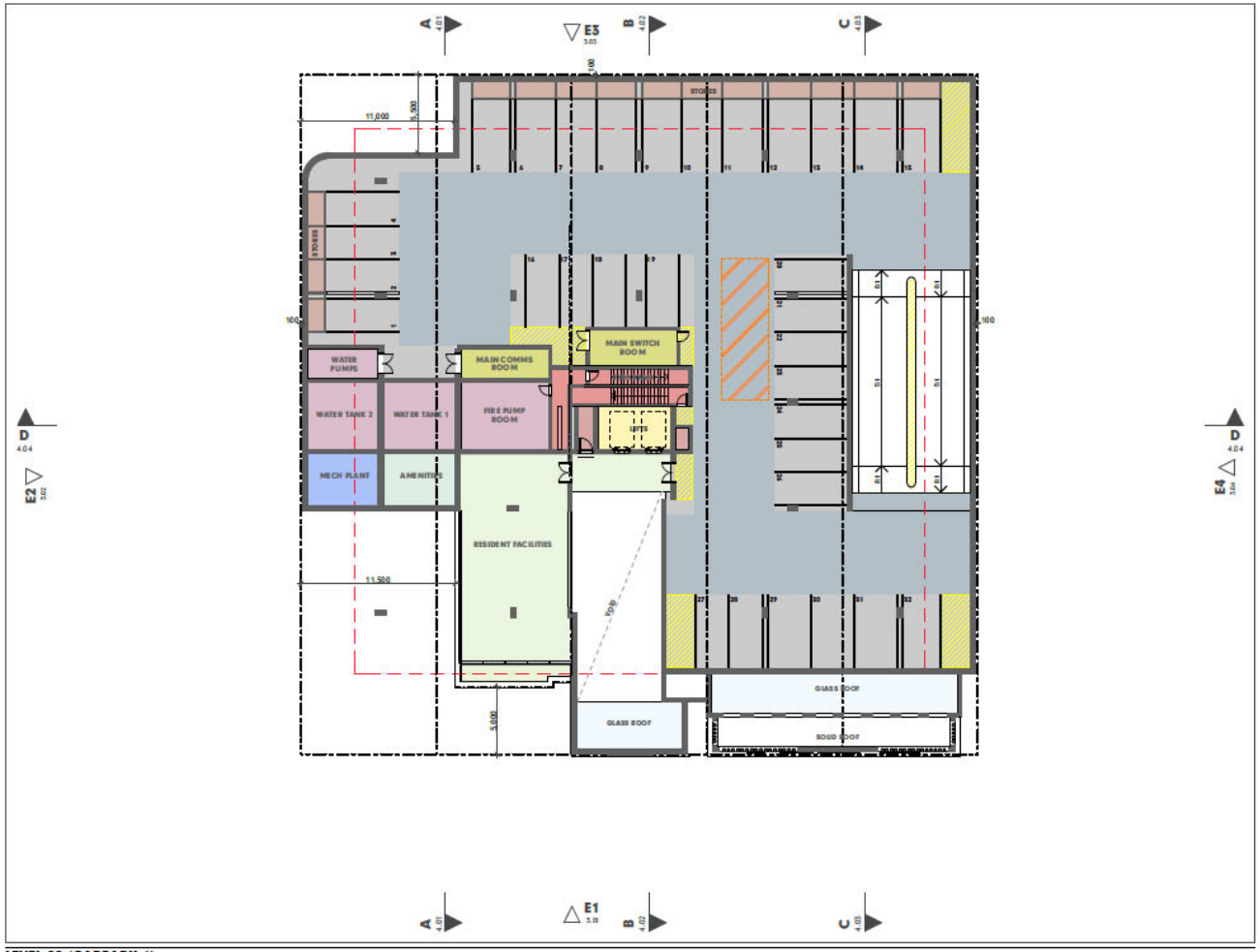
PRELIMINARY

PLANS
LEVEL 01 (CARINS POST)

DRAFT - WIP

PROJECT NO. POST001
DRAWING NO. 2.02
REVISION NO. 01
DATE 1/9/2023

HUNT DESIGN



LEVEL 02 (CARPARK 1)
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 01

ZONE CATEGORY	ZONE NAME	AREA	QTY
FIRE STAIRS			
	FIRE STAIR 2	41	1
LIFTS			
	LIFT	4	1
	LIFTS	17	1
RETAIL			
	RETAIL 1A MEZZANINE	109	1
	RETAIL 1B MEZZANINE	105	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

PLANS
LEVEL 02 (CARPARK 1)

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.03
REVISION NO.	01
DATE	1/9/2025

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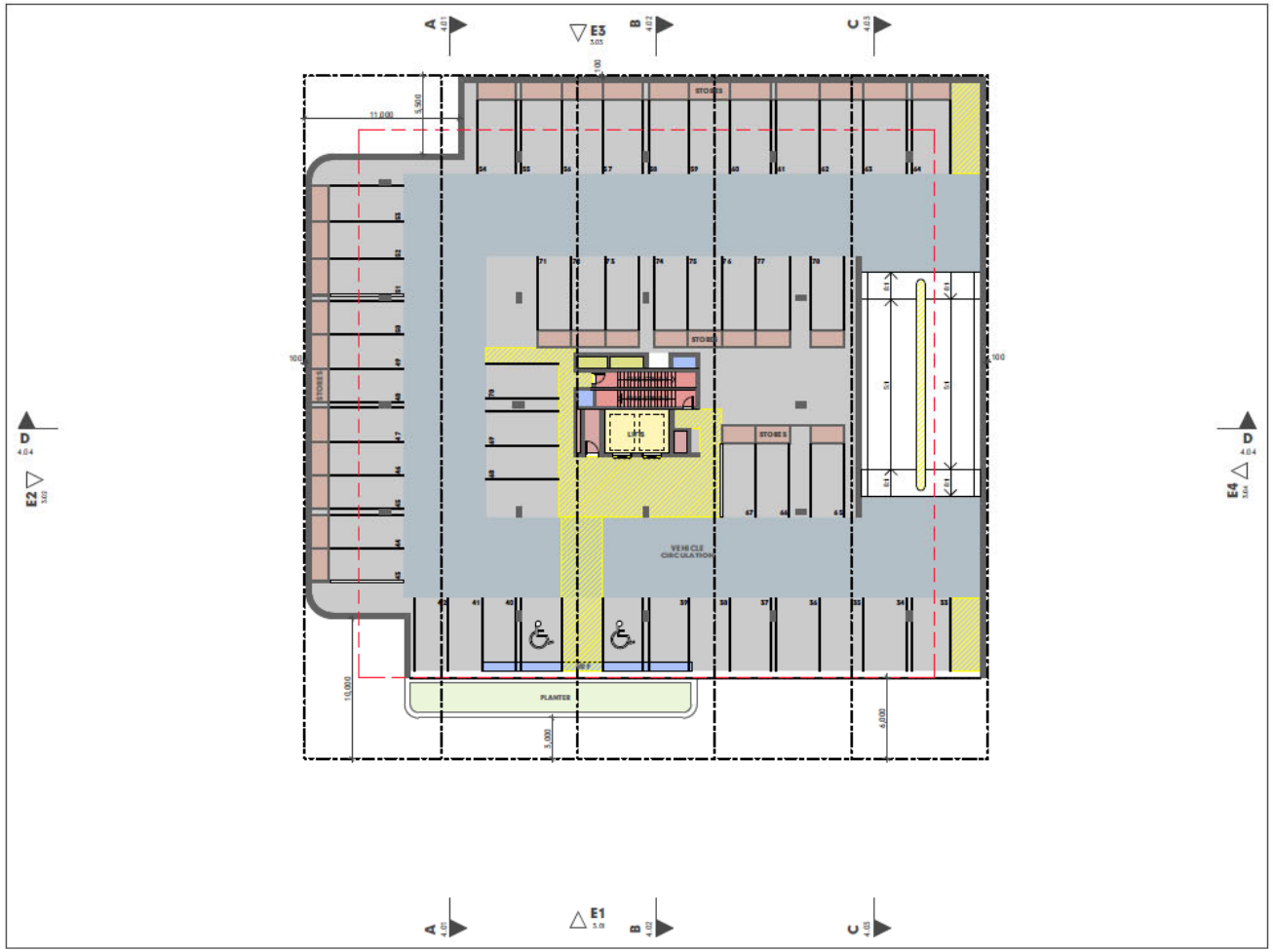

LEVEL 03 (CARPARK 2)
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 03

ZONE CATEGORY	ZONE NAME	AREA	QTY
CAR PARKING SPACES			
	CAR PARKING	1,834	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	STAIR PRESSURISATION	3	2
	VRF	9	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	STORES	105	14
VEHICLE CIRCULATION			
	VEHICLE CIRCULATION	657	1

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
PLANS
LEVEL 03 (CARPARK 2)

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PROJECT NO.	POST001
DRAWING NO.	2.04
REVISION NO.	01
DATE	1/9/2023

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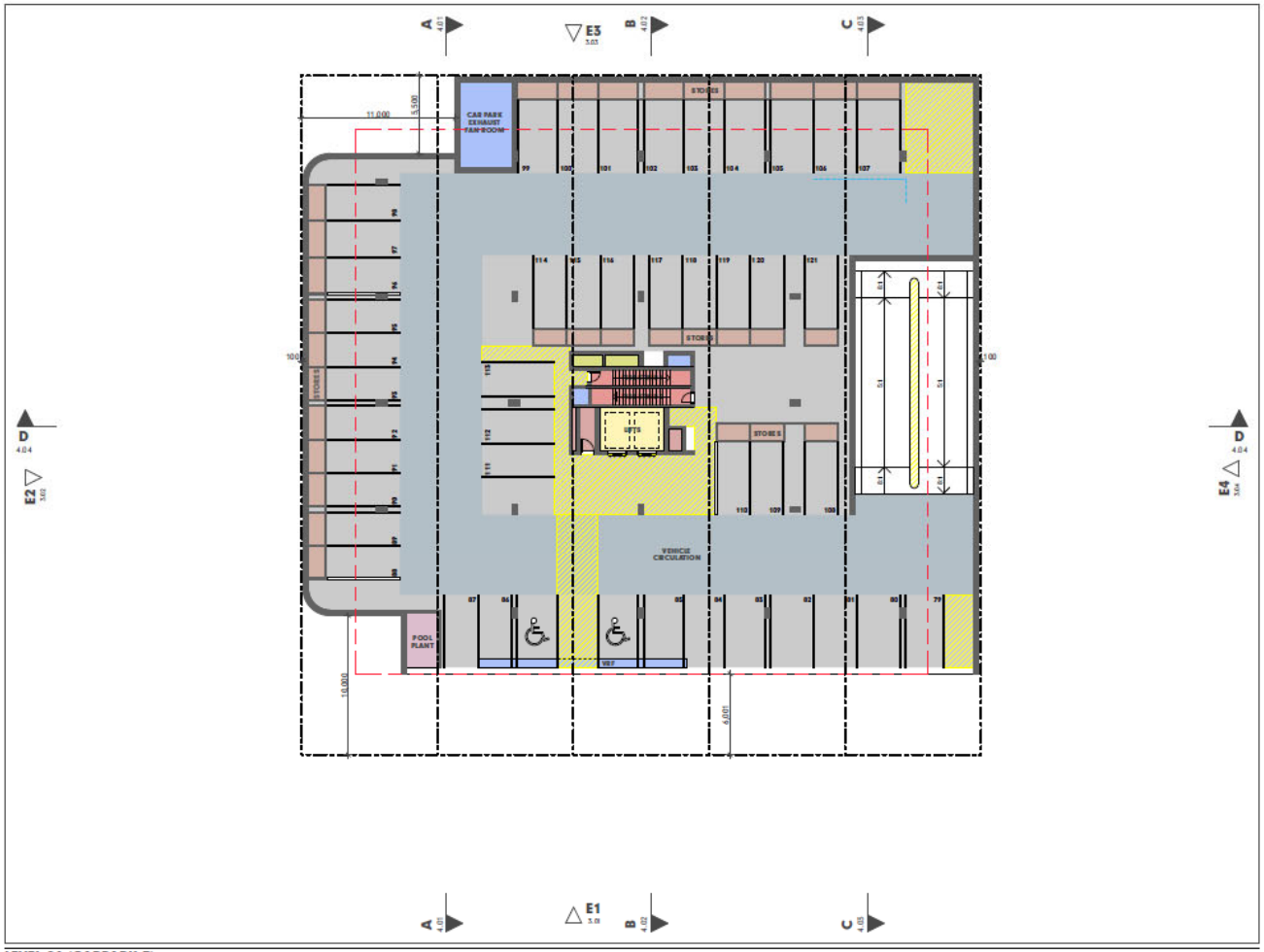

LEVEL 04 (CARPARK 3)
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 04

ZONE CATEGORY	ZONE NAME	AREA	QTY
CAR PARKING SPACES			
	CAR PARKING	1,799	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC. METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
HYDRAULIC PLANT			
	POOL PLANT	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	CAR PARK EXHAUST FAN ROOM	25	1
	STAIR PRESSURISATION	3	2
	VRF	9	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	STORES	99	12
VEHICLE CIRCULATION			
	VEHICLE CIRCULATION	647	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

PLANS
LEVEL 04 (CARPARK 3)

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.05
REVISION NO.	01
DATE	1/9/2023

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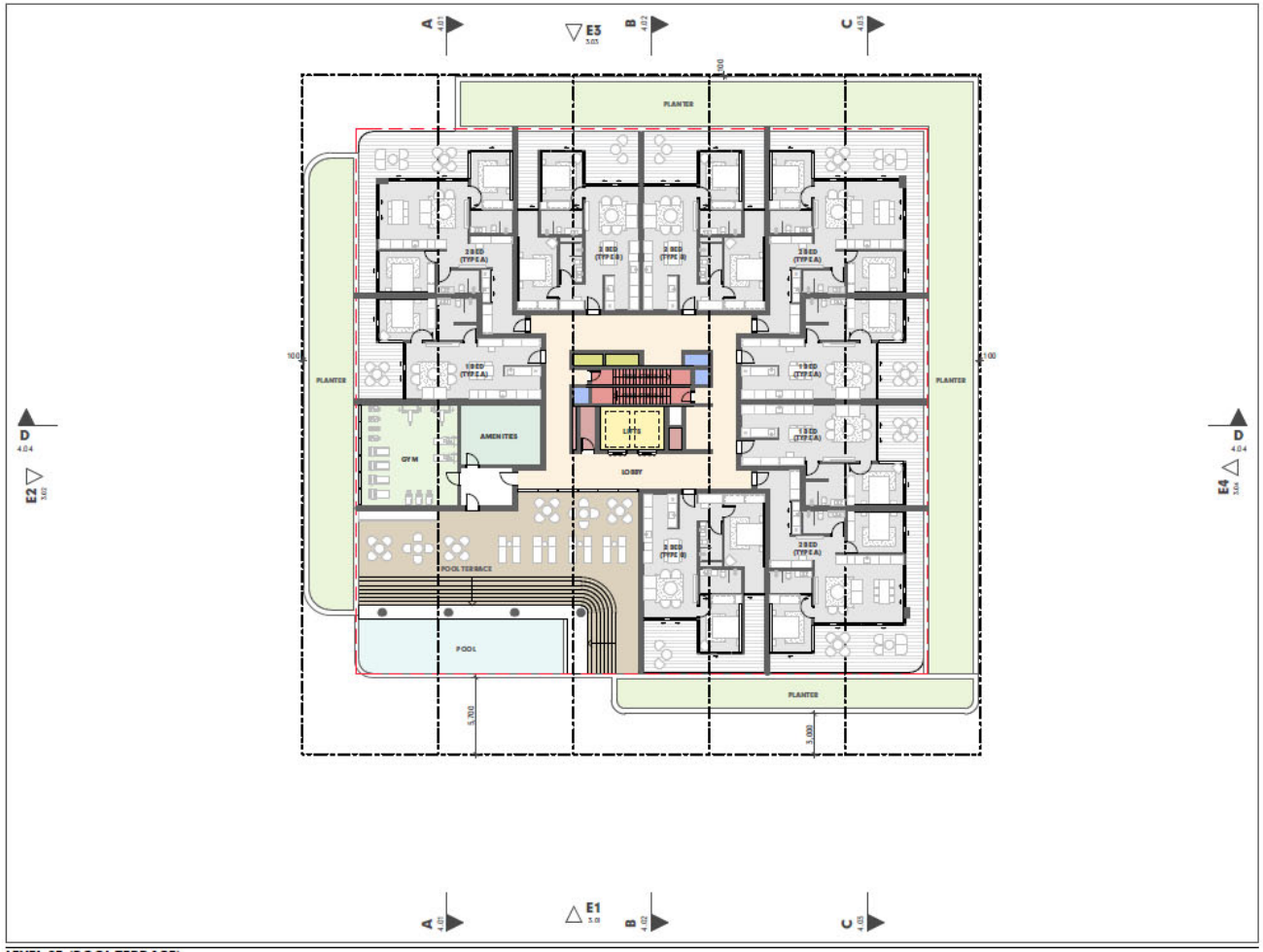


LEVEL 05 (POOL TERRACE)
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 05

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	201	3
	2 BED (TYPE A)	292	3
	2 BED (TYPE B)	261	3
AMENITIES			
	AMENITIES	27	1
CIRCULATION			
	LOBBY	125	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFESTYLE			
	GYM	55	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

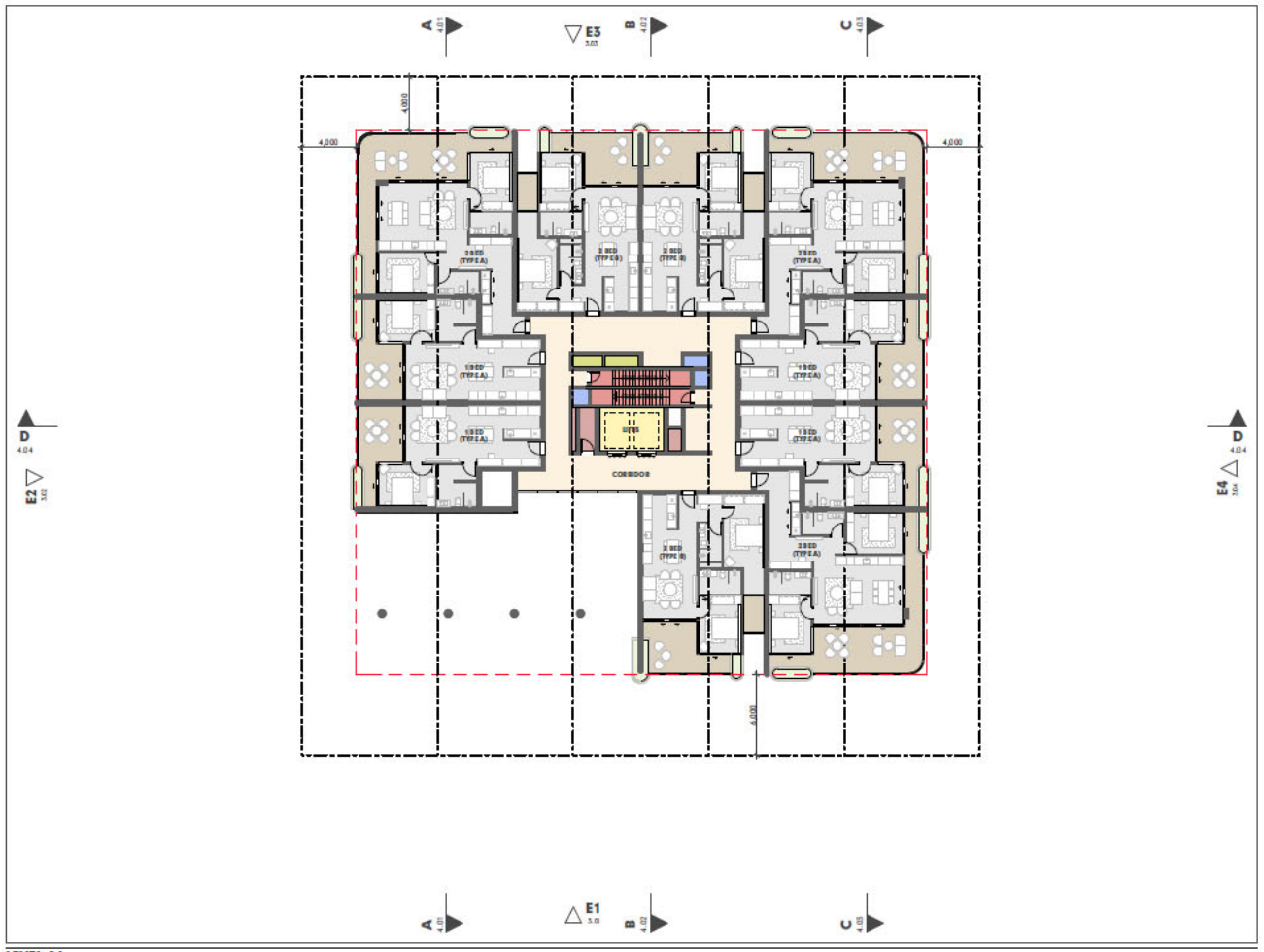
CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
PLANS
LEVEL 05 (POOL TERRACE)

DRAFT - WIP

PROJECT NO. POST001
DRAWING NO. 2.06
REVISION NO. 01
DATE 1/9/2025

HUNT DESIGN



INTERNAL AREA CALCULATIONS - LEVEL 06

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	268	4
	2 BED (TYPE A)	292	3
	2 BED (TYPE B)	261	3
CIRCULATION			
	CORRIDOR	125	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

LEVEL 06
SCALE 1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
PLANS
LEVEL 06

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.07
REVISION NO.	01
DATE	1/9/2023

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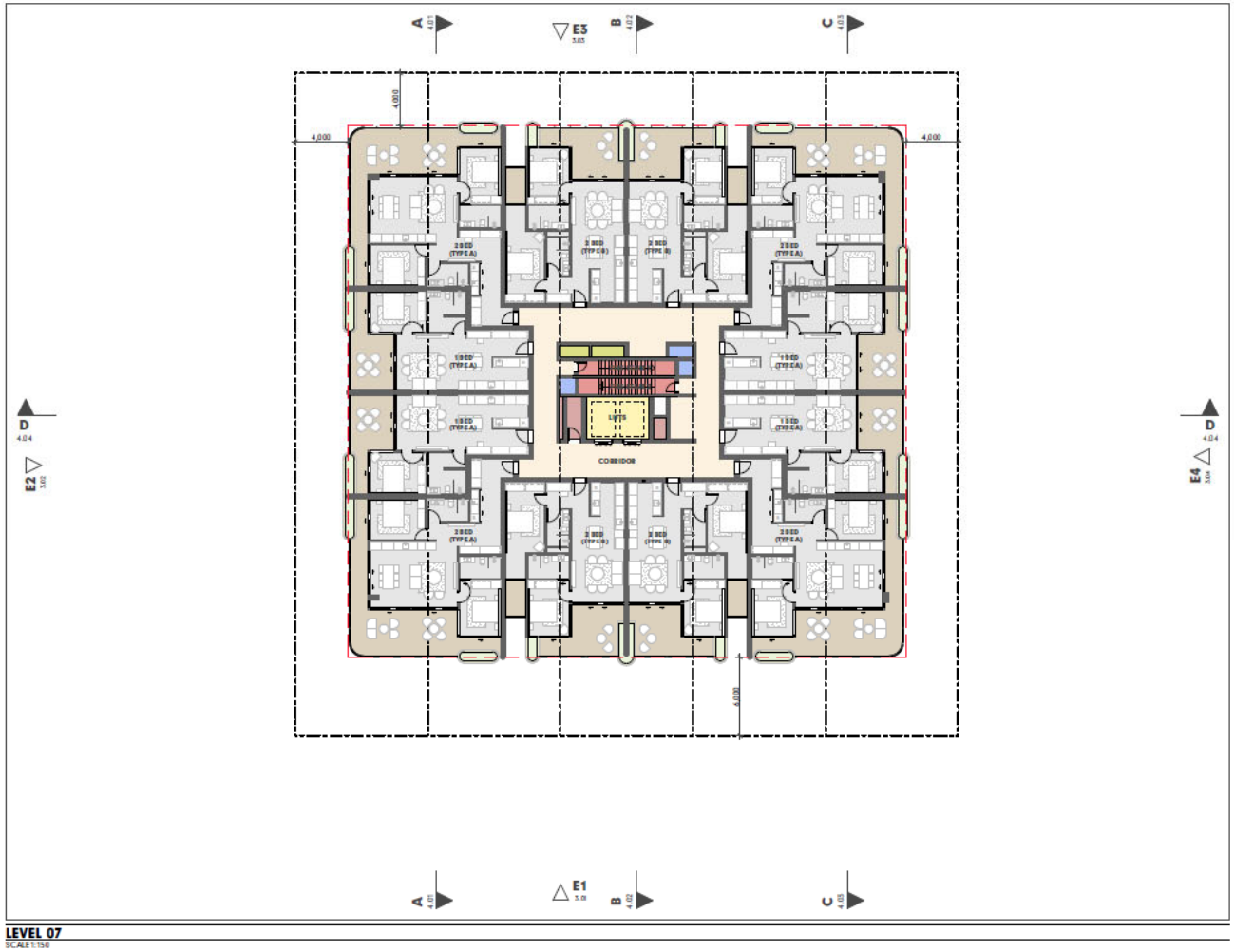


LEVEL 07
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 07

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	268	4
	2 BED (TYPE A)	389	4
	2 BED (TYPE B)	346	4
CIRCULATION			
	CORRIDOR	122	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
	WIP EOF	0	1
LIFTS			
	LIFTS	55	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

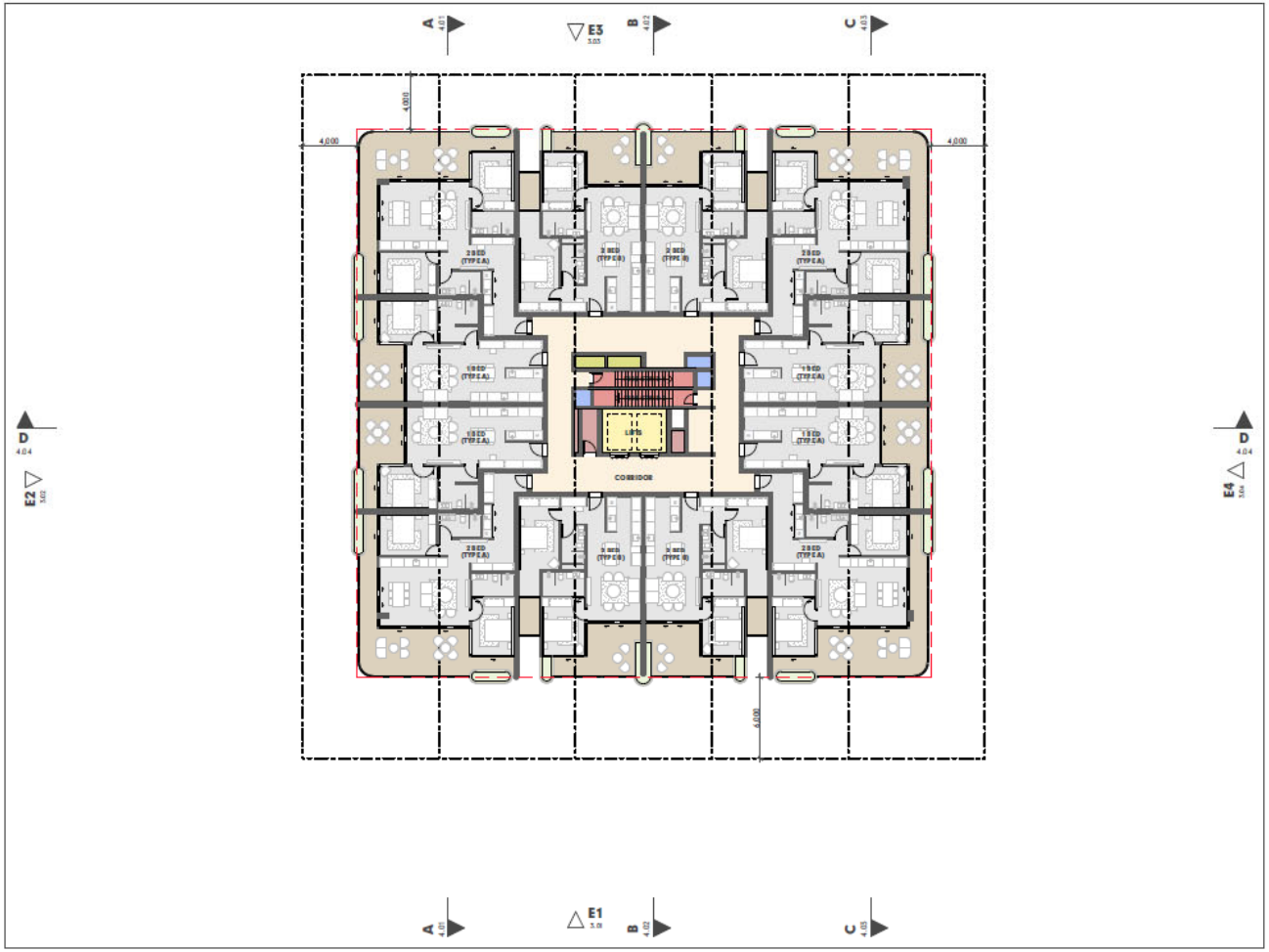
PRELIMINARY

PLANS
LEVEL 07

DRAFT - WIP

PROJECT NO. POST001
DRAWING NO. 2.08
REVISION NO. 01
DATE 1/9/2025

HUNT DESIGN



LEVEL 08
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 08

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	2.68	4
	2 BED (TYPE A)	3.89	4
	2 BED (TYPE B)	3.48	4
CIRCULATION			
	CORRIDOR	1.22	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

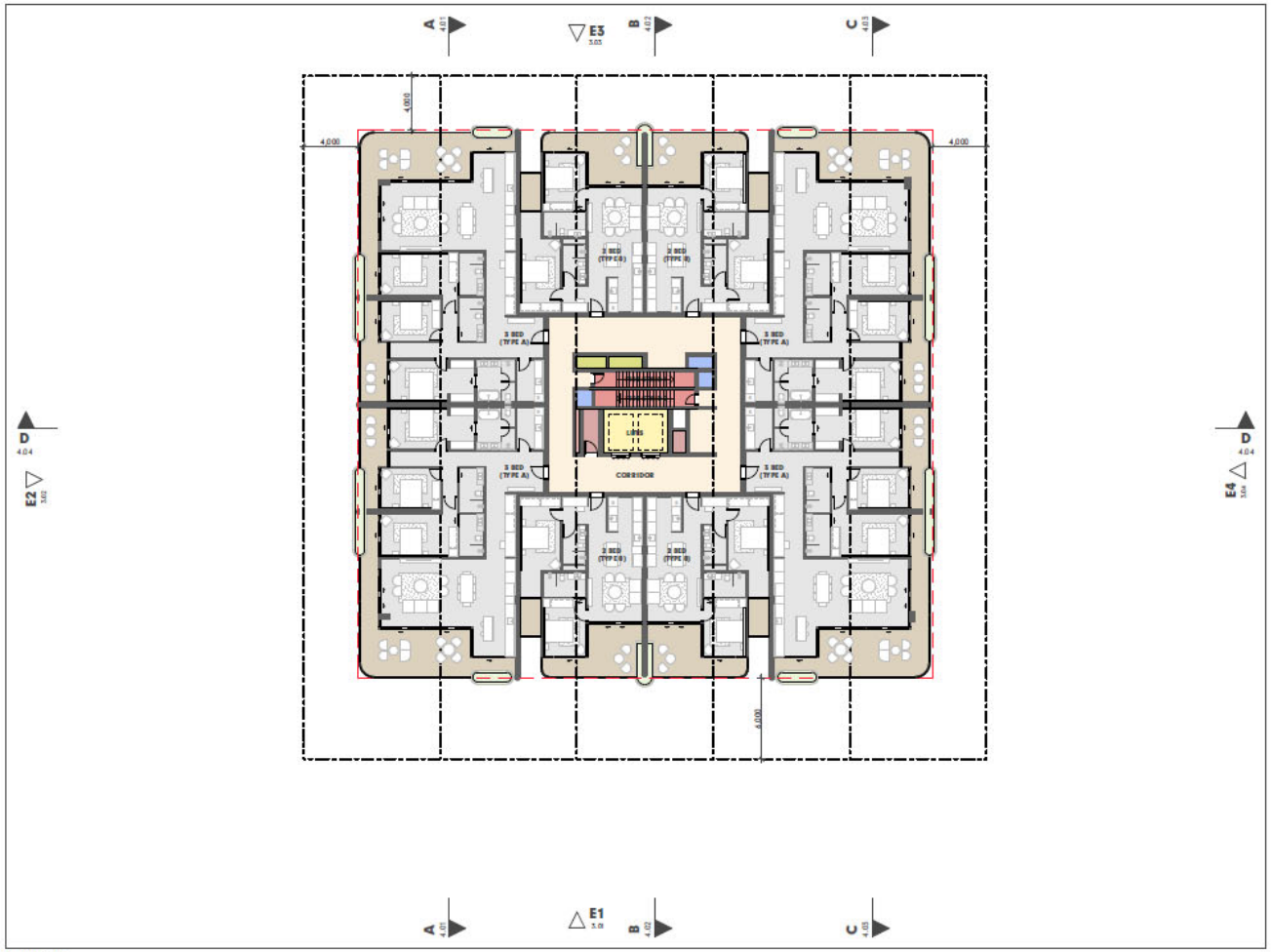
CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
PLANS
LEVEL 08

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.09
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



LEVEL 09
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 09

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	114	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

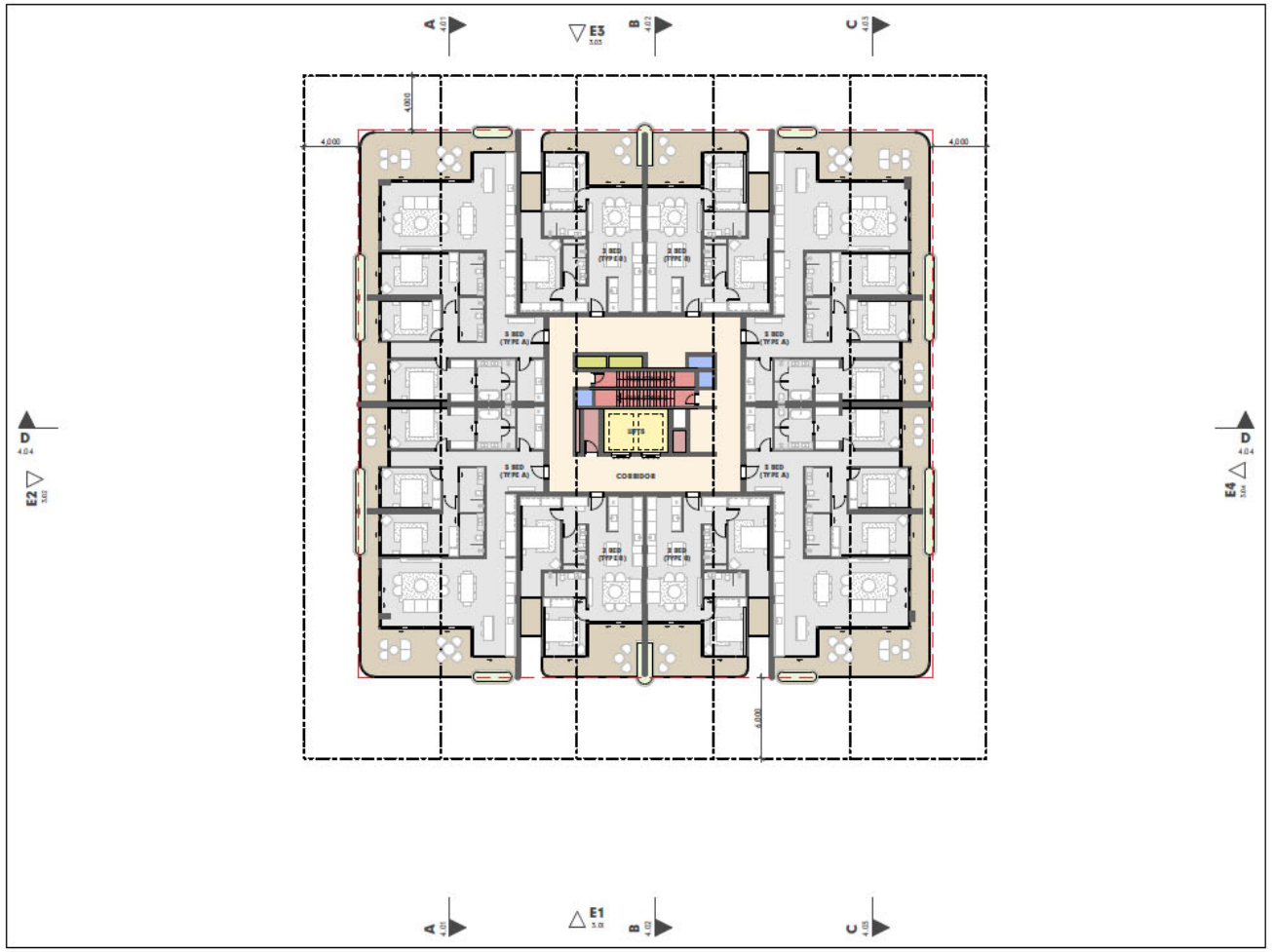
PRELIMINARY

PLANS
LEVEL 09

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.10
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



LEVEL 10
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 10

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	114	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

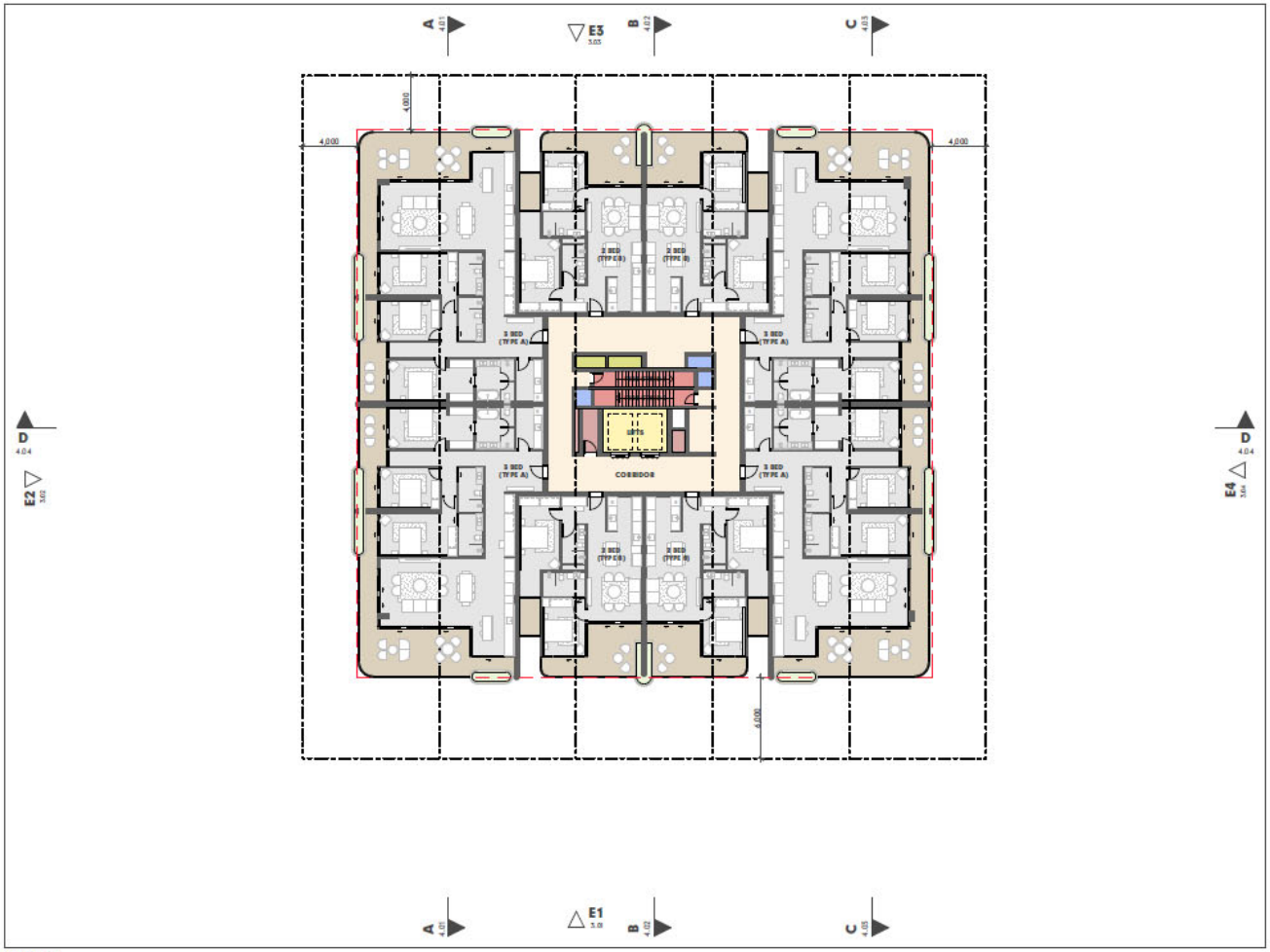
PRELIMINARY

PLANS
LEVEL 10

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.11
REVISION NO.	01
DATE	1/9/2025

HUNT DESIGN



INTERNAL AREA CALCULATIONS - LEVEL 11			
ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	348	4
	3 BED (TYPE A)	710	4
CIRCULATION			
	CORRIDOR	158	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	1	1
	WATER METERS	4	1

LEVEL 11
SCALE 1:150

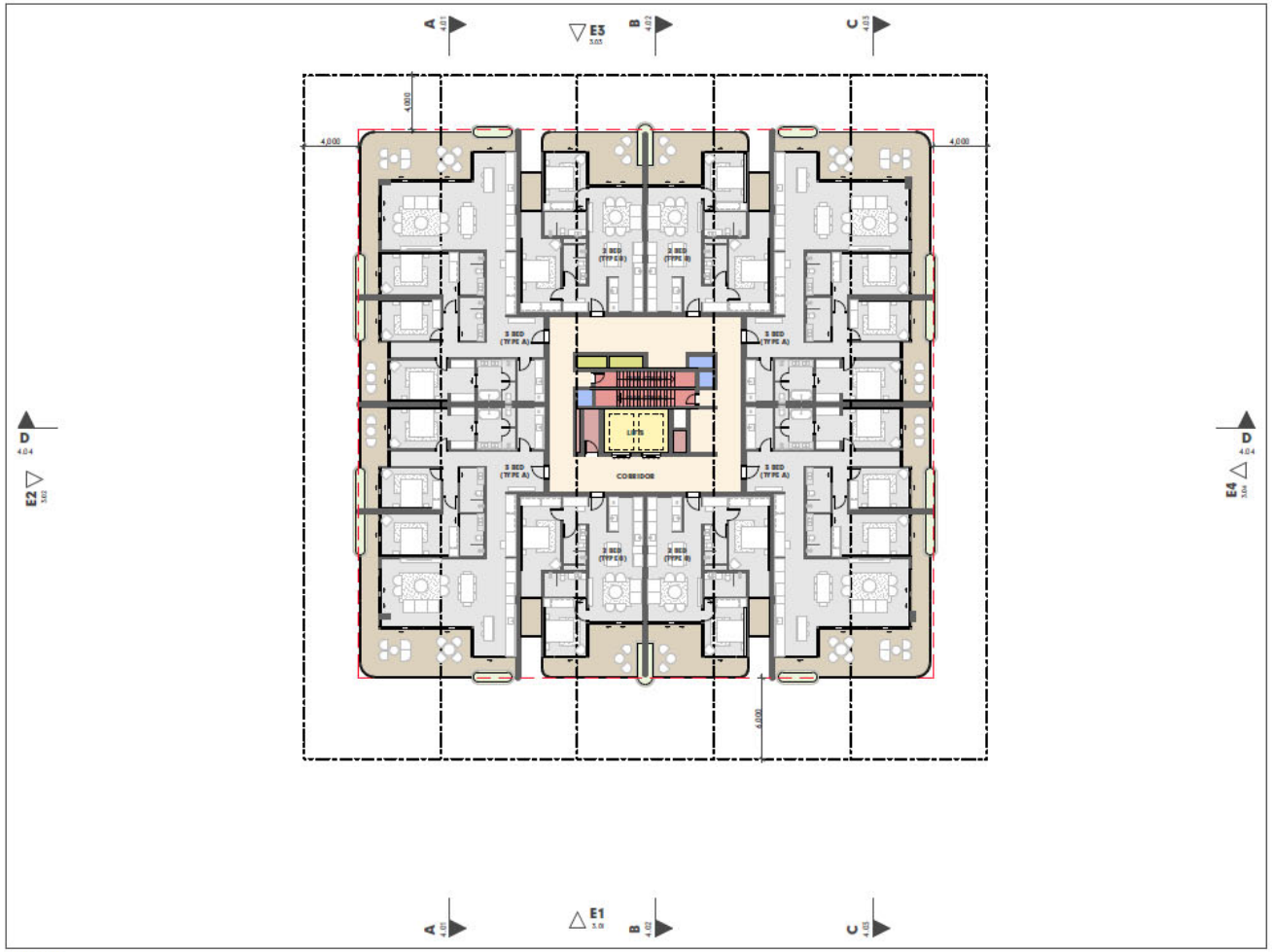
CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
PLANS
LEVEL 11

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.12
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



LEVEL 12
SCALE 1:150

INTERNAL AREA CALCULATIONS - LEVEL 12

ZONE CATEGORY	ZONE NAME	AREA	QTY
ACCOMODATION			
	2 BED (TYPE B)	148	4
	3 BED (TYPE A)	210	4
CIRCULATION			
	CORRIDOR	116	1
ELECTRICAL PLANT			
	COMMS RISER	2	1
	ELEC METERS	2	1
FIRE STAIRS			
	FIRE STAIR 1	9	1
	FIRE STAIR 2	9	1
LIFTS			
	LIFTS	15	1
MECHANICAL PLANT			
	LOBBY RELIEF SHAFT	1	1
	STAIR PRESSURISATION	2	2
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

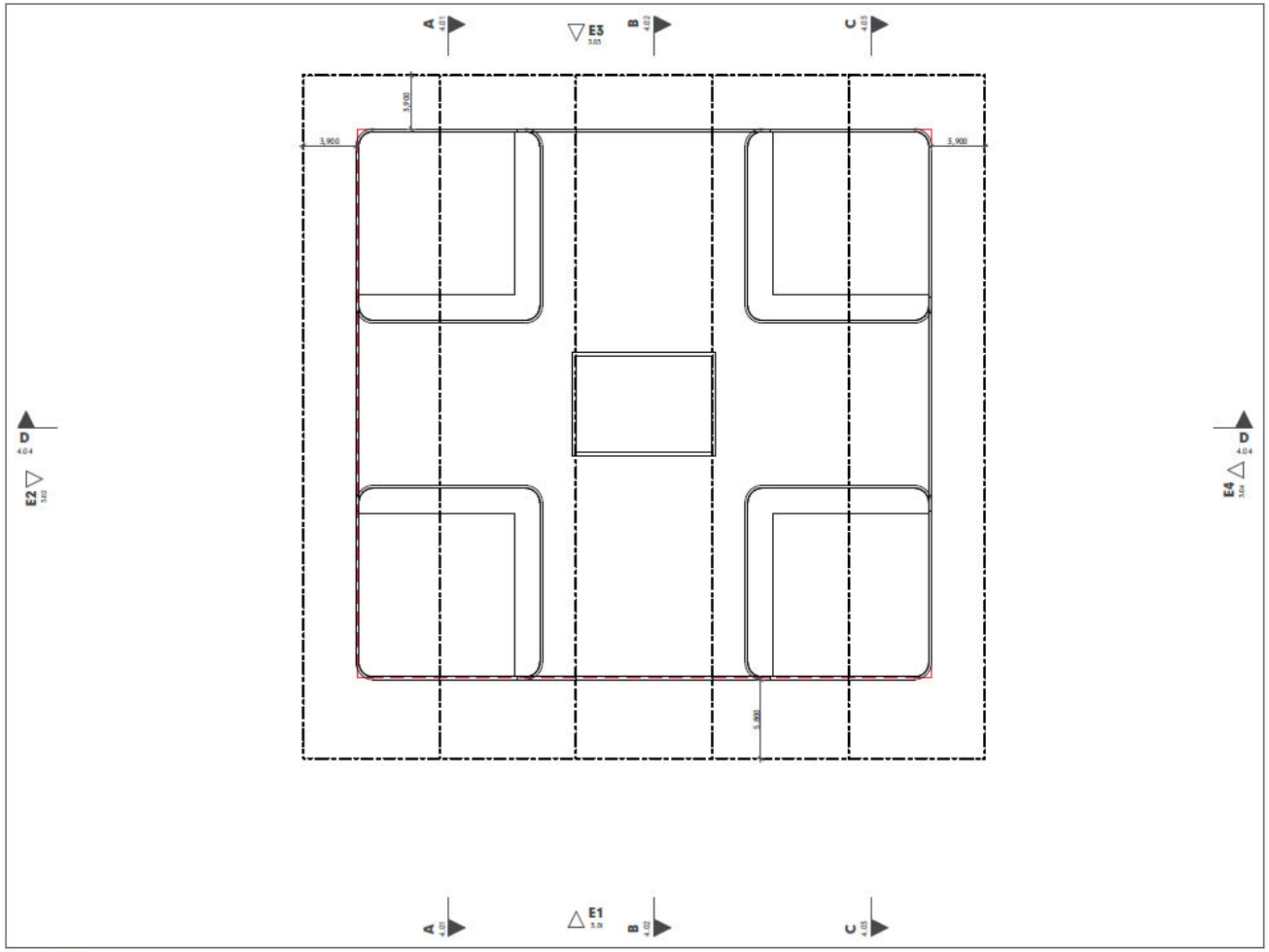
PRELIMINARY

PLANS
LEVEL 12

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.15
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



ROOF LEVEL
SCALE 1:150

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

PLANS
ROOF LEVEL

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	2.14
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

SOUTH WEST ELEVATION
SCALE 1:150

E1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

ELEVATIONS
ELEVATION 1 - SOUTH WEST

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	3.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

NORTH WEST ELEVATION
SCALE 1:150

E2

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

ELEVATIONS
ELEVATION 2 - NORTH WEST

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	3.02
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

NORTH EAST ELEVATION
SCALE 1:150

E3

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

ELEVATIONS
ELEVATION 3 - NORTH EAST

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	3.03
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

SOUTH EAST ELEVATION E4
SCALE 1:150

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

ELEVATIONS
ELEVATION 4 - SOUTH EAST

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	3.04
REVISION NO.	01
DATE	1/9/2025

HUNT DESIGN

SECTION A A
SCALE 1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

PRELIMINARY
SECTIONS
SECTION A

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	4.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

SECTION B
SCALE 1:150

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

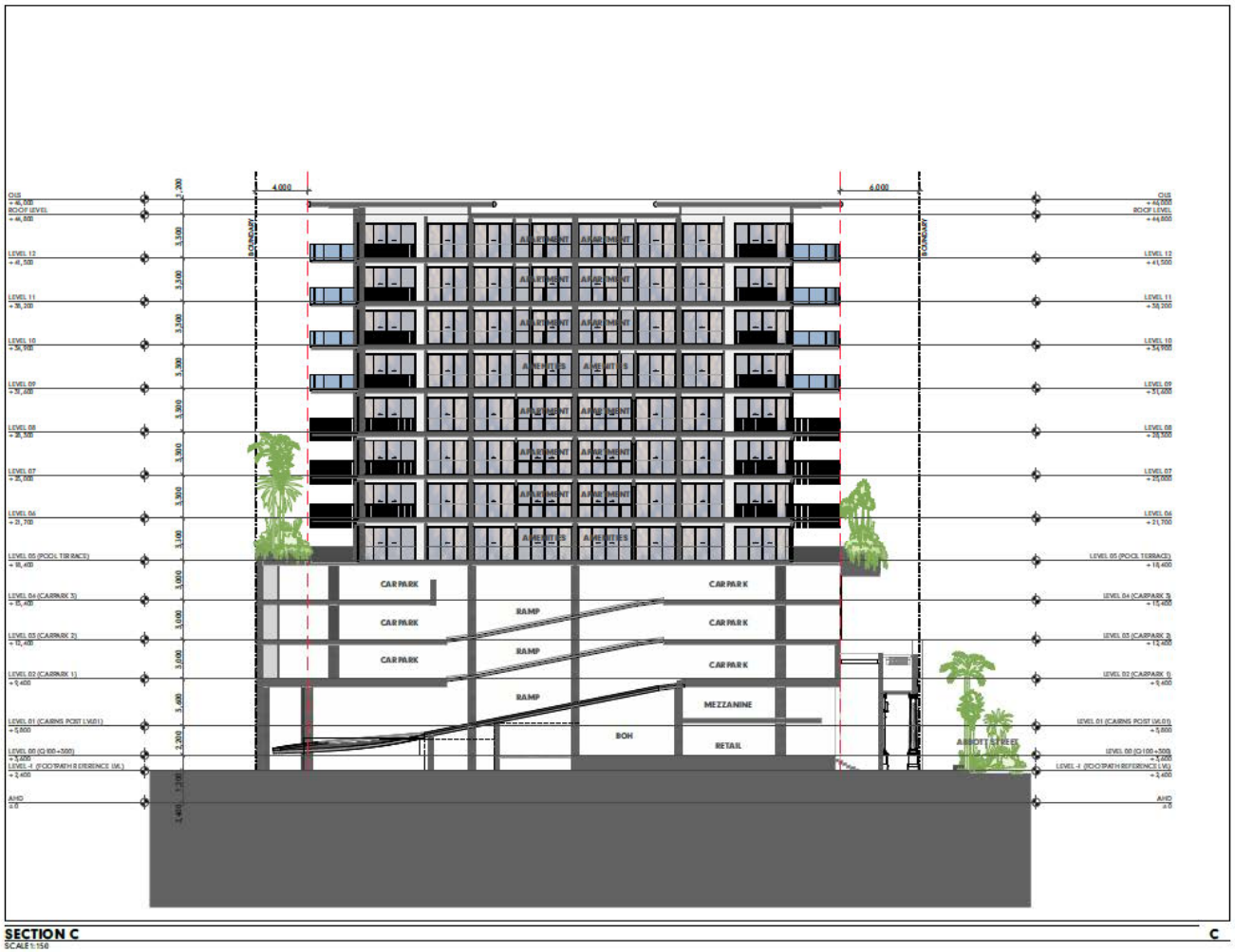
PRELIMINARY

SECTIONS
SECTION B

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	4.02
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



SECTION C
SCALE 1:150

C

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

SECTIONS
SECTION C

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	4.03
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

SECTION D
SCALE 1:150

D

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

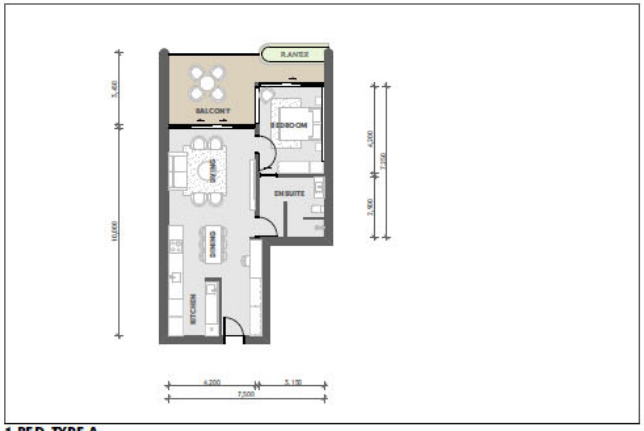
PRELIMINARY

SECTIONS
SECTION D

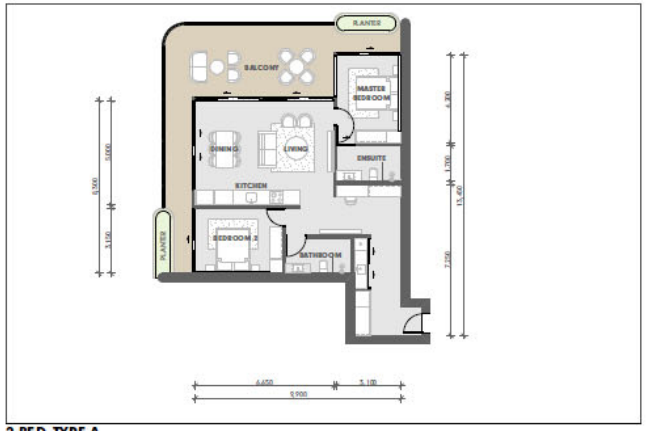
DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	4.04
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



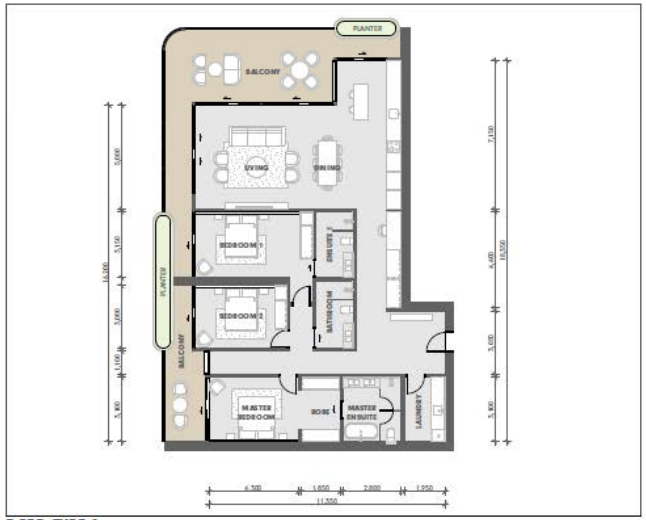
1 BED_TYPE A
SCALE 1:100



2 BED_TYPE A
SCALE 1:100

AREA CALCULATIONS - APARTMENTS	
TYPE	TOTAL AREA (m2)
1 BED (TYPE A)	67
2 BED (TYPE A)	97
2 BED (TYPE B)	87
3 BED (TYPE A)	178

2 BED_TYPE B
SCALE 1:100



3 BED_TYPE A
SCALE 1:100

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

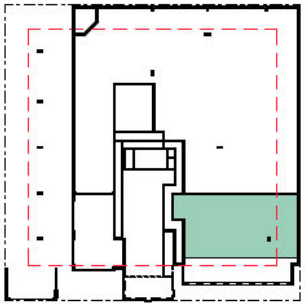
APARTMENT PLANS
APARTMENT PLANS

DRAFT - WIP

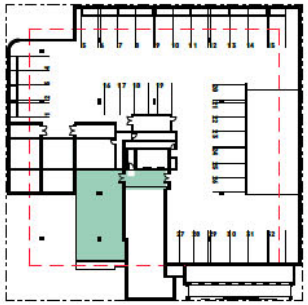
PROJECT NO.	POST001
DRAWING NO.	5.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

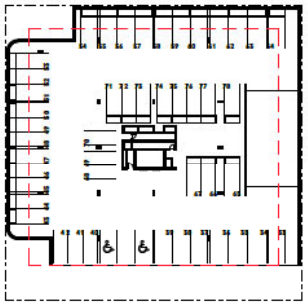
LEVEL 00 (Q100+300)



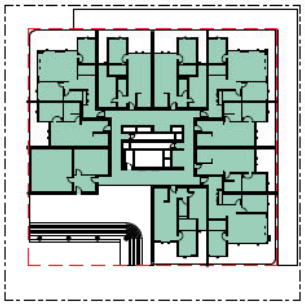
LEVEL 01 (CAIRNS POST LVL01)



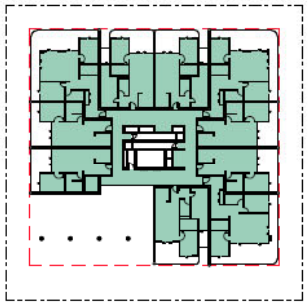
LEVEL 02 (CARPARK 1)



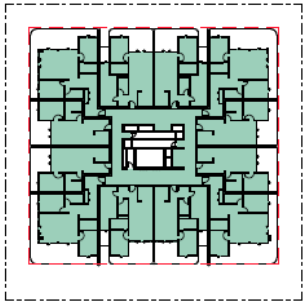
LEVELS 03 & 04 (CARPARK 2 & 3)



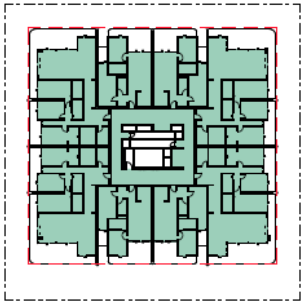
LEVEL 05 (POOL TERRACE)



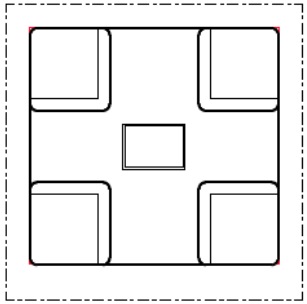
LEVEL 06



LEVELS 07 & 08



LEVELS 09, 10, 11 & 12



ROOF LEVEL

GROSS FLOOR AREA (GFA)

STORY	ZONE NAME	AREA
LEVEL 00 (Q100+300)		
	GFA	972
LEVEL 01 (CAIRNS POST LVL01)		
	GFA	229
LEVEL 02 (CARPARK 1)		
	GFA	158
LEVEL 05 (POOL TERRACE)		
	GFA	1,073
LEVEL 06		
	GFA	1,053
LEVEL 07		
	GFA	1,241
LEVEL 08		
	GFA	1,241
LEVEL 09		
	GFA	1,265
LEVEL 10		
	GFA	1,265
LEVEL 11		
	GFA	1,265
LEVEL 12		
	GFA	1,265
		11,025 m²

BALCONIES & TERRACES

STORY	ZONE NAME	AREA
LEVEL 05 (POOL TERRACE)		
	1 BED TYPE A BALCONY	56
	2 BED TYPE A BALCONY	133
	2 BED TYPE B BALCONY	87
	POOL TERRACE	186
LEVEL 06		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	132
	2 BED (TYPE B) BALCONY	69
LEVEL 07		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 08		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 09		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 10		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 11		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 12		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
		2,707 m²

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

AREA ANALYSIS
GROSS FLOOR AREA (GFA)

PROJECT NO. POST001
DRAWING NO. 6.01
REVISION NO. 01
DATE 1/9/2023

HUNT DESIGN

INTERNAL AREA ANALYSIS

ZONE	ZONE NAME	AREA	QTY
ACCOMODATION			
	1 BED (TYPE A)	1,006	15
	2 BED (TYPE A)	1,361	14
	2 BED (TYPE B)	2,612	30
	3 BED (TYPE A)	2,842	16
ADMIN + OFFICE			
	MANAGERS OFFICE	14	1
AMENITIES			
	AMENITIES	137	8
CAR PARKING SPACES			
	CAR PARKING	4,899	3
CIRCULATION			
	CORRIDOR	830	7
	LOBBY	123	1
ELECTRICAL PLANT			
	CHAMBER SUBSTATION	52	1
	COMMS RISER	18	10
	ELEC METERS	20	10
	MAIN COMMS ROOM	14	1
	MAIN SWITCH ROOM	17	1
FIRE STAIRS			
	FCC	16	1
	FIRE STAIR	6	1
	FIRE STAIR 1	113	13
	FIRE STAIR 2	144	13
	FIRE STAIRS	27	1
	WIP ECP	0	1
FOOD + BEVERAGES (F+B)			
	F&B	320	1
	RESIDENTIAL LOBBY	148	1
HYDRAULIC PLANT			
	FIRE PUMP ROOM	33	1
	HYDRANT	5	1
	POOL PLANT	9	1
	WATER METER	5	1
	WATER PUMPS	12	1

INTERNAL AREA ANALYSIS

ZONE	ZONE NAME	AREA	QTY
	WATER TANK 1	27	1
	WATER TANK 2	26	1
LIFESTYLE			
	GYM	55	1
	RESIDENT FACILITIES	146	1
LIFTS			
	LIFT	18	5
	LIFTS	206	13
MECHANICAL PLANT			
	CAR PARK EXHAUST FAN ROOM	25	1
	LOBBY RELIEF SHAFT	12	8
	MECH PLANT	20	1
	STAIR PRESSURISATION	25	20
	VRF	19	2
PATHS			
	LANEWAY	195	1
RETAIL			
	RETAIL 1A	107	1
	RETAIL 1A MEZZANINE	109	1
	RETAIL 1B	145	1
	RETAIL 1B MEZZANINE	105	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	14	13
	WASTE CHUTE	21	13
	WATER METERS	54	14
STORES			
	BACK OF HOUSE	67	1
	BIN WASH	6	1
	LOADING	15	1
	REFUSE	49	1
	SERVICE	14	1
	STORES	295	54
VEHICLE CIRCULATION			
	TRUCK TURN TABLE	95	1
	VEHICLE CIRCULATION	2,365	5
		19,012 m²	

BALCONIES & TERRACES

STORY	ZONE NAME	AREA
LEVEL 05 (POOL TERRACE)		
	1 BED TYPE A BALCONY	56
	2 BED TYPE A BALCONY	133
	2 BED TYPE B BALCONY	87
	POOL TERRACE	186
LEVEL 06		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	132
	2 BED (TYPE B) BALCONY	69
LEVEL 07		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 08		
	1 BED (TYPE A) BALCONY	74
	2 BED (TYPE A) BALCONY	177
	2 BED (TYPE B) BALCONY	91
LEVEL 09		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 10		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 11		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
LEVEL 12		
	2 BED (TYPE B) BALCONY	91
	3 BED (TYPE A) BALCONY	230
		2,707 m²

TOWN PLANNING ANALYSIS

LOT NUMBER	ADDRESS	AREA
LOT 1 ON RP715691	(52-54 ABBOTT STREET)	509.4M²
LOT 2 ON RP715691	(28-50 ABBOTT STREET)	509.4M²
LOT 502 ON C1981	(26 ABBOTT STREET)	509.4M²
LOT 503 ON C1981	(22-24 ABBOTT STREET)	509.4M²
LOT 504 ON C1981	(22-24 ABBOTT STREET)	509.4M²

TOTAL SITE AREA - 2547M²

AUTHORITY: CAIRNS REGIONAL COUNCIL

ZONING: PRINCIPAL CENTRE ZONE

PROPOSAL: MIXED USE DEVELOPMENT

GFA - 11,025M²

75 APARTMENTS TOTAL

15 - 1 BED APARTMENTS

44 - 2 BED APARTMENTS

16 - 3 BED APARTMENTS

121 TOTAL CARPARKING SPACES (+4 DDA)

LEVEL 2 - 32 SPACES

LEVEL 3 - 46 SPACES (+2 DDA)

LEVEL 3 - 43 SPACES (+2 DDA)

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

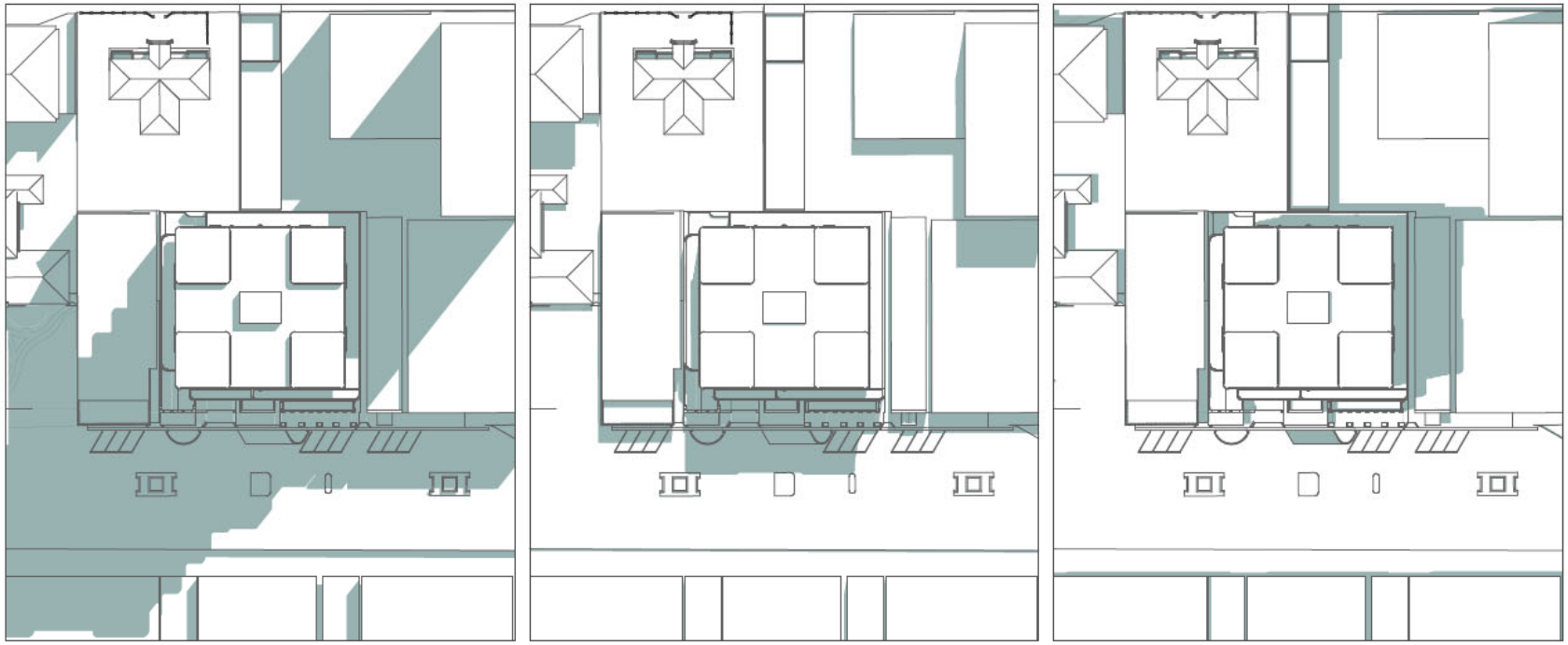
PRELIMINARY

AREA ANALYSIS
SUMMARY

DRAFT - WIP

PROJECT NO. POST001
DRAWING NO. 6.02
REVISION NO. 01
DATE 1/9/2023

HUNT DESIGN



MARCH 20TH (EQUINOX) - 9AM
SCALE1:500

MARCH 20TH (EQUINOX) - 12PM
SCALE1:500

MARCH 20TH (EQUINOX) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

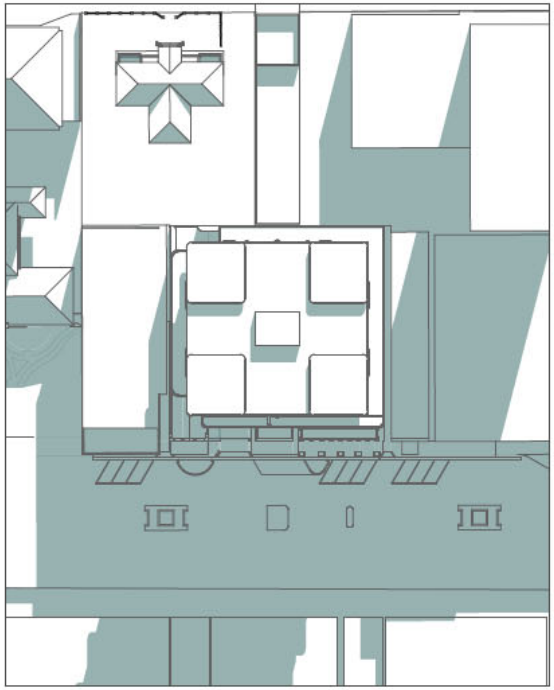
PRELIMINARY

SHADOW DIAGRAMS
SHADOW DIAGRAMS - MARCH 2023 EQUINOX

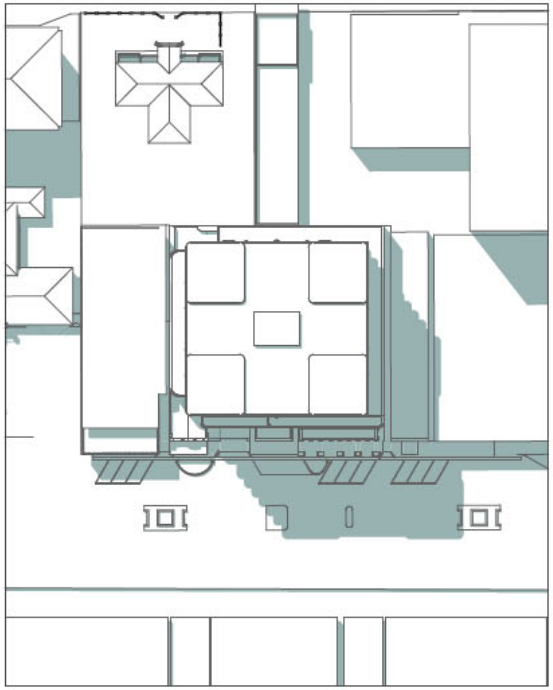
DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	7.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



JUNE 22ND (SOLSTICE) - 9AM
SCALE1:500



JUNE 22ND (SOLSTICE) - 12PM
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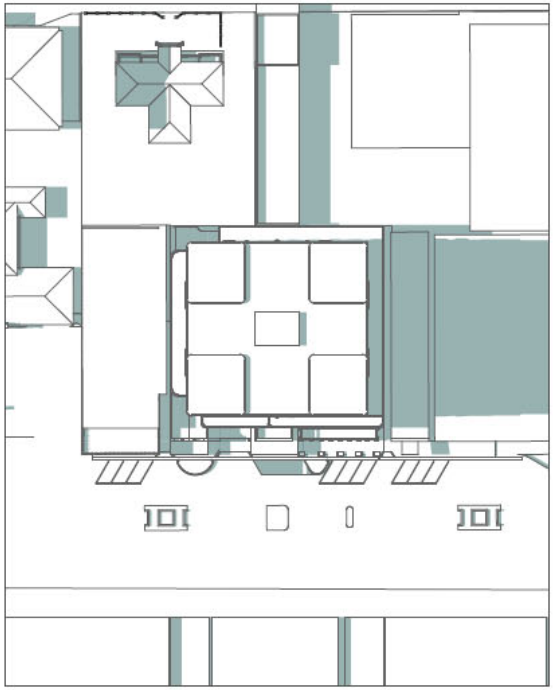


JUNE 22ND (SOLSTICE) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

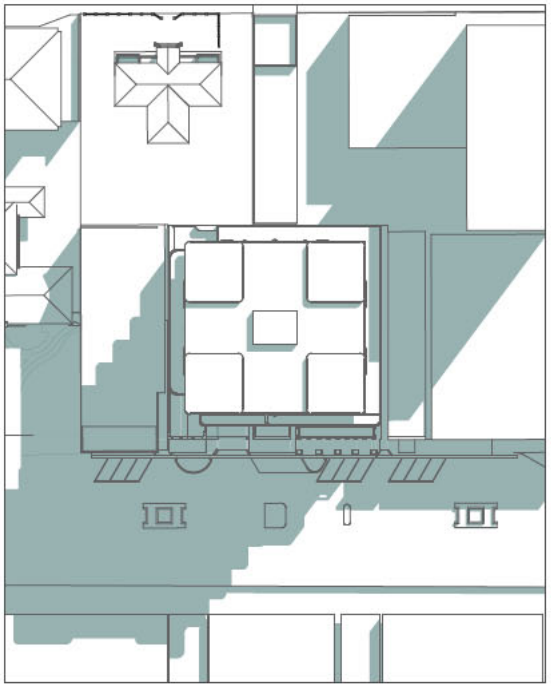
PRELIMINARY

SHADOW DIAGRAMS
SHADOW DIAGRAMS - JUNE 2023 SOLSTICE

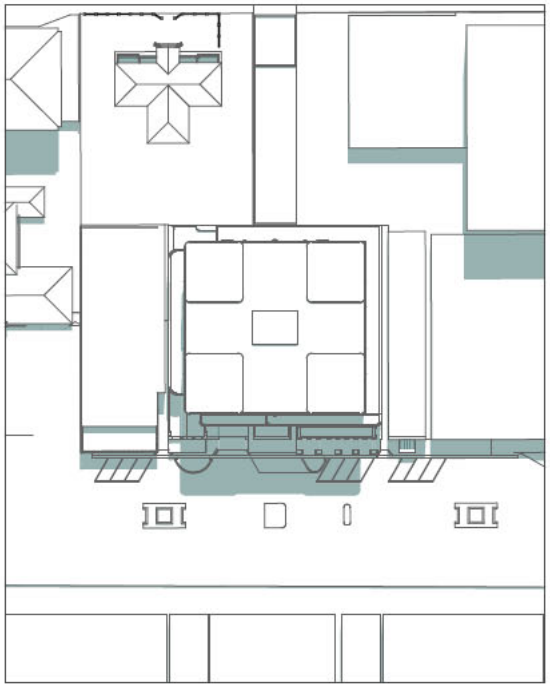
DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	7.02
REVISION NO.	01
DATE	1/9/2023

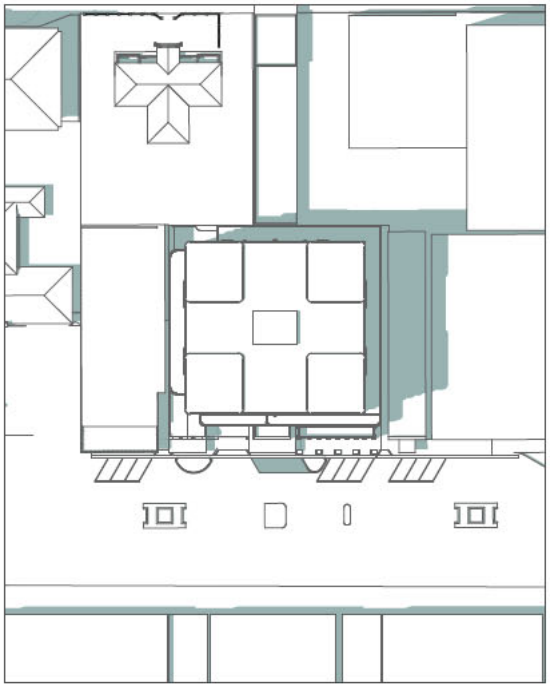
HUNT DESIGN



SEPTEMBER 23RD (EQUINOX) - 9AM
SCALE1:500



SEPTEMBER 23RD (EQUINOX) - 12PM
SCALE1:500



SEPTEMBER 23RD (EQUINOX) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

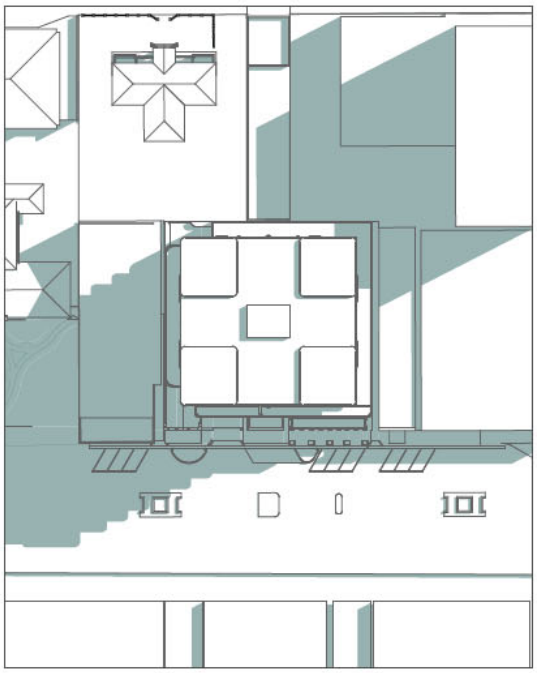
PRELIMINARY

SHADOW DIAGRAMS
SHADOW DIAGRAMS - SEPTEMBER 2023 EQUINOX

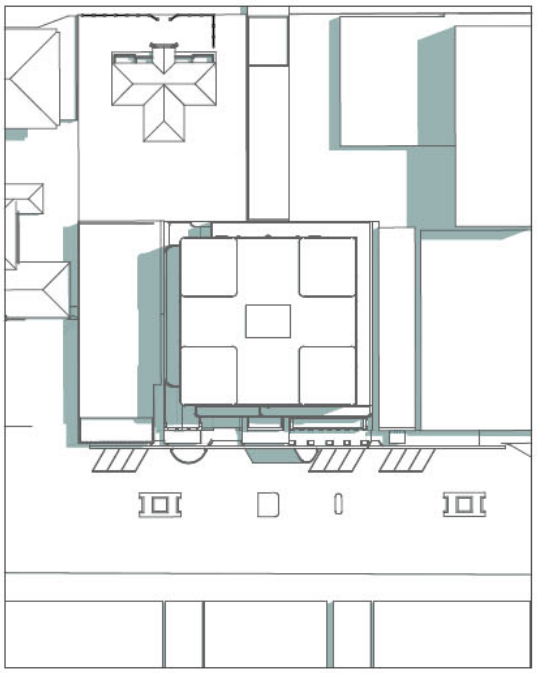
DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	7.05
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN



DECEMBER 22ND (SOLSTICE) - 9AM
SCALE1:500



DECEMBER 22ND (SOLSTICE) - 12PM
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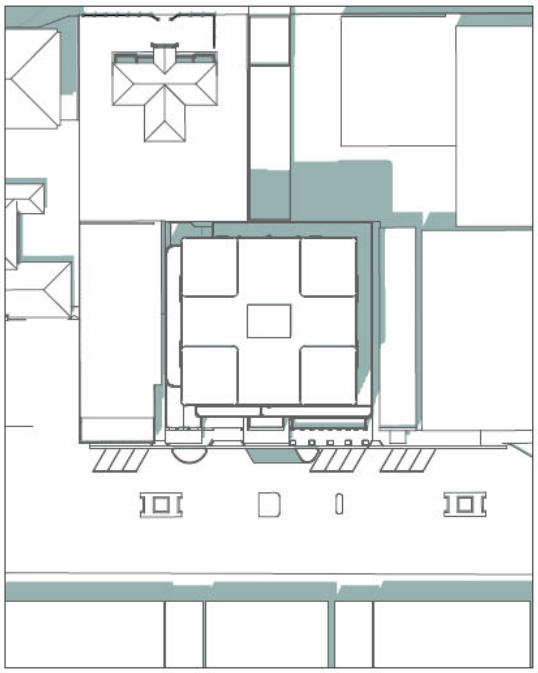


DECEMBER 22ND (SOLSTICE) - 3PM
SCALE1:500

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

SHADOW DIAGRAMS
SHADOW DIAGRAMS - DECEMBER 2023 (SOLSTICE)

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	7.04
REVISION NO.	01
DATE	1/9/2025

HUNT DESIGN

ABBOTT STREET STREETSCAPE PERSPECTIVE

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

VISUALISATIONS
STREETSCAPE PERSPECTIVE - ABBOTT STREET

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	8.01
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

ABBOTT STREET STREETSCAPE PERSPECTIVE

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

PRELIMINARY

VISUALISATIONS
TOWER PERSPECTIVE - ABBOTT STREET

DRAFT - WIP

PROJECT NO.	POST001
DRAWING NO.	8.02
REVISION NO.	01
DATE	1/9/2023

HUNT DESIGN

APPENDIX B

SIDRA REPORTS

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2024 AM Back] — **Network: N101 [2024 AM Background]**

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	65	15.2	65	15.2	0.234	31.8	LOS C	8.6	67.7	0.90	0.78	13.5
22	T1	248	15.2	248	15.2	0.234	22.1	LOS C	8.6	67.7	0.75	0.67	21.3
23	R2	47	15.2	47	15.2	0.234	22.6	LOS C	4.1	32.6	0.55	0.54	38.2
Approach		361	15.2	361	15.2	0.234	23.9	LOS C	8.6	67.7	0.75	0.67	22.8
NorthEast: Aplin St													
24	L2	7	4.1	7	4.1	0.025	26.7	LOS C	0.5	3.8	0.63	0.55	34.2
25	T1	17	4.1	17	4.1	0.025	21.2	LOS C	0.5	3.8	0.63	0.55	35.6
26	R2	7	4.1	7	4.1	0.025	26.9	LOS C	0.4	3.1	0.63	0.57	34.9
Approach		32	4.1	32	4.1	0.025	23.8	LOS C	0.5	3.8	0.63	0.56	35.1
NorthWest: Abbott St													
27	L2	48	9.2	48	9.2	0.197	20.9	LOS C	4.8	36.1	0.57	0.55	39.7
28	T1	294	9.2	294	9.2	0.197	15.2	LOS B	4.8	36.1	0.57	0.50	18.7
29	R2	29	9.2	29	9.2	0.070	26.3	LOS C	0.9	6.7	0.63	0.69	16.2
Approach		372	9.2	372	9.2	0.197	16.8	LOS B	4.8	36.1	0.57	0.52	23.8
SouthWest: Aplin St													
30	L2	23	6.4	23	6.4	0.064	25.9	LOS C	1.4	10.0	0.64	0.60	9.5
31	T1	66	6.4	66	6.4	0.064	21.6	LOS C	1.4	10.2	0.64	0.53	36.5
32	R2	31	6.4	31	6.4	0.058	26.1	LOS C	0.9	6.9	0.64	0.68	8.9
Approach		120	6.4	120	6.4	0.064	23.6	LOS C	1.4	10.2	0.64	0.58	25.7
All Vehicles		884	11.1	884	11.1	0.234	20.9	LOS C	8.6	67.7	0.66	0.59	24.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2024 AM Back]

Network: N101 [2024 AM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	118	0.0	118	0.0	0.299	29.7	LOS C	7.3	51.2	0.72	0.70	15.1
22	T1	137	0.0	137	0.0	0.299	25.7	LOS C	7.3	51.2	0.74	0.71	11.6
23	R2	89	0.0	89	0.0	0.299	35.2	LOS D	4.8	33.9	0.78	0.73	12.9
Approach		344	0.0	344	0.0	0.299	29.5	LOS C	7.3	51.2	0.74	0.71	13.2
NorthEast: Spence St													
24	L2	132	6.7	132	6.7	0.323	20.4	LOS C	8.5	62.8	0.62	0.63	19.2
25	T1	245	6.7	245	6.7	0.323	18.6	LOS B	8.5	62.8	0.65	0.65	16.2
26	R2	89	6.7	89	6.7	0.323	26.5	LOS C	5.7	42.5	0.70	0.68	8.3
Approach		466	6.7	466	6.7	0.323	20.6	LOS C	8.5	62.8	0.65	0.65	15.6
NorthWest: Abbott St													
27	L2	83	9.6	83	9.6	0.265	35.2	LOS D	6.5	49.0	0.90	0.77	7.2
28	T1	97	9.6	97	9.6	0.265	32.1	LOS C	6.5	49.0	0.90	0.77	12.4
29	R2	97	9.6	97	9.6	0.279	44.7	LOS D	4.7	35.4	0.99	0.81	7.1
Approach		277	9.6	277	9.6	0.279	37.5	LOS D	6.5	49.0	0.93	0.79	8.8
SouthWest: Spence St													
30	L2	114	6.7	114	6.7	0.339	21.0	LOS C	9.0	66.8	0.63	0.62	12.0
31	T1	227	6.7	227	6.7	0.339	17.7	LOS B	9.0	66.8	0.64	0.63	16.7
32	R2	114	6.7	114	6.7	0.339	28.7	LOS C	5.0	37.3	0.73	0.73	15.4
Approach		455	6.7	455	6.7	0.339	21.3	LOS C	9.0	66.8	0.66	0.65	15.4
All Vehicles		1542	5.7	1542	5.7	0.339	25.8	LOS C	9.0	66.8	0.72	0.69	13.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

▽ Site: 103 [Abbot St / Site Access - 2024 AM Back]

Network: N101 [2024 AM Background]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	280	15.2	280	15.2	0.079	0.0	LOS A	0.0	0.1	0.00	0.00	59.4
23	R2	1	0.0	1	0.0	0.079	4.1	LOS A	0.0	0.1	0.01	0.00	41.3
Approach		281	15.2	281	15.2	0.079	0.0	NA	0.0	0.1	0.00	0.00	59.3
NorthEast: Access													
24	L2	1	0.0	1	0.0	0.004	3.3	LOS A	0.0	0.1	0.32	0.51	18.5
26	R2	1	0.0	1	0.0	0.004	6.0	LOS A	0.0	0.1	0.32	0.51	18.5
Approach		2	0.0	2	0.0	0.004	4.6	LOS A	0.0	0.1	0.32	0.51	18.5
NorthWest: Abbott St													
27	L2	1	0.0	1	0.0	0.087	4.7	LOS A	1.2	9.0	0.00	0.00	38.6
28	T1	286	9.6	286	9.6	0.087	0.0	LOS A	1.2	9.0	0.00	0.00	59.7
Approach		287	9.6	287	9.6	0.087	0.0	NA	1.2	9.0	0.00	0.00	59.6
All Vehicles		571	12.3	571	12.3	0.087	0.0	NA	1.2	9.0	0.00	0.00	59.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 7:21:34 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2024 AM Back]

Network: N101 [2024 AM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	65	15.2	65	15.2	0.234	31.8	LOS C	8.6	67.7	0.90	0.78	13.5
22	T1	248	15.2	248	15.2	0.234	22.1	LOS C	8.6	67.7	0.75	0.67	21.3
23	R2	47	15.2	47	15.2	0.234	22.6	LOS C	4.1	32.6	0.55	0.54	38.2
Approach		361	15.2	361	15.2	0.234	23.9	LOS C	8.6	67.7	0.75	0.67	22.8
NorthEast: Aplin St													
24	L2	7	4.1	7	4.1	0.025	26.7	LOS C	0.5	3.8	0.63	0.55	34.2
25	T1	17	4.1	17	4.1	0.025	21.2	LOS C	0.5	3.8	0.63	0.55	35.6
26	R2	7	4.1	7	4.1	0.025	26.9	LOS C	0.4	3.1	0.63	0.57	34.9
Approach		32	4.1	32	4.1	0.025	23.8	LOS C	0.5	3.8	0.63	0.56	35.1
NorthWest: Abbott St													
27	L2	48	9.2	48	9.2	0.197	20.9	LOS C	4.8	36.1	0.57	0.55	39.7
28	T1	294	9.2	294	9.2	0.197	15.2	LOS B	4.8	36.1	0.57	0.50	18.7
29	R2	29	9.2	29	9.2	0.070	26.3	LOS C	0.9	6.7	0.63	0.69	16.2
Approach		372	9.2	372	9.2	0.197	16.8	LOS B	4.8	36.1	0.57	0.52	23.8
SouthWest: Aplin St													
30	L2	23	6.4	23	6.4	0.064	25.9	LOS C	1.4	10.0	0.64	0.60	9.5
31	T1	66	6.4	66	6.4	0.064	21.6	LOS C	1.4	10.2	0.64	0.53	36.5
32	R2	31	6.4	31	6.4	0.058	26.1	LOS C	0.9	6.9	0.64	0.68	8.9
Approach		120	6.4	120	6.4	0.064	23.6	LOS C	1.4	10.2	0.64	0.58	25.7
All Vehicles		884	11.1	884	11.1	0.234	20.9	LOS C	8.6	67.7	0.66	0.59	24.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2024 AM Back + Dev] — **Network: N101 [2024 AM Background + Dev]**

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	Demand Flows HV %	Arrival Flows Total veh/h	Arrival Flows HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	95% Back of Queue Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Abbott St													
21	L2	71	15.2	71	15.2	0.247	32.7	LOS C	9.2	73.1	0.92	0.79	13.3
22	T1	255	15.2	255	15.2	0.247	22.8	LOS C	9.2	73.1	0.76	0.69	20.9
23	R2	53	15.2	53	15.2	0.247	22.7	LOS C	4.3	33.7	0.55	0.55	38.0
Approach		378	15.2	378	15.2	0.247	24.6	LOS C	9.2	73.1	0.76	0.69	22.5
NorthEast: Aplin St													
24	L2	9	4.1	9	4.1	0.026	26.7	LOS C	0.6	4.0	0.63	0.57	33.9
25	T1	17	4.1	17	4.1	0.026	21.2	LOS C	0.6	4.0	0.63	0.56	35.5
26	R2	7	4.1	7	4.1	0.026	26.9	LOS C	0.5	3.3	0.63	0.56	35.0
Approach		34	4.1	34	4.1	0.026	24.0	LOS C	0.6	4.0	0.63	0.56	34.9
NorthWest: Abbott St													
27	L2	48	9.2	48	9.2	0.198	20.9	LOS C	4.8	36.3	0.57	0.55	39.7
28	T1	295	9.2	295	9.2	0.198	15.2	LOS B	4.8	36.3	0.57	0.50	18.7
29	R2	29	9.2	29	9.2	0.072	26.4	LOS C	0.9	6.8	0.63	0.69	16.2
Approach		373	9.2	373	9.2	0.198	16.8	LOS B	4.8	36.3	0.57	0.52	23.8
SouthWest: Aplin St													
30	L2	24	6.4	24	6.4	0.065	26.0	LOS C	1.4	10.1	0.64	0.60	9.5
31	T1	66	6.4	66	6.4	0.065	21.6	LOS C	1.4	10.4	0.64	0.53	36.5
32	R2	35	6.4	35	6.4	0.066	26.2	LOS C	1.1	7.9	0.65	0.69	8.9
Approach		125	6.4	125	6.4	0.066	23.7	LOS C	1.4	10.4	0.65	0.59	25.2
All Vehicles		909	11.1	909	11.1	0.247	21.3	LOS C	9.2	73.1	0.66	0.60	24.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2024 AM Back + Dev]

Network: N101 [2024 AM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.299	20.7	LOS C	6.9	59.7	0.60	0.51	15.3
22	T1	329	27.8	329	27.8	0.299	17.1	LOS B	6.9	59.7	0.61	0.55	12.8
23	R2	78	0.0	78	0.0	0.299	25.0	LOS C	5.1	40.3	0.67	0.66	14.2
Approach		408	22.5	408	22.5	0.299	18.6	LOS B	6.9	59.7	0.62	0.57	13.2
NorthEast: Shields St													
24	L2	24	0.0	24	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
25	T1	1	0.0	1	0.0	0.255	32.9	LOS C	4.8	33.6	0.81	0.76	10.1
26	R2	98	0.0	98	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
Approach		123	0.0	123	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
NorthWest: Abbot St													
27	L2	75	0.0	75	0.0	0.223	32.0	LOS C	8.2	65.5	0.91	0.78	12.9
28	T1	304	25.5	304	25.5	0.223	24.8	LOS C	8.2	65.5	0.86	0.73	12.3
29	R2	1	0.0	1	0.0	0.223	29.3	LOS C	7.2	61.8	0.83	0.70	15.0
Approach		380	20.4	380	20.4	0.223	26.3	LOS C	8.2	65.5	0.87	0.74	12.5
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
31	T1	1	0.0	1	0.0	0.028	50.5	LOS D	0.2	1.1	0.94	0.61	7.4
32	R2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
Approach		3	0.0	3	0.0	0.028	53.4	LOS D	0.2	1.1	0.94	0.61	5.6
All Vehicles		915	18.5	915	18.5	0.299	24.3	LOS C	8.2	65.5	0.75	0.67	11.5

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 103 [Abbot St / Site Access - 2024 AM Back + Dev]

Network: N101 [2024 AM Background + Dev]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	299	15.2	299	15.2	0.085	0.0	LOS A	0.0	0.1	0.00	0.00	59.4
23	R2	1	0.0	1	0.0	0.085	4.1	LOS A	0.0	0.1	0.01	0.00	41.3
Approach		300	15.2	300	15.2	0.085	0.0	NA	0.0	0.1	0.00	0.00	59.3
NorthEast: Access													
24	L2	37	0.0	37	0.0	0.066	3.3	LOS A	0.1	1.0	0.26	0.51	23.1
26	R2	1	0.0	1	0.0	0.066	6.5	LOS A	0.1	1.0	0.26	0.51	23.1
Approach		38	0.0	38	0.0	0.066	3.4	LOS A	0.1	1.0	0.26	0.51	23.1
NorthWest: Abbott St													
27	L2	9	0.0	9	0.0	0.093	4.7	LOS A	1.3	9.5	0.00	0.03	37.7
28	T1	286	9.6	286	9.6	0.093	0.0	LOS A	1.3	9.5	0.00	0.02	58.0
Approach		296	9.3	296	9.3	0.093	0.2	NA	1.3	9.5	0.00	0.02	56.8
All Vehicles		634	11.5	634	11.5	0.093	0.3	NA	1.3	9.5	0.02	0.04	54.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 8:21:19 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2024 AM Back + Dev]

Network: N101 [2024 AM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	128	0.0	128	0.0	0.302	29.0	LOS C	7.5	52.5	0.71	0.70	15.3
22	T1	138	0.0	138	0.0	0.302	25.4	LOS C	7.5	52.5	0.74	0.71	11.7
23	R2	89	0.0	89	0.0	0.302	35.2	LOS D	5.0	34.9	0.78	0.73	12.9
Approach		356	0.0	356	0.0	0.302	29.2	LOS C	7.5	52.5	0.74	0.71	13.4
NorthEast: Spence St													
24	L2	132	6.7	132	6.7	0.334	21.1	LOS C	8.8	65.1	0.63	0.64	18.8
25	T1	245	6.7	245	6.7	0.334	19.4	LOS B	8.8	65.1	0.66	0.65	15.7
26	R2	91	6.6	91	6.6	0.334	28.1	LOS C	5.8	43.2	0.72	0.69	7.9
Approach		467	6.7	467	6.7	0.334	21.6	LOS C	8.8	65.1	0.67	0.66	15.1
NorthWest: Abbott St													
27	L2	89	9.6	89	9.6	0.276	33.9	LOS C	6.5	49.0	0.88	0.77	7.4
28	T1	103	9.6	103	9.6	0.276	30.8	LOS C	6.5	49.0	0.88	0.77	12.8
29	R2	103	9.6	103	9.6	0.302	46.1	LOS D	5.1	38.4	1.00	0.82	6.9
Approach		296	9.6	296	9.6	0.302	37.1	LOS D	6.5	49.0	0.92	0.78	8.8
SouthWest: Spence St													
30	L2	115	6.7	115	6.7	0.345	21.7	LOS C	9.2	68.0	0.64	0.63	11.7
31	T1	227	6.7	227	6.7	0.345	18.4	LOS B	9.2	68.0	0.65	0.64	16.3
32	R2	114	6.7	114	6.7	0.345	28.8	LOS C	5.1	37.9	0.73	0.73	15.3
Approach		456	6.7	456	6.7	0.345	21.8	LOS C	9.2	68.0	0.67	0.66	15.1
All Vehicles		1575	5.7	1575	5.7	0.345	26.3	LOS C	9.2	68.0	0.73	0.69	13.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	19.9	LOS B	0.1	0.1	0.63	0.63
P6	NorthEast Full Crossing	53	28.9	LOS C	0.1	0.1	0.76	0.76
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	28.9	LOS C	0.1	0.1	0.76	0.76
All Pedestrians		211	20.5	LOS C			0.64	0.64

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2024 PM Back] — **Network: N101 [2024 PM Background]**

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	94	15.2	94	15.2	0.281	31.9	LOS C	10.2	80.4	0.89	0.78	13.4
22	T1	314	15.2	314	15.2	0.281	20.8	LOS C	10.2	80.4	0.69	0.63	22.1
23	R2	40	15.2	40	15.2	0.281	21.4	LOS C	4.9	38.4	0.51	0.49	39.4
Approach		447	15.2	447	15.2	0.281	23.2	LOS C	10.2	80.4	0.72	0.65	22.1
NorthEast: Aplin St													
24	L2	22	4.1	22	4.1	0.084	27.4	LOS C	1.8	13.3	0.65	0.58	33.9
25	T1	65	4.1	65	4.1	0.084	21.9	LOS C	1.8	13.3	0.65	0.59	35.4
26	R2	22	4.1	22	4.1	0.084	27.6	LOS C	1.5	11.2	0.65	0.59	34.7
Approach		109	4.1	109	4.1	0.084	24.2	LOS C	1.8	13.3	0.65	0.59	35.0
NorthWest: Abbott St													
27	L2	53	9.2	53	9.2	0.228	21.1	LOS C	5.6	42.6	0.58	0.55	39.6
28	T1	316	9.2	316	9.2	0.228	15.3	LOS B	5.6	42.6	0.57	0.51	18.5
29	R2	71	9.2	71	9.2	0.192	29.2	LOS C	2.3	17.7	0.68	0.73	15.2
Approach		439	9.2	439	9.2	0.228	18.2	LOS B	5.6	42.6	0.59	0.55	22.5
SouthWest: Aplin St													
30	L2	23	6.4	23	6.4	0.059	25.9	LOS C	1.2	9.1	0.64	0.61	9.5
31	T1	59	6.4	59	6.4	0.059	21.6	LOS C	1.3	9.4	0.64	0.52	36.6
32	R2	36	6.4	36	6.4	0.074	27.7	LOS C	1.1	8.5	0.67	0.69	8.4
Approach		118	6.4	118	6.4	0.074	24.3	LOS C	1.3	9.4	0.65	0.59	24.2
All Vehicles		1114	10.8	1114	10.8	0.281	21.5	LOS C	10.2	80.4	0.65	0.60	24.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2024 PM Back]

Network: N101 [2024 PM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.285	20.4	LOS C	6.5	56.1	0.59	0.50	15.5
22	T1	311	27.8	311	27.8	0.285	16.8	LOS B	6.5	56.1	0.61	0.54	13.0
23	R2	78	0.0	78	0.0	0.285	24.9	LOS C	4.8	37.9	0.66	0.66	14.2
Approach		389	22.2	389	22.2	0.285	18.4	LOS B	6.5	56.1	0.62	0.56	13.3
NorthEast: Shields St													
24	L2	39	0.0	39	0.0	0.366	38.0	LOS D	7.1	49.9	0.84	0.78	5.5
25	T1	1	0.0	1	0.0	0.366	34.1	LOS C	7.1	49.9	0.84	0.78	9.8
26	R2	137	0.0	137	0.0	0.366	38.0	LOS D	7.1	49.9	0.84	0.78	5.5
Approach		177	0.0	177	0.0	0.366	38.0	LOS D	7.1	49.9	0.84	0.78	5.5
NorthWest: Abbot St													
27	L2	112	0.0	112	0.0	0.217	31.2	LOS C	8.0	61.0	0.89	0.78	12.9
28	T1	260	25.5	260	25.5	0.217	24.4	LOS C	8.0	61.0	0.85	0.73	12.4
29	R2	1	0.0	1	0.0	0.217	29.3	LOS C	7.0	60.0	0.83	0.70	15.0
Approach		373	17.8	373	17.8	0.217	26.4	LOS C	8.0	61.0	0.86	0.74	12.6
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
31	T1	1	0.0	1	0.0	0.028	50.5	LOS D	0.2	1.1	0.94	0.61	7.4
32	R2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
Approach		3	0.0	3	0.0	0.028	53.4	LOS D	0.2	1.1	0.94	0.61	5.6
All Vehicles		942	16.2	942	16.2	0.366	25.4	LOS C	8.0	61.0	0.76	0.68	11.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

▽ Site: 103 [Abbot St / Site Access - 2024 PM Back]

Network: N101 [2024 PM Background]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	359	15.2	359	15.2	0.102	0.0	LOS A	0.0	0.1	0.00	0.00	59.5
23	R2	1	0.0	1	0.0	0.102	4.2	LOS A	0.0	0.1	0.00	0.00	41.4
Approach		360	15.2	360	15.2	0.102	0.0	NA	0.0	0.1	0.00	0.00	59.4
NorthEast: Access													
24	L2	1	0.0	1	0.0	0.004	3.3	LOS A	0.0	0.1	0.34	0.52	17.4
26	R2	1	0.0	1	0.0	0.004	6.9	LOS A	0.0	0.1	0.34	0.52	17.4
Approach		2	0.0	2	0.0	0.004	5.1	LOS A	0.0	0.1	0.34	0.52	17.4
NorthWest: Abbott St													
27	L2	1	0.0	1	0.0	0.093	4.7	LOS A	1.0	7.9	0.00	0.00	38.7
28	T1	299	9.6	299	9.6	0.093	0.0	LOS A	1.0	7.9	0.00	0.00	59.8
Approach		300	9.6	300	9.6	0.093	0.0	NA	1.0	7.9	0.00	0.00	59.6
All Vehicles		662	12.6	662	12.6	0.102	0.0	NA	1.0	7.9	0.00	0.00	59.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 7:22:20 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2024 PM Back]

Network: N101 [2024 PM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Abbott St													
21	L2	137	0.0	137	0.0	0.338	30.1	LOS C	8.4	59.1	0.74	0.71	14.9
22	T1	136	0.0	136	0.0	0.338	25.8	LOS C	8.4	59.1	0.75	0.72	11.5
23	R2	111	0.0	111	0.0	0.338	35.7	LOS D	5.3	37.3	0.79	0.75	12.6
Approach		383	0.0	383	0.0	0.338	30.2	LOS C	8.4	59.1	0.76	0.72	13.1
NorthEast: Spence St													
24	L2	105	6.7	105	6.7	0.366	20.9	LOS C	10.0	73.8	0.64	0.62	19.3
25	T1	274	6.7	274	6.7	0.366	18.2	LOS B	10.0	73.8	0.65	0.63	16.7
26	R2	117	6.7	117	6.7	0.366	28.6	LOS C	5.6	41.6	0.74	0.73	7.5
Approach		496	6.7	496	6.7	0.366	21.2	LOS C	10.0	73.8	0.67	0.65	14.9
NorthWest: Abbott St													
27	L2	87	9.6	87	9.6	0.277	30.6	LOS C	6.5	49.0	0.84	0.74	8.0
28	T1	101	9.6	101	9.6	0.277	27.5	LOS C	6.5	49.0	0.84	0.74	14.0
29	R2	101	9.6	101	9.6	0.302	45.9	LOS D	4.9	37.2	1.00	0.81	6.9
Approach		289	9.6	289	9.6	0.302	34.8	LOS C	6.5	49.0	0.90	0.77	9.3
SouthWest: Spence St													
30	L2	134	6.7	134	6.7	0.409	21.8	LOS C	11.4	84.3	0.66	0.64	11.6
31	T1	241	6.7	241	6.7	0.409	17.4	LOS B	11.4	84.3	0.66	0.64	17.1
32	R2	161	6.7	161	6.7	0.421	30.5	LOS C	5.9	44.0	0.76	0.78	14.4
Approach		536	6.7	536	6.7	0.421	22.5	LOS C	11.4	84.3	0.69	0.68	14.9
All Vehicles		1704	5.7	1704	5.7	0.421	25.9	LOS C	11.4	84.3	0.73	0.70	13.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2024 PM Back + Dev]

Network: N101 [2024 PM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	100	15.2	100	15.2	0.296	32.6	LOS C	10.9	86.1	0.91	0.80	13.2
22	T1	319	15.2	319	15.2	0.296	21.2	LOS C	10.9	86.1	0.70	0.64	21.8
23	R2	46	15.2	46	15.2	0.296	21.2	LOS C	4.9	39.1	0.50	0.49	39.4
Approach		465	15.2	465	15.2	0.296	23.7	LOS C	10.9	86.1	0.73	0.66	22.0
NorthEast: Aplin St													
24	L2	26	4.1	26	4.1	0.087	27.5	LOS C	1.9	13.8	0.65	0.60	33.7
25	T1	65	4.1	65	4.1	0.087	21.9	LOS C	1.9	13.8	0.65	0.59	35.3
26	R2	22	4.1	22	4.1	0.087	27.6	LOS C	1.6	11.7	0.65	0.59	34.8
Approach		114	4.1	114	4.1	0.087	24.3	LOS C	1.9	13.8	0.65	0.59	34.8
NorthWest: Abbott St													
27	L2	53	9.2	53	9.2	0.232	21.2	LOS C	5.7	43.3	0.58	0.55	39.5
28	T1	320	9.2	320	9.2	0.232	15.3	LOS B	5.7	43.3	0.57	0.51	18.5
29	R2	71	9.2	71	9.2	0.198	29.3	LOS C	2.4	17.8	0.69	0.73	15.1
Approach		443	9.2	443	9.2	0.232	18.3	LOS B	5.7	43.3	0.59	0.55	22.4
SouthWest: Aplin St													
30	L2	23	6.4	23	6.4	0.059	25.9	LOS C	1.2	9.1	0.64	0.61	9.5
31	T1	59	6.4	59	6.4	0.059	21.6	LOS C	1.3	9.4	0.64	0.52	36.6
32	R2	40	6.4	40	6.4	0.083	27.8	LOS C	1.3	9.5	0.67	0.70	8.4
Approach		122	6.4	122	6.4	0.083	24.4	LOS C	1.3	9.5	0.65	0.60	23.9
All Vehicles		1144	10.8	1144	10.8	0.296	21.7	LOS C	10.9	86.1	0.66	0.60	24.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2024 PM Back + Dev]

Network: N101 [2024 PM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.344	21.1	LOS C	8.2	70.6	0.61	0.53	15.2
22	T1	369	27.8	369	27.8	0.344	17.5	LOS B	8.2	70.6	0.63	0.56	12.6
23	R2	88	0.0	88	0.0	0.344	26.3	LOS C	5.8	45.0	0.69	0.68	13.7
Approach		459	22.4	459	22.4	0.344	19.2	LOS B	8.2	70.6	0.64	0.59	12.9
NorthEast: Shields St													
24	L2	44	0.0	44	0.0	0.416	38.6	LOS D	8.2	57.6	0.85	0.79	5.4
25	T1	1	0.0	1	0.0	0.416	34.7	LOS C	8.2	57.6	0.85	0.79	9.7
26	R2	156	0.0	156	0.0	0.416	38.5	LOS D	8.2	57.6	0.85	0.79	5.4
Approach		201	0.0	201	0.0	0.416	38.5	LOS D	8.2	57.6	0.85	0.79	5.4
NorthWest: Abbot St													
27	L2	126	0.0	126	0.0	0.253	31.0	LOS C	9.2	70.3	0.88	0.78	13.0
28	T1	307	25.5	307	25.5	0.253	23.0	LOS C	9.2	70.3	0.84	0.72	13.0
29	R2	1	0.0	1	0.0	0.253	27.4	LOS C	8.1	68.8	0.82	0.69	15.7
Approach		435	18.0	435	18.0	0.253	25.3	LOS C	9.2	70.3	0.85	0.74	13.0
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
31	T1	1	0.0	1	0.0	0.028	50.5	LOS D	0.2	1.1	0.94	0.61	7.4
32	R2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
Approach		3	0.0	3	0.0	0.028	53.4	LOS D	0.2	1.1	0.94	0.61	5.6
All Vehicles		1098	16.5	1098	16.5	0.416	25.3	LOS C	9.2	70.6	0.76	0.68	11.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 103 [Abbot St / Site Access - 2024 PM Back + Dev]

Network: N101 [2024 PM Background + Dev]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	377	15.2	377	15.2	0.110	0.0	LOS A	0.0	0.1	0.00	0.00	59.5
23	R2	1	0.0	1	0.0	0.110	4.3	LOS A	0.0	0.1	0.00	0.00	41.4
Approach		378	15.2	378	15.2	0.110	0.0	NA	0.0	0.1	0.00	0.00	59.4
NorthEast: Access													
24	L2	7	0.0	7	0.0	0.016	3.3	LOS A	0.0	0.2	0.26	0.50	21.6
26	R2	1	0.0	1	0.0	0.016	7.3	LOS A	0.0	0.2	0.26	0.50	21.6
Approach		8	0.0	8	0.0	0.016	3.8	LOS A	0.0	0.2	0.26	0.50	21.6
NorthWest: Abbott St													
27	L2	27	0.0	27	0.0	0.103	4.7	LOS A	1.3	9.5	0.00	0.09	36.0
28	T1	299	9.6	299	9.6	0.103	0.0	LOS A	1.3	9.5	0.00	0.05	55.3
Approach		326	8.8	326	8.8	0.103	0.4	NA	1.3	9.5	0.00	0.05	52.5
All Vehicles		713	12.1	713	12.1	0.110	0.2	NA	1.3	9.5	0.00	0.03	54.2

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 7:25:19 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2024 PM Back + Dev] **Network: N101 [2024 PM Background + Dev]**

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Abbott St													
21	L2	137	0.0	137	0.0	0.343	30.2	LOS C	8.6	60.0	0.74	0.71	14.9
22	T1	140	0.0	140	0.0	0.343	25.8	LOS C	8.6	60.0	0.75	0.72	11.5
23	R2	111	0.0	111	0.0	0.343	35.8	LOS D	5.4	37.6	0.79	0.75	12.6
Approach		387	0.0	387	0.0	0.343	30.2	LOS C	8.6	60.0	0.76	0.72	13.1
NorthEast: Spence St													
24	L2	105	6.7	105	6.7	0.374	21.0	LOS C	10.2	75.6	0.64	0.62	19.3
25	T1	274	6.7	274	6.7	0.374	18.1	LOS B	10.2	75.6	0.65	0.63	16.7
26	R2	121	6.7	121	6.7	0.374	29.4	LOS C	5.6	41.6	0.75	0.74	7.3
Approach		500	6.7	500	6.7	0.374	21.5	LOS C	10.2	75.6	0.67	0.66	14.8
NorthWest: Abbott St													
27	L2	88	9.6	88	9.6	0.282	31.3	LOS C	6.5	49.0	0.86	0.75	7.9
28	T1	103	9.6	103	9.6	0.282	28.2	LOS C	6.5	49.0	0.86	0.75	13.7
29	R2	103	9.6	103	9.6	0.311	46.7	LOS D	5.1	38.5	1.00	0.81	6.8
Approach		295	9.6	295	9.6	0.311	35.6	LOS D	6.5	49.0	0.91	0.77	9.1
SouthWest: Spence St													
30	L2	139	6.7	139	6.7	0.415	21.8	LOS C	11.6	85.8	0.66	0.65	11.6
31	T1	241	6.7	241	6.7	0.415	17.5	LOS B	11.6	85.8	0.66	0.65	17.0
32	R2	161	6.7	161	6.7	0.429	31.4	LOS C	6.0	44.6	0.78	0.78	14.1
Approach		541	6.7	541	6.7	0.429	22.7	LOS C	11.6	85.8	0.69	0.69	14.7
All Vehicles		1723	5.7	1723	5.7	0.429	26.2	LOS C	11.6	85.8	0.74	0.70	13.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2034 AM Back]

Network: N101 [2034 AM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	74	15.2	74	15.2	0.268	32.6	LOS C	9.9	78.6	0.91	0.79	13.3
22	T1	281	15.2	281	15.2	0.268	22.8	LOS C	9.9	78.6	0.76	0.69	20.9
23	R2	53	15.2	53	15.2	0.268	22.9	LOS C	4.5	36.0	0.55	0.55	37.9
Approach		407	15.2	407	15.2	0.268	24.6	LOS C	9.9	78.6	0.76	0.69	22.4
NorthEast: Aplin St													
24	L2	8	4.1	8	4.1	0.028	26.8	LOS C	0.6	4.3	0.63	0.55	34.2
25	T1	19	4.1	19	4.1	0.028	21.2	LOS C	0.6	4.3	0.63	0.56	35.6
26	R2	8	4.1	8	4.1	0.028	26.9	LOS C	0.5	3.5	0.63	0.57	34.8
Approach		36	4.1	36	4.1	0.028	23.9	LOS C	0.6	4.3	0.63	0.56	35.1
NorthWest: Abbott St													
27	L2	55	9.2	55	9.2	0.227	21.1	LOS C	5.6	42.3	0.58	0.56	39.5
28	T1	334	9.2	334	9.2	0.227	15.4	LOS B	5.6	42.3	0.58	0.51	18.5
29	R2	34	9.2	34	9.2	0.086	27.2	LOS C	1.0	7.9	0.64	0.70	15.9
Approach		422	9.2	422	9.2	0.227	17.1	LOS B	5.6	42.3	0.58	0.53	23.5
SouthWest: Aplin St													
30	L2	27	6.4	27	6.4	0.074	26.1	LOS C	1.6	11.7	0.65	0.61	9.5
31	T1	74	6.4	74	6.4	0.074	21.7	LOS C	1.6	11.7	0.65	0.53	36.4
32	R2	34	6.4	34	6.4	0.064	26.1	LOS C	1.0	7.7	0.64	0.69	8.9
Approach		135	6.4	135	6.4	0.074	23.7	LOS C	1.6	11.7	0.65	0.59	25.4
All Vehicles		1000	11.1	1000	11.1	0.268	21.3	LOS C	9.9	78.6	0.66	0.60	24.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2034 AM Back]

Network: N101 [2034 AM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.287	20.8	LOS C	6.6	57.5	0.60	0.51	15.3
22	T1	311	27.8	311	27.8	0.287	17.2	LOS B	6.6	57.5	0.62	0.55	12.7
23	R2	78	0.0	78	0.0	0.287	25.6	LOS C	4.9	38.2	0.67	0.66	13.9
Approach		389	22.2	389	22.2	0.287	18.9	LOS B	6.6	57.5	0.63	0.57	13.1
NorthEast: Shields St													
24	L2	24	0.0	24	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
25	T1	1	0.0	1	0.0	0.255	32.9	LOS C	4.8	33.6	0.81	0.76	10.1
26	R2	98	0.0	98	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
Approach		123	0.0	123	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
NorthWest: Abbot St													
27	L2	75	0.0	75	0.0	0.221	32.5	LOS C	8.3	65.9	0.92	0.79	12.8
28	T1	300	25.5	300	25.5	0.221	25.4	LOS C	8.3	65.9	0.88	0.75	12.1
29	R2	1	0.0	1	0.0	0.221	29.9	LOS C	7.3	62.4	0.85	0.71	14.7
Approach		376	20.3	376	20.3	0.221	26.9	LOS C	8.3	65.9	0.89	0.76	12.3
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
31	T1	1	0.0	1	0.0	0.028	50.5	LOS D	0.2	1.1	0.94	0.61	7.4
32	R2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
Approach		3	0.0	3	0.0	0.028	53.4	LOS D	0.2	1.1	0.94	0.61	5.6
All Vehicles		892	18.3	892	18.3	0.287	24.8	LOS C	8.3	65.9	0.76	0.67	11.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 103 [Abbot St / Site Access - 2034 AM Back]

Network: N101 [2034 AM Background]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	405	15.2	405	15.2	0.115	0.0	LOS A	0.0	0.1	0.00	0.00	59.5
23	R2	1	0.0	1	0.0	0.115	4.3	LOS A	0.0	0.1	0.00	0.00	41.4
Approach		406	15.2	406	15.2	0.115	0.0	NA	0.0	0.1	0.00	0.00	59.4
NorthEast: Access													
24	L2	1	0.0	1	0.0	0.005	3.3	LOS A	0.0	0.1	0.36	0.52	16.5
26	R2	1	0.0	1	0.0	0.005	7.6	LOS A	0.0	0.1	0.36	0.52	16.5
Approach		2	0.0	2	0.0	0.005	5.5	LOS A	0.0	0.1	0.36	0.52	16.5
NorthWest: Abbott St													
27	L2	1	0.0	1	0.0	0.099	4.7	LOS A	1.2	8.9	0.00	0.00	38.7
28	T1	324	9.6	324	9.6	0.099	0.0	LOS A	1.2	8.9	0.00	0.00	59.8
Approach		325	9.6	325	9.6	0.099	0.0	NA	1.2	8.9	0.00	0.00	59.6
All Vehicles		734	12.6	734	12.6	0.115	0.0	NA	1.2	8.9	0.00	0.00	59.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 7:23:04 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2034 AM Back]

Network: N101 [2034 AM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	137	0.0	137	0.0	0.324	30.0	LOS C	8.0	56.1	0.73	0.71	14.9
22	T1	153	0.0	153	0.0	0.324	26.2	LOS C	8.0	56.1	0.75	0.71	11.4
23	R2	89	0.0	89	0.0	0.324	34.7	LOS C	5.5	38.2	0.78	0.73	13.2
Approach		379	0.0	379	0.0	0.324	29.6	LOS C	8.0	56.1	0.75	0.72	13.2
NorthEast: Spence St													
24	L2	140	6.7	140	6.7	0.400	21.3	LOS C	11.1	82.1	0.65	0.64	18.9
25	T1	272	6.7	272	6.7	0.400	18.5	LOS B	11.1	82.1	0.67	0.66	16.3
26	R2	137	6.7	137	6.7	0.400	28.3	LOS C	6.4	47.6	0.74	0.74	7.6
Approach		548	6.7	548	6.7	0.400	21.6	LOS C	11.1	82.1	0.68	0.68	14.7
NorthWest: Abbott St													
27	L2	83	9.6	83	9.6	0.265	35.2	LOS D	6.5	49.0	0.90	0.77	7.2
28	T1	97	9.6	97	9.6	0.265	32.1	LOS C	6.5	49.0	0.90	0.77	12.4
29	R2	97	9.6	97	9.6	0.289	45.0	LOS D	4.7	35.5	0.99	0.81	7.0
Approach		277	9.6	277	9.6	0.289	37.5	LOS D	6.5	49.0	0.93	0.79	8.8
SouthWest: Spence St													
30	L2	114	6.7	114	6.7	0.343	21.0	LOS C	9.2	68.0	0.63	0.62	12.0
31	T1	227	6.7	227	6.7	0.343	17.6	LOS B	9.2	68.0	0.64	0.63	16.8
32	R2	114	6.7	114	6.7	0.343	28.8	LOS C	4.9	36.3	0.73	0.73	15.3
Approach		455	6.7	455	6.7	0.343	21.3	LOS C	9.2	68.0	0.66	0.65	15.4
All Vehicles		1659	5.6	1659	5.6	0.400	26.0	LOS C	11.1	82.1	0.73	0.70	13.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.3 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2034 AM Back + Dev]

Network: N101 [2034 AM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Abbott St													
21	L2	79	15.2	79	15.2	0.282	32.8	LOS C	10.5	82.9	0.91	0.80	13.3
22	T1	287	15.2	287	15.2	0.282	23.4	LOS C	10.5	82.9	0.77	0.70	20.5
23	R2	59	15.2	59	15.2	0.282	23.7	LOS C	4.9	38.9	0.58	0.57	37.4
Approach		425	15.2	425	15.2	0.282	25.2	LOS C	10.5	82.9	0.77	0.70	22.2
NorthEast: Aplin St													
24	L2	11	4.1	11	4.1	0.030	26.8	LOS C	0.6	4.6	0.63	0.57	33.9
25	T1	19	4.1	19	4.1	0.030	21.3	LOS C	0.6	4.6	0.63	0.57	35.4
26	R2	8	4.1	8	4.1	0.030	26.9	LOS C	0.5	3.7	0.63	0.57	34.9
Approach		38	4.1	38	4.1	0.030	24.1	LOS C	0.6	4.6	0.63	0.57	34.9
NorthWest: Abbott St													
27	L2	55	9.2	55	9.2	0.227	21.1	LOS C	5.6	42.2	0.58	0.56	39.5
28	T1	333	9.2	333	9.2	0.227	15.4	LOS B	5.6	42.2	0.58	0.51	18.5
29	R2	34	9.2	34	9.2	0.089	28.0	LOS C	1.1	8.0	0.65	0.70	15.6
Approach		421	9.2	421	9.2	0.227	17.2	LOS B	5.6	42.2	0.58	0.53	23.5
SouthWest: Aplin St													
30	L2	27	6.4	27	6.4	0.075	26.1	LOS C	1.6	11.7	0.65	0.61	9.5
31	T1	74	6.4	74	6.4	0.075	21.7	LOS C	1.6	11.7	0.65	0.53	36.4
32	R2	35	6.4	35	6.4	0.066	26.2	LOS C	1.1	7.9	0.65	0.69	8.9
Approach		136	6.4	136	6.4	0.075	23.7	LOS C	1.6	11.7	0.65	0.59	25.3
All Vehicles		1020	11.1	1020	11.1	0.282	21.6	LOS C	10.5	82.9	0.67	0.61	23.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P7	NorthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
P8	SouthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2034 AM Back + Dev]

Network: N101 [2034 AM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.299	21.0	LOS C	7.0	60.8	0.61	0.52	15.2
22	T1	329	27.8	329	27.8	0.299	17.3	LOS B	7.0	60.8	0.62	0.56	12.7
23	R2	78	0.0	78	0.0	0.299	25.0	LOS C	5.1	40.3	0.67	0.66	14.2
Approach		408	22.5	408	22.5	0.299	18.8	LOS B	7.0	60.8	0.63	0.57	13.1
NorthEast: Shields St													
24	L2	24	0.0	24	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
25	T1	1	0.0	1	0.0	0.255	32.9	LOS C	4.8	33.6	0.81	0.76	10.1
26	R2	98	0.0	98	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
Approach		123	0.0	123	0.0	0.255	36.8	LOS D	4.8	33.6	0.81	0.76	5.7
NorthWest: Abbot St													
27	L2	75	0.0	75	0.0	0.223	32.3	LOS C	8.3	66.1	0.92	0.79	12.8
28	T1	304	25.5	304	25.5	0.223	25.3	LOS C	8.3	66.1	0.87	0.74	12.1
29	R2	1	0.0	1	0.0	0.223	29.8	LOS C	7.4	62.8	0.85	0.71	14.8
Approach		380	20.4	380	20.4	0.223	26.7	LOS C	8.3	66.1	0.88	0.75	12.3
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
31	T1	1	0.0	1	0.0	0.028	50.5	LOS D	0.2	1.1	0.94	0.61	7.4
32	R2	1	0.0	1	0.0	0.028	54.8	LOS D	0.2	1.1	0.94	0.61	4.7
Approach		3	0.0	3	0.0	0.028	53.4	LOS D	0.2	1.1	0.94	0.61	5.6
All Vehicles		915	18.5	915	18.5	0.299	24.6	LOS C	8.3	66.1	0.76	0.67	11.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

▽ Site: 103 [Abbot St / Site Access - 2034 AM Back + Dev]

⧓ Network: N101 [2034 AM Background + Dev]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	423	15.2	423	15.2	0.120	0.0	LOS A	0.0	0.1	0.00	0.00	59.5
23	R2	1	0.0	1	0.0	0.120	4.4	LOS A	0.0	0.1	0.00	0.00	41.4
Approach		424	15.2	424	15.2	0.120	0.0	NA	0.0	0.1	0.00	0.00	59.4
NorthEast: Access													
24	L2	37	0.0	37	0.0	0.068	3.4	LOS A	0.1	1.0	0.28	0.52	22.5
26	R2	1	0.0	1	0.0	0.068	8.4	LOS A	0.1	1.0	0.28	0.52	22.5
Approach		38	0.0	38	0.0	0.068	3.6	LOS A	0.1	1.0	0.28	0.52	22.5
NorthWest: Abbott St													
27	L2	9	0.0	9	0.0	0.105	4.7	LOS A	1.2	9.3	0.00	0.03	37.8
28	T1	324	9.6	324	9.6	0.105	0.0	LOS A	1.2	9.3	0.00	0.02	58.2
Approach		334	9.3	334	9.3	0.105	0.1	NA	1.2	9.3	0.00	0.02	57.1
All Vehicles		796	12.0	796	12.0	0.120	0.2	NA	1.2	9.3	0.01	0.03	55.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 8:06:42 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2034 AM Back + Dev]

Network: N101 [2034 AM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	137	0.0	137	0.0	0.328	30.0	LOS C	8.1	57.0	0.73	0.71	14.9
22	T1	154	0.0	154	0.0	0.328	26.4	LOS C	8.1	57.0	0.75	0.72	11.3
23	R2	89	0.0	89	0.0	0.328	35.5	LOS D	5.5	38.2	0.79	0.73	12.9
Approach		380	0.0	380	0.0	0.328	29.9	LOS C	8.1	57.0	0.75	0.72	13.1
NorthEast: Spence St													
24	L2	140	6.7	140	6.7	0.366	20.9	LOS C	9.9	73.2	0.64	0.64	19.0
25	T1	272	6.7	272	6.7	0.366	18.7	LOS B	9.9	73.2	0.66	0.66	16.1
26	R2	109	6.7	109	6.7	0.366	27.1	LOS C	6.4	47.3	0.72	0.70	8.1
Approach		521	6.7	521	6.7	0.366	21.1	LOS C	9.9	73.2	0.67	0.66	15.3
NorthWest: Abbott St													
27	L2	89	9.6	89	9.6	0.283	31.8	LOS C	6.5	49.0	0.87	0.76	7.8
28	T1	103	9.6	103	9.6	0.283	28.7	LOS C	6.5	49.0	0.87	0.76	13.5
29	R2	103	9.6	103	9.6	0.313	45.7	LOS D	5.0	37.9	0.99	0.81	6.9
Approach		296	9.6	296	9.6	0.313	35.6	LOS D	6.5	49.0	0.91	0.78	9.1
SouthWest: Spence St													
30	L2	115	6.7	115	6.7	0.339	21.0	LOS C	9.0	66.9	0.63	0.62	12.0
31	T1	227	6.7	227	6.7	0.339	17.6	LOS B	9.0	66.9	0.64	0.63	16.8
32	R2	114	6.7	114	6.7	0.339	28.0	LOS C	5.0	37.0	0.72	0.73	15.6
Approach		456	6.7	456	6.7	0.339	21.1	LOS C	9.0	66.9	0.66	0.65	15.4
All Vehicles		1653	5.6	1653	5.6	0.366	25.7	LOS C	9.9	73.2	0.73	0.69	13.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.9 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2034 PM Back]

Network: N101 [2034 PM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	106	15.2	106	15.2	0.433	42.2	LOS D	13.0	102.5	0.96	0.83	11.0
22	T1	355	15.2	355	15.2	0.433	28.4	LOS C	13.0	102.5	0.79	0.70	18.3
23	R2	45	15.2	45	15.2	0.433	25.5	LOS C	6.5	51.8	0.62	0.57	36.7
Approach		506	15.2	506	15.2	0.433	31.0	LOS C	13.0	102.5	0.81	0.72	18.5
NorthEast: Aplin St													
24	L2	24	4.1	24	4.1	0.071	19.7	LOS B	1.7	12.0	0.53	0.52	39.5
25	T1	74	4.1	74	4.1	0.071	14.2	LOS B	1.7	12.0	0.53	0.52	40.8
26	R2	24	4.1	24	4.1	0.071	19.8	LOS B	1.4	10.0	0.53	0.53	39.5
Approach		122	4.1	122	4.1	0.071	16.4	LOS B	1.7	12.0	0.53	0.52	40.3
NorthWest: Abbott St													
27	L2	59	9.2	59	9.2	0.355	30.4	LOS C	8.6	64.7	0.74	0.66	34.0
28	T1	357	9.2	357	9.2	0.355	24.2	LOS C	8.6	64.7	0.72	0.62	13.4
29	R2	79	9.2	79	9.2	0.417	43.0	LOS D	3.4	25.4	0.86	0.76	11.4
Approach		495	9.2	495	9.2	0.417	27.9	LOS C	8.6	64.7	0.75	0.65	17.0
SouthWest: Aplin St													
30	L2	26	6.4	26	6.4	0.050	18.3	LOS B	1.1	8.3	0.52	0.56	10.7
31	T1	66	6.4	66	6.4	0.050	14.0	LOS B	1.2	8.5	0.52	0.45	42.2
32	R2	40	6.4	40	6.4	0.064	19.1	LOS B	1.0	7.5	0.54	0.67	11.5
Approach		133	6.4	133	6.4	0.064	16.4	LOS B	1.2	8.5	0.53	0.54	28.6
All Vehicles		1256	10.8	1256	10.8	0.433	26.8	LOS C	13.0	102.5	0.73	0.65	21.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
P8	SouthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2034 PM Back]

Network: N101 [2034 PM Background]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total veh/h	HV %	Arrival Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate per veh	Average Speed km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.345	21.1	LOS C	7.6	66.0	0.61	0.53	15.1
22	T1	353	27.8	353	27.8	0.345	17.7	LOS B	7.6	66.0	0.63	0.57	12.5
23	R2	88	0.0	88	0.0	0.345	26.3	LOS C	5.9	45.9	0.69	0.68	13.7
Approach		442	22.2	442	22.2	0.345	19.4	LOS B	7.6	66.0	0.65	0.59	12.8
NorthEast: Shields St													
24	L2	44	0.0	44	0.0	0.416	38.6	LOS D	8.2	57.6	0.85	0.79	5.4
25	T1	1	0.0	1	0.0	0.416	34.7	LOS C	8.2	57.6	0.85	0.79	9.7
26	R2	156	0.0	156	0.0	0.416	38.5	LOS D	8.2	57.6	0.85	0.79	5.4
Approach		201	0.0	201	0.0	0.416	38.5	LOS D	8.2	57.6	0.85	0.79	5.4
NorthWest: Abbot St													
27	L2	126	0.0	126	0.0	0.245	32.2	LOS C	9.2	70.6	0.91	0.80	12.6
28	T1	294	25.5	294	25.5	0.245	25.1	LOS C	9.2	70.6	0.87	0.74	12.1
29	R2	1	0.0	1	0.0	0.245	29.9	LOS C	8.1	68.8	0.85	0.72	14.7
Approach		421	17.8	421	17.8	0.245	27.3	LOS C	9.2	70.6	0.88	0.76	12.3
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.029	54.9	LOS D	0.2	1.1	0.94	0.61	4.7
31	T1	1	0.0	1	0.0	0.029	50.6	LOS D	0.2	1.1	0.94	0.61	7.4
32	R2	1	0.0	1	0.0	0.029	54.9	LOS D	0.2	1.1	0.94	0.61	4.7
Approach		3	0.0	3	0.0	0.029	53.5	LOS D	0.2	1.1	0.94	0.61	5.6
All Vehicles		1067	16.2	1067	16.2	0.416	26.2	LOS C	9.2	70.6	0.78	0.69	10.8

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 103 [Abbot St / Site Access - 2034 PM Back]

Network: N101 [2034 PM Background]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	405	15.2	405	15.2	0.115	0.0	LOS A	0.0	0.1	0.00	0.00	59.5
23	R2	1	0.0	1	0.0	0.115	4.4	LOS A	0.0	0.1	0.00	0.00	41.4
Approach		406	15.2	406	15.2	0.115	0.0	NA	0.0	0.1	0.00	0.00	59.4
NorthEast: Access													
24	L2	1	0.0	1	0.0	0.005	3.4	LOS A	0.0	0.1	0.37	0.53	16.3
26	R2	1	0.0	1	0.0	0.005	7.7	LOS A	0.0	0.1	0.37	0.53	16.3
Approach		2	0.0	2	0.0	0.005	5.5	LOS A	0.0	0.1	0.37	0.53	16.3
NorthWest: Abbott St													
27	L2	1	0.0	1	0.0	0.106	4.7	LOS A	1.0	7.7	0.00	0.00	38.7
28	T1	338	9.6	338	9.6	0.106	0.0	LOS A	1.0	7.7	0.00	0.00	59.8
Approach		339	9.6	339	9.6	0.106	0.0	NA	1.0	7.7	0.00	0.00	59.6
All Vehicles		747	12.6	747	12.6	0.115	0.0	NA	1.0	7.7	0.00	0.00	59.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 7:23:49 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2034 PM Back] **Network: N101 [2034 PM Background]**

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	158	0.0	158	0.0	0.369	30.5	LOS C	9.3	65.2	0.75	0.72	14.7
22	T1	153	0.0	153	0.0	0.369	26.6	LOS C	9.3	65.2	0.76	0.73	11.2
23	R2	113	0.0	113	0.0	0.369	36.0	LOS D	6.1	42.6	0.80	0.75	12.6
Approach		423	0.0	423	0.0	0.369	30.5	LOS C	9.3	65.2	0.77	0.73	13.0
NorthEast: Spence St													
24	L2	109	6.6	109	6.6	0.415	21.4	LOS C	11.6	86.2	0.66	0.63	19.0
25	T1	311	6.7	311	6.7	0.415	18.5	LOS B	11.6	86.2	0.67	0.65	16.6
26	R2	137	6.7	137	6.7	0.415	29.2	LOS C	6.3	46.9	0.75	0.75	7.3
Approach		557	6.6	557	6.7	0.415	21.7	LOS C	11.6	86.2	0.69	0.67	14.6
NorthWest: Abbott St													
27	L2	87	9.6	87	9.6	0.277	30.4	LOS C	6.5	49.0	0.84	0.74	8.0
28	T1	101	9.6	101	9.6	0.277	27.4	LOS C	6.5	49.0	0.84	0.74	14.0
29	R2	101	9.6	101	9.6	0.321	46.9	LOS D	5.0	37.5	1.00	0.81	6.8
Approach		289	9.6	289	9.6	0.321	35.1	LOS D	6.5	49.0	0.90	0.77	9.2
SouthWest: Spence St													
30	L2	134	6.7	134	6.7	0.409	21.8	LOS C	11.4	84.3	0.66	0.64	11.6
31	T1	241	6.7	241	6.7	0.409	17.4	LOS B	11.4	84.3	0.66	0.64	17.1
32	R2	161	6.7	161	6.7	0.445	31.6	LOS C	6.1	45.0	0.78	0.78	14.0
Approach		536	6.7	536	6.7	0.445	22.8	LOS C	11.4	84.3	0.69	0.69	14.8
All Vehicles		1805	5.6	1805	5.6	0.445	26.2	LOS C	11.6	86.2	0.74	0.70	13.1

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 2.2 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 101 [Abbott St / Aplin St - 2034 PM Back + Dev] — **Network: N101 [2034 PM Background + Dev]**

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	Demand Flows HV	Arrival Flows Total	Arrival Flows HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	95% Back of Queue Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	113	15.2	113	15.2	0.454	42.2	LOS D	13.6	107.4	0.96	0.83	11.0
22	T1	360	15.2	360	15.2	0.454	29.3	LOS C	13.6	107.4	0.81	0.72	17.8
23	R2	52	15.2	52	15.2	0.454	26.9	LOS C	7.0	55.4	0.65	0.60	35.8
Approach		524	15.2	524	15.2	0.454	31.9	LOS C	13.6	107.4	0.83	0.73	18.3
NorthEast: Aplin St													
24	L2	29	4.1	29	4.1	0.074	19.8	LOS B	1.7	12.5	0.53	0.54	39.2
25	T1	74	4.1	74	4.1	0.074	14.2	LOS B	1.7	12.5	0.53	0.53	40.6
26	R2	24	4.1	24	4.1	0.074	19.9	LOS B	1.5	10.6	0.53	0.53	39.6
Approach		127	4.1	127	4.1	0.074	16.6	LOS B	1.7	12.5	0.53	0.53	40.1
NorthWest: Abbott St													
27	L2	59	9.2	59	9.2	0.361	30.4	LOS C	8.7	65.8	0.74	0.67	34.0
28	T1	361	9.2	361	9.2	0.361	24.2	LOS C	8.7	65.8	0.72	0.62	13.4
29	R2	79	9.2	79	9.2	0.432	43.2	LOS D	3.4	25.5	0.86	0.77	11.4
Approach		499	9.2	499	9.2	0.432	28.0	LOS C	8.7	65.8	0.75	0.65	16.9
SouthWest: Aplin St													
30	L2	26	6.4	26	6.4	0.050	18.3	LOS B	1.1	8.3	0.52	0.56	10.7
31	T1	66	6.4	66	6.4	0.050	14.0	LOS B	1.2	8.5	0.52	0.45	42.2
32	R2	45	6.4	45	6.4	0.072	19.2	LOS B	1.2	8.6	0.54	0.68	11.4
Approach		138	6.4	138	6.4	0.072	16.5	LOS B	1.2	8.6	0.53	0.54	28.2
All Vehicles		1288	10.8	1288	10.8	0.454	27.2	LOS C	13.6	107.4	0.74	0.66	21.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow ped/h	Average Delay sec	Level of Service	Average Back of Queue Pedestrian ped	Average Back of Queue Distance m	Prop. Queued	Effective Stop Rate per ped
P5	SouthEast Full Crossing	53	21.2	LOS C	0.1	0.1	0.65	0.65
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	23.2	LOS C	0.1	0.1	0.68	0.68
P8	SouthWest Full Crossing	53	32.1	LOS D	0.1	0.1	0.80	0.80
All Pedestrians		211	26.5	LOS C			0.73	0.73

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 102 [Abbot St / Sheilds St - 2034 PM Back + Dev]

Network: N101 [2034 PM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	1	0.0	1	0.0	0.367	21.3	LOS C	7.8	67.7	0.62	0.54	15.0
22	T1	369	27.8	369	27.8	0.367	18.0	LOS B	7.8	67.7	0.64	0.58	12.3
23	R2	88	0.0	88	0.0	0.367	26.5	LOS C	6.4	50.2	0.70	0.68	13.6
Approach		459	22.4	459	22.4	0.367	19.7	LOS B	7.8	67.7	0.66	0.60	12.6
NorthEast: Shields St													
24	L2	44	0.0	44	0.0	0.416	38.6	LOS D	8.2	57.6	0.85	0.79	5.4
25	T1	1	0.0	1	0.0	0.416	34.7	LOS C	8.2	57.6	0.85	0.79	9.7
26	R2	156	0.0	156	0.0	0.416	38.5	LOS D	8.2	57.6	0.85	0.79	5.4
Approach		201	0.0	201	0.0	0.416	38.5	LOS D	8.2	57.6	0.85	0.79	5.4
NorthWest: Abbot St													
27	L2	126	0.0	126	0.0	0.253	31.8	LOS C	9.4	72.1	0.90	0.79	12.8
28	T1	307	25.5	307	25.5	0.253	24.7	LOS C	9.4	72.1	0.85	0.73	12.3
29	R2	1	0.0	1	0.0	0.253	29.4	LOS C	8.2	69.7	0.83	0.70	14.9
Approach		435	18.0	435	18.0	0.253	26.8	LOS C	9.4	72.1	0.87	0.75	12.5
SouthWest: Sheilds St													
30	L2	1	0.0	1	0.0	0.029	55.0	LOS D	0.2	1.1	0.94	0.62	4.7
31	T1	1	0.0	1	0.0	0.029	50.6	LOS D	0.2	1.1	0.94	0.62	7.4
32	R2	1	0.0	1	0.0	0.029	54.9	LOS D	0.2	1.1	0.94	0.62	4.7
Approach		3	0.0	3	0.0	0.029	53.5	LOS D	0.2	1.1	0.94	0.62	5.6
All Vehicles		1098	16.5	1098	16.5	0.416	26.0	LOS C	9.4	72.1	0.78	0.69	10.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P6	NorthEast Full Crossing	53	18.0	LOS B	0.1	0.1	0.60	0.60
P7	NorthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P8	SouthWest Full Crossing	53	21.8	LOS C	0.1	0.1	0.66	0.66
All Pedestrians		211	24.8	LOS C			0.70	0.70

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

MOVEMENT SUMMARY

Site: 103 [Abbot St / Site Access - 2034 PM Back + Dev]

Network: N101 [2034 PM Background + Dev]

New Site
Giveway / Yield (Two-Way)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
22	T1	423	15.2	423	15.2	0.121	0.0	LOS A	0.0	0.1	0.00	0.00	59.5
23	R2	1	0.0	1	0.0	0.121	4.6	LOS A	0.0	0.1	0.00	0.00	41.4
Approach		424	15.2	424	15.2	0.121	0.0	NA	0.0	0.1	0.00	0.00	59.4
NorthEast: Access													
24	L2	7	0.0	7	0.0	0.016	3.4	LOS A	0.0	0.2	0.28	0.51	20.9
26	R2	1	0.0	1	0.0	0.016	8.2	LOS A	0.0	0.2	0.28	0.51	20.9
Approach		8	0.0	8	0.0	0.016	4.0	LOS A	0.0	0.2	0.28	0.51	20.9
NorthWest: Abbott St													
27	L2	27	0.0	27	0.0	0.115	4.7	LOS A	1.1	8.5	0.00	0.08	36.3
28	T1	338	9.6	338	9.6	0.115	0.0	LOS A	1.1	8.5	0.00	0.04	55.8
Approach		365	8.9	365	8.9	0.115	0.4	NA	1.1	8.5	0.00	0.04	53.1
All Vehicles		798	12.1	798	12.1	0.121	0.2	NA	1.1	8.5	0.00	0.03	54.7

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Minor Road Approach LOS values are based on average delay for all vehicle movements.
NA: Intersection LOS and Major Road Approach LOS values are Not Applicable for two-way sign control since the average delay is not a good LOS measure due to zero delays associated with major road movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Organisation: LANGTREE CONSULTING | Processed: Saturday, 9 September 2023 7:26:49 PM
Project: C:\Users\Fei Ngoo\Documents\SIDRA Projects\22-34 Abbott St, Cairns TIA.sip7

MOVEMENT SUMMARY

Site: 104 [Abbot St / Spence St - 2034 PM Back + Dev]

Network: N101 [2034 PM Background + Dev]

New Site
Signals - Actuated Coordinated Cycle Time = 100 seconds (Network Cycle Time - User-Given)

Movement Performance - Vehicles

Mov ID	OD Mov	Demand Flows Total	HV	Arrival Flows Total	HV	Deg. Satn	Average Delay	Level of Service	95% Back of Queue Vehicles	Distance	Prop. Queued	Effective Stop Rate	Average Speed
		veh/h	%	veh/h	%	v/c	sec		veh	m		per veh	km/h
SouthEast: Abbott St													
21	L2	158	0.0	158	0.0	0.373	30.5	LOS C	9.4	66.1	0.75	0.72	14.7
22	T1	157	0.0	157	0.0	0.373	26.6	LOS C	9.4	66.1	0.76	0.73	11.2
23	R2	113	0.0	113	0.0	0.373	36.1	LOS D	6.1	43.0	0.80	0.75	12.6
Approach		427	0.0	427	0.0	0.373	30.6	LOS C	9.4	66.1	0.77	0.73	13.0
NorthEast: Spence St													
24	L2	109	6.7	109	6.7	0.422	21.5	LOS C	11.9	88.2	0.66	0.63	19.0
25	T1	311	6.7	311	6.7	0.422	18.5	LOS B	11.9	88.2	0.67	0.65	16.6
26	R2	141	6.7	141	6.7	0.422	30.1	LOS C	6.3	47.0	0.76	0.75	7.1
Approach		561	6.6	561	6.7	0.422	22.0	LOS C	11.9	88.2	0.69	0.67	14.4
NorthWest: Abbott St													
27	L2	88	9.6	88	9.6	0.282	30.6	LOS C	6.5	49.0	0.84	0.74	8.0
28	T1	103	9.6	103	9.6	0.282	27.5	LOS C	6.5	49.0	0.84	0.74	13.9
29	R2	103	9.6	103	9.6	0.330	46.7	LOS D	5.0	38.1	1.00	0.81	6.8
Approach		295	9.6	295	9.6	0.330	35.2	LOS D	6.5	49.0	0.90	0.77	9.2
SouthWest: Spence St													
30	L2	139	6.7	139	6.7	0.415	21.8	LOS C	11.6	85.8	0.66	0.65	11.6
31	T1	241	6.7	241	6.7	0.415	17.5	LOS B	11.6	85.8	0.66	0.65	17.0
32	R2	161	6.7	161	6.7	0.448	31.7	LOS C	6.1	45.1	0.78	0.78	14.0
Approach		541	6.7	541	6.7	0.448	22.8	LOS C	11.6	85.8	0.70	0.69	14.7
All Vehicles		1824	5.6	1824	5.6	0.448	26.4	LOS C	11.9	88.2	0.74	0.71	13.0

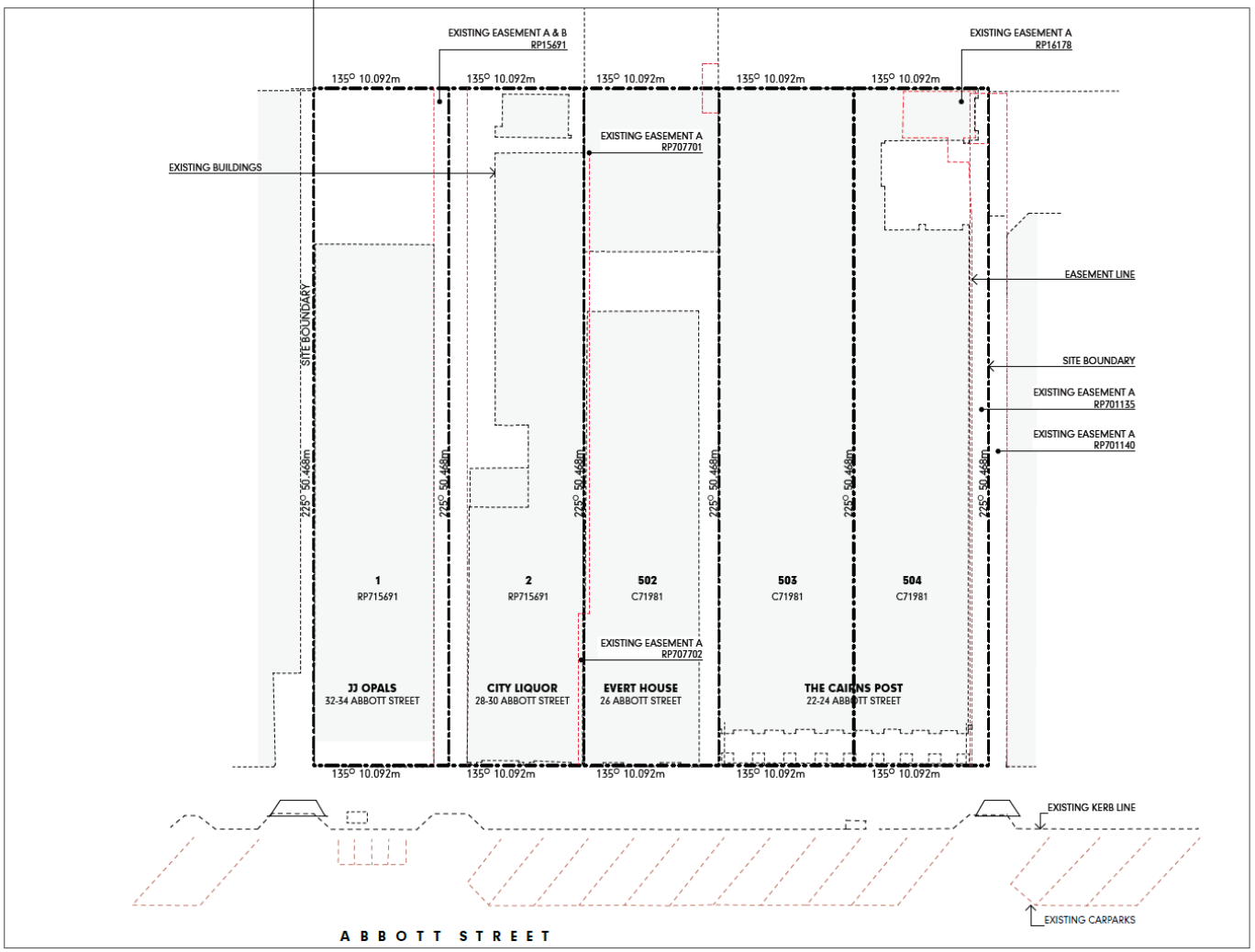
Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Network Data dialog (Network tab).
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Largest change in Average Back of Queue or Degree of Saturation for any lane during the last three iterations: 3.5 %
Number of Iterations: 10 (maximum specified: 10)

Movement Performance - Pedestrians

Mov ID	Description	Demand Flow	Average Delay	Level of Service	Average Back of Queue Pedestrian	Distance	Prop. Queued	Effective Stop Rate
		ped/h	sec		ped	m		per ped
P5	SouthEast Full Crossing	53	19.3	LOS B	0.1	0.1	0.62	0.62
P6	NorthEast Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
P7	NorthWest Full Crossing	53	4.4	LOS A	0.0	0.0	0.42	0.42
P8	SouthWest Full Crossing	53	29.7	LOS C	0.1	0.1	0.77	0.77
All Pedestrians		211	20.8	LOS C			0.65	0.65

Level of Service (LOS) Method: SIDRA Pedestrian LOS Method (Based on Average Delay)
Pedestrian movement LOS values are based on average delay per pedestrian movement.
Intersection LOS value for Pedestrians is based on average delay for all pedestrian movements.

ATTACHMENT 2: APPROVED PLAN(S) & DOCUMENT(S) – BUILDING WORKS



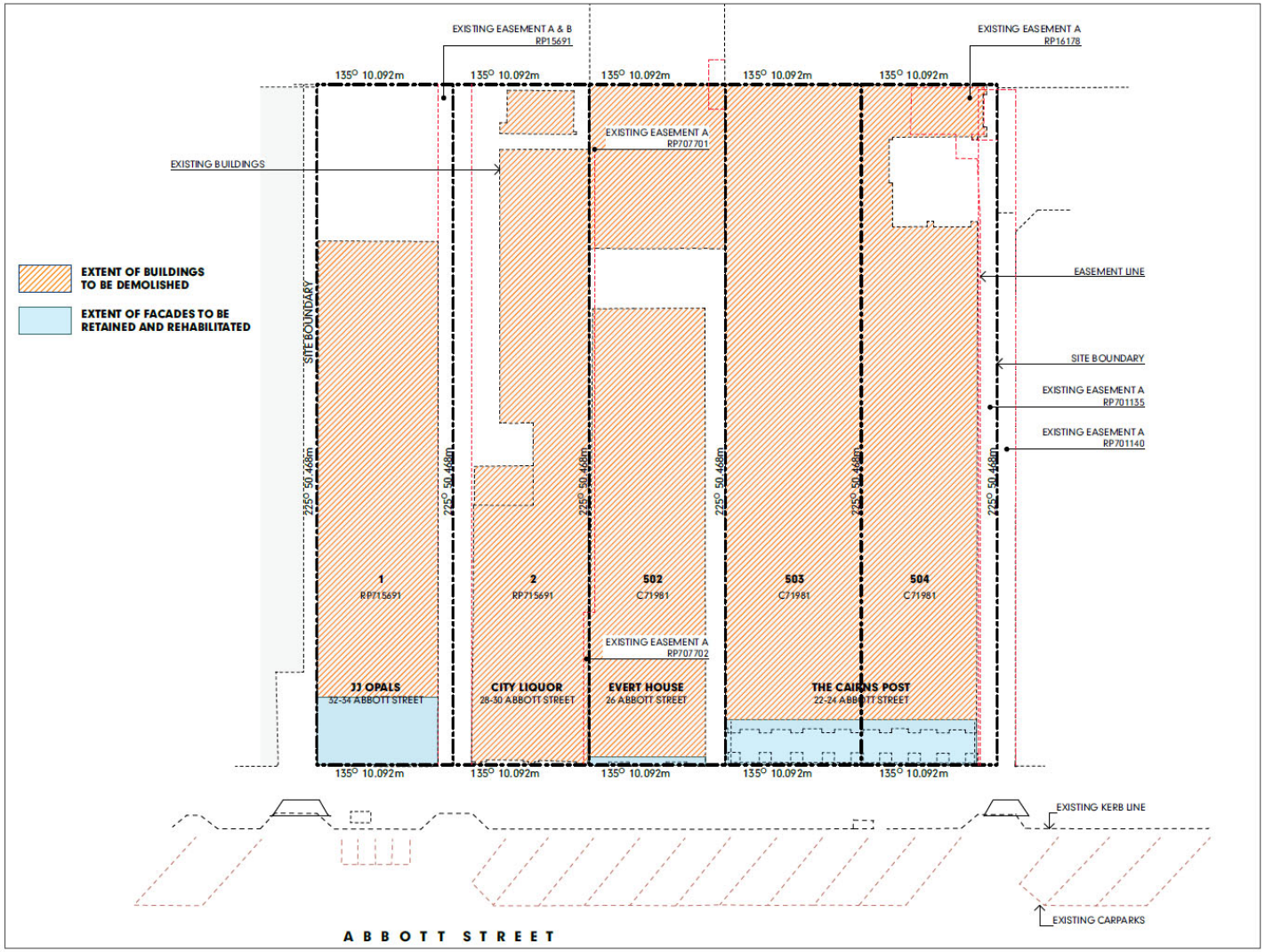
EXISTING SITE PLAN
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
SITE
SITE PLAN EXISTING

PROJECT NO.	POST001
DRAWING NO.	1.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN



SITE PLAN - DEMOLITION
SCALE 1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DEVELOPMENT APPLICATION
SITE
SITE PLAN DEMOLITION

PROJECT NO.	POST001
DRAWING NO.	1.03
REVISION NO.	01
DATE	13/9/2023

HUNT DESIGN

ATTACHMENT 3: NOTICE OF INTENTION TO COMMENCE USE

Notice of Intention to Commence Use

DEVELOPMENT PERMIT
Planning Act 2016 (Qld)

Development Permit	8/39/14
Date of Approval	6 March 2024
Approved Use	Material Change of Use for Multiple Dwelling, Short-Term Accommodation, Food & Drink Outlet, and Shop
Location	22, 24, 26, 28-30, & 32-34 Abbott Street, CAIRNS CITY
Property Description	Lots 1 & 2 on RP715691 and Lots 502,503, & 504 on C1981

I/we are hereby notifying Cairns Regional Council of my/our intention to commence the approved use outlined above.

on _____ (insert date).

I have read the conditions of the Decision Notice issued and believe that all the applicable conditions have been complied with.

Applicant:	
Address:	
Contact Phone:	
Signature of Applicant/Owner:	
Date:	

ATTACHMENT 4: REFERRAL AGENCY RESPONSE

RA6-N

Queensland Government

SARA reference: 2309-36986 SRA
Council reference: 8/39/14
Applicant reference: KRPDS:CAIRNSPOST

11 December 2023

Chief Executive Officer
Cairns Regional Council
PO Box 359
CAIRNS QLD 4870
PlanningAdmin@cairns.qld.gov.au

Attention: Louise Cameron

Dear Sir/Madam

SARA referral agency response——22, 24, 26, 28-30 and 32-34 Abbott Street, Cairns City

(Referral agency response given under section 56 of the *Planning Act 2016*)

The development application described below was confirmed as properly referred by the State Assessment and Referral Agency (SARA) on 4 October 2023.

Response

Outcome:	Referral agency response – with conditions
Date of response:	11 December 2023
Conditions:	The conditions in **Attachment 1** must be attached to any development approval
Advice:	Advice to the applicant is in **Attachment 2**
Reasons:	The reasons for the referral agency response are in **Attachment 3**

Development details

Description:	Development Permit	Material Change of Use for Multiple dwelling and Short-term accommodation (75 Units), Food and drink outlet and Shop
	Development Permit	Building Work assessable against the Planning Scheme for partial demolition within a place of significance
SARA role:	Referral agency	

Far North Queensland regional office
Ground Floor, Cnr Grafton and Hartley Street, Cairns
PO Box 2358, Cairns QLD 4870

SARA trigger:	Schedule 10, Part 8, Division 2, Subdivision 3, Table 2, Item 1 (10.8.2.3.2.1) (Planning Regulation 2017) - Development on or adjoining a Queensland heritage place
SARA reference:	2309-36986 SRA
Assessment manager:	Cairns Regional Council
Street address:	22, 24, 26, 28-30 and 32-34 Abbott Street, Cairns City
Real property description:	Lots 1 and 2 on RP715691 and Lots 502, 503 and 504 on C1981
Applicant name:	Sky Commercial Pty Ltd C/- Kelly Reaston Development and Property Services
Applicant contact details:	51 Sheridan Street Cairns QLD 4870 kelly@kellyreaston.com.au
Human Rights Act 2019 considerations:	Section 58 of the *Human Rights Act 2019* specifies required conduct for public entities when acting or making a decision. Sections 15 – 37 of the *Human Rights Act 2019* identifies the human rights a public entity must consider in making a decision. This decision does not limit the above identified human rights.

Representations

An applicant may make representations to a concurrence agency, at any time before the application is decided, about changing a matter in the referral agency response (s.30 Development Assessment Rules). Copies of the relevant provisions are in **Attachment 4**.

A copy of this response has been sent to the applicant for their information.

For further information please contact Jenny Sapuppo, A/Principal Planning Officer, on 07 5644 3220 or via email CairnsSARA@dsdilgp.qld.gov.au who will be pleased to assist.

Yours sincerely

Brett Nancarrow
Manager (Planning)

cc Sky Commercial Pty Ltd C/- Kelly Reaston Development and Property Services, kelly@kellyreaston.com.au

enc Attachment 1 - Referral agency conditions
Attachment 2 - Advice to the applicant
Attachment 3 - Reasons for referral agency response
Attachment 4 - Representations about a referral agency response provisions
Attachment 5 - Documents referenced in conditions

Attachment 1—Referral agency conditions

(Under section 56(1)(b)(i) of the *Planning Act 2016* the following conditions must be attached to any development approval relating to this application) (Copies of the documents referenced below are found at Attachment 5)

No.	Conditions	Condition timing
Material change of use		
10.8.2.3.2.1 – Development on or adjoining a Queensland heritage place—The chief executive administering the *Planning Act 2016* nominates the Director-General of the Department of Environment and Science to be the enforcement authority for the development to which this development approval relates for the administration and enforcement of any matter relating to the following condition(s):		
1.	The development must be carried out generally in accordance with the following plans: • DA Plans Level 00 prepared by Hunt Design, dated 20/11/2023, Drawing No. 2.01, Revision No. 02 • DA Elevations Elevation 1 – South West prepared by Hunt Design, dated 20/11/2023, Drawing No. 3.01, Revision No. 02 • DA Elevations Elevation 3 – North West prepared by Hunt Design, dated 20/11/2023, Drawing No. 3.02, Revision No. 02 • DA Elevations Elevation 3 – North East prepared by Hunt Design, dated 20/11/2023, Drawing No. 3.03, Revision No. 02 • DA Elevations Elevation 4 – South East prepared by Hunt Design, dated 20/11/2023, Drawing No. 3.04, Revision No. 02.	Prior to the commencement of use and to be maintained at all times
2.	Provide written notice of the commencement of the Multiple dwelling and Short-term accommodation, Food and drink outlet and Shop to the Department of Environment and Science at palm@des.qld.gov.au.	Within 10 business days of the commencement of the first material change of use on the site
3.	(a) A vibration assessment and mitigation report must be prepared by a Registered Professional Engineer of Queensland (RPEQ) who is suitably qualified and experienced with vibration impacts. The vibration assessment and mitigation report must: i. stipulate the vibration guidelines and maximum vibration levels in accordance with DIN4150-3: 2016 to ensure the vibration effects are set to the levels for sensitive/historic types of structure and to ensure the works do not result in 'minor damage' as defined in DIN4150-3 ii. outline the methods proposed to manage vibration and avoid damaging the former Mulgrave Shire Council Chambers from development including: 1. identifying any potential damage to the former Mulgrave Shire Council Chambers caused by the proposed demolition and construction vibration levels 2. proposed steps to carry out the demolition and construction works	(a) and (b) - Prior to the commencement of any works including demolition works

	iii. define aesthetic damage thresholds and structural damage thresholds in accordance with DIN4150-3:2016 iv. provide the vibration management controls including: 1. vibration monitoring 2. vibration alarms set below the designated vibration limit 3. vibration limits for less critical activities prior to the commencement of critical activities 4. construction methodologies to reduce impact v. include the reporting periods for vibration monitoring. (b) Submit the vibration assessment and mitigation report to palm@des.qld.gov.au or mail to: Department of Environment and Science Permit and License Management GPO Box 2454 Brisbane QLD 4001 (c) Carry out the development in accordance with the recommendations and/or actions outlined in the vibration assessment and mitigation report.	(c) For the duration of the works

Attachment 2—Advice to the applicant

General advice	
1.	Terms and phrases used in this document are defined in the *Planning Act 2016*, its regulation or the State Development Assessment Provisions (SDAP) (version 3.0). If a word remains undefined it has its ordinary meaning.
Further approval requirements	
2.	It is an offence under section 163 of the *Planning Act 2016*, to carry out assessable development, unless all necessary development permits are in effect for the development.

Attachment 3—Reasons for referral agency response

(Given under section 56(7) of the *Planning Act 2016*)

The reasons for the SARA's decision are:

The development complies with State code 14: Queensland heritage of the SDAP. Specifically, the development:

- maintains or substantially reduces unavoidable impacts on, the setting and/or streetscape where these form part of the cultural heritage significance of the Queensland heritage place
- avoids direct adverse impacts on the cultural heritage significance of the Queensland heritage place.

Material used in the assessment of the application:

- the development application material and submitted plans
- *Planning Act 2016*
- Planning Regulation 2017
- the SDAP (version 3.0), as published by SARA
- the Development Assessment Rules
- SARA DA Mapping system
- section 58 of the *Human Rights Act 2019*

Attachment 4—Representations about a referral agency response provisions

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Attachment 5—Documents referenced in conditions

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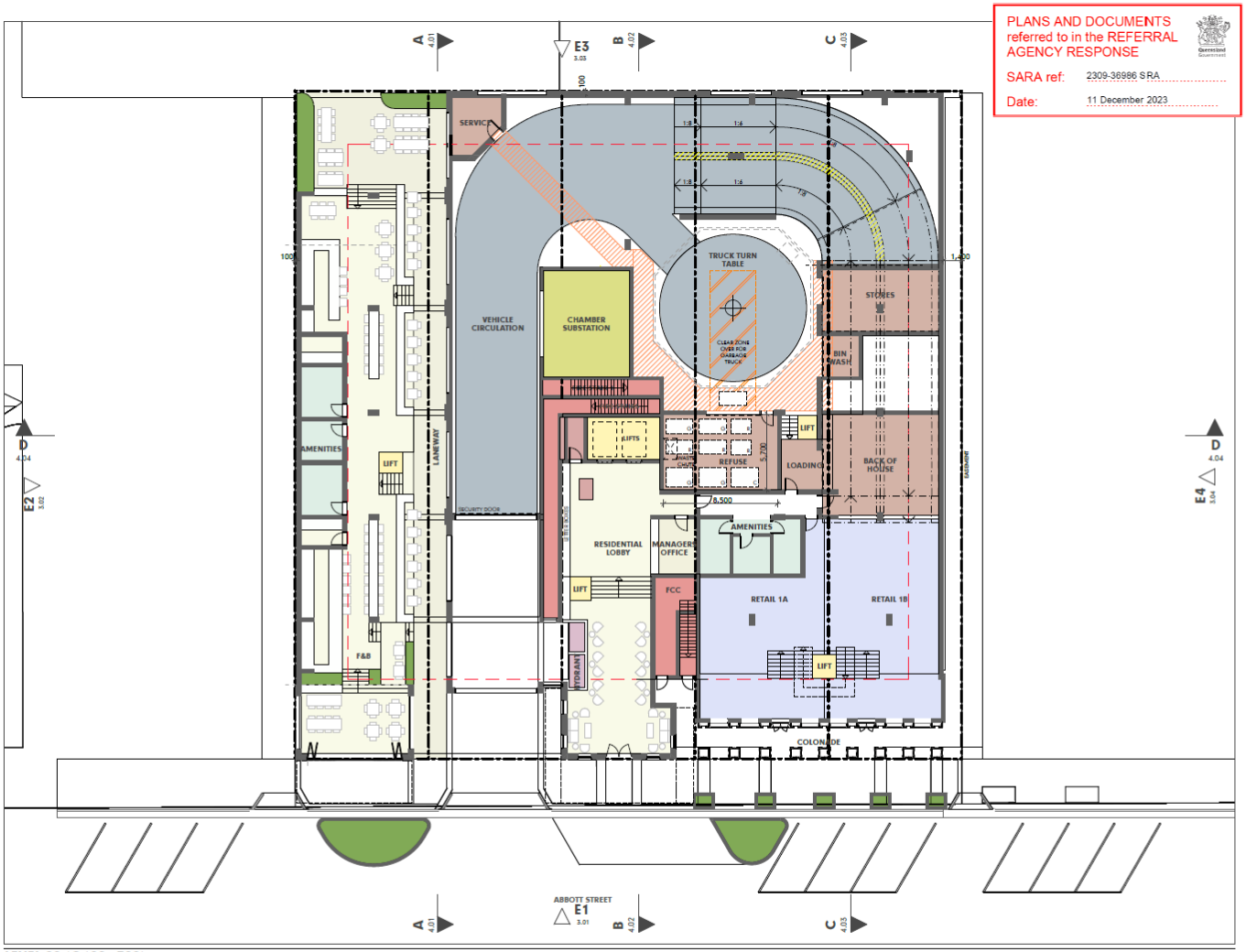


LEVEL 00 (Q100+300)
SCALE1:150

PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE

SARA ref: 2309-36986 SRA

Date: 11 December 2023

INTERNAL AREA CALCULATIONS - LEVEL 00

ZONE CATEGORY	ZONE NAME	AREA	QTY
ADMIN+OFFICE			
	MANAGERS OFFICE	14	1
AMENITIES			
	AMENITIES	90	6
ELECTRICAL PLANT			
	CHAMBER SUBSTATION	52	1
FIRE STAIRS			
	FCC	16	1
	FIRE STAIR	6	1
	FIRE STAIR 1	10	1
	FIRE STAIRS	27	1
FOOD + BEVERAGES (F+B)			
	F&B	319	1
	RESIDENTIAL LOBBY	148	1
HYDRAULIC PLANT			
	HYDRANT	3	1
	WATER METER	3	1
LIFTS			
	LIFT	12	4
	LIFTS	17	1
PATHS			
	LANEWAY	195	1
RETAIL			
	RETAIL 1A	107	1
	RETAIL 1B	131	1
SERVICES - RETICULATION			
	HYDRAULIC DUCT	1	1
	WASTE CHUTE	2	1
	WATER METERS	4	1
STORES			
	BACK OF HOUSE	67	1
	BIN WASH	9	1
	LOADING	15	1
	REFUSE	49	1
	SERVICE	14	1
	STORES	40	1
VEHICLE CIRCULATION			
	TRUCK TURN TABLE	95	1
	VEHICLE CIRCULATION	458	1

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

PLANS
LEVEL 00

PROJECT NO.	POST001
DRAWING NO.	2.01
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

PLANS AND DOCUMENTS
referred to in the REFERRAL
AGENCY RESPONSE

Queensland Government

SARA ref: 2309-36986 SRA

Date: 11 December 2023

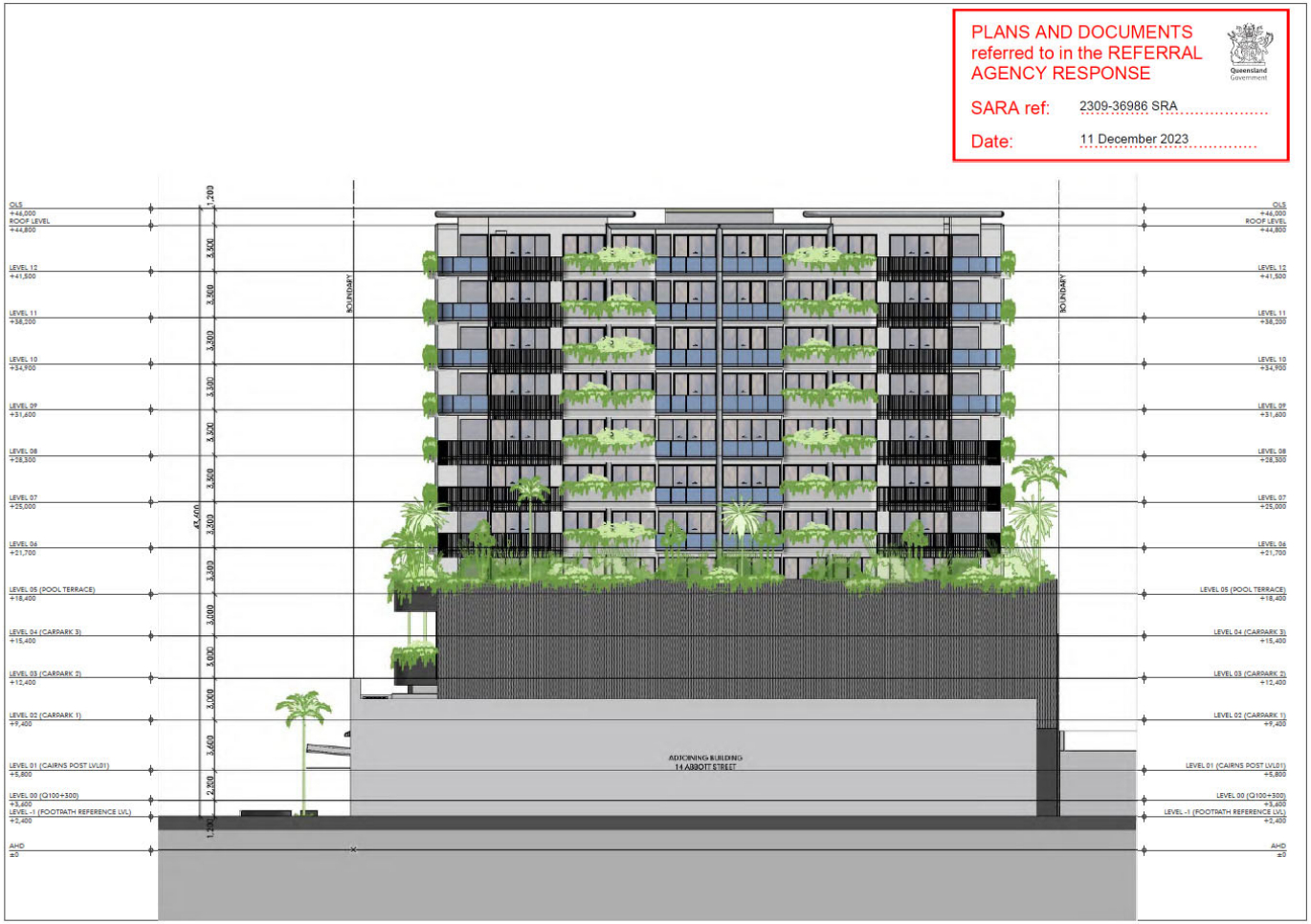
SOUTH WEST ELEVATION E1
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
ELEVATIONS
ELEVATION 1 - SOUTH WEST

PROJECT NO. POST001
DRAWING NO. 3.01
REVISION NO. 02
DATE 20/11/2023

HUNT DESIGN



NORTH WEST ELEVATION E2
SCALE1:150

CAIRNS POST DEVELOPMENT
APARTMENT BUILDING
FOR : ASV

DA
ELEVATIONS
ELEVATION 2 - NORTH WEST

PROJECT NO.	POST001
DRAWING NO.	3.02
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

PLANS AND DOCUMENTS referred to in the REFERRAL AGENCY RESPONSE

SARA ref: 2309-36986 SRA

Date: 11 December 2023

NORTH EAST ELEVATION E3

SCALE1:150

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING

FOR : ASV

DA

ELEVATIONS

ELEVATION 3 - NORTH EAST

PROJECT NO.	POST001
DRAWING NO.	3.03
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

PLANS AND DOCUMENTS
referred to in the REFERRAL
AGENCY RESPONSE

Queensland Government

SARA ref: 2309-36986 SRA

Date: 11 December 2023

SOUTH EAST ELEVATION E4
SCALE1:150

CAIRNS POST DEVELOPMENT

APARTMENT BUILDING
FOR : ASV

DA

ELEVATIONS
ELEVATION 4 - SOUTH EAST

PROJECT NO.	POST001
DRAWING NO.	3.04
REVISION NO.	02
DATE	20/11/2023

HUNT DESIGN

Development Assessment Rules—Representations about a referral agency response

The following provisions are those set out in sections 28 and 30 of the Development Assessment Rules[1] regarding **representations about a referral agency response**

Part 6: Changes to the application and referral agency responses

28 Concurrence agency changes its response or gives a late response

28.1. Despite part 2, a concurrence agency may, after its referral agency assessment period and any further period agreed ends, change its referral agency response or give a late referral agency response before the application is decided, subject to section 28.2 and 28.3.

28.2. A concurrence agency may change its referral agency response at any time before the application is decided if—

(a) the change is in response to a change which the assessment manager is satisfied is a change under section 26.1; or

(b) the Minister has given the concurrence agency a direction under section 99 of the Act; or

(c) the applicant has given written agreement to the change to the referral agency response.[2]

28.3. A concurrence agency may give a late referral agency response before the application is decided, if the applicant has given written agreement to the late referral agency response.

28.4. If a concurrence agency proposes to change its referral agency response under section 28.2(a), the concurrence agency must—

(a) give notice of its intention to change its referral agency response to the assessment manager and a copy to the applicant within 5 days of receiving notice of the change under section 25.1; and

(b) the concurrence agency has 10 days from the day of giving notice under paragraph (a), or a further period agreed between the applicant and the concurrence agency, to give an amended referral agency response to the assessment manager and a copy to the applicant.

---

1 Pursuant to Section 68 of the *Planning Act 2016*

2 In the instance an applicant has made representations to the concurrence agency under section 30, and the concurrence agency agrees to make the change included in the representations, section 28.2(c) is taken to have been satisfied.

Part 7: Miscellaneous

30 Representations about a referral agency response

30.1. An applicant may make representations to a concurrence agency at any time before the application is decided, about changing a matter in the referral agency response.[3]

ATTACHMENT 5: INFRASTRUCTURE CHARGES CALCULATIONS

Attachment to Infrastructure Charges Notice

Applicant Name:	Sky Commercial Pty Ltd	**Development Application Number:**	8/39/14
Development Address	22, 24, 26, 28-30, & 32-34 Abbott Street, Cairns	**Preparing Officer:**	L Cameron
Property Description:	Lots 1 & 2 on RP715691, Lots 502, 503, & 504 on C	**Development Type:**	Material Change of Use
Parcel Number/s:		**Relevant Charges Policy:**	Cairns Regional Council Charges Resolution No. 2 of 2021
Estate Name & Stage:	The Cairns Post Redevelopment	**Date Levied:**	13-Feb-24
DM5 Ref:	#7358016	**Index:**	132.32

Levied Charge Calculation

AC - (BASE CHARGE)

Category	Use					Quantity	Sub Total	Indexed Sub Total
Residential uses	Multiple dwelling	Use component	$	16,364.65	for each dwelling with 2 or less bedrooms	59	$965,514.35	$1,063,768.86
		Impervious area component	$	-			$0.00	$0.00
Residential uses	Multiple dwelling	Use component	$	22,027.88	for each dwelling with 3 or more bedrooms	16	$352,446.08	$388,312.37
		Impervious area component	$	-			$0.00	$0.00
Commercial (retail)	Food and drink outlet	Use component	$	197.20	for each square metre of gross floor area	319	$62,906.80	$69,308.44
		Impervious area component	$	10.95	for each square metre impervious to stormwater		$0.00	$0.00
Commercial (retail)	Shop	Use component	$	197.20	for each square metre of gross floor area	485	$95,642.00	$105,374.90
		Impervious area component	$	10.95	for each square metre impervious to stormwater	2536	$27,769.20	$30,595.10
						PROPOSED CHARGE	$1,504,278.43	$1,657,359.68

C - (CREDIT)

Category	Use					Quantity	Sub Total	Indexed Sub Total
Commercial (retail)	Shop	Use component	$	197.20	for each square metre of gross floor area	601	$118,517.20	$130,577.97
		Impervious area component	$	10.95	for each square metre impervious to stormwater		$0.00	$0.00
Entertainment	Bar	Use component	$	219.10	for each square metre of gross floor area, other than areas for providing	232	$50,831.20	$56,003.98
		Impervious area component	$	10.95	for each square metre impervious to stormwater		$0.00	$0.00
Commercial (office)	Office	Use component	$	153.40	for each square metre of gross floor area	1847	$283,329.80	$312,162.55
		Impervious area component	$	10.95	for each square metre impervious to stormwater	2536	$27,769.20	$30,595.10
						EXISTING CHARGE	$480,447.40	$529,339.60
						LC (LEVIED CHARGE)	$1,023,831.03	$1,128,020.07

IMPORTANT NOTE:
In accordance with section 3.5 of *Council's Charges Resolution No 2 of 2021*, all Levied Charges are subject to automatic indexation.
Please contact Council's Development Assessment Team on 1300 692 247 or by email to townplanner@cairns.qld.gov.au to confrim the payment amount prior to

ATTACHMENT 6: THIRD PARTY ADVICE

1 Nov 2023

Louise Cameron
Acting Principal Planner
(Infrastructure Coordination & Strategy)
Cairns Regional Council
PO Box 359
CAIRNS QLD 4870

Via email: L.Cameron@cairns.qld.gov.au

Dear Louise,

DEVELOPMENT APPLICATION REFERENCE NUMBER: 12484/2023
CA REFERENCE: DA 2023-04 MCU 22-34 ABBOTT ST
DEVELOPMENT APPLICATION FOR A DEVELOPMENT PERMIT FOR MATERIAL CHANGE OF USE FOR MULTIPLE DWELLINGS AND SHORT-TERM ACCOMMODATION (75 UNITS), FOOD AND DRINK OUTLET, AND SHOPS AND A PRELIMINARY APPROVAL FOR BUILDING WORK ASSESSABLE AGAINST THE PLANNING SCHEME (PARTIAL DEMOLITION) AT 22-34 ABBOTT STREET, CAIRNS CITY (LOTS 502-504 C1981 AND LOTS 1 & 2 ON RP715691)

Thank you for the opportunity to provide 3rd party advice on the above development.

The project seeks to the development of luxury accommodation, dining, and shopping on Abbott Street and retention/restoration of streetscape facades.

There are no identified places of State Heritage value on the subject site. However, there are 4 Local Heritage Places, as identified within the Cairns Plan 2016 (The Plan), on the subject site. These are:
• 22-24 Abbott St. • 26 Abbott St. • 28-30 Abbott St. • 32-24 Abbott St.

The Development proposes the following key elements:
• Retention of, and restoration/ reconstruction and conservation works to three of the four streetscape facades to Abbott Street (Cairns Post Building (22-24 Abbott St), JJ Opals (26 Abbott St), and Evert House (32-34 Abbott St)).

• Demolition of the streetscape façade to City Liquor Store (28-30 Abbott St).

• Demolition of the remainder of the buildings and structures on the Subject Site, including the former Stables Building at the Rear of 28-30 Abbott St.

• Modifications to three retained facades to accommodate their proposed adaptative reuse (including restoration / reconstruction and conservation works).

• Construction of a new multi storey, multi-use tower building containing retail/hospitality, residential, and carparking uses, and associated services, and support spaces.

• Reconstruction of heritage elements within the new works

The proposed development indicates a height of 46.0 metres and 12 storeys (Report page 16 & , Hunt Design Drgs 3.01/01, 3.02/01, 3.03/01, 3.04/01, 4.01/01, 4.02/01, 4.03/01, 4.04/01).

Cairns Airport Pty Ltd (CA) owns and manages Cairns Airport which includes all airside and landside operations, terminals, car parking and associated land holdings. CA is part of the North Queensland Airports group.

From CA's perspective it is imperative that development is appropriately located and designed to ensure the ongoing safety and viability of airport operations.

Development applications of interest from CA's perspective are those which may occur within, or result in the following:

1. Obstacle Limitation Surface (OLS) – all applications that infringe on the Obstacle Limitation Surface either permanent or transitory;

2. Australia Noise Exposure Forecast (ANEF) - all applications within the 20 ANEF noise contour or greater;

3. Public Safety Area (PSA) - all applications within the Public Safety Area;

4. Procedures for Air Navigation Operations Services-Aircraft Operations (PANS-OPS) - all material change of use and/or building work applications that penetrate PANS-OPS;

5. Wildlife Attracting Land Uses - material change of use applications within 13 kilometres that may attract birds or bats;

6. Lighting Hazards - applications that involve reflected sunlight, lighting and lit advertising signs; or distracts or interferes with pilot visibility; or creates pilot confusion regarding approach or runway lighting;

7. Land uses that may generate gaseous plumes with a velocity of greater than 4.3 m/s or airborne particulates that that impair visibility or aircraft engine operation within 15 kilometres of the airport;

8. Air services equipment located off-airport - material change of use applications that effect Air services equipment located "off-airport" including Air strips and Helicopter Landing sites. The establishment of such uses off-airport may result in flight path conflicts;

9. Navigational Equipment - all applications within the area of interest shown on the relevant Airport Land Use Plan of the navigational aid; and

10. Environmental Impacts - all applications that may result in increased stormwater run-off or other environmental impacts on airport land.

The following submission addresses each of the above points in further detail where relevant to the proposal.

1. Obstacle Limitation Surface

The OLS defines the operational airspace that should be kept free of obstacles for aircraft operations being conducted under the visual flight rules. Any obstacle must remain below the OLS at the given site. The OLS for the site is 46.0 to 50.0metres AHD (Drg DA2023-04 OLS), the proposed building has a height of 46.0 metres AHD (top of the roof).

- **Nil Impact on OLS.**

Details regarding proposed construction works have not been provided and these are also likely to lead to temporary infringements (e.g. cranes). Where construction methods are expected to result in a temporary penetration of the OLS, details of the potential penetration should be provided to CA as soon as possible but not later than ten working weeks prior to the expected date of the penetration, for further assessment and mitigation action as required by Air Services Australia (AsA), CASA and External Procedural Designers (EPD). It must also be understood that any infringement of OLS or PANS-OPs surfaces may not be approved therefore consideration and assessments must be completed prior to any DA approval.

- **If temporary penetration of the OLS is expected (e.g. cranes) details should be provided to CA.**

2. ANEF

The site is located outside the ANEF 20 noise contour

-**Nil Impact**

3. Public Safety Area

A Public Safety Area (PSA) is a defined as the area at each end of a strategic airport's runway where there is potentially an increased risk of an aircraft accident occurring. The site is not located within either of the PSAs applicable at Cairns Airport.

- **Not Applicable**

4. PANS-OPS surfaces

PANS-OPS surfaces define the operational airspace a pilot is required to use when flying an aircraft under the instrument flight rules, that is, when relying on instruments for navigation. The Development should seek to avoid any permanent or temporary encroachments into PANS-OPS airspace.

If a temporary infringement of any OLS surface is anticipated during construction then assessment of the PANS-OPS surfaces needs to be conducted. In this case details should be provided to CA as soon as possible noting that a minimum of ten working weeks is required for further assessment of the impact on PANOPS surfaces by AsA, CASA and EPD. It must also be understood that any infringement of OLS or PANOPs surfaces may not be approved therefore consideration and assessments such be completed prior to any DA approval.

- **May impact PANS-OPS to be advised by CASA/EPD.**

5. Wildlife Attracting Land Uses

The site is located approximately 3.9km from the Runway and therefore within 13 kilometres of the runway (refer to **Appendix 1**), The Development is to ensure landscaping species selected does not result in the attraction of wildlife (eg birds & bats) . Refer to SPP and National Airports Safeguarding Framework.

- **Possible impact.**

6. Lighting Hazards

The site lies within 6 km of the Airport where the Maximum Light Intensity of light sources measured at 3 degrees above the horizontal" refer to guideline noted below. It is recommended that a condition be included that requires any lighting to be designed and constructed by a suitably qualified Person to ensure that it does not increase risk of an aircraft incident and has regard to the following;

- *Civil Aviation Safety Authority Manual of Standards Part 139—Aerodromes Chapter 9 Section 9.144 Lights – requirements for zones.*

- *Civil Aviation Regulations 1988- REG 94 Dangerous Lights*

Possible impact.

7. Land uses that may generate gaseous plumes
- Not applicable.

8. Air services where located off-airport
- Not applicable.

9. Navigational Equipment
- Not applicable.

10. Environmental impacts on Airport Land
- None identified.

11. Glint and Glare

The site lies within 6 km of the Airport.
Air Traffic Control towers must be protected from glare and development applications that contain the risk of glare and require forwarding (by CA) to Airservices Australia and CASA for assessment. The proponent is to take into account that this assessment may take up considerable time of up to two months.

- None identified.

Recommendations

Prior to DA approval the developer is to submit a Cairns Airport "Application for height approval of a permanent structure" this will allow Cairns Airport to seek input from EPDs and CASA on the suitability of a permanent structure at this site.

Based on the above assessment, it is recommended that the following conditions be imposed on any approval to mitigate potential impacts on the efficient and safe movement of aircraft:

OLS AND PANS-OPS

(a) Overall Height
The applicant/developer should ensure that all buildings, structures, aerials, lightning rods, antennae, poles, posts, trees (at maximum height) or other obstacles remain under the Airport's Obstacle Limitation Surface which is 46.0 to 50.0 metres AHD over the site (Drg DA2023-04 OLS).
CA recommends all buildings structures etc are no higher than 46m AHD.

(b) Survey Certification
The applicant/developer is to demonstrate that all buildings, structures, aerials, lightning rods, antennae, poles, posts, trees (at maximum height) or other obstacles will not penetrate the Airport's Obstacle Limitation Surface which is 46.0 metres AHD over the site (Drg DA2023-04 OLS).

(c) Submit Certification
The applicant/developer must submit certification from a licensed surveyor that the overall height of the "As Constructed roof" and associated structures are in accordance with the above condition.

Advisory Note

This condition is to be completed prior to issue of Certificate of Classification/Final Inspection Certificate or prior to commencement of use, whichever comes first.
To ensure the final building height is on program the applicant/developer must submit certification from a licensed surveyor that the "As Constructed" Level seven (7) height is in accordance with the latest drawings.

CONSTRUCTION IMPACTS

(d) The applicant/developer must provide confirmation that any encroachments in the Airport's operational airspace (OLS or PANS-OPS) as a result of construction activities, including the use of cranes or other equipment, have been assessed by CASA and external procedural designers and approved by CA, prior to issue of a Development Permit for Building Work.

Submit Certification
The applicant/developer must submit certification from a licensed surveyor that the overall height of the cranes or other equipment are in accordance with the above condition.

LIGHTING

(e) Lighting is to be designed and constructed by a suitably qualified person to ensure that it does not increase the risk of an aircraft incident and has regard to the *Manual of Standards Part 139—Aerodromes Chapter 9 Section 9.144 Lights – requirements for zones and Civil Aviation Regulations 1988- REG 94 Dangerous Lights.*

If you have any queries please contact Berni Burgstaller, Senior Drafting and Projects Officer on 0418 769 519 or berni.burgstaller@cairnsairport.com.au

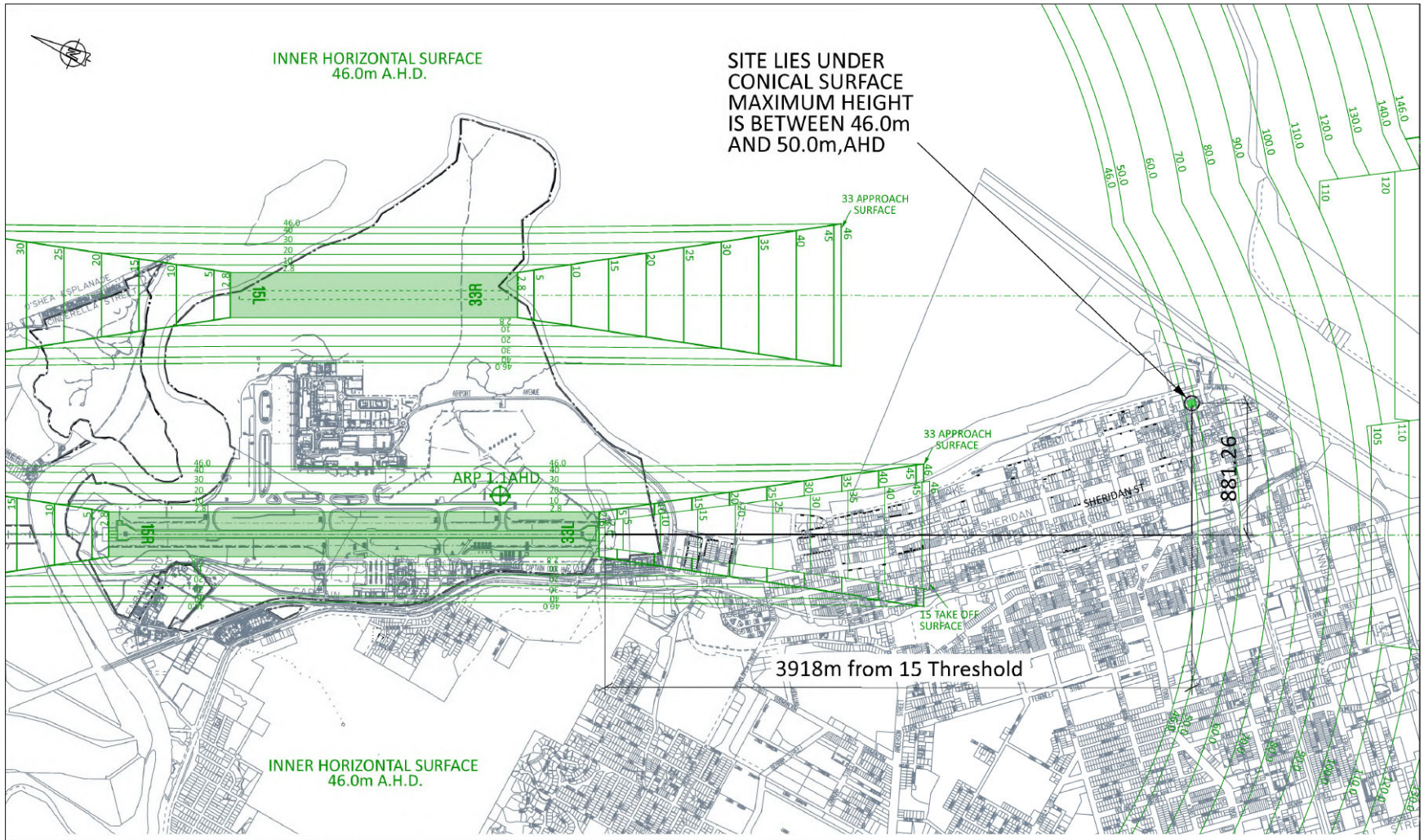
Yours sincerely

Davy Semal
CAIRNS AIRPORT
MANAGER AERODROME

Enquiries: Berni Burgstaller
Email: berni.burgstaller@cairnsairport.com.au
Our Ref: DA 2023-04 22-34 Abbott St Cairns

CC: Department of Infrastructure Local Government and Planning
PO Box 2358
CAIRNS QLD 4870
CairnsSARA@dilgp.qld.gov.au

Appendix 1 – Mapping Extracts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CONICAL SURFACE
MAXIMUM HEIGHT
IS BETWEEN 46.0m
AND 50.0m,AHD
33 APPROACH
SURFACE
ARP 1.1AHD
33 APPROACH
SURFACE
15 TAKE OFF
SURFACE
3918m from 15 Threshold
92.188
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APP
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DRN
DATE
Cairns airport
CAIRNS AIRPORT
DEVELOPMENT APPLICATION 2023-04
22-34 ABBOTT ST CAIRNS
OLS
CAD. FILE NO.
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DWG. NO.
2024-04 OLS
REV.
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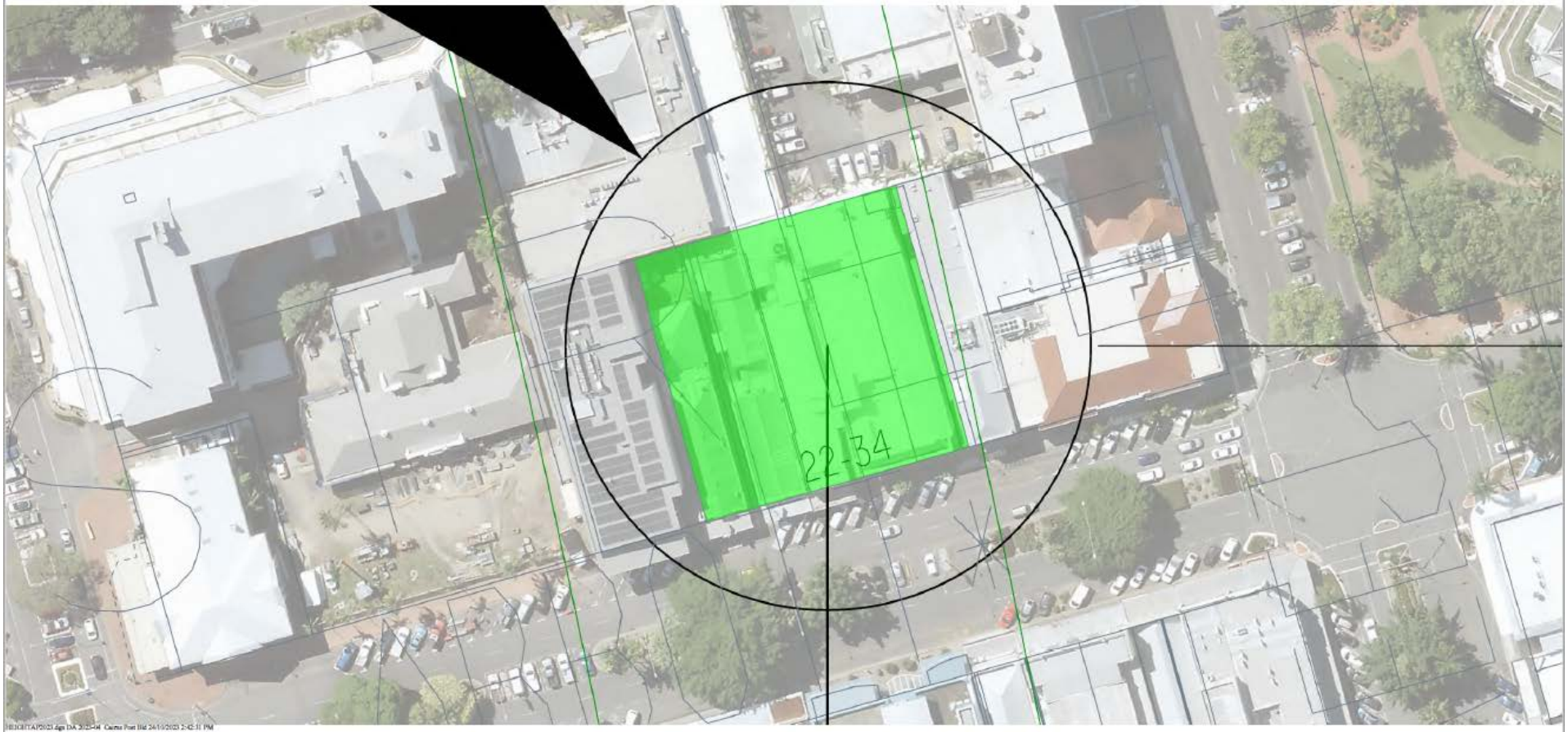
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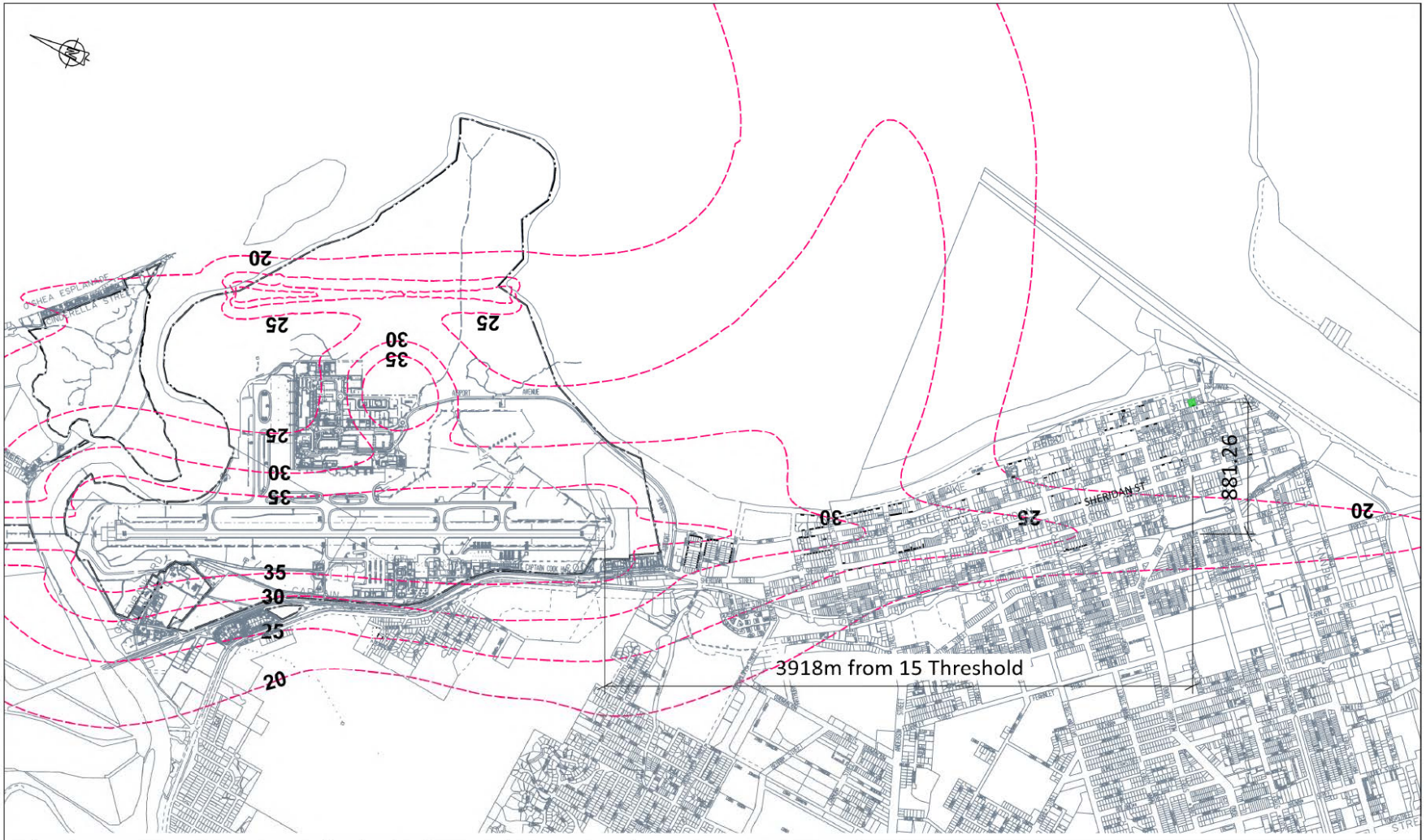

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						APPROVED	CE
						DATE	
NO.		APP	CKD	DRN	DATE	SCALE	

Cairns airport

CAIRNS AIRPORT

DEVELOPMENT APPLICATION 2023-04
22-34 ABBOTT ST CAIRNS
ANEF

CAD. FILE NO.	DWG. NO.	REV.	
HEIGHTAP2016	2023-04 ANEF		A3