



PART B – CITY OF STIRLING

1. Declarations of Due Consideration

2. Disclosure of Interests

3. Form 1 DAP Applications

- 3.1 Lot 500 (No.12) Reserve Street, Scarborough - Mixed Use Development
235 Multiple Dwellings, Six Commercial Tenancies And Eight Community
Uses – DAP/25/02855

4. Form 2 DAP Applications

Nil.

5. Section 31 SAT Reconsiderations

Nil.

Part B – Item 3.1 - LOT 500 (HOUSE NUMBER 12), RESERVE STREET, SCARBOROUGH – MIXED USE DEVELOPMENT 235 MULTIPLE DWELLINGS, SIX COMMERCIAL TENANCIES AND EIGHT COMMUNITY USES

Form 1 – Responsible Authority Report
(Regulation 12)

DAP Name:	Metro Inner DAP
Local Government Area:	City of Stirling
Applicant:	Element Advisory
Owner:	Edge Holdings No 16 Pty Ltd
Value of Development:	\$10 Million
Responsible Authority:	City of Stirling
Authorising Officer:	Giovanna Lumbaca, Acting Director Planning and Development
LG Reference:	DA24/1902
DAP File No:	DAP/25/02855
Application Received Date:	21 January 2025
Report Due Date:	17 April 2025
Application Statutory Process Timeframe:	90 Days
Attachment(s):	1. Development Application Plans (received 17 January 2025) 2. Aerial Location Plan 3. Metropolitan Region Scheme Zoning Map 4. City of Stirling Local Planning Scheme No.3 Zoning Map 5. Applicant's Planning Report received on 17 January 2025 6. Applicant's Comparison of Proposed Amendments received on 21 January 2025 7. Applicant's Final Submission received on 21 January 2025: a. BAL Assessment Report prepared by element b. Pedestrian Wind Environment Statement prepared by WINDTECH c. Sustainable Design Assessment prepared by Cundall d. Acoustic Specification prepared by Stantec e. Community Needs Analysis prepared by element

	f. Place Strategy prepared by element g. Car Parking and Traffic Management Plan prepared by Stantec h. Operational Waste Management Plan prepared by Tails Consultants i. Universal Access Statement prepared by Milestone 8. Previous Development WA Conditions of Approval dated 24 November 2021 and 16 February 2023 9. External Agency Referral Responses: a. Main Roads WA, received 21 March 2025 b. Department of Fire and Emergency Services received 12 March 2025. 10. Applicant's Response to Public Consultation and Main Roads Western Australia comments received on 6 November 2024
--	---

Responsible Authority Recommendation

That the Metro Inner DAP resolves to:

Approve DAP Application reference DAP/25/02855 and accompanying plans as listed in Condition 3 in accordance with Clause 68 of Schedule 2 (Deemed Provisions) of the *Planning and Development (Local Planning Schemes) Regulations 2015*, and the provisions of the City of Stirling Local Planning Scheme No. 3, for the proposed Mixed Use Development on Lot 500, House Number 12, Reserve Street, Scarborough subject to the following conditions:

Conditions

1. Pursuant to Clause 26 of the Metropolitan Region Scheme, this approval is deemed to be an approval under Clause 24(1) of the Metropolitan Region Scheme.
2. This decision constitutes planning approval only and is valid for a period of four (4) years from the date of approval. If the subject development is not substantially commenced within the specified period, the approval shall lapse and be of no further effect.
3. The development is to comply in all respects with the attached approved plans, as dated, marked and stamped, together with any requirements and annotations detailed thereon. The plans approved as part of this application form part of the planning approval issued (including any modifications required by conditions of approval).

PLAN TITLE	REV	DRAWING No.	DRAWN BY
OVERALL BASEMENT 02	9	A01 - 102	Hillam Architects
OVERALL BASEMENT 01	9	A01 - 103	Hillam Architects
OVERALL LOWER GROUND 02	8	A01 - 104	Hillam Architects
OVERALL LOWER GROUND 01	8	A01 - 105	Hillam Architects
MEZZANINE LEVEL	7	A01 -106	Hillam Architects
OVERALL GROUND FLOOR	6	A01 - 107	Hillam Architects
OVERALL LEVEL 01	4	A01 - 108	Hillam Architects
OVERALL LEVEL 02	4	A01 - 109	Hillam Architects
OVERALL LEVEL 03	2	A01 - 110	Hillam Architects
OVERALL LEVEL 04	2	A01 - 111	Hillam Architects
OVERALL LEVEL 05	2	A01 - 112	Hillam Architects
OVERALL LEVEL 06	2	A01 - 113	Hillam Architects
OVERALL LEVEL 07	2	A01 - 114	Hillam Architects
OVERALL LEVEL 08	2	A01 - 115	Hillam Architects
OVERALL LEVEL 09	2	A01 - 116	Hillam Architects
OVERALL LEVEL 10	2	A01 - 117	Hillam Architects
OVERALL LEVEL 11	2	A01 - 118	Hillam Architects
OVERALL LEVEL 12	2	A01 - 119	Hillam Architects
OVERALL LEVEL 13	2	A01 - 120	Hillam Architects
OVERALL LEVEL 14	2	A01 - 121	Hillam Architects
OVERALL LEVEL 15	2	A01 - 122	Hillam Architects
OVERALL LEVEL 16	2	A01 - 123	Hillam Architects
OVERALL LEVEL 17	2	A01 - 124	Hillam Architects
OVERALL ROOF	2	A01 - 125	Hillam Architects
EXTERNAL EAST ELEVATIONS OVERALL	0	A03 - 001	Hillam Architects
EXTERNAL NORTH ELEVATIONS OVERALL	0	A03 - 002	Hillam Architects
EXTERNAL SOUTH ELEVATIONS OVERALL	0	A03 - 003	Hillam Architects
EXTERNAL WEST ELEVATIONS OVERALL	0	A03 - 004	Hillam Architects
OVERALL CROSS SECTION OVERLAY OVERLAY	0	A04 - 001	Hillam Architects
OVERALL CROSS SECTION OVERLAY	1	A04 – 001	Hillam Architects
OVERALL SECTIONS SHEET 01	4	A04 – 001A	Hillam Architects
PRE CONSTRUCTION FEATURE SURVEY	-	A00 - 000	Hillam Architects

4. An easement(s) or other legal agreement confirming in perpetuity public access rights, generally consistent with the extent shown on the approved Basement 01 Floor Plan (A01 – 103), Basement 02 Floor Plan (A01 - 102), Lower Ground 02 (A01 - 104), Lower Ground 01 (A01 - 105) and Level 01 Floor Plan (A01 - 108)

is to be provided prior to planning condition clearance (working drawings stage), and executed prior to occupancy, to the satisfaction of the City of Stirling.

5. A legal agreement confirming the operation and management of the identified Community Offerings shown on the approved Basement 01 Floor Plan (A01 – 103), Basement 02 Floor Plan (A01 - 102), Lower Ground 02 (A01 - 104), Level 01 Floor Plan (A01 - 108) and Level 02 Floor Plan (A01 - 109) in perpetuity, including public access rights, to be provided prior to planning condition clearance (working drawings stage), and executed prior to occupancy, to the satisfaction of the City of Stirling.
6. The provision of an easement for existing infrastructure as may be required by the City of Stirling, or other relevant statutory entity, being granted free of cost to that body, to the satisfaction of the City of Stirling.
7. Elevations and specification detailing high quality materials, finishes and colours for the development (including "colour swatches" or material samples are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
8. A report and certification from the Green Building Council of Australia is to be provided within 12 months of practical completion, confirming each building has achieved the minimum 5 Star Green Star 'As-Built' rating, to the satisfaction of the City of Stirling.
9. Affordable Housing is to be provided in accordance with Development Policy 9 - Affordable and Diverse Housing, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling in consultation with the Department of Communities.
10. Public art is to be provided in accordance with Development Policy 4 - Providing Public Art, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
11. A report and certification from a qualified acoustic consultant is to be submitted at practical completion stage and prior to occupation of the building, confirming that all recommendations of the Acoustic and Vibration Report integral to achieving compliance with Development Policy 3 - Sound and Vibration Attenuation, have been implemented, to the satisfaction of the City of Stirling.
12. A Signage Strategy, detailing the proposed location and size of all external signage consistent with Development Policy 6 - Signage, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
13. A Lighting Strategy, detailing lighting of the building exterior and ground floor public areas to enhance building features, amenity and security, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
14. A Venue Management Strategy for the Dining and Entertainment tenancies of the development is to be provided prior to planning condition clearance (working

drawings stage) to the satisfaction of the City of Stirling and implemented thereafter by each venue operator.

15. A Demolition and Construction Management Plan is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
16. All service areas, service related hardware and piped or wired services (such as car park gates, plant areas, fire booster cabinets, service meters, exhaust systems and air-conditioning units) are to be designed as an integral component of the development or screened from public view, to minimise any detrimental impact on the architectural quality of the building and the public realm, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
17. All building and tenancy entrance levels are to be consistent with the constructed paving levels of the adjoining public realm, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the City of Stirling.
18. A development contribution payment, in accordance with the Scarborough Development Contribution Plan, is to be provided prior to planning condition clearance (working drawings stage), to the satisfaction of the City of Stirling.
19. Prior to the occupation of the development, a notification, pursuant to Section 70A of the Transfer of Land Act 1893 is to be placed on the Certificates of Title of future residential lots at the site. The notification is to state as follows: 'The lot is situated in the vicinity of a transport corridor and is currently affected, or may in future be affected by transport noise.'
20. Redundant vehicle crossover(s) are to be removed, and the kerbing, verge, and footpath (where relevant) made good to the satisfaction of the City of Stirling.
21. All exposed parapet walls and walls adjacent to boundaries are to be finished to the same standard as the remainder of the development, to the satisfaction of the City of Stirling.
22. Prior to the occupation of the development, a Bushfire Management Plan (BMP) prepared by an Accredited BPAD Practitioner is to be submitted to the City of Stirling, incorporating Management measures in accordance with Australian Standard AS3959 and State Planning Policy 3.7 and Guidelines.
23. Prior to the submission of a Building Permit application, a revised Bushfire Attack Level Assessment Report prepared by an Accredited BPAD Practitioner is to be submitted to the City of Stirling, incorporating the BAL rating of the development in accordance with Australian Standard AS3959 and State Planning Policy 3.7 and Guidelines.

Advice Note

1. Where an approval has so lapsed, no development shall be carried out without the further approval of the Development Assessment Panel or City of Stirling having first been sought and obtained.

2. If an applicant is aggrieved by this determination there is a right of appeal under Part 14 of the *Planning and Development Act 2005*. An appeal must be lodged within 28 days of the determination with the State Administrative Tribunal.
3. This is a Development Approval under the City of Stirling Local Planning Scheme and related policies. It is not a Building Permit or an approval to commence or carry out development under any other law. It is the responsibility of the applicant to obtain any other necessary approvals, consents and licenses required under any other law, and to commence and carry out development in accordance with all relevant laws.
4. This approval is not an authority to ignore any constraint to development on the land, which may exist through statute, regulation, contract or on title, such as an easement or restrictive covenant. It is the responsibility of the applicant and not the Development Assessment Panel or City of Stirling to investigate any such constraints before commencing development. This approval will not necessarily have regard to any such constraint to development, regardless of whether or not it has been drawn to the Development Assessment Panel or City of Stirling's attention.
5. Noisy Construction Work outside the period 7.00am to 7.00pm Monday to Saturday and at any time on Sundays and Public Holidays is not permitted unless a Noise Management Plan for the construction site has been approved in writing by the City of Stirling.
6. The applicant is responsible for ensuring that all lot boundaries as shown on the approved plans are correct.
7. Development is to comply in all respects with the attached approved plans which have been stamped accordingly.
8. In relation to the light pole's relocation, the relocation of the light poles is to comply with Australian Lighting Standards, to the satisfaction of the City of Stirling and Western Power.
9. Where, in the opinion of the City of Stirling, achieving compliance with the conditions of approval require significant modifications to the approved plans, a Form 2 application will be required for consideration in accordance with Clause 17 or 17A of the *Planning and Development (Development Assessment Panels) Regulations 2011*.
10. All construction works to comply with the requirements of the *Environmental Protection Act 1986* and the *Environmental Protection (Noise) Regulations 1997*. Noisy construction work outside the period 7:00am to 7:00pm Monday to Saturday and at any time on Sundays and Public Holidays is not permitted unless an approved Noise Management Plan for the construction site has been issued.
11. With regard to the public access easement, this is to be registered on the Certificate of Title for the property in accordance with sections 195 and 196 of the Land Administration Act 1997 and notice of the easement is to be included on the diagram or plan of survey (deposited plan), unless subject to an alternative legal agreement agreed to the City of Stirling. The public access easement(s) or

alternative legal agreement are to include the following, generally noted on the approved plan(s) Basement 01 Floor Plan (A01 – 103), Basement 02 Floor Plan (A01 - 102), Lower Ground 02 (A01 - 104), Lower Ground 01 (A01 - 105) and Level 01 Floor Plan (A01 - 108)

- The central Right of Way (ROW), generally described as 9m in width with a 1.5m pedestrian path, connecting Reserve Street to adjacent sites described as No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough;
 - The northern pedestrian access linking West Coast Highway and the central ROW;
 - The 102 public car bays, and associated infrastructure, located on Basement 02 and, and connecting to The Esplanade carpark;
 - The raised footpath, generally 1.5m in width, traversing the western boundary in a north-south direction; and
12. With regard to the legal agreement, is to address the long term operation, management, maintenance and costs associated with the Community Benefit Areas. The legal agreement is to be prepared by the applicant in consultation with the City of Stirling with all costs to be borne by the applicant. The legal agreement is to include the following areas.
- Basement 2 (A01-102 E): 51 public car bays
 - Basement 1 (A01-103 E): 49 public car bays
 - Lower Ground Floor 2 (A01-104 D): Public Lobby, Public Facilities and Public Stairs;
 - Lower Ground Floor 1 (A01-105 E): Multi-Purpose Room, Public Lobby, Public Lookout
 - Level 1 (A01 -107 D): Public Lobby

The legal agreement shall also consider the inclusion of the proposed pocket park and in particular full details of redevelopment, long term maintenance and operation consistent with the high standard provided within the submitted development application and further detailed as a component of the landscaping plan.

13. With regard to the easement for infrastructure, nominally located along the northern boundary of Lot 500 Reserve Street, Scarborough is to be prepared by the Landowner in consultation with the affected operator, with all costs to be borne by the Landowner.
14. With regard to all the elevations, specifications, details and information of external colours and finishes, including specifications and samples, are to be provided for all external elevations, demonstrating a well resolved high-quality materials palette for the whole project, which has been further detailed and/or enhanced from development application stage through to the final constructed outcome. Elevations and specifications shall confirm the use of pre-cast concrete for all edge conditions and architectural expression. To demonstrate that an exemplary design outcome will be achieved through to construction, detailed information regarding the tower facade glazing types, colours and level of transparency is to be provided. The facade glazing should achieve a high level of solar performance without a dark or highly reflective finish, demonstrating a

level of visual permeability generally consistent with the development application perspectives.

15. With regard to the development application has committed to providing a minimum 15% affordable housing in accordance with section 4.1 of the Scarborough Design Guidelines, over and above the requirement under Development Policy 9 -Affordable Housing. Unless otherwise agreed the following shall be provided:
 - the affordable housing units are to be sold by the developer to the Department of Communities (or alternative housing provider approved by the City of Stirling) at construction cost (based on the Development WA Authority's construction cost chart dated July 2016), at the time of practical completion of the development;
 - a draft strata plan and management statement is to be prepared at the Landowner's expense and provided at working drawings stage demonstrating how ongoing costs of the affordable housing units will be minimised including but not limited to:
 - minimising unit entitlements; and
 - restricted access to common amenity areas (with potential to opt in).
16. With regard to public art, the provision of public art is to be in accordance with Development Policy 4 - Providing Public Art, with a minimum contribution, either as public art or cash-in-lieu, of \$850,000.00 based on the development value of \$120 million.
17. With regard to the acoustic report, the certifications to be submitted at practical completion stage should include results of onsite testing to confirm appropriate levels of sound attenuation mitigation have been achieved.
18. With regard to the Signage Strategy, this should provide an indicative plan of all proposed signage (including wayfinding signage) outlining the locations and dimensions demonstrating that such signage will be complementary to the architectural design. Consideration shall be given to the integration of wayfinding signage to and from the public car park, including 24 hour access, as well as the central ROW connecting No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough to Reserve Street, with a view to enhance overall legibility to these separate entities. Development Policy 6- Signage requires signage to demonstrate restraint in scale, size and collective amount of signage installed, in order to minimise visual clutter, protect amenity, and support a safe, attractive and legible,
19. With regard to the Lighting Strategy this should:
 - include a plan which illustrates how the building will be illuminated to highlight architectural elements, to provide an attractive building at night;
 - demonstrate how lighting and safe access will be provided between the development and the public realm and within loading areas and pedestrian pathways; and
 - be designed to comply with Australian Standard 1158 (Public Lighting Code) and Australian Standard 4282 (Control of the Effects of Outdoor

Lighting) in order to ensure that any nuisance light to adjoining properties and to passing vehicular traffic are controlled to an acceptable level.

20. With regard to the Venue Management Strategy, this is intended to provide guidance for all future tenancies and may inform the development of individual Venue Management Plans as required. The Strategy is to include, but not be limited to the following:
 - hours of operation, including the operation of the public lobby for 24 hours a day;
 - types of proposed liquor licences;
 - location of alfresco/service/back of house areas for each tenancy, ensuring an active interface between the tenancies and the street is maintained, including unobstructed pedestrian movement;
 - any proposed entertainment or music, including noise attenuation reports and plans for any premises proposing live music, amplified music or other entertainment with noise levels above ordinary background music;
 - management of noise and patron behaviour to minimise adverse impacts on residents within the development and the locality;
 - alfresco management, including location of alfresco, proposed temporary structures and furniture, wind impact management, operating times, alcohol service and any music/entertainment; and
 - any other matters deemed appropriate by the Authority.
21. With regard to the Demolition and Construction Management Plan, this should address the following matters, which are to address all phases of development including demolition and construction:
 - establishment and continuation of tree protection zones for all street trees, maintained throughout the period of demolition and construction;
 - continuous and unobstructed access for No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, consistent with the Staging Plan;
 - construction operation days / hours, with consideration for surrounding premises and residents;
 - management of dust, noise, vibration and other construction activities;
 - details of construction deliveries, collections and on-site storage;
 - workers car parking arrangements;
 - traffic management, including management of all construction works traffic and all measures to minimise disruption to traffic and pedestrian movements within the vicinity of the site;
 - details of construction signage and fencing, including high quality site hoardings;
 - community consultation plan and details to notify surrounding premises of the works and outlining procedures to manage enquiries and complaints;
 - measures to limit the impact of disturbance to the operation and amenity of surrounding buildings; and
 - any other matters deemed appropriate by the Authority and/or the City of Stirling.
22. With regard to the requirement to screen services and service related infrastructure, this includes but is not limited to all piped and wired services, car parking areas and associated ventilation, roof plant / plant areas, bin storage areas, service meters and related infrastructure, fire booster cabinets, exhaust systems, air-conditioning units, antennae and satellite dishes. Fire booster

hydrants and service meter boxes should be designed, located, oriented and finished to minimise any visual impact on the adjacent streetscape and maximise visual interaction between the development and the street. The landowner is advised to liaise with service authorities to rationalise and consolidate service infrastructure, where possible.

23. With regard to the development contribution payment is calculated on the total site area (excluding areas required to be ceded for road widening or otherwise) and the maximum 'base height' permitted to be delivered on the site, in accordance with the following table and Schedule 2 - Maximum Building Heights Plan in the Scarborough Development Contribution Plan.

- The contribution payable for the site is calculated at \$430,454.13, based on an estimated site area of 6,397m² and permitted maximum (base) building height of 8 storeys. Excluding areas to be ceded for road widening.

Maximum Building Height (Base)	Cost/Site Area (\$/m ²)
2 storeys/ 8 metres	\$16.82
3 storeys/ 11.5 metres	\$25.23
4 storeys / 15 metres	\$33.64
8 storeys / 29 metres	\$67.29
12 storeys / 43 metres	\$100.93

24. With regard to the BMP, details of the Bushfire Management Plan measures are to be submitted to and approved by the City of Stirling on the advice from Department of Fire and Emergency Services to the satisfaction of the City.

Details: outline of development application

Region Scheme	Metropolitan Region Scheme (MRS)
Region Scheme - Zone/Reserve	Urban
Local Planning Scheme	City of Stirling Local Planning Scheme No.3 (LPS3)
Local Planning Scheme - Zone/Reserve	Development
Structure Plan/Precinct Plan	N/A
Structure Plan/Precinct Plan - Land Use Designation	N/A
Development Control Area	Scarborough Special Control Area
Local Planning Strategy Designation	N/A
Preferred Land Uses:	Preferred Ground Floor - Residential, hotel, serviced apartments Preferred Upper Floors - Residential apartments, residential townhouses, hotel, serviced apartments No changes are proposed to the Preferred Land Uses as previously approved by Development WA.
Lot Size:	6,442m ²

State Heritage Register	No
Local Heritage	☒ N/A ☐ Heritage List ☐ Heritage Area
Design Review	☐ N/A ☐ Local Design Review Panel ☐ State Design Review Panel ☒ Other – Development WA Design Review Panel as part of MRA-13231
Bushfire Prone Area	Yes
Swan River Trust Area	No

Background

The subject site is 6,440.5m² in area and has a 31.27 metre frontage to West Coast Highway which is identified as 'Primary Regional Road' as per the City's Functional Road Hierarchy. The subject site is located within the Scarborough Special Control Area (SSCA) formally the Scarborough Redevelopment Area. The Scarborough Special Control Area has its own design guidelines and policies to guide development within the SSCA and facilitates delivery of the vision originally produced by the Scarborough Redevelopment Scheme.

The area to the north and south is typically residential in character, with a range of Multiple Dwelling developments ranging from 4 – 12 storeys in height. To the west of the subject site lies Scarborough Beach Reserve and associated public car parking.

On 9 August 2023, the former Scarborough Redevelopment Area was normalised, transferring planning control within the Scarborough Redevelopment Area back into the City of Stirling as the decision-making authority. As the City was not the original decision maker the City cannot exercise its power under Clause 77 of the *Planning and Development (Local Planning Schemes) Regulations 2015* to amend a decision made by Development WA. As such the applicant has lodged this development application with the City of Stirling for consideration by the Metro Inner DAP.

Existing Development Approval

The development that is currently under construction on the subject site was approved by Development WA on 24 November 2021 (DA21/0735) with subsequent amendments approved by Development WA in February 2023 (DA22/1198). Please refer to Attachment 9 for the previous conditions of approval granted by Development WA.

The existing development approval is summarised as follows:

- A Mixed Use development, consisting of two towers, a 15 and 17 storey development, and four parking levels below:
- A total of 235 Multiple Dwellings (apartments) within the two towers:
- Non-residential land uses of 682m² of floor area:
 - o One Café/Restaurant;
 - o Two Shops; and
 - o One Small Bar.
- Non-residential land uses for community use of 696m² of floor area:
 - o Three Public Facilities;

- o One Community Facility;
- o One Public Lookout; and
- o Three Public Lobbies.
- Podium residential amenities which include Pool, Gym and Lounge.
- One vehicle crossover providing two-way access and egress from The Esplanade.
- The provision of 536 on-site car parking bays, including two ACROD bays.

The City has granted a building permit to commence work for in-ground civil works on 17 May 2024, and subsequently construction for the approved development has substantially commenced.

Proposed Development Subject of this Development Application

On 21 January 2025, the City formally accepted this DAP Form 1 application. The development application seeks approval modifications to the design currently under construction. The proposed modifications as part of the development application are considered minor in the context of the overall development and seeks to amend the development, to address operational, functional, and construction regulation matters only. This application does not affect the validity of the existing approval, which substantially commenced.

A summary of the key modifications to the approved built form is provided as follows:

- Increased height for Tower 1 by 0.6m;
- Increased height for Tower 2 by 1.04m; and
- Reconfiguration of the approved basement levels from three levels to two levels.

The building height increase is sought to accommodate engineering requirements and effective installation of building services such as thicker floor slabs, and essential building services within the ceiling space, including water services and ducts. The applicant's indication of the proposed change of heights is provided in Attachment 6.

The reconfiguration of the car parking removes basement level 3. The car parking bays from level 3 have been incorporated into basement level 2. The basement level reconfiguration does not alter the approved number of car parking bays and has been indicated as a means of reducing the amount of excavation needed for the site. The approved and proposed car parking configurations is provided in Attachment 6.

The proposed car parking reconfiguration does not alter or amend the previously approved number of dwellings or the number of approved on-site car parking bays. Additionally, there are no alterations to non-residential land uses or access arrangements to and from the site.

Legislation and Policy:

The following legislation is applicable to the proposed development.

Legislation

- *Planning and Development Act 2005*
- *Planning and Development (Development Assessment Panels) Regulations 2011*
- *Planning and Development (Local Planning Schemes) Regulations 2015*

- *Metropolitan Region Scheme (MRS)*
- *City of Stirling Local Planning Scheme No. 3 (LPS3)*

State Planning Policies

- State Planning Policy 3.7 – Bushfire (SPP3.7)
- State Planning Policy 5.4 – Road and rail noise (SPP5.4)
- State Planning Policy 7.0 – Design of the Built Environment (SPP7.0)

Local Planning Policies

- Local Planning Policy 6.18 – Public Consultation (LPP6.18)

Scarborough Redevelopment Area

- Scarborough Special Control Area Development Policies
- Scarborough Special Control Area Design Guidelines

Consultation:

Public Consultation

The proposed development was advertised for a period of 28 days in accordance with the 'Complex Application' requirements LPP 6.18 and Clause 64(3) and (6)(a) of *the Planning and Development (Local Planning Schemes) Regulations 2015*. Letters were posted to landowners and occupiers, a notice was placed on the City of Stirling's website, an advertising sign was placed on-site and relevant Ward Councillors were notified.

The consultation period commenced on 14 February 2025 and concluded on 14 March 2025. In response, a total of three submissions were received, comprising two objections and one letter of comment. Details related to the number, type and origin of these submissions received during the consultation period and their relative locations are tabled below.

Submissions Received	Within 200m Radius	Greater than 200m Radius	Number of Submissions
SUPPORT	0 (0%)	0%	0 (0%)
OBJECT	1 (33.3%)	1 (33.3%)	2 (66.6%)
OTHER (Comment)	0 (0%)	1 (33.3%)	1 (33.4%)

All matters raised in submissions received during the advertising period have been summarised in the table below.

Public Consultation Submissions		
Number of Submissions to Raise Matters	Summary of Matters Raised	Officer Response
2	Concerns relating to the lack of ACROD and residential parking bays	The proposed basement level reconfiguration does not change the

Public Consultation Submissions		
Number of Submissions to Raise Matters	Summary of Matters Raised	Officer Response
	provided by the development proposal.	approved number of car parking bays previously approved onsite. The reconfiguration includes the removal of basement level 3. The bays being removed as part of basement level 3 have been included in basement level 2. This matter is discussed further in this report.

The City forwarded all submissions received during the public consultation to the Applicant for a response. The Applicant's response to submissions is contained in Attachment 11.

Consultation with Government/Service Agencies

The proposed development was referred to the relevant Government/Service Agencies including Department of Fire and Emergency Services and Main Roads WA. Any comments or recommendations of relevance have been incorporated into the recommended conditions of approval. The referral response from the Department of Fire and Emergency Services and Main Roads WA is contained in Attachment 9.

Planning Assessment:

The development has been assessed against the City's LPS3, State Planning Policies and Local Planning Policies. The following matters have been identified as the relevant key considerations in the assessment of this application:

1. Building Height;
2. Bushfire Management; and
3. Technical Supporting Documents

1. Building Height

The building height provisions applicable to the proposed development are provided in the below table.

Scarborough Design Guidelines Section 7.3.1 Gateway West -Development Standards		
Building Height (Maximum)		
Provision	Previously Approved	Proposed
12 storeys (43m) including bonus heights as per Section 4.1	- Tower 1 (West Tower) – 15 Storeys (58.3m) - Tower 2 (East Tower) – 17 Storeys (57.2m)	Tower 1 (West Tower) – 15 Storeys (58.9m) – 0.6m increase

		• Tower 2 (East Tower) – 17 Storeys (58.24m) – 1.04m increase
--	--	---

In the context of the existing approval, the proposed building height increases of 0.6m for Tower 1 and 1.04m for Tower 2 are considered minor adjustments to the heights previously approved by Development WA.

These height increases are necessary to comply with regulatory Building Code requirements and to accommodate building services, such as thicker floor slabs and essential ceiling space utilities, including water systems and ducts. The City has determined that these adjustments are minor in nature and do not hinder the ability of the proposed development to align with the design intent of the Gateway West Precinct, as outlined in the Scarborough Design Guidelines. The originally approved heights were 58.3m for Tower 1 and 57.2m for Tower 2, and the minor increases do not compromise the development's design intent.

The additional building height is 1% and 1.8% of the total building height of Towers 1 and 2, this nominal amount demonstrates that the total building height increase will not be perceivable in the context of the approved developments scale from either the street level or for adjacent properties. As such, the building height increase is consistent with the built form previously approved by Development WA.

The minor building height increase is deemed to have minimal undue adverse impact on the previously approved building design and is supported.

2. Bushfire Management

While the subject site is identified as being within a Bush Fire Prone Area due to the coastal vegetation, the existing approvals over the site did not include the requirement for a Bushfire Management Plan (BMP). The City's assessment of the proposal, has deemed that additional measures relating to bush fire risk are necessary. The City notes that part of the approval process with Development WA included an agreement for the City to manage vegetation in the Scarborough Beach Reserve to reduce the BAL rating. Commentary provided by the Department of Fire and Emergency Services (DFES) have indicated that DFES cannot validate the reduced (post-development) BAL rating in the absence of a BMP that includes actions to address bushfire requirements of State Planning Policy 3.7 - Bushfire. The City considers that a BMP is an appropriate mechanism to ensure there are enforceable mechanisms to ensure compliance and mitigate risk.

As such, the City has recommended conditions of development approval to require a BMP and revised BAL to be submitted to the City to formalise the management measures in accordance with Australian Standard AS3959 and compliance with SPP3.7 on the advice from DFES. The particulars of the proposed conditions and the City's position on this matter has been discussed with the applicant.

3. Technical Supporting Documents

The following technical supporting reports were submitted as part of this development application, intended to address the conditions of the Development WA approvals:

- Car Parking and Traffic Management Plan;
- Landscaping Plans;
- Sustainable Design Assessment Report;

- Acoustic Specification; and
- Operation Waste Management Plan.

Noting the scope of the changes from the Development WA approvals to this application, these supporting documents and reports for the current application required revisions.

Furthermore, the following technical supporting reports were approved at working drawing stage and therefore, were not required to be updated to address the height and basement car parking amendments:

- Pedestrian Wind Environmental Statement;
- Universal Access Statement;
- Community Needs Analysis; and
- Place Strategy.

All supporting reports are provided in the attachments to this RAR. Condition clearance will be reviewed accordingly by the City at working drawings stage.

Conclusion:

The proposed modifications as part of the development application are considered minor in the context of the overall development. The proposed development seeks to make changes to an existing approval issued by Development WA prior to the Scarborough Redevelopment area reverting to the control of the City of Stirling. The application seeks to address operational, functional and construction regulation matters only that have resulted in an increase in building height and a reconfiguration of basement car parking. No additional floors or additional dwellings to the are sought in this application.

The building height increase is sought to accommodate engineering requirements and effective installation of building services such as thicker floor slabs, and essential building services within the ceiling space, including water services and ducts. The basement level reconfiguration does not change the approved number of car parking bays and has been indicated as a means to reduce the amount of excavation needed for the site.

The City has identified matters relating to bushfire but considers that these matters can be adequately addressed via appropriate condition setting.

Accordingly, the application is recommended for approval subject to conditions.



2005-Dunes

Phase: CD

Date: 13.01.2025

Dunes RL/Level Change Comparison

Tower 1 (West)					
Level	DA Approved 16.02.2023	Floor to Floor	Proposed	Floor to Floor	Proposed Height Difference
Basement 03	2.60	2.80	n/a	n/a	n/a
Basement 02	5.40	2.80	5.60	2.80	0.00
Basement 01	8.20	3.60	8.40	2.80	-0.80
Lower Ground 02	11.80	3.20	11.20	3.20	0.00
Lower Ground 01	15.00	3.20	14.40	3.40	0.20
Mezzanine Level	n/a	n/a	n/a	n/a	n/a
Ground Floor	18.20	3.20	17.80	3.20	0.00
Level 1	21.40	4.38	21.00	4.50	0.12
Level 2	25.78	3.36	25.50	3.36	0.00
Level 3	29.14	3.18	28.86	3.18	0.00
Level 4	32.32	3.18	32.04	3.18	0.00
Level 5	35.50	3.18	35.22	3.18	0.00
Level 6	38.68	3.18	38.40	3.18	0.00
Level 7	41.86	3.18	41.58	3.18	0.00
Level 8	45.04	3.18	44.76	3.18	0.00
Level 9	48.22	3.18	47.94	3.18	0.00
Level 10	51.40	3.18	51.12	3.18	0.00
Level 11	54.58	3.18	54.30	3.18	0.00
Level 12	57.76	3.18	57.48	3.18	0.00
Level 13	60.94	3.18	60.66	3.18	0.00
Level 14	64.12	3.18	63.84	3.18	0.00
Level 15	67.30	3.25	67.02	4.13	0.88
Roof	70.55		71.15		0.60

Tower 2 (East)					
Level	DA Approved 16.02.2023	Floor to Floor	Proposed	Floor to Floor	Proposed Height Difference
Basement 03	n/a	n/a	n/a	n/a	n/a
Basement 02	6.00	2.80	5.60	2.80	0.00
Basement 01	8.80	2.80	8.40	2.80	0.00
Lower Ground 02	11.60	2.80	11.20	2.80	0.00
Lower Ground 01	14.40	2.70	14.00	2.80	0.10
Mezzanine Level	17.10	2.70	16.80	3.00	0.30
Ground Floor	19.80	3.10	19.80	3.18	0.08
Level 1	22.90	3.10	22.98	3.18	0.08
Level 2	26.00	3.18	26.16	3.18	0.00
Level 3	29.18	3.18	29.34	3.18	0.00
Level 4	32.36	3.18	32.52	3.18	0.00
Level 5	35.54	3.18	35.70	3.18	0.00
Level 6	38.72	3.18	38.88	3.18	0.00
Level 7	41.90	3.18	42.06	3.18	0.00
Level 8	45.08	3.18	45.24	3.18	0.00
Level 9	48.26	3.18	48.42	3.18	0.00
Level 10	51.44	3.18	51.60	3.18	0.00
Level 11	54.62	3.18	54.78	3.18	0.00
Level 12	57.80	3.18	57.96	3.18	0.00
Level 13	60.98	3.18	61.14	3.18	0.00
Level 14	64.16	3.18	64.32	3.18	0.00
Level 15	67.34	3.18	67.50	3.18	0.00
Level 16	70.52	3.18	70.68	3.18	0.00
Level 17	73.70	3.25	73.86	4.13	0.88
Roof	76.95		77.99		1.04

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

PARKING ABBREVIATIONS

C-xx	COMMERCIAL PARKING ALLOCATION
C-xxL	COMMERCIAL PARKING LONG ALLOCATION
M-xx	MOTOR CYCLE PARKING ALLOCATION
P-xxx	PUBLIC PARKING ALLOCATION
R-xxx	RESIDENTIAL PARKING ALLOCATION
R-xxxL	RESIDENTIAL PARKING LONG ALLOCATION
R-xxxG	RESIDENTIAL PARKING GARAGE ALLOCATION
R-xxxGL	RESIDENTIAL PARKING GARAGE LONG ALLOCATION
V-xx	VISITOR PARKING ALLOCATION

2.12.24	9	Parking Updates to Suit Consultant Feedback	MK
15.11.24	8	Issue Preliminary DA Drawings	MK
14.11.24	7	Parking Updates To Suit Traffic Review	MK
11.06.24	6	Issue for Coordination	YV
05.11.24	5	Issue for information	MK
18.03.24	4	Issue for IFC	MK
23.01.24	3	Issue For IFC	SG
12.01.24	2	Issue For information	SG
20.12.23	1	Issue For information- Piling Layout Revised (Tolerance added)	SG
29.05.23	0	Issue For Tender	JG
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

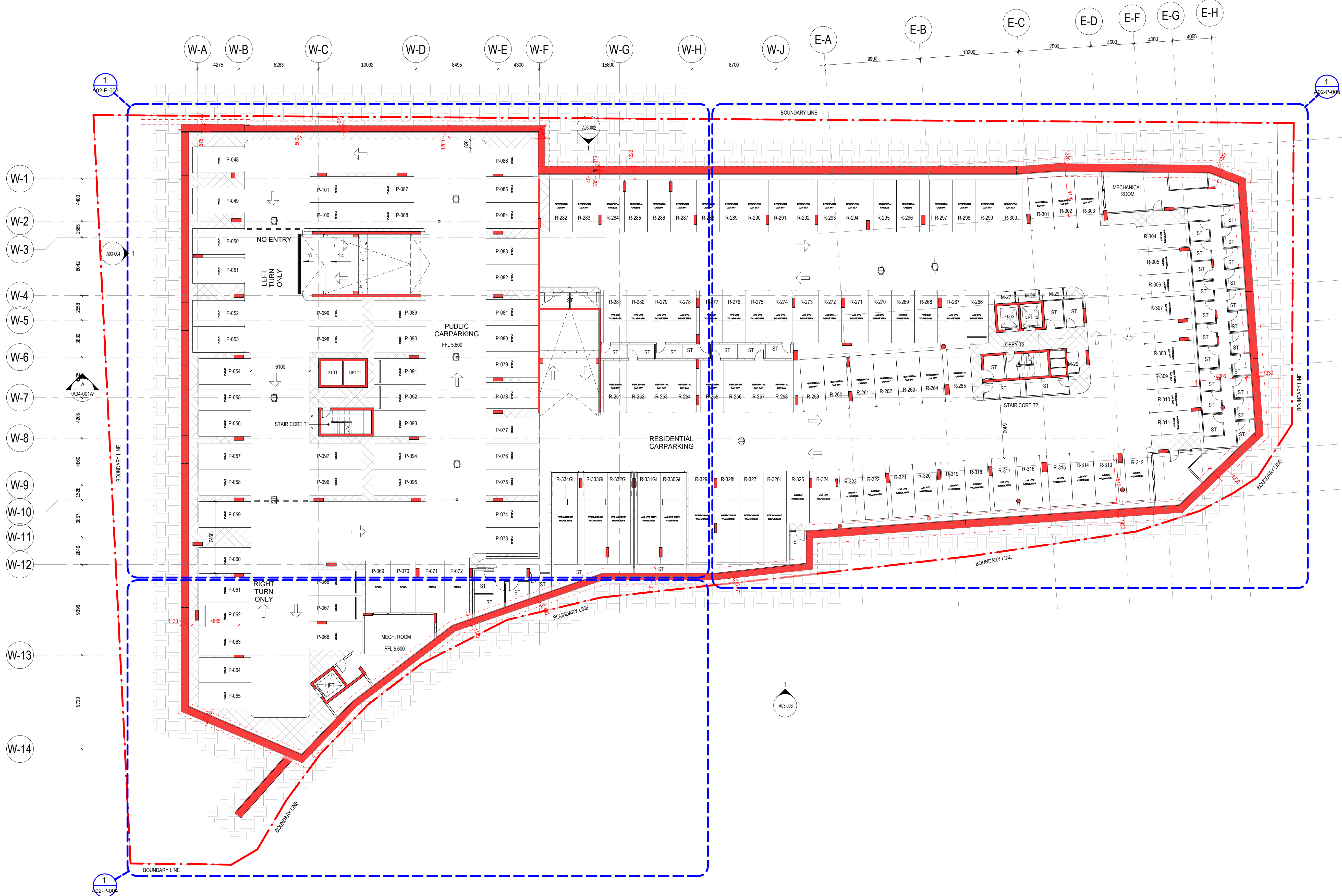
OVERALL BASEMENT 02

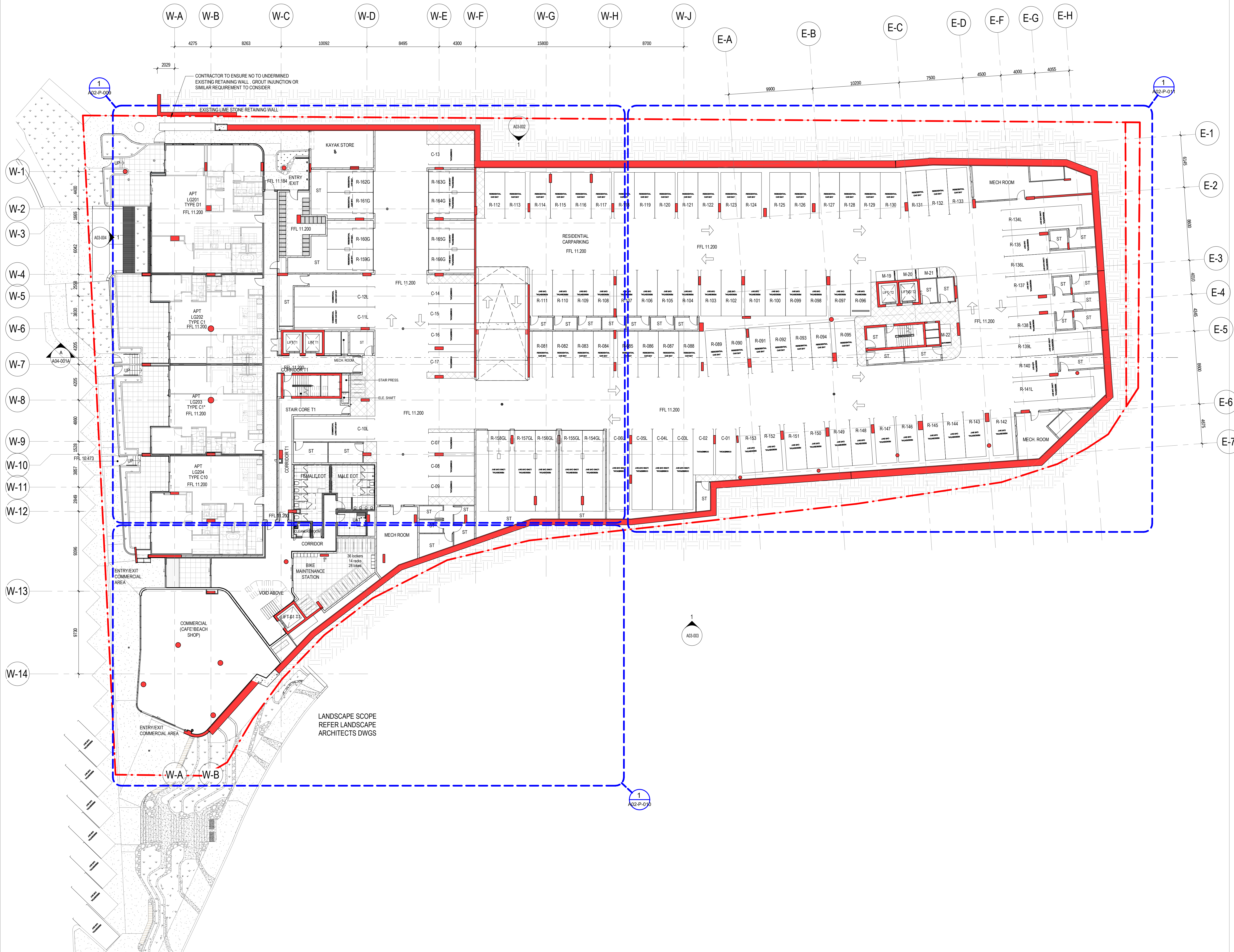
SCALE 1 : 200 (A1)

PROJECT No.	DRAWING No.	REV
2005	A01-102	9

DRAWN BY Author

© Hillam Architects Pty Ltd





- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

- PARKING ABBREVIATIONS
- C-xx COMMERCIAL PARKING ALLOCATION
 - C-xxL COMMERCIAL PARKING LONG ALLOCATION
 - M-xx MOTOR CYCLE PARKING ALLOCATION
 - P-xxx PUBLIC PARKING ALLOCATION
 - R-xxx RESIDENTIAL PARKING ALLOCATION
 - R-xxL RESIDENTIAL PARKING LONG ALLOCATION
 - R-xxGL RESIDENTIAL PARKING GARAGE ALLOCATION
 - R-xxGL RESIDENTIAL PARKING GARAGE LONG ALLOCATION
 - V-xx VISITOR PARKING ALLOCATION

2.12.24	8	Parking Updates to Suit Consultant Feedback	MK
15.11.24	7	Issue Preliminary DA Drawings	MK
14.11.24	6	Parking Updates To Suit Traffic Review	MK
11.08.24	5	Issue for Coordination	YW
05.11.24	4	Issue for Information	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
13.11.23	1	Issue For Information	SG
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



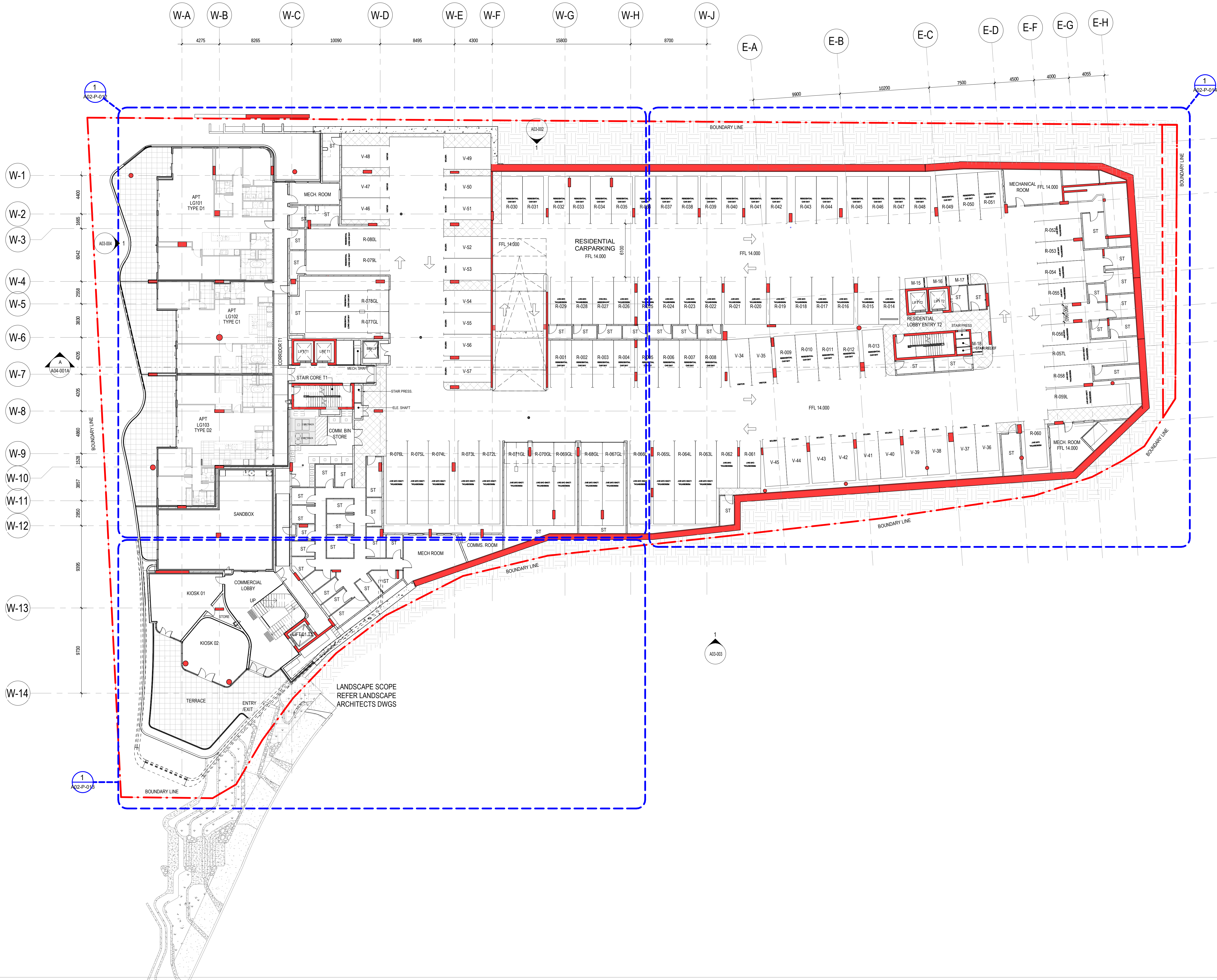
CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
OVERALL LOWER GROUND
02



PROJECT No.	DRAWING No.	REV
2005	A01-104	8
DRAWN BY	Author	



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL DIMENSIONS ARE MEASURED FROM STUD WALL, NOT WALL FINISH
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED
- PARKING ABBREVIATIONS
- | | |
|--------|--|
| C-xx | COMMERCIAL PARKING ALLOCATION |
| C-xxL | COMMERCIAL PARKING LONG ALLOCATION |
| M-xx | MOTOR CYCLE PARKING ALLOCATION |
| P-xx | PUBLIC PARKING ALLOCATION |
| R-xx | RESIDENTIAL PARKING ALLOCATION |
| R-xxL | RESIDENTIAL PARKING LONG ALLOCATION |
| R-xxG | RESIDENTIAL PARKING GARAGE ALLOCATION |
| R-xxGL | RESIDENTIAL PARKING GARAGE LONG ALLOCATION |
| V-xx | VISITOR PARKING ALLOCATION |

10.12.24	8	Amendment to Suit Waste Consultant Feedback	MK
2.12.24	7	Parking Updates to Suit Consultant Feedback	MK
15.11.24	6	Issue Preliminary DA Drawings	MK
14.11.24	5	Parking Updates To Suit Traffic Review	MK
11.08.24	4	Issue for Coordination	YW
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
**OVERALL LOWER GROUND
01**

SCALE 1 : 200 (A1)		
PROJECT No.	DRAWING No.	REV
2005	A01-105	8
DRAWN BY		Author



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

PARKING ABBREVIATIONS

C-xx	COMMERCIAL PARKING ALLOCATION
C-xxL	COMMERCIAL PARKING LONG ALLOCATION
M-xx	MOTOR CYCLE PARKING ALLOCATION
P-xxx	PUBLIC PARKING ALLOCATION
R-xxx	RESIDENTIAL PARKING ALLOCATION
R-xxL	RESIDENTIAL PARKING LONG ALLOCATION
R-xxG	RESIDENTIAL PARKING GARAGE ALLOCATION
R-xxGL	RESIDENTIAL PARKING GARAGE LONG ALLOCATION
V-xx	VISITOR PARKING ALLOCATION

2.12.24	7	Parking Updates to Suit Consultant Feedback	MK
15.11.24	6	Issue Preliminary DA Drawings	MK
14.11.24	5	Parking Updates To Suit Traffic Review	MK
11.08.24	4	Issue for Coordination	YW
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

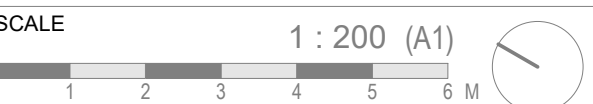
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

MEZZANINE LEVEL



PROJECT No.	DRAWING No.	REV
2005	A01-106	7
DRAWN BY		MM



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL DIMENSIONS ARE MEASURED FROM STUD WALL, NOT WALL FINISH
 5. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 6. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 7. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED
- PARKING ABBREVIATIONS
- | | |
|--------|--|
| C-xx | COMMERCIAL PARKING ALLOCATION |
| C-xxL | COMMERCIAL PARKING LONG ALLOCATION |
| M-xx | MOTOR CYCLE PARKING ALLOCATION |
| P-xx | PUBLIC PARKING ALLOCATION |
| R-xx | RESIDENTIAL PARKING ALLOCATION |
| R-xxL | RESIDENTIAL PARKING LONG ALLOCATION |
| R-xxG | RESIDENTIAL PARKING GARAGE ALLOCATION |
| R-xxGL | RESIDENTIAL PARKING GARAGE LONG ALLOCATION |
| V-xx | VISITOR PARKING ALLOCATION |

10.12.24	6	Amendment to Suit Waste Consultant Feedback	MK
2.12.24	5	Parking Updates to Suit Consultant Feedback	MK
15.11.24	4	Issue Preliminary DA Drawings	MK
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
00.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT
HILLAM ARCHITECTS
1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillum.com.au

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
OVERALL GROUND FLOOR

SCALE 1 : 200 (A1)		
PROJECT No. 2005	DRAWING No. A01-107	REV 6
DRAWN BY RR		

- ## GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLIAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLIAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED



15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

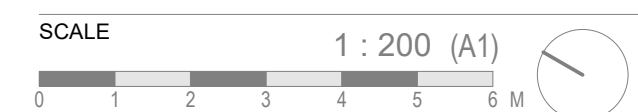
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 03



PROJECT No.	DRAWING No.	REV
2005	A01-110	2
DRAWN BY		Author



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 04

SCALE			1 : 200 (A1)
0 1 2 3 4 5 6 M			
PROJECT No.	DRAWING No.	REV	
2005	A01-111	2	
DRAWN BY		Author	



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 05

SCALE

1 : 200 (A1)

0 1 2 3 4 5 6 M

PROJECT No.	DRAWING No.	REV
2005	A01-112	2
DRAWN BY	Author	

© Hillam Architects Pty Ltd



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

EDGE VISIONARY LIVING

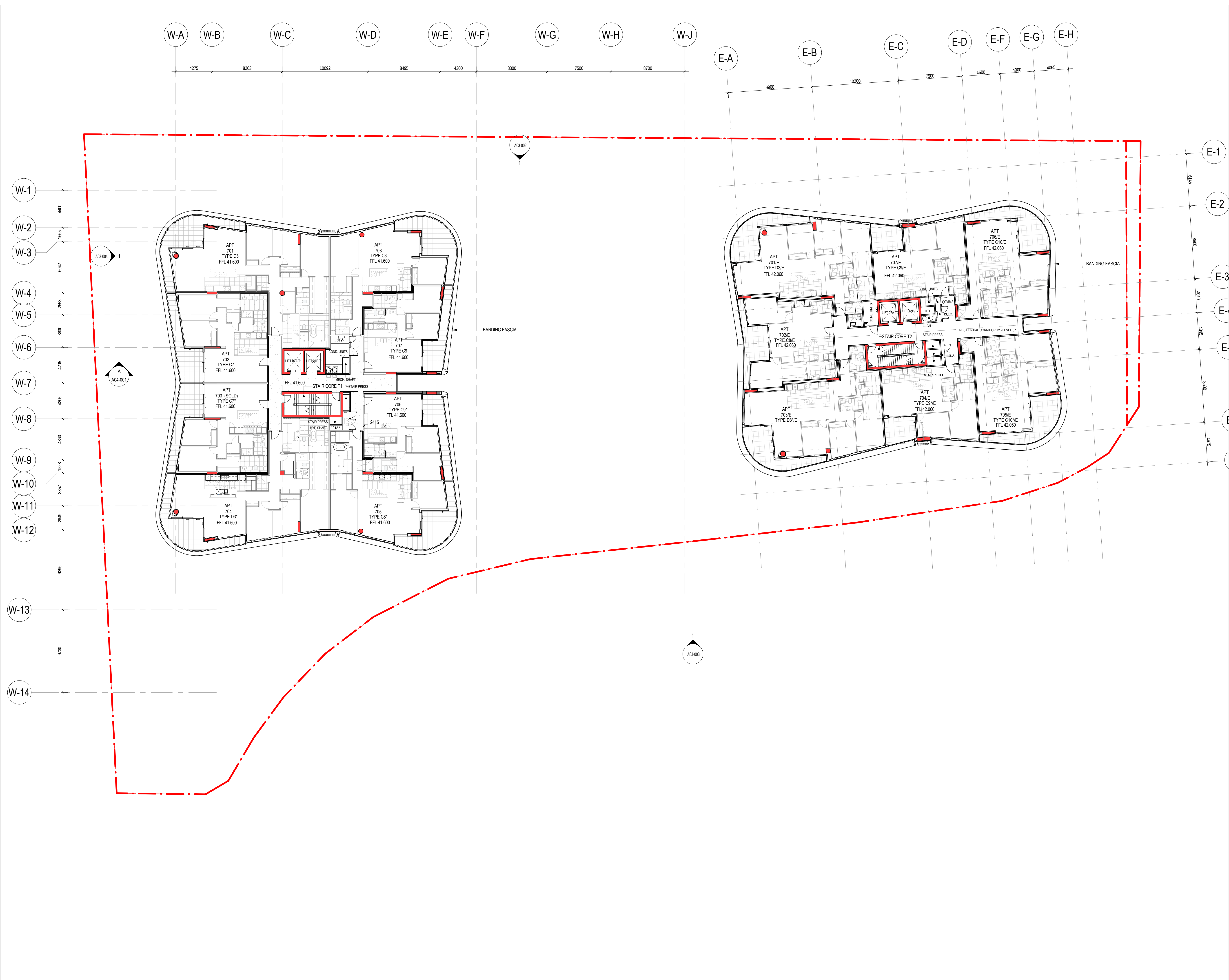
PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 06

SCALE			1 : 200 (A1)
0 1 2 3 4 5 6 M			
PROJECT No.	DRAWING No.	REV	
2005	A01-113	2	
DRAWN BY		Author	



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 07

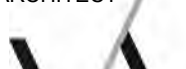
SCALE

1 : 200 (A1)

PROJECT No.	DRAWING No.	REV
2005	A01-114	2
DRAWN BY	Author	

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

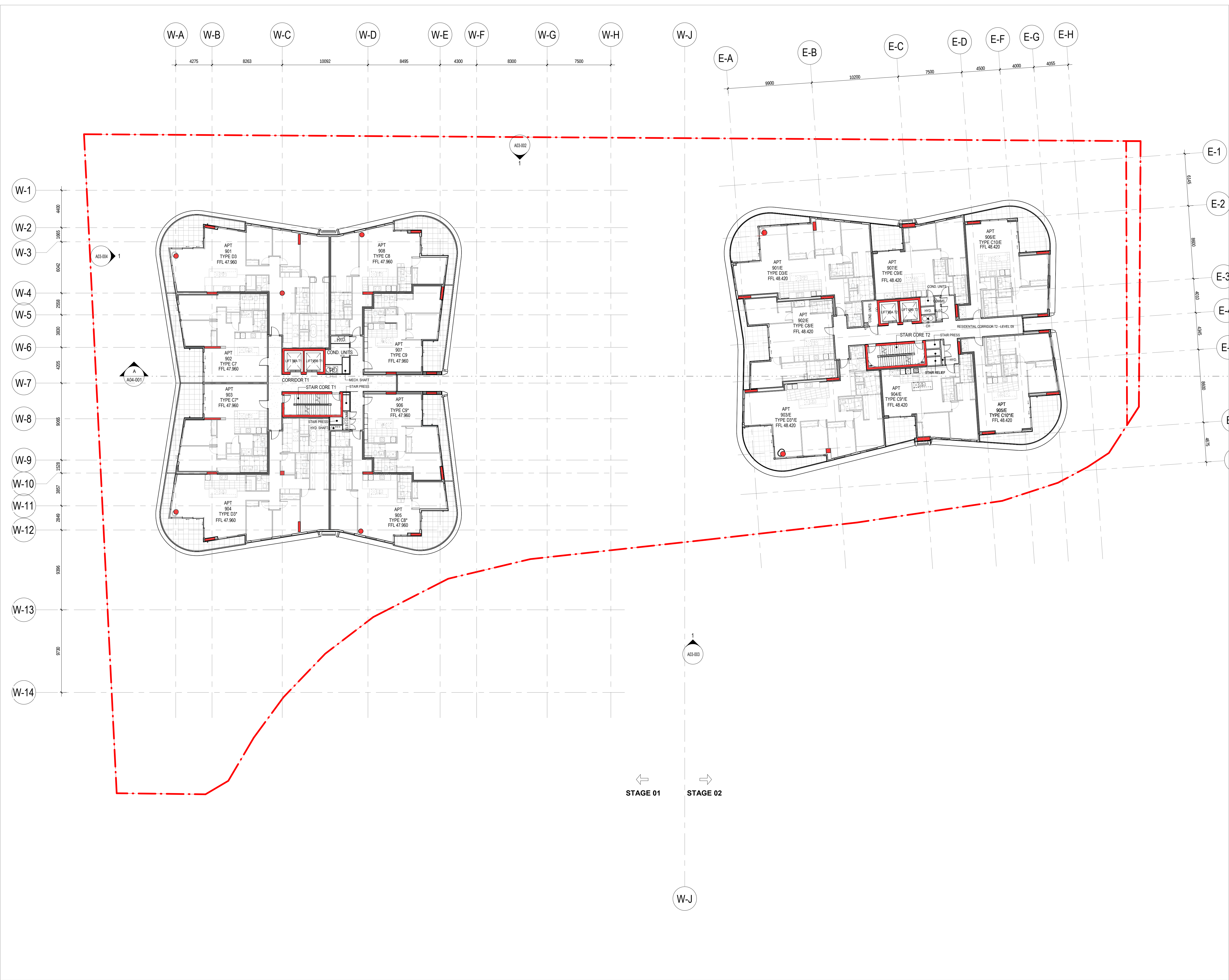
 HILLAM
ARCHITECTS

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

Figure 1.1 shows a scale bar and a clock face. The scale bar is labeled "SCALE" and "1 : 200 (A1)". It has a total length of 6 M (meters) and is divided into 6 segments, each 1 M long. The clock face shows a time of 1:50.



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

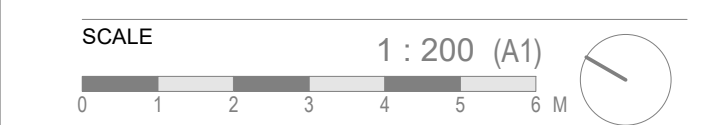
EDGE VISIONARY LIVING

PROJECT NAME

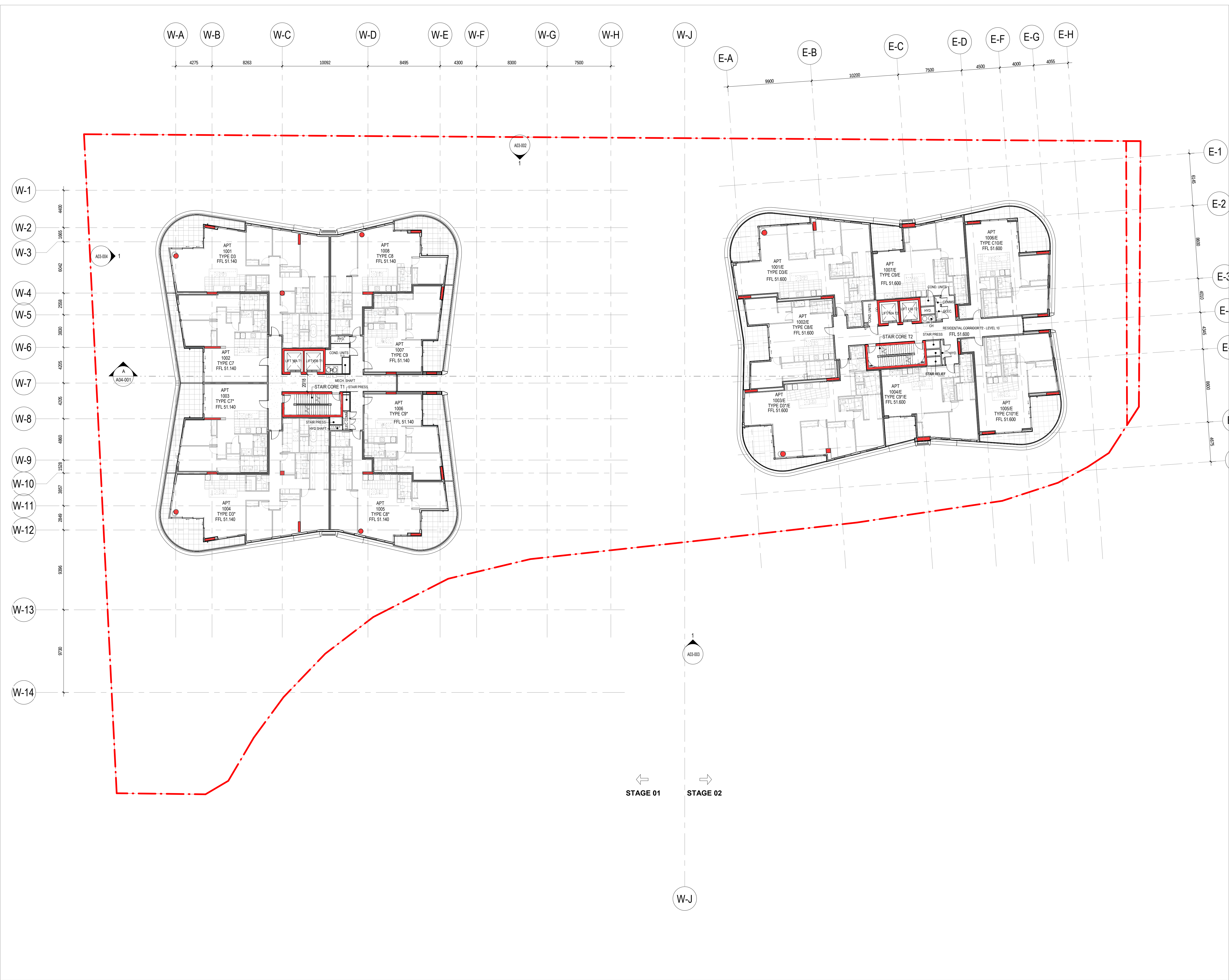
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 09



PROJECT No.	DRAWING No.	REV
2005	A01-116	2
DRAWN BY	Author	



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 10

SCALE			1 : 200 (A1)	
PROJECT No.	DRAWING No.	REV		
2005	A01-117	2		
DRAWN BY		Author		



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

EDGE VISIONARY LIVING

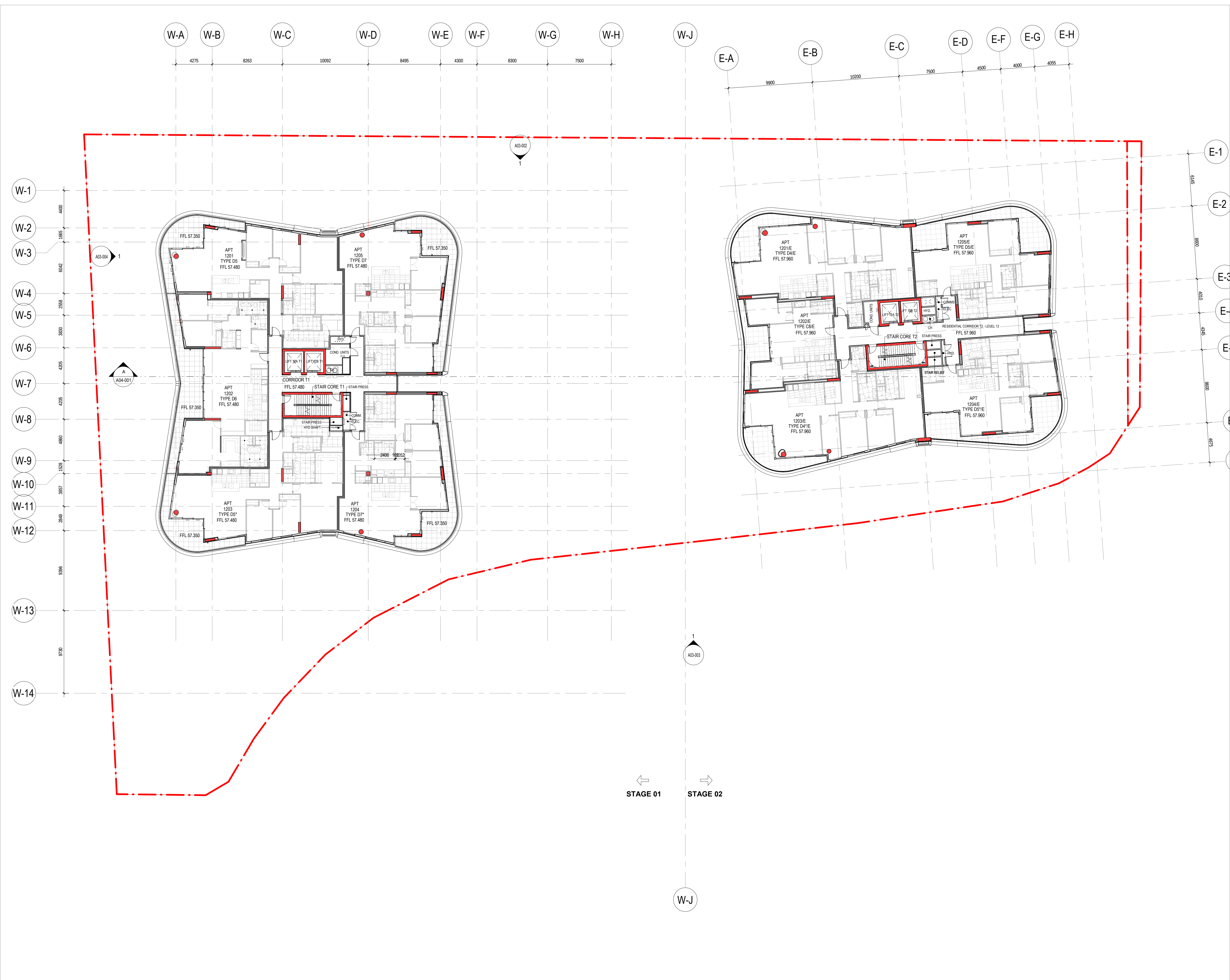
PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 11

SCALE			1 : 200 (A1)	
PROJECT No.	DRAWING No.	REV		
2005	A01-118	2		
DRAWN BY		Author		



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

EDGE VISIONARY LIVING

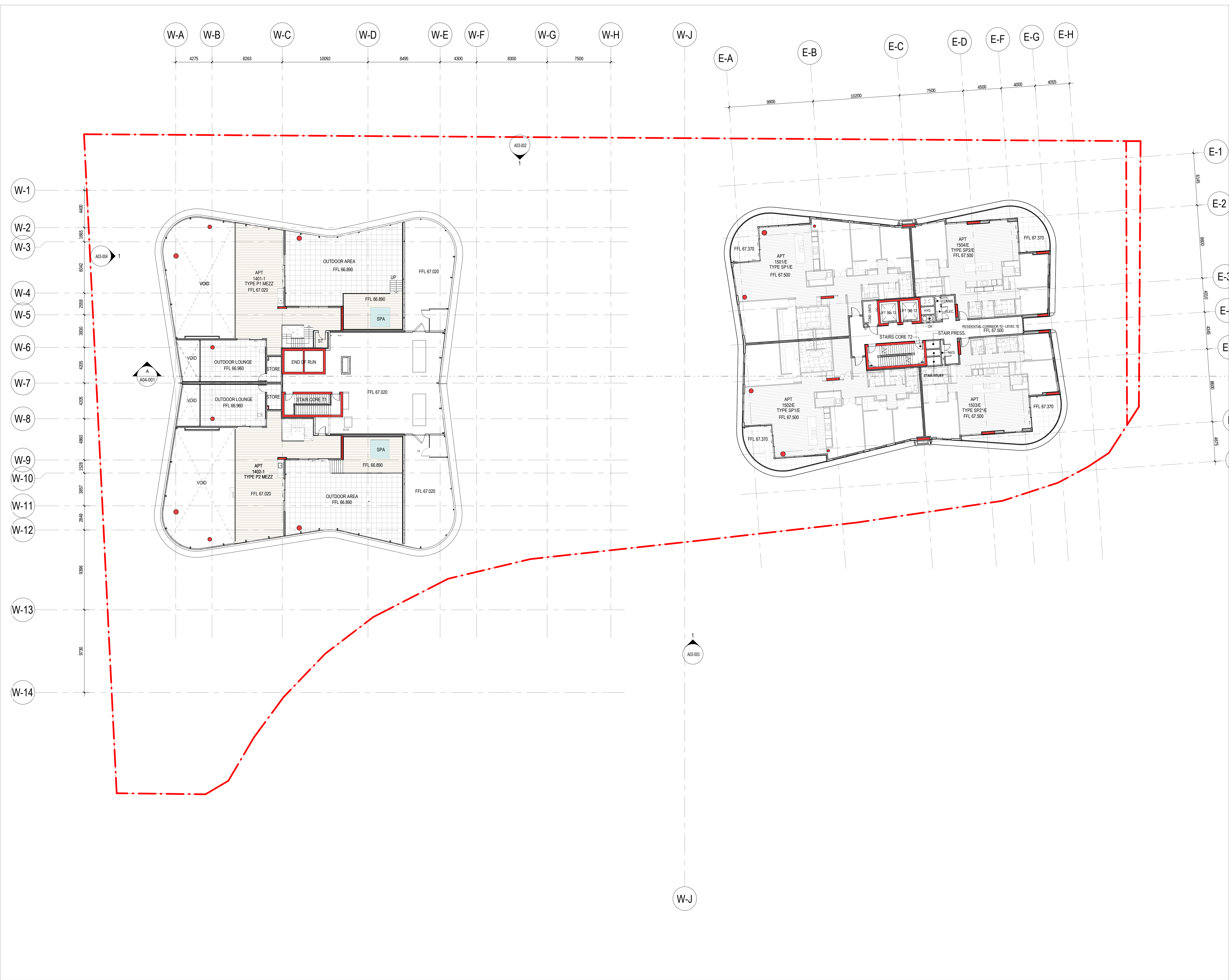
PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 12

SCALE			1 : 200 (A1)	
PROJECT No.	DRAWING No.	REV		
2005	A01-119	2		
DRAWN BY		Author		



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

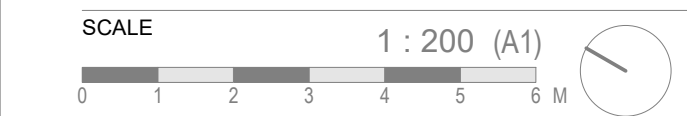
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 15



PROJECT No.	DRAWING No.	REV
2005	A01-122	2
DRAWN BY	Author	



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED

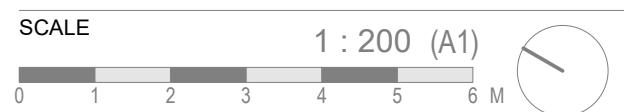
ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



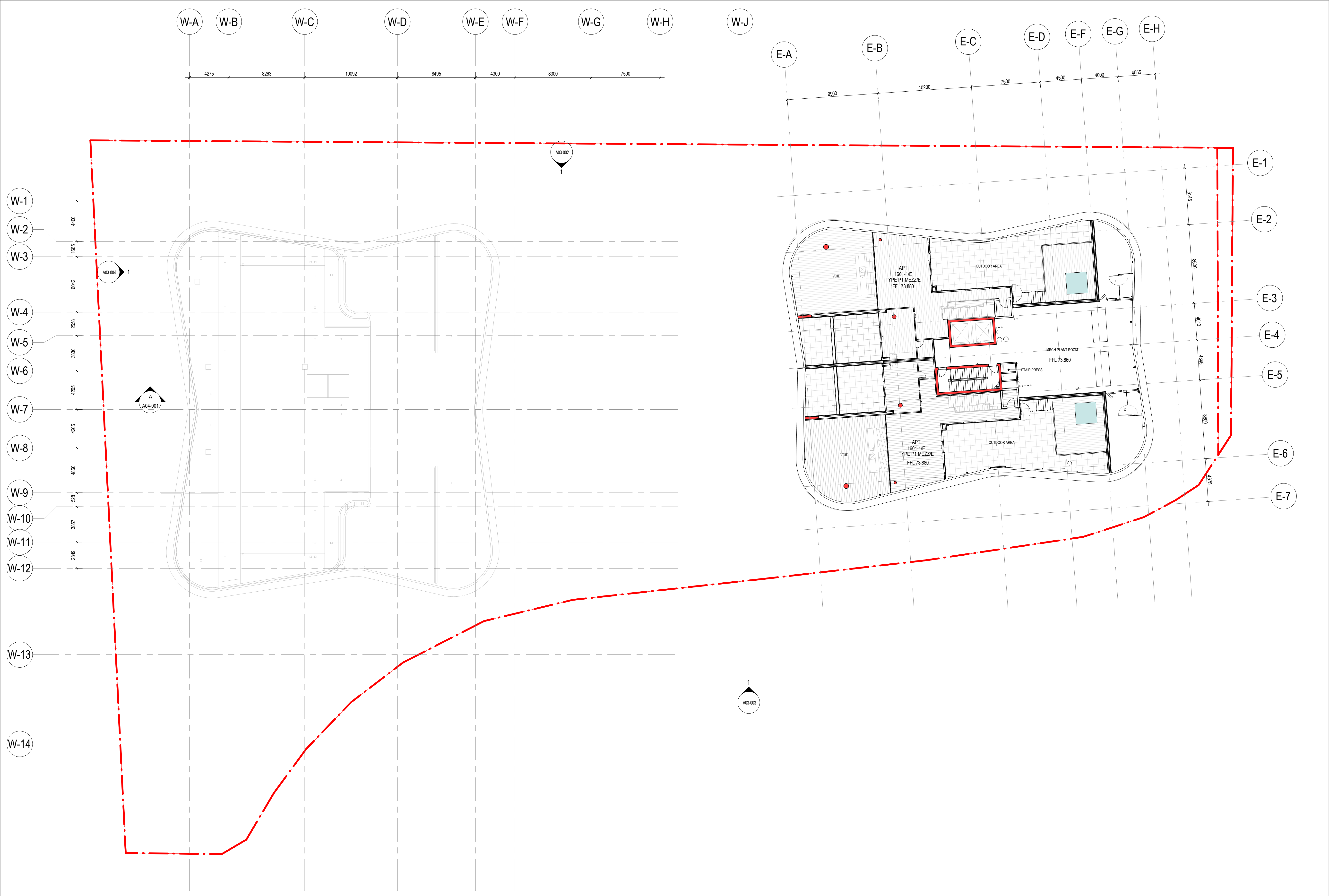
CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
OVERALL LEVEL 16



PROJECT No.	DRAWING No.	REV
2005	A01-123	2
DRAWN BY	Author	



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

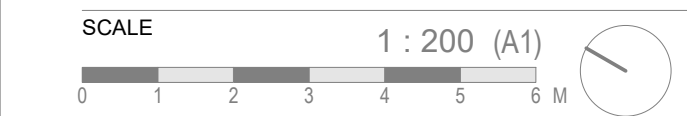
EDGE VISIONARY LIVING

PROJECT NAME

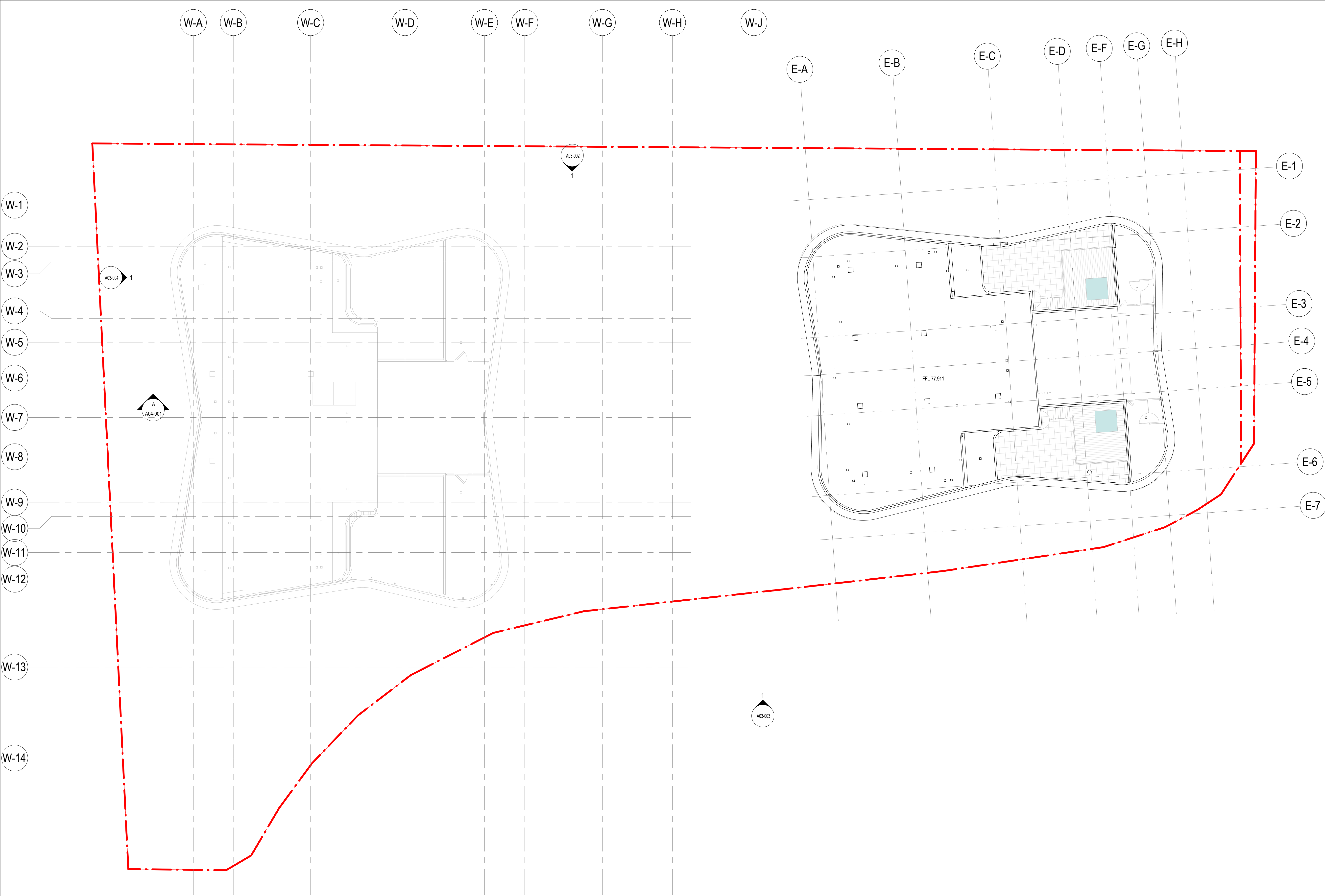
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 17



PROJECT No.	DRAWING No.	REV
2005	A01-124	2
DRAWN BY	Author	



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	2	Issue Preliminary DA Drawings	MK
05.11.24	1	Issue for Information	MK
18.03.24	0	Revised Tender Issue	MK
DD.MM.YY	REV	DESCRIPTION	CHECKED



CLIENT

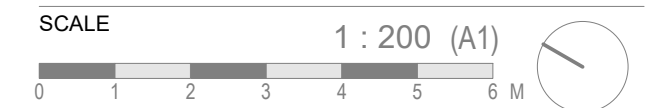
EDGE VISIONARY LIVING

PROJECT NAME

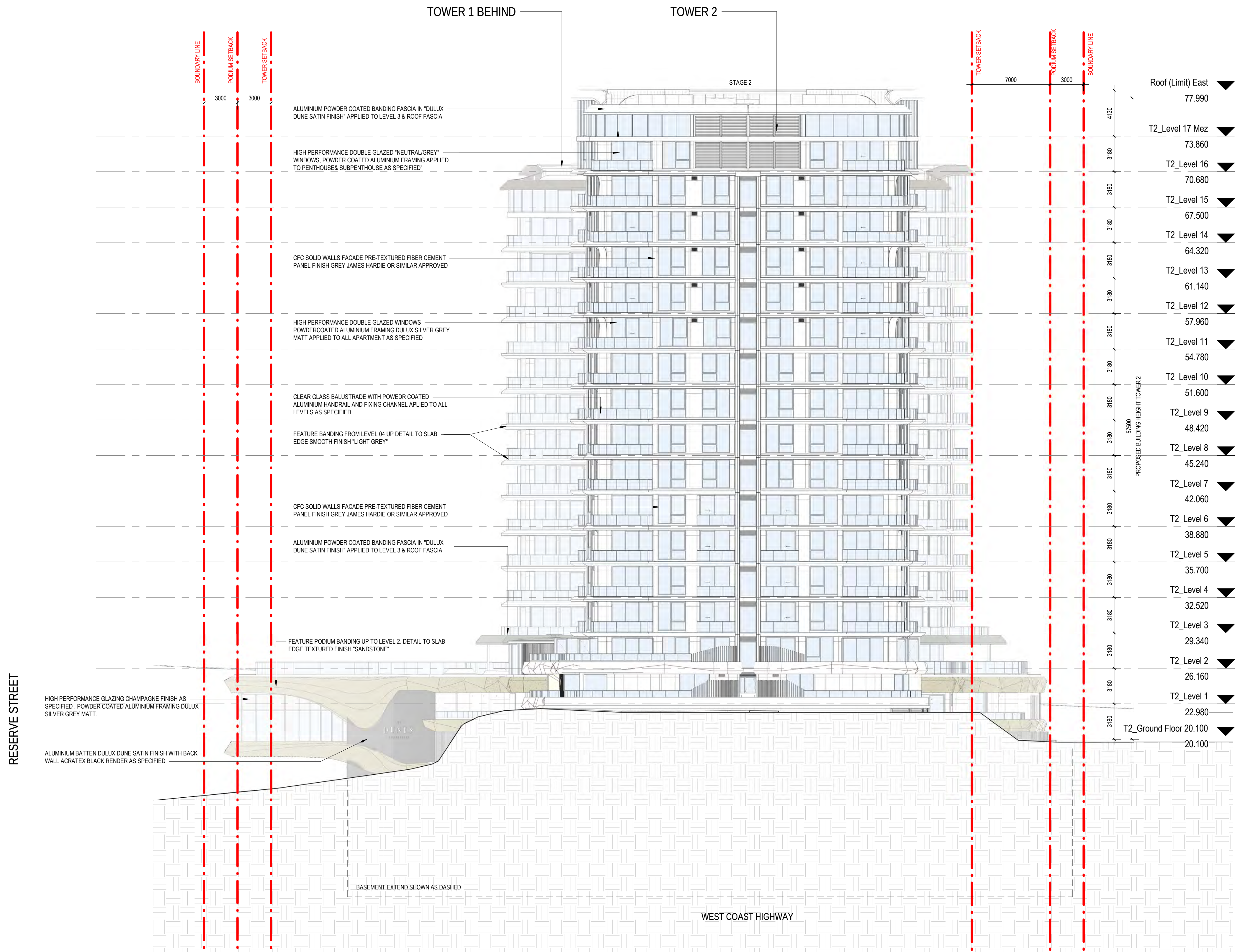
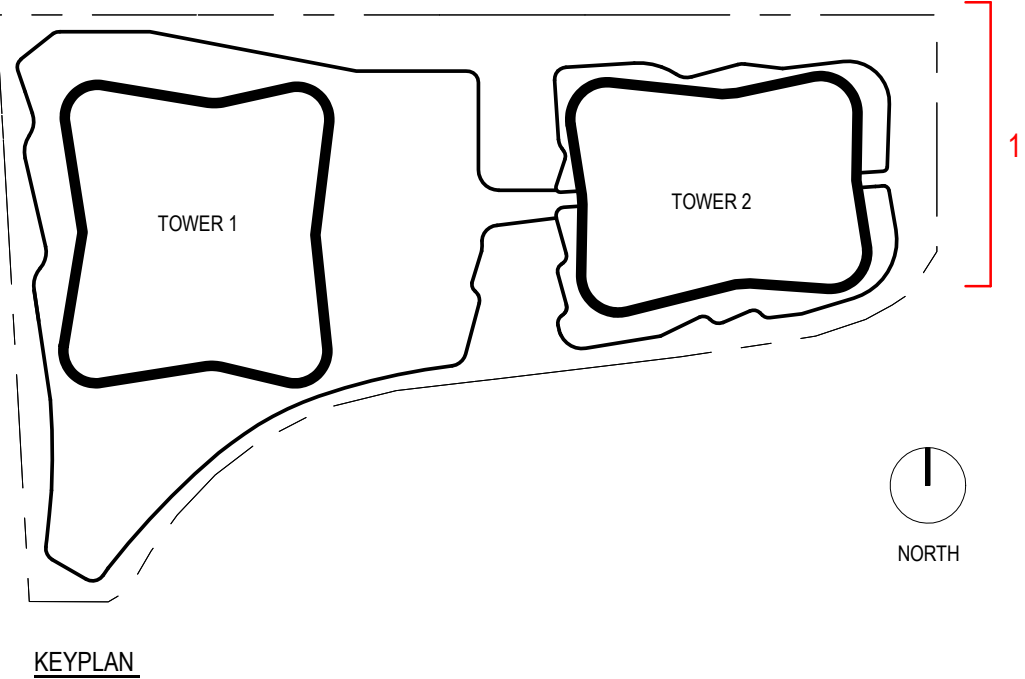
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL ROOF



PROJECT No.	DRAWING No.	REV
2005	A01-125	2
DRAWN BY	Author	



1 EAST ELEVATION
A01-101 1:200

THE DUNES-T1
LOT 500 RESERVE STREET SCARBOROUGH



COPYRIGHT
THIS DRAWING IS COPYRIGHT (C)
AND REMAINS THE PROPERTY OF
HILLAM ARCHITECTS. IT MUST NOT
BE RETAINED, COPIED OR USED
WITHOUT THE AUTHORITY OF
HILLAM ARCHITECTS.

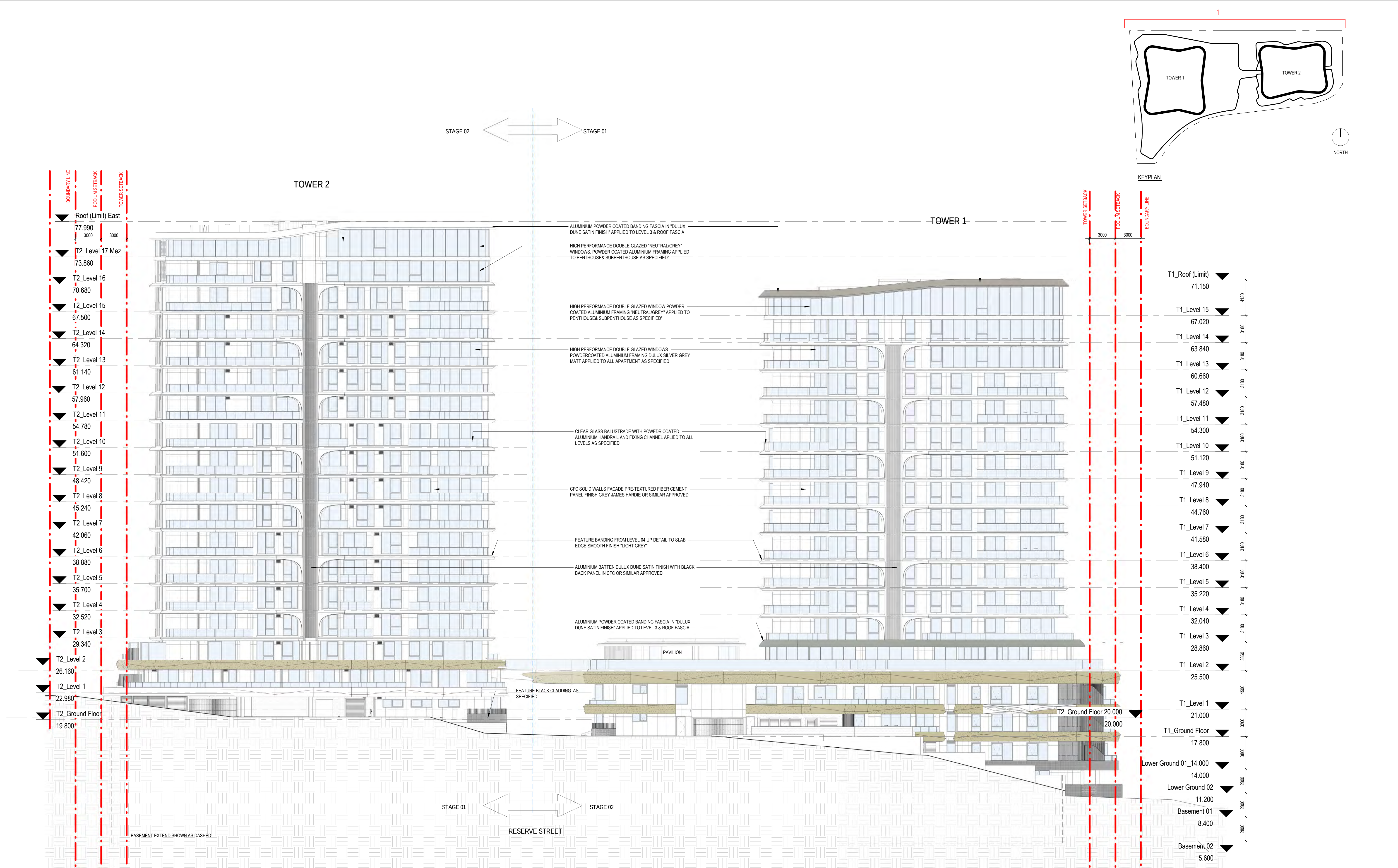
As indicated
(A1)
0 1 2 3 4 5 6 M
© Hillam Architects Pty Ltd



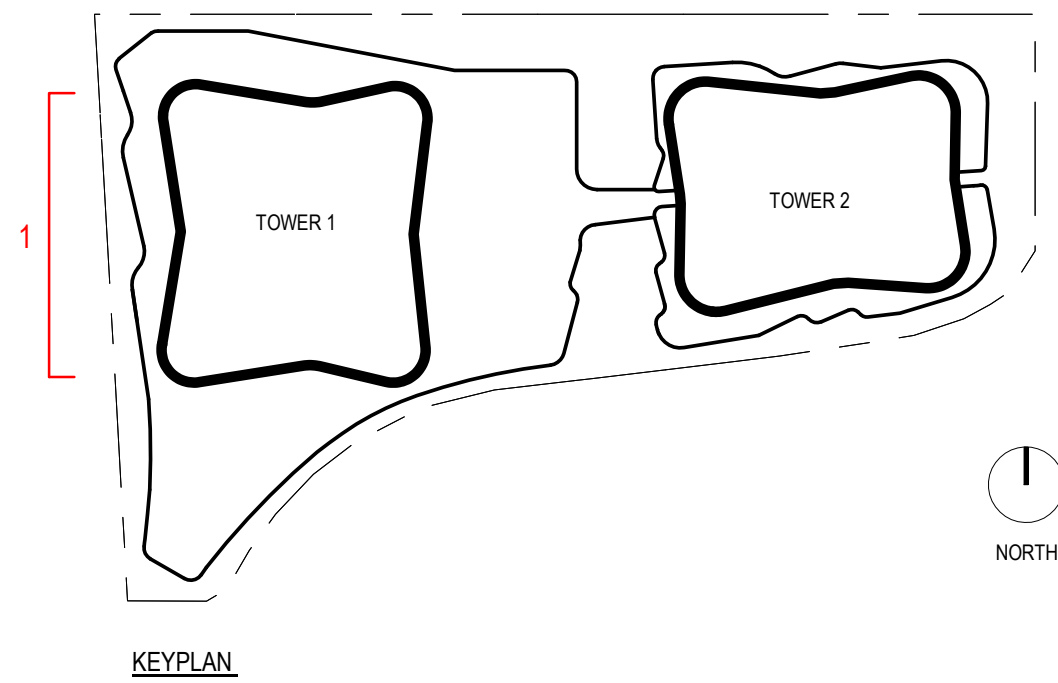
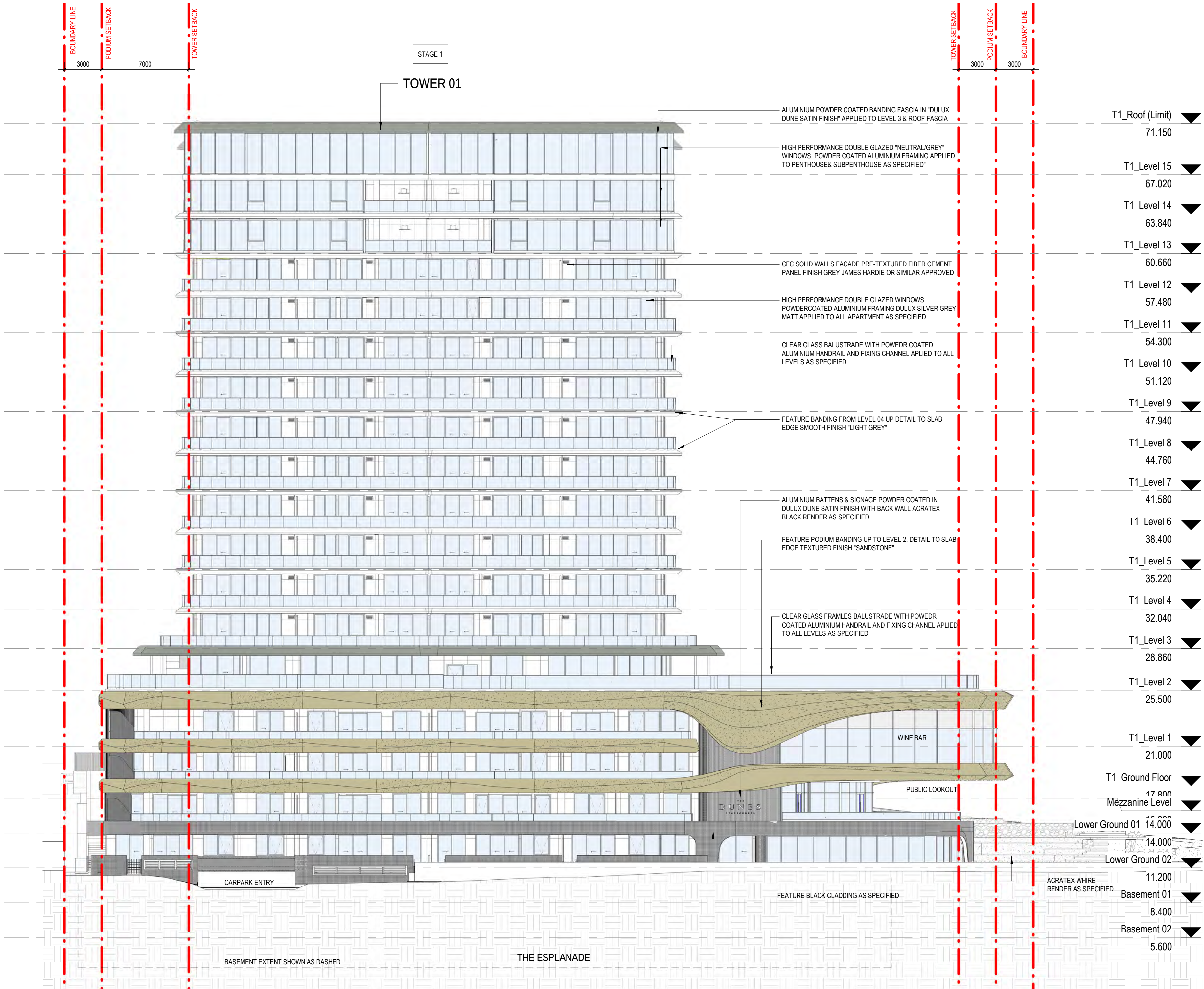
15.11.24	0	Issue Preliminary DA Drawings	MK
09.11.23	A	Issued For Information (Banding Revised)	SG
DD MM YY	REV	DESCRIPTION	ISSUED BY / CHECKED

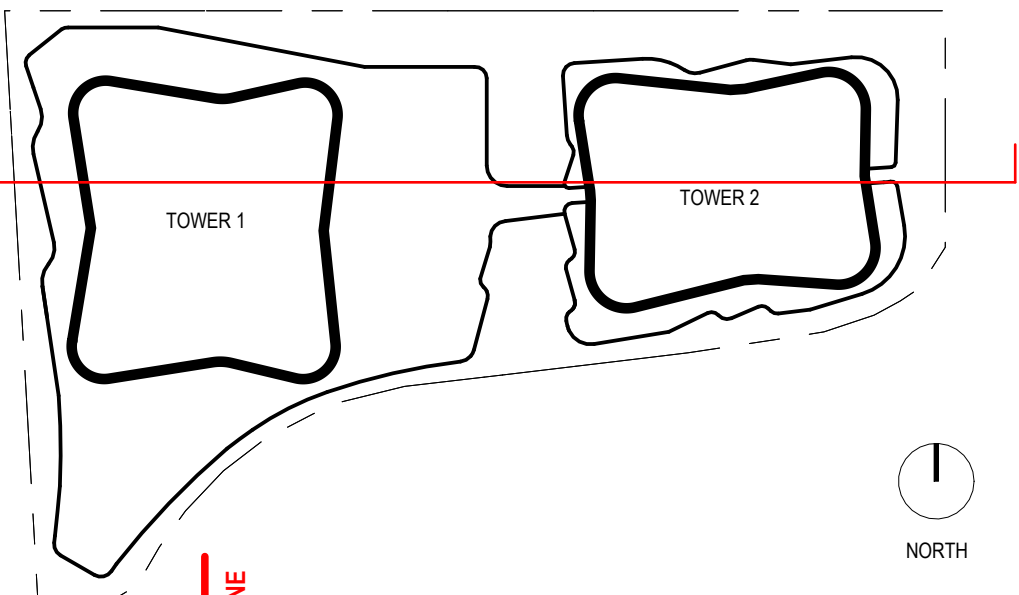
PROJECT No.
2005
DWG NAME
**EXTERNAL NORTH ELEVATIONS
OVERALL**

DWG No.
A03-002
REV
0









GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-03	190 CONCRETE BLOCK WALL
CO-02	150mm IN-SITU REINFORCED CONCRETE WALL
CO-51	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CO-54	330mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH
CO-56	400mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LA-02	GARDEN SOIL ON DRAINAGE CELLS
MW-01	GLASS BALUSTRADE - 1050H
MW-02	GLASS BALUSTRADE - 1200H
MW-03	GLASS BALUSTRADE SIDE MOUNTED TO WALL - 720H
MW-30	ALUMINIUM BANDING FASCIA TOWER - POWDERCOAT FINISH
MW-41	ALUMINIUM PALASADE FENCE - FLOOR MOUNTED 1200H POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE
WN-01	POWDERCOATED ALUMINIUM FRAME WINDOWS AND GLAZED DOORS GENERALLY
WN-02	COMMERCIAL SHOPFRONT GLAZING

15.11.24	4	Issue Preliminary DA Drawings	MK
07.10.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL SECTIONS SHEET
01

SCALE 1 : 200 (A1)

0 1 2 3 4 5 6 M

PROJECT No.	DRAWING No.	REV
2005	A04-001A	4
DRAWN BY	AA	

© Hillam Architects Pty Ltd



A

SECTION A

1:200



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

PARKING ABBREVIATIONS

C-xx	COMMERCIAL PARKING ALLOCATION
C-xxL	COMMERCIAL PARKING LONG ALLOCATION
M-xx	MOTOR CYCLE PARKING ALLOCATION
P-xxx	PUBLIC PARKING ALLOCATION
R-xxx	RESIDENTIAL PARKING ALLOCATION
R-xxL	RESIDENTIAL PARKING LONG ALLOCATION
R-xxG	RESIDENTIAL PARKING GARAGE ALLOCATION
R-xxGL	RESIDENTIAL PARKING GARAGE LONG ALLOCATION
V-xx	VISITOR PARKING ALLOCATION

2.12.24	7	Parking Updates to Suit Consultant Feedback	MK
15.11.24	6	Issue Preliminary DA Drawings	MK
14.11.24	5	Parking Updates To Suit Traffic Review	MK
11.08.24	4	Issue for Coordination	YW
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

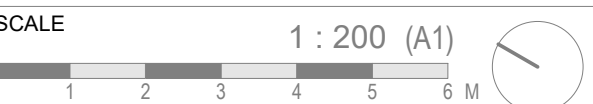
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

MEZZANINE LEVEL



PROJECT No.	DRAWING No.	REV
2005	A01-106	7
DRAWN BY	MM	



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	4	Issue Preliminary DA Drawings	MK
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillum.com.au

HILLAM ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

OVERALL LEVEL 01

SCALE

1 : 200 (A1)

0 1 2 3 4 5 6 M

PROJECT No.	DRAWING No.	REV
2005	A01-108	4
DRAWN BY		RR

© Hillam Architects Pty Ltd



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

15.11.24	4	Issue Preliminary DA Drawings	MK
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

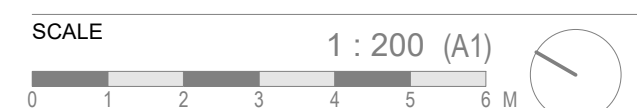
ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



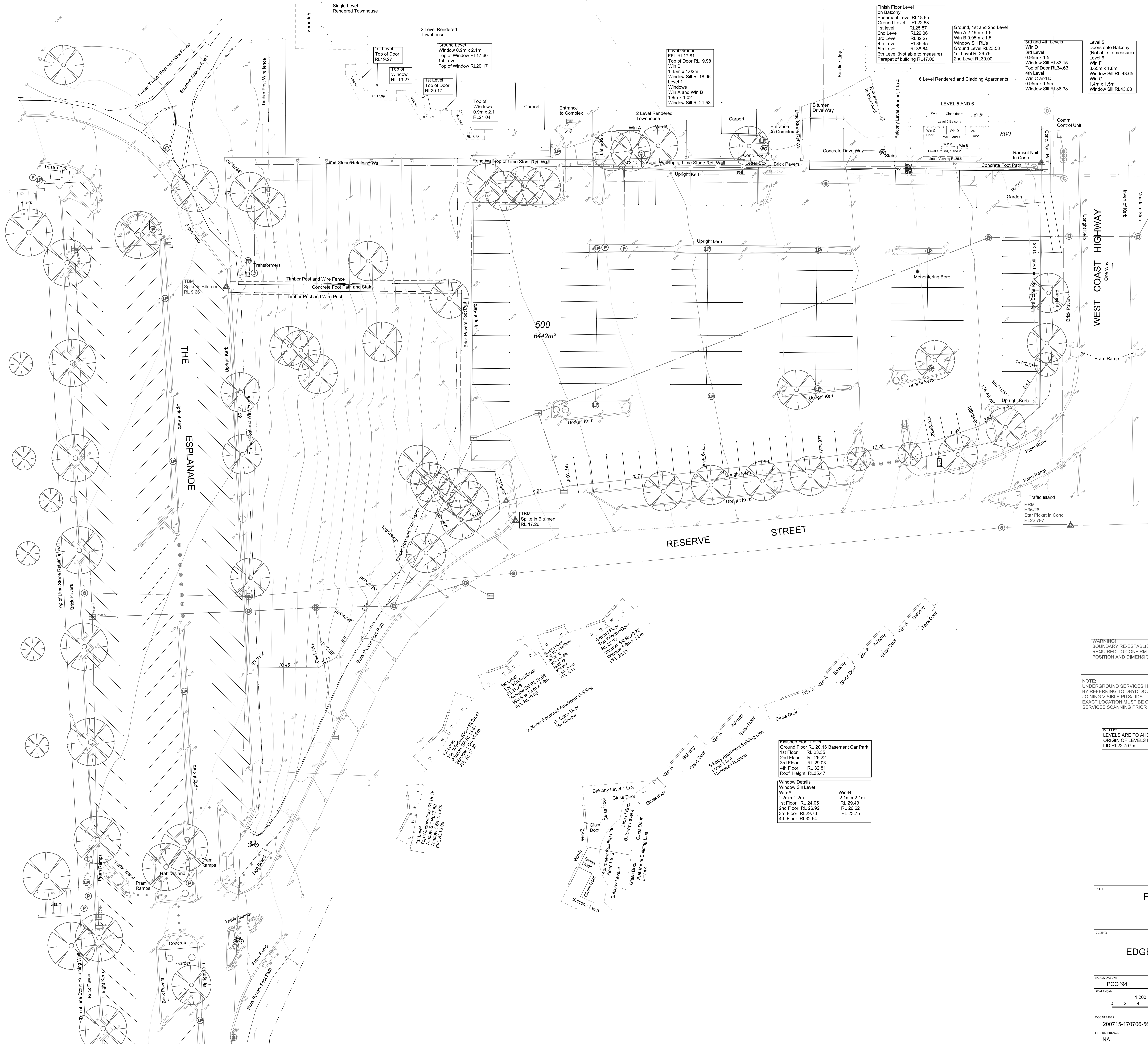
CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
OVERALL LEVEL 02



PROJECT No.	DRAWING No.	REV
2005	A01-109	4
DRAWN BY	Author	



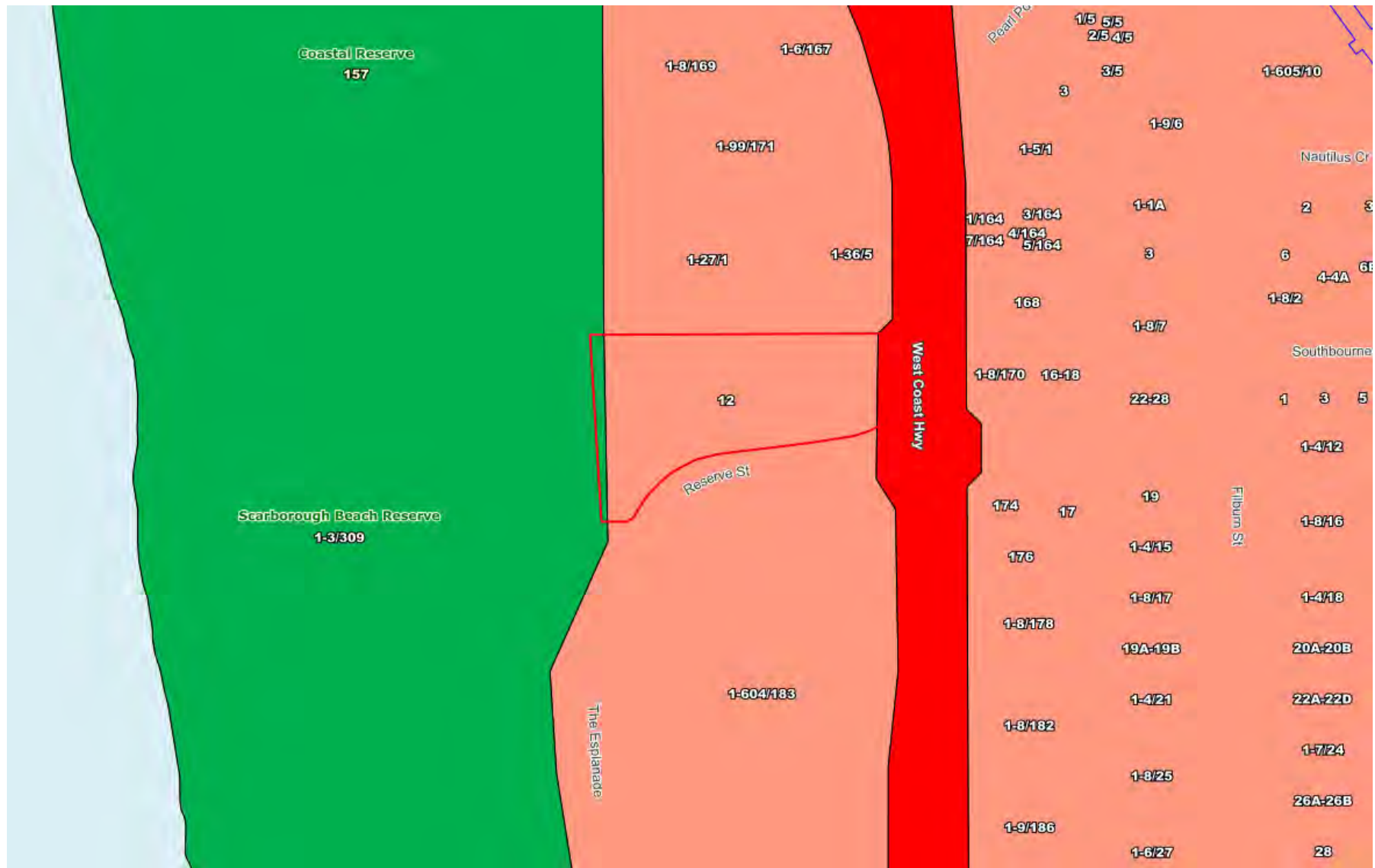
METROPOLITAN REDEVELOPMENT
AUTHORITY
10 SEP 2021
RECEIVED

NOTE:
LEVELS ARE TO AHD
ORIGIN OF LEVELS RRM h36-26
LID RL22.797m

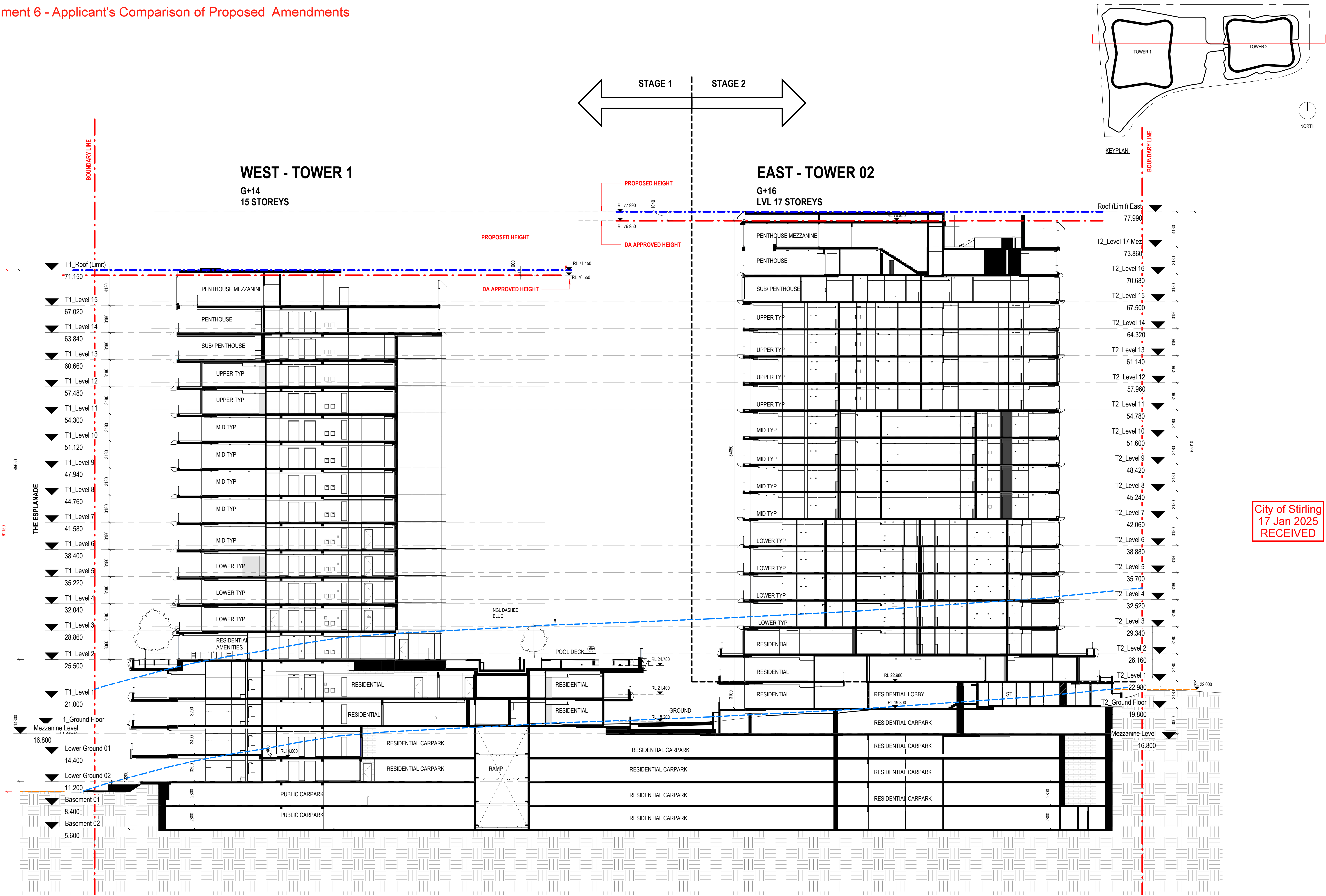
FEATURE AND CONTOUR SURVEY LOT 500 RESERVE STREET SCARBOROUGH	
CLIENT: EDGE VL	LOT NUMBER: 500
PLAN/NAME: DP413012	SITE SURVEY ONLY: This is formation shown on this drawing is current at the date of survey. Boundary information, Easements ETC. to be verified from the Certificate of Title, Plan/Diagram or a boundary Report. Boundary position information etc. is derived from the Certificate of Title in relation to the boundary lines are not guaranteed. Sever, drainage may vary from the Statutory representation. All measurements to be checked on site. Service information to be confirmed with the relevant authorities. For underground services ring "DIAL BEFORE YOU DIG" for confirmation.
SHEET/NO: LR3171/315	
HORIZ. DATUM: PCG '94	VERT. DATUM: AHD
SCALE (AS SHOWN): 	
DOC. NUMBER: 200715-170706-5613-MK-FS-1	
FILE REFERENCE: NA	

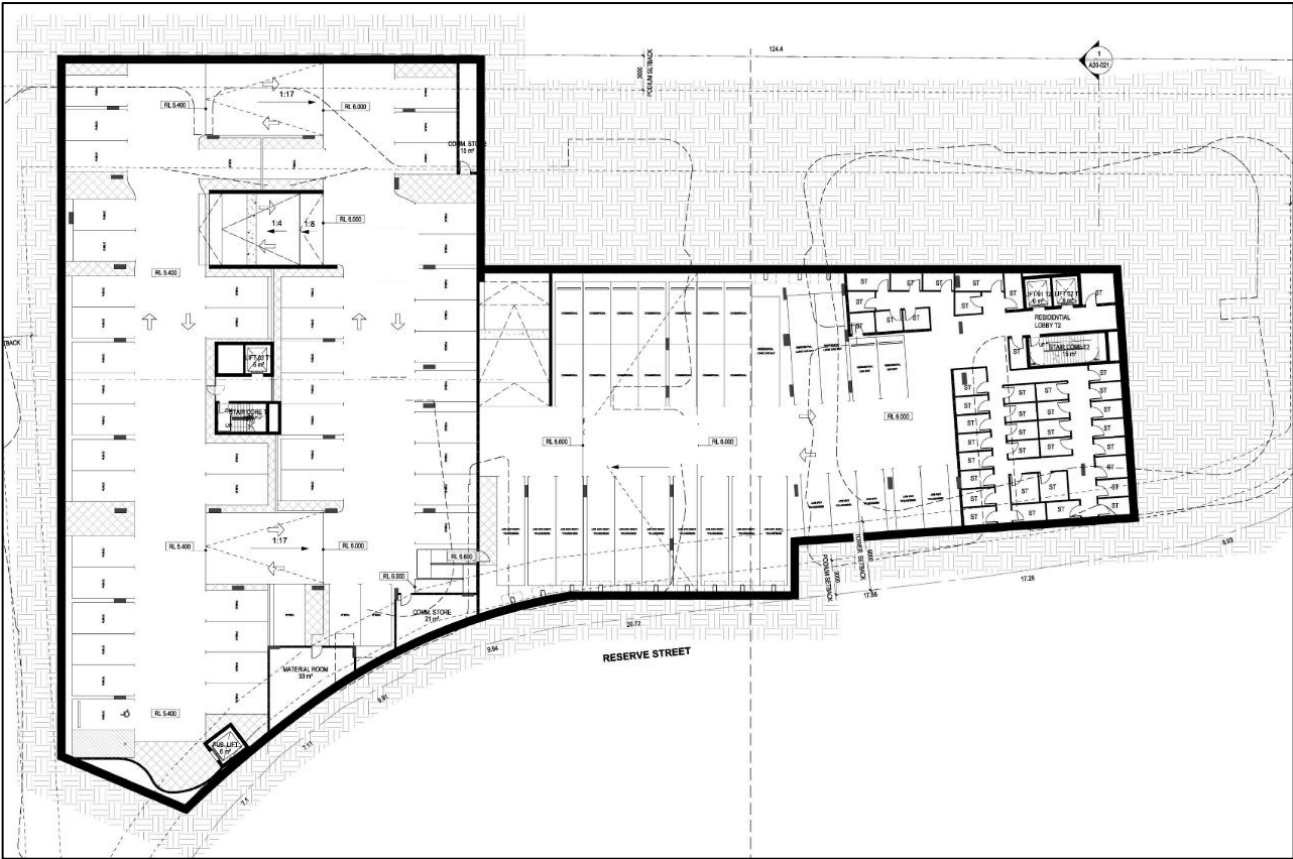
[illegible]

Attachment 3 – Metropolitan Region Scheme Zoning Map

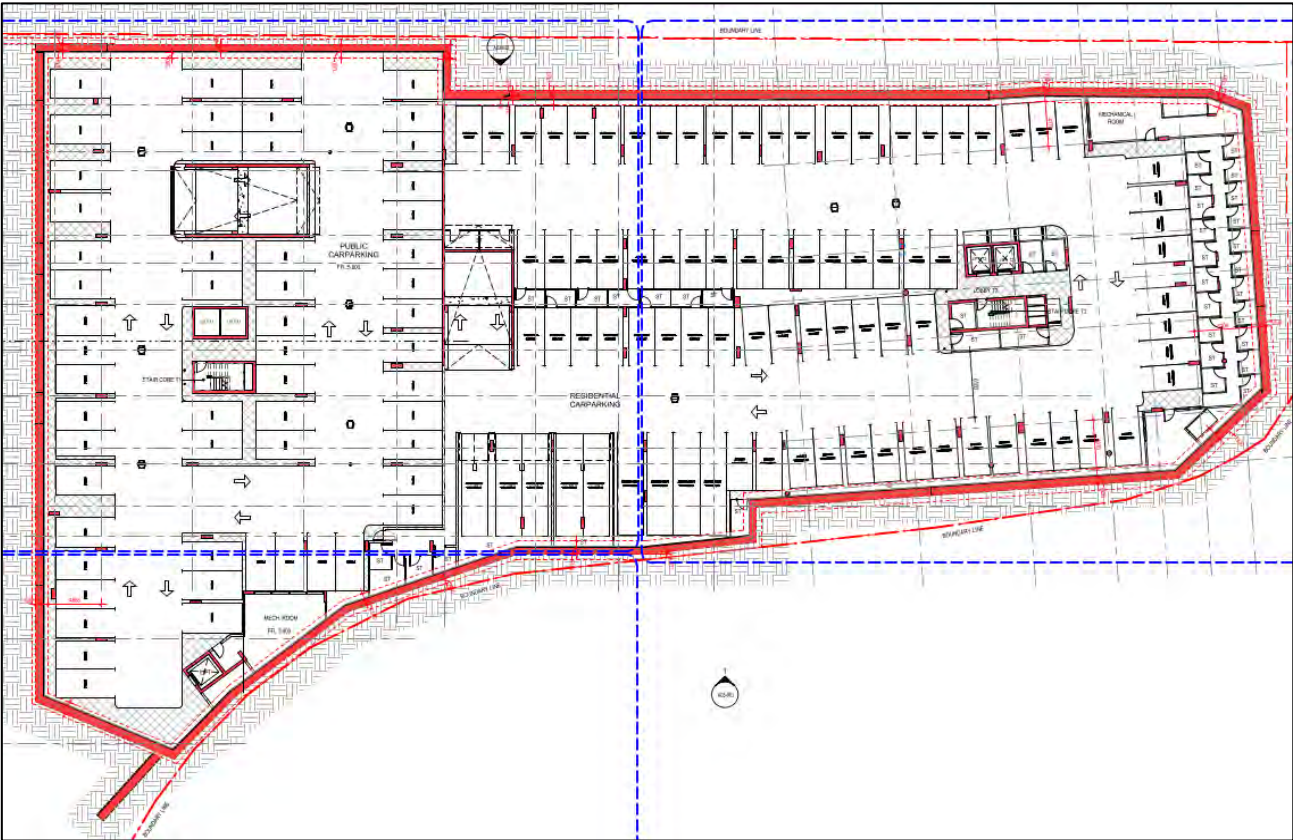


[illegible]

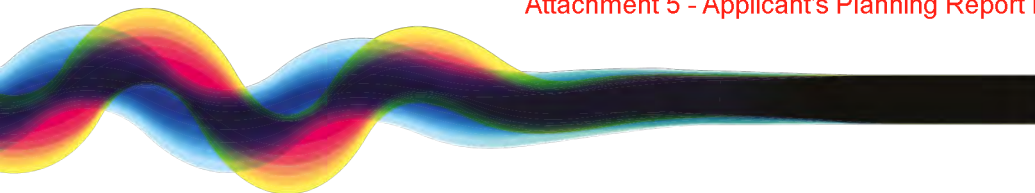




Previously Approved Basement 2.



Proposed Basement 2 including the bays relocated from the removed Basement 3.



element.

Our Ref: 24-287
CoS Ref: DA22/1198

10 February 2025

City of Stirling
25 Cedric Street
STIRLING WA 6021

Attention: Amanda Sheers – Director Planning & Development

Dear Amanda,

DA22/1198 – APPROVED MIXED USE DEVELOPMENT AT 12 RESERVE STREET, SCARBOROUGH – THE DUNES – APPLICATION FOR DEVELOPMENT APPROVAL FOR MINOR HEIGHT INCREASE

On behalf of Edge Holdings No. 16 Pty Ltd, **Element Advisory** is pleased to submit this Development Assessment Panel (DAP) application seeking approval for a minor height increase to the existing development approval for The Dunes, at 12 Reserve Street, Scarborough (subject site), along with a reconfiguration of the approved basement levels.

The existing development was originally approved by DevelopmentWA (DWA) in October 2021, broadly described as a 17 storey mixed use development comprising residential apartments and a range of non-residential tenancies and community use components across two towers.

Subsequently a building permit has been granted by the City of Stirling for in-ground works, and based on site works undertaken to-date, substantial commencement has been achieved.

In accordance with Regulation 7 of the *Planning and Development (Development Assessment Panels) Regulations 2011*, the applicant elects for this application to be determined by the Development Assessment Panel (DAP).

In accordance with the City of Stirling (City) and DAP requirements, please find enclosed:

- Completed and signed development application forms, comprising the City's Application for Development Approval Form, a Metropolitan Region Scheme (MRS) Form 1, and a DAP Form 1;
- City of Stirling DAP Application Lodgement checklist;
- Current copy of the Certificate of Title for the subject site;
- Architectural drawings of the proposed development; and
- A copy of the DWA report to the Land Redevelopment Committee in support of the October 2021 development approval.

It is understood that the City will issue an invoice for the payment of the application fee at the time of

DA22/1198 – APPROVED MIXED USE DEVELOPMENT AT 12 RESERVE STREET, SCARBOROUGH – THE DUNES – APPLICATION FOR DEVELOPMENT APPROVAL FOR MINOR HEIGHT INCREASE

lodgement.

Project and Planning Context

Since the development approval was originally granted by DWA in October 2021, and then a minor amendment approved by DWA in February 2023, development control for the Scarborough foreshore has been transferred from DWA to the City of Stirling. Despite the development approval remaining valid and substantial commencement having been achieved, it is understood that it is not possible to seek a minor amendment to the current approval.

An assessment of the approved development, and rationale for the support of the approved variations from the planning framework is provided in the enclosed DWA report to the Land Redevelopment Committee in support of the October 2021 original development approval. (*Refer to Appendix A*).

In this regard, this application effectively seeks “re-approval” of the existing approved development, currently under construction, but with the only built form changes being:

- minor height increases of 0.6 metres to the western tower and 1.04 metres to the eastern tower; and
- reconfiguration of the approved basement levels, to rationalise these from three approved levels, to two proposed levels. There is no change to the approved number of car parking bays. This has been achieved by achieving greater efficiencies within Basement Levels 1 and 2, so that approved Basement Level 3 (which comprised a reduced site footprint) is no longer required.

As such, this letter focuses solely on the assessment of this minor height increase and does not address matters already covered by the aforementioned DWA report.

The need for this minor height increase has been identified through the ongoing detailed design review process. This has involved the proposal to thicken some slabs within the buildings, to remove any steps in the slab soffit and therefore increase the efficiency of formwork in the construction process. Associated with this, in order to locate essential building services within ceiling spaces, and maintain desirable internal ceiling heights, there is therefore a requirement to increase the floor to floor heights of a limited number of floors, resulting in the proposed height increases of 0.6 metres to the western tower and 1.04 metres to the eastern tower.

Subject Site

The subject site is No. 12 Reserve Street, Scarborough.

The Certificate of Title details for the subject site are summarised in Table 1, below.

Table 1 – Certificate of Title Details

Lot	Deposited Plan	Volume	Folio	Area	Site Address
500	413012	4007	352	6442m ²	12 Reserve Street

The subject site is zoned ‘Urban’ under the MRS and is zoned ‘Development’ under the City of Stirling Local Planning Scheme No. 3 (LPS3).

LPS3 identifies the site within the Scarborough Special Control Area, with all pre-existing DWA policies and design guidelines for the former Scarborough Redevelopment Area to apply, along with the former Scarborough Redevelopment Scheme which is now contained at Schedule 13 of LPS3.

DA22/1198 – APPROVED MIXED USE DEVELOPMENT AT 12 RESERVE STREET, SCARBOROUGH – THE DUNES – APPLICATION FOR DEVELOPMENT APPROVAL FOR MINOR HEIGHT INCREASE

State Planning Policy 3.7 – Bushfire

The Department of Fire and Emergency Services map of bush fire prone areas identifies some of the site within “bush fire prone area 1”. Bushfire has previously been considered and addressed as part of the original development application and approval granted by DWA in October 2021, however a current BAL assessment has been undertaken and is enclosed.

Supporting Information

The following supporting reports and information are included with this application, noting that some of these are overarching reports that supported the original application (approved by DWA in October 2021) and are not directly relevant or require updating for this current application.

Supporting Information	Status
BAL Assessment and Covering Letter	Current BAL Assessment (January 2025).
Car Parking and Traffic Management Plan	Current (December 2024) – prepared to address condition of current DWA development approval and building permit submission.
Detailed Landscaping Drawings	Current (January 2025) – prepared to address condition of current DWA development approval and building permit submission.
Sustainable Design Assessment Report	Current (December 2024) – prepared to address condition of current DWA development approval and building permit submission.
Acoustic Specification	Current (December 2024) – prepared to address condition of current DWA development approval and building permit submission.
Operational Waste Management Plan	Current (December 2024) – prepared to address condition of current DWA development approval and building permit submission.
Pedestrian Wind Environment Statement	Supported original DA – does not warrant updating to address minor height increase.
Universal Access Statement	Supported original DA – does not warrant updating to address minor height increase.
Community Needs Analysis	Supported original DA – does not warrant updating to address minor height increase.
Place Strategy	Supported original DA – does not warrant updating to address minor height increase.

 EXISTING

 NEW

DA22/1198 – APPROVED MIXED USE DEVELOPMENT AT 12 RESERVE STREET, SCARBOROUGH – THE DUNES – APPLICATION FOR DEVELOPMENT APPROVAL FOR MINOR HEIGHT INCREASE

Proposed Minor Height Increase

As noted above, the proposed minor increases are 0.6 metres to the western tower and 1.04 metres to the eastern tower. No change is proposed to the number of storeys, and these ~1 metre height increases are entirely a function of the detailed design review process and practical requirement for an efficient build process and to maintain desirable internal ceiling heights.

The proposed changes will support the delivery of the project by ensuring a viable apartment product that responds to current market conditions, via an efficient and cost effective construction process.

Planning Assessment

Reference is made to the DWA report to the Land Redevelopment Committee in support of the October 2021 original development approval enclosed at Appendix A. This found that the building height was worthy of approval based on the following matters:

- *the design has been reviewed by the Authority's Design Review Panel and is deemed to have demonstrated design excellence; and*
- *the proposal includes 100 publicly accessible car bays.*

No change is proposed to the above matters, which have been maintained in the development currently under construction.

The report further supported the building height, noting that the proposal provides significant community benefit and redistributes mass in a manner which positively affects its surrounds. Furthermore, the proposal was considered to be consistent with the Design Intent of the Gateway West Precinct of the Design Guidelines, given the following:

- *the physical form provides a transition down from the high density urban core of the Redevelopment Area towards the low density residential periphery, and steps down to the foreshore, following existing topography;*
- *development is reflective of Scarborough's urban-coastal character, in particular the surrounding dune network and foreshore redevelopment;*
- *a 9m Right-Of-Way, in excess of the 6m minimum, as well as a 1.5m pedestrian path, is provided through the site to enable full access to the northern sites, minimising crossovers to the local road network; and*
- *approximately 600m² of deep soil area, including mature vegetation, allowing landscaping to thrive in coastal conditions. In addition, all but two existing street trees will be retained.*

As above, these aspects have been maintained in the development currently under construction and will therefore deliver the significant community benefit that underpinned DWA's original development approval.

The proposed 0.6 metre and 1.04 metre height increases are considered to be so minor in the context of the approved tower heights of ~58 metres that they would practically be imperceptible. In this regard they are not considered to result in any perceptible impact on the amenity of the locality and are therefore appropriate for approval.

Conclusion

Based on the assessment and justification provided above, the proposed minor height increase is considered appropriate in the context of the existing development approval and of no perceptible impact. The proposed minor height increase warrants approvals on the basis that it will facilitate the delivery of this key project within the Scarborough Redevelopment Area, of a scale and design quality envisaged by the vision for this precinct. This also represents a significant contribute to residential

DA22/1198 – APPROVED MIXED USE DEVELOPMENT AT 12 RESERVE STREET, SCARBOROUGH – THE DUNES –
APPLICATION FOR DEVELOPMENT APPROVAL FOR MINOR HEIGHT INCREASE

apartment supply in an established locality of high amenity, in alignment with local and State Government housing supply objectives.

We trust the information provided will assist the City in assessing the proposed minor height increase in the context of the existing approval to the existing approval, and we look forward to the DAP's favourable consideration of this application.

Should you have any queries or require clarification on the above matter, then please do not hesitate to contact the undersigned on (08) 9289 8300.

Yours sincerely

element



Daniel Lees
Principal - Planning

element acknowledges the Whadjuk people of the Noongar nation as Traditional Owners of the land on which we live and work. We acknowledge and respect their enduring culture, their contribution to the life of this city, and Elders, past and present.

EDGE

MEMORANDUM

Project	Lot 500 Reserve Street, Scarborough (The Dunes Scarborough)
Description	Development Approval - Amendment Summary
Prepared By	Daniel Visser
Date	19 November 2024
Revision	01

Edge Visionary Living is seeking to submit a revised Development Application for Lot 500 Reserve Street, Scarborough (The Dunes).

The project has undergone significant value management to ensure the project remains commercially viable amid a challenging construction environment. Design changes undertaken as a result of value management are outlined below.

Please refer **Attachment 01** for architectural drawings displaying the proposed design amendments, and **Attachment 02** for the latest DA approved architectural drawing set.

Description	Increase in building height
Design Amendment	- Tower 1 has increased in height from an RL of 70.55 to 71.15 (0.6m). - Tower 2 has increased in height from an RL of 76.95 to 77.99 (1.04m). - Neither Tower has added any additional floors. Height increases are purely due an increase in floor-to-floor height.
Justification	A significant part of value management has been the rationalisation of the building structure for Tower 1 and Tower 2. This has involved two key components relating to suspended concrete slabs: - Slabs have been flattened, particularly in the basement and podium structures, to delete slab steps and eliminate ramping. - Typical slabs have also been thickened to remove any steps in the slab soffit and therefore increase the efficiency of formwork. The combination of flattening and thickening slabs has resulted in less height in some areas to effectively run building services. As such, it is proposed to increase the floor-to-floor height of a limited number of floors, resulting in the height increase of 0.6m for Tower 1 (west) and 1.04m for Tower 2 (east).

Description	Basement rationalisation
Design Amendment	The existing approval includes Basement 03 on the western side of the site which sits at an RL of 2.60. There are significant concerns with this level of excavation, given the site's proximity to the ocean and potential need for extensive dewatering. To eliminate this risk, and assist with the flattening of slabs (as outlined above) it is proposed to: - Omit Basement 03. - Move all car bays from Basement 03 into Basement 02. Please note per Attachment 03 (Drawing No A01-102 Rev 8) that Basement 02 still falls within the originally approved line of piling but now fully utilises the available area on this level.

EDGE

	Note that, as part of the proposed basement rationalisation, <u>all public parking bays are retained and the location of bays is maintained on the western side of the project</u>. Public car bays are now located on Basement 01 and Basement 02, in lieu of the previous Basement 02 and Basement 03.
Justification	The omission of Basement 03 and rationalisation of Basement 02 will significantly improve the constructability of the development and lead to time and cost savings, whilst retaining the same number of car bays included in the original DA approval. Attachment 04 (Drawing No A04-001) graphically displays the simplification of basement car parks with flat slabs throughout and all ramping deleted. In addition, the deletion of Basement 03 will negate the need for dewatering.
Description	Amendment of façade materials
Design Amendment	Refer Attachment 05 for: - Slab edge banding (towers) - orange. - Podium banding - blue. <u>Slab Edge (Towers) - Material</u> A DA amendment on 10 November 2023 approved a change in the slab edge shape/profile for Tower 1 and Tower 2. It is proposed to retain the slab edge profile but construct this from aluminium in-lieu of in-situ concrete. The slab edge will have a textured powdercoat finish and retain the same colour, look and feel. <u>Podium Banding Material</u> It is proposed to construct the podium banding of aluminium, with a textured powdercoat finish in line with the tower slab edges.
Justification	Extensive design testing has been undertaken with our façade engineer to assess the constructability of the tower slab edges and podium banding. Previous designs which reflected in-situ or precast concrete have been found unsuitable for the project due to the following factors: - Proximity to ocean / ocean spray. - Maintenance. - Weight. - Cost. Aluminium is considered significantly more durable and constructable for this project. As noted above, the proposed material substitution will not impact on the colour, look and/or feel of the slab edge and podium banding and will have a textured powdercoat finish.

City of Stirling
21 Jan 2025
RECEIVED

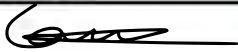
BAL Assessment Report

Prepared by a BPAD Accredited Practitioner

This report has been prepared by an Accredited BPAD Practitioner using the Simplified Procedure (Method 1) as detailed in Section 2 of AS 3959 – 2018 (Incorporating Amendment Nos 1, 2 and 3). FPA Australia makes no warranties as to the accuracy of the information provided in the report. All enquiries related to the information and conclusions presented in this report must be made to the BPAD Accredited Practitioner.

Property Details and Description of Works				
Address Details	Lot No	Street No.	Street Name	
	500	12	Reserve Street	
	Suburb		State	Postcode
	Scarborough		WA	6010
Local government area	City of Stirling			
Main BCA class of the building	New Class 2, Class 6 and Class 7a building		Use(s) of the building	Mixed Use
Description of the building or works	Proposed mixed use development comprising of residential and non-residential uses.			

Report Details			
Report / Job Number	Report Version	Assessment Date	Report Date
24287	F1	17 January 2025	17 January 2025

BPAD Accredited Practitioner Details	
Name: Cale Otter – Level 1 Company Details: element Level 18, 191 St Georges Terrace Perth WA 6000 (08) 9289 8300 element.	I hereby declare that I am a BPAD accredited bushfire practitioner.  Accreditation No. BPAD 62598 Signature  Date 17/01/2025
Reliance on the assessment and BAL Assessment contained in this report should not extend beyond a period of 12 months from the date of issue of the report. If this report was issued more than 12 months ago, it is recommended that the validity of the determination be confirmed with the Accredited Practitioner and where required an updated report issued.	

Vegetation Classification

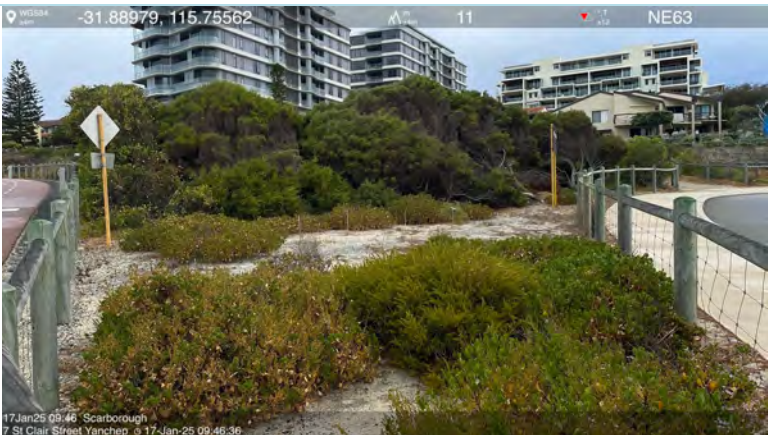
All vegetation within 150m of the proposed development was classified in accordance with Clause 2.2.3 of AS3959, as detailed in Figure 1. Each distinguishable vegetation plot with the potential to determine the Bushfire Attack Level is identified below.

Photo ID: 1.1 Plot: 1	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking upslope with the subject site located to the righthand side of the frame.	
Photo ID: 1.2 Plot: 1	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking downslope with the subject site located to the lefthand side of the frame.	
Photo ID: 1.3 Plot: 1	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking downslope towards the subject site.	

City of Stirling
21 Jan 2025
RECEIVED

Photo ID: 1.4 Plot: 1	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking downslope towards the subject site.	
Photo ID: 1.5 Plot: 1	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking upslope with the subject site located behind the photographer.	
Photo ID: 1.6 Plot: 1	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking downslope with the subject site located to the lefthand side of the frame.	
Photo ID: 2.1 Plot: 2	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking downslope with the subject site located behind the photographer.	

City of Stirling
21 Jan 2025
RECEIVED

Photo ID: 2.2 Plot: 2	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking a sharp upslope with the subject site located left of the frame. Predominant slope is still downslope.	
Photo ID: 2.3 Plot: 2	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking upslope with the subject site located on the righthand side of the frame.	
Photo ID: 2.4 Plot: 2	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking a sharp upslope with the subject site located behind the photographer. Predominant slope is still downslope.	
Photo ID: 2.5 Plot: 2	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking a sharp upslope with the subject site located behind the photographer. Predominant slope is still downslope.	

City of Stirling
21 Jan 2025
RECEIVED

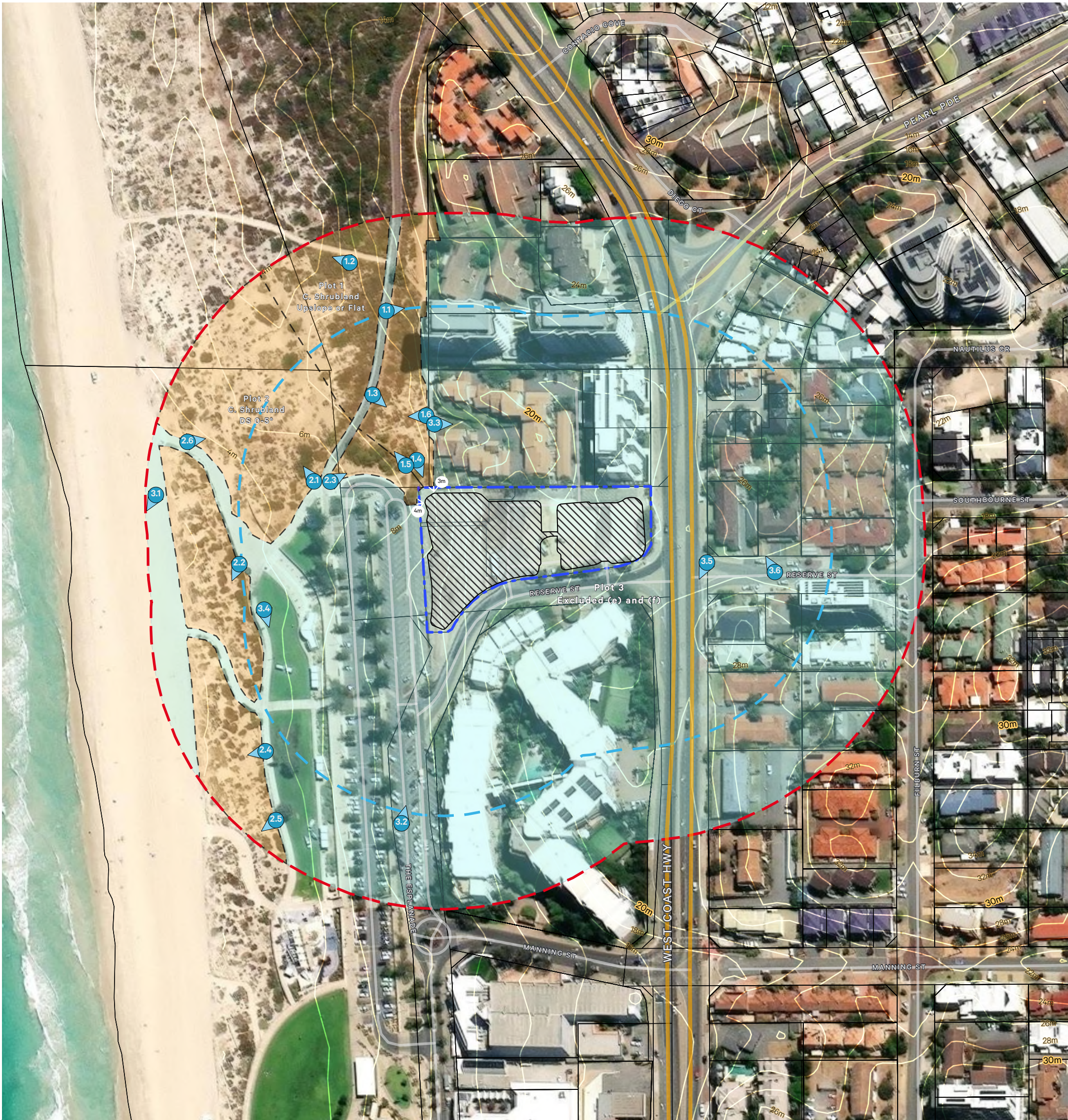
Photo ID: 2.6 Plot: 2	
Vegetation Classification or Exclusion Clause	
Class C Shrubland - Low shrubland C-12	
Description / Justification for Classification	
Shrubs <2m in height; greater than 30% foliage cover located on a dune reserve. Understorey is comprised of a dense mix of low grasses and shrubs no taller than 1m. Photo taken looking upslope with the subject site located on the righthand side of the frame.	
Photo ID: 3.1 Plot: 3	
Vegetation Classification or Exclusion Clause	
Excludable - 2.2.3.2(e) Non Vegetated Areas	
Description / Justification for Classification	
Non vegetated beach with loose sand. Will be in a low threat state in perpetuity as loose sand will unlikely support further expansion of vegetation from the adjoining plots.	
This area has been excluded in accordance with Clause 2.2.3.2 (e) of AS3959-2018.	
Photo ID: 3.2 Plot: 3	
Vegetation Classification or Exclusion Clause	
Excludable - 2.2.3.2(e) Non Vegetated Areas	
Description / Justification for Classification	
Non-vegetated parking lot with managed garden beds which are managed in a low-threat state through regular pruning and watering.	
This has been excluded in accordance with Clause 2.2.3.2 (e) and (f) of AS3959-2018.	
Photo ID: 3.3 Plot: 3	
Vegetation Classification or Exclusion Clause	
Excludable - 2.2.3.2(e) Non Vegetated Areas	
Description / Justification for Classification	
Existing multiple and grouped dwelling development present adjacent to the dune reserve which contained developed, non-vegetated areas as well as managed vegetation.	
This has been excluded in accordance with Clause 2.2.3.2 (e) and (f) of AS3959-2018.	

City of Stirling
21 Jan 2025
RECEIVED

Photo ID: 3.4	Plot: 3	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(f) Low Threat Vegetation		
Description / Justification for Classification		
Foreshore parklands that are managed in a low-threat state through maintaining grass heights less than 50mm with regular watering evident through the colour of grass.		
This area has been excluded in accordance with Clause 2.2.3.2 (f) of AS3959-2018.		
Photo ID: 3.5	Plot: 3	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(e) Non Vegetated Areas		
Description / Justification for Classification		
West Coast Highway, a four-lane road separated by an unvegetated median strip.		
This area has been excluded in accordance with Clause 2.2.3.2 (f) of AS3959-2018.		
Photo ID: 3.6	Plot: 3	
Vegetation Classification or Exclusion Clause		
Excludable - 2.2.3.2(e) Non Vegetated Areas		
Description / Justification for Classification		
Existing multiple, grouped and single dwelling development present across West Coast Highway which contained developed, non-vegetated areas as well as managed vegetation.		
This has been excluded in accordance with Clause 2.2.3.2 (e) and (f) of AS3959-2018.		



City of Stirling
21 Jan 2025
RECEIVED



- Legend**
- Subject Site
 - Proposed Buildings
 - Vegetation Extents
 - Cadastre
 - Photo Point
 - Contours (2m)
- AS 3959 Classifications**
- Class C Shrubland
 - Excluded - Clause 2.2.3.2 (e) & (f)

City of Stirling
21 Jan 2025
RECEIVED

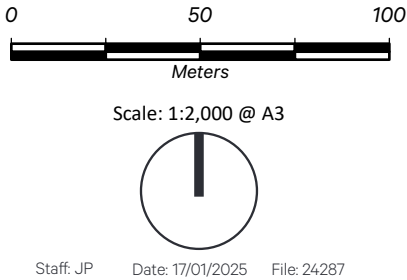


Figure 1: Bushfire Attack Level (BAL) Assessment

Proposed Multiple Dwellings

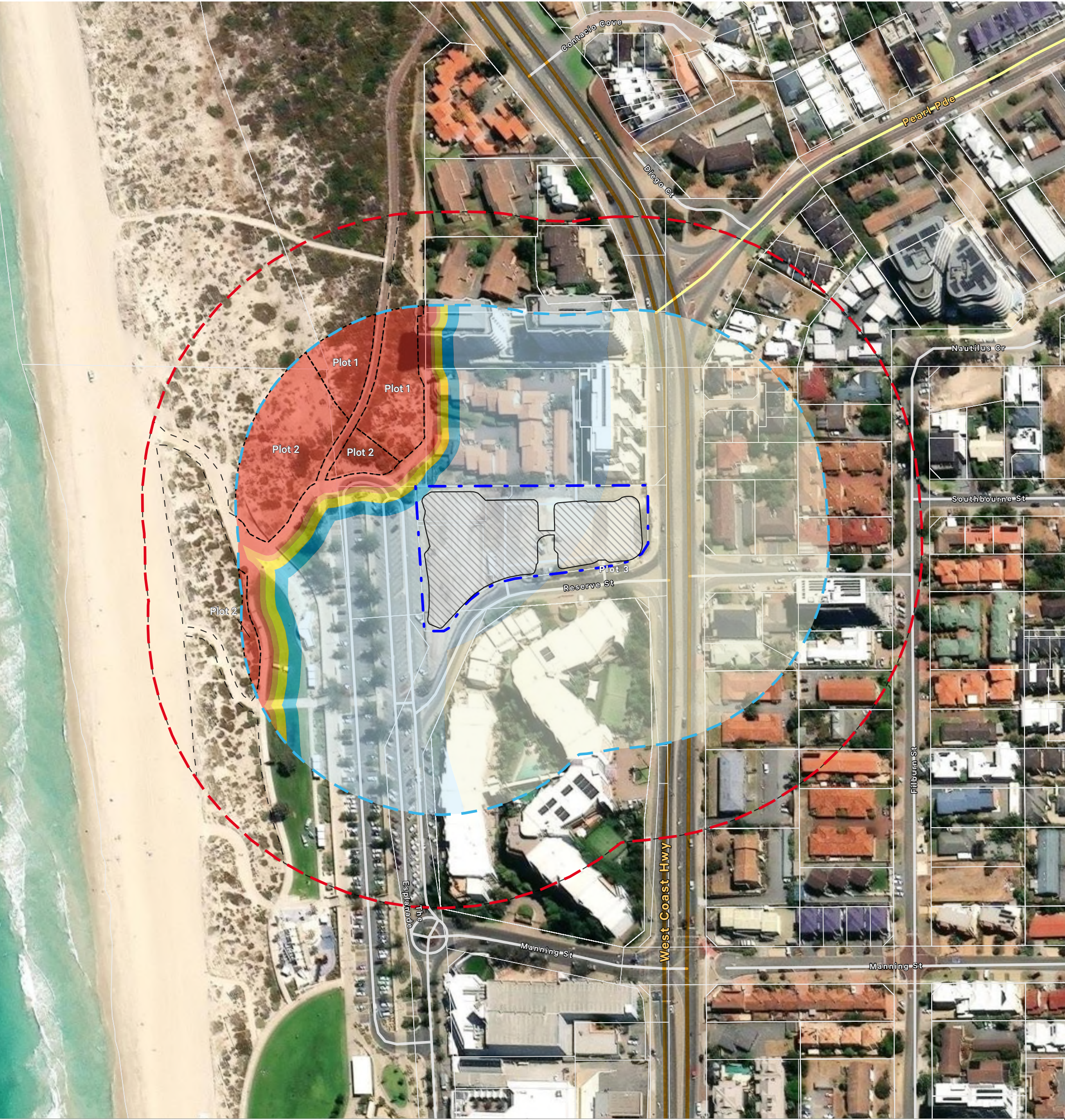
Lot 500 Reserve Street, Scarborough

Assessment Date: 17/1/2025
Accreditation Details: BPAD 62598 (Level 1)

element.

© Element Advisory WA Pty Ltd. This concept has been prepared for the purposes of meeting client specifications. The drawing does not constitute an invitation, agreement or contract (or part thereof) of any kind whatsoever. Although care has been taken in the compilation of this drawing by Element Advisory WA Pty Ltd, all parties associated with the proposed development disclaim all responsibility for any errors or omissions. The right is reserved to change the plan at any time. Liability is expressly disclaimed by Element Advisory WA Pty Ltd for any loss or damage which may be sustained by any person acting on any visual impression gained from this drawing.

Level 18, 191 St Georges Terrace, Perth Western Australia 6000
PO Box 7375 Cloisters Square, Perth Western Australia 6850
T. +61 8 9289 8300 | E. hello@elementwa.com.au
elementwa.com.au



Legend

- Subject Site
- Assessment Area (100m)
- Assessment Buffer (150m)
- Building Footprints
- Plot Outlines

BAL Contours

- BAL-FZ
- BAL-40
- BAL-29
- BAL-19
- BAL-12.5
- BAL-LOW

Excluded - Clause 2.2.3.2 (e) & (f)

0 50 100

Meters

Scale: 1:2,000 @ A3

Staff: JP Date: 17/01/2025 File: 24287

Figure 2 - Alternative Option

Proposed Multiple Dwellings

Lot 500 Reserve Street, Scarborough

Assessment Date: 17/1/2025

Accreditation Details: BPAD 62598 (Level 1)

City of Stirling
21 Jan 2025
RECEIVED

element.

Site Inspection

A site assessment was undertaken on the 17th of January 2025 by an accredited Level 1 BPAD Practitioner (Cale Otter).

Relevant Fire Danger Index

The fire danger index for this site has been determined in accordance with Table 2.1 of AS3959.

Fire Danger Index			
FDI 40 ☐	FDI 50 ☐	FDI 80 ☒	FDI 100 ☐
Table 2.7	Table 2.6	Table 2.5	Table 2.4

Potential Bushfire Impacts

The potential bushfire impact to the proposed development from each of the identified vegetation plots in accordance with Figure 1 are identified below.

Plot	Vegetation Classification	Effective Slope	Separation Distance	BAL
1	C. Shrubland	All upslopes and flat land (0 degrees)	3m	BAL – FZ
2	C. Shrubland	Downslope >0 to 5 degrees	4m	BAL – FZ

Table 1 – BAL Analysis to Dwelling

Determined Bushfire Attack Level (BAL) as of Assessment

The Determined Bushfire Attack Level (highest BAL) for the proposed building has been determined in accordance with Clause 2.2.6 of AS3959 using the above analysis.

Determined Bushfire Attack Level	BAL – FZ
----------------------------------	----------

City of Stirling
21 Jan 2025
RECEIVED

THE DUNES-T1
LOT 600 RESERVE STREET SCARBOROUGH

COMPILED BY
HILLMAN ARCHITECTS

SCALE
1:500 (A1)

PROJECT No.
2006

SITE LOCATION PLAN

DATE
A01-005

RECEIVED
City of Stirling
21 Jan 2025

Appendix 2: Bushfire Attack Level Explained

A Bushfire Attack Level (BAL) Assessment is a means of measuring the severity of a building's potential exposure to ember attack, radiant heat and direct flame contact, using increments of radiant heat expressed in kilowatts per metre squared, and the basis for establishing the requirements for construction to improve protection of building elements from attack by bushfire.

The methodology used to determine the Bushfire Attack Level and the subsequent building construction standards are sourced from *AS3959-2018 Construction of buildings in bushfire prone areas*. The Bushfire Attack Level is determined through the following steps:

1. Determine the relevant Fire Danger Index (FDI) rating. FDI 80 is assigned within WA;
2. Determine the classified vegetation within 100 metres of the subject building;
3. Determine the separation distance between the building and the classified vegetation source/s;
4. Determine the slope of the land under the classified vegetation; and
5. Determine the BAL from the appropriate table of AS3959-2018.

AS 3959-2018 has six levels of BAL ratings based on the radiant heat flux exposure to buildings as outlined below. AS 3959 details the building construction standards relevant to each BAL; the relevant sections of AS 3959 are provided below.

Bushfire Attack Level (BAL)	Heat flux exposure thresholds	Description of predicted bushfire attack and levels of exposure	Section of AS3959-2018
BAL-LOW	See clause 2.2.3.2	There is insufficient risk to warrant specific construction requirements	4
BAL-12.5	$\leq 12.5\text{kW/m}^2$	Ember attack	3 & 5
BAL-19	$> 12.5\text{kW/m}^2$ to $\leq 19\text{kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 & 6
BAL-29	$> 19\text{kW/m}^2$ to $\leq 29\text{kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux	3 & 7
BAL-40	$> 29\text{kW/m}^2$ to $\leq 40\text{kW/m}^2$	Increasing levels of ember attack and burning debris ignited by windborne embers together with increasing heat flux with increased likelihood of exposure to flames	3 & 8
BAL-FZ	$> 40\text{kW/m}^2$	Direct exposure to flames from fire front in addition to heat flux and ember attack	3 & 9

City of Stirling
21 Jan 2025
RECEIVED



Rene Hutter – Bushfire Assessor Level 2 (BPAD 38247)

Xero Fire & Risk

PO Box 340

Quinns Rock

WA 6030

Daniel Visser
Edge Visionary Living

17 January 2025

Re: Lot 500 Reserve Street, Scarborough – Bushfire Covering Letter

Dear Daniel

The subject site was assessed on 5 November 2021 and 17 January 2025. The Bushfire Attack Level (BAL) assessments both determined BAL-FZ. This is due to the Class C shrubland to the north western side of the building. The remainder of the site is deemed to be BAL-12.5.

As a result of the redevelopment, the plot located to the north western side of the building, referred to as Plot 4 in the Xero Fire BAL assessment and Plot 1 and 2 in the Element BAL assessment is to be excluded in accordance with AS 3959 Clause 2.2.3.2 (e) and (f), to provide non-vegetated areas and vegetation regarded as low threat.

In support, the revegetation planting plan provides a planting mix of ground covers, small shrubs and grasses which are considered to meet the intent of AS 3959 Clause 2.2.3.2 (f).

Therefore, in our considered opinion, the subject site is deemed to be BAL-12.5. Further reference is to be provided to the following:

- + Xero Fire BAL assessment dated 12 November 2021 and revised Contour Map.
- + Element BAL assessment dated 17 January 2025 and revised Contour Map.
- + Revegetation Planting Plans by Realm Studios.

Sincerely yours,

René Hutter | BSc (Fire) | MIEAust | NER | CPEng | BPAD |
Director
Xero Fire & Risk
E rene@xerofire.com.au
M +61 478 007 230

City of Stirling
21 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED

PEDESTRIAN WIND ENVIRONMENT STATEMENT
LOT 500, RESERVE STREET, SCARBOROUGH

WF825-01F02(REV0)- WS REPORT

NOVEMBER 20, 2020

Prepared for:

Edge Visionary Living

Unit 2, 23 Hood Street Subiaco WA, 6008

WINDTECH Consultants Pty Ltd

Head Office: 607 Forest Road, Bexley, NSW 2207, Australia

P +61 2 9503 0300 **E** reception@windtechglobal.com **W** www.windtechconsult.com

Sydney | Dubai | London | Melbourne | Mumbai | New York | Hong Kong | Singapore

DOCUMENT CONTROL

Date	Revision History	Issued Revision	Prepared By (initials)	Instructed By (initials)	Reviewed & Authorised by (initials)
November 20, 2020	Initial.	0	TH	SWR	TH/TR

The work presented in this document was carried out in accordance with the Windtech Consultants Quality Assurance System, which is based on International Standard ISO 9001.

This document is issued subject to review and authorisation by the Team Leader noted by the initials printed in the last column above. If no initials appear, this document shall be considered as preliminary or draft only and no reliance shall be placed upon it other than for information to be verified later.

This document is prepared for our Client's particular requirements which are based on a specific brief with limitations as agreed to with the Client. It is not intended for and should not be relied upon by a third party and no responsibility is undertaken to any third party without prior consent provided by Windtech Consultants. The information herein should not be reproduced, presented or reviewed except in full. Prior to passing on to a third party, the Client is to fully inform the third party of the specific brief and limitations associated with the commission.

City of Stirling
17 Jan 2025
RECEIVED

EXECUTIVE SUMMARY

This report presents an opinion on the likely impact of the proposed development known as Lot 500, located on Reserve Street, Scarborough, on the local wind environment at the critical outdoor areas within and around the subject development. The effect of wind activity is examined for the three predominant wind directions for the Perth region; namely the easterly, south-westerly, and westerly winds. The analysis of the wind effects relating to the proposed development was carried out in the context of the local wind climate, building morphology and land topography.

The conclusions of this report are drawn from our extensive experience in this field and are based on an examination of the latest architectural drawings. No wind tunnel testing was undertaken for the subject development, and hence this report addresses only the general wind effects and any localised effects that are identifiable by visual inspection. Any recommendations in this report are made only in-principle and are based on our extensive experience in the study of wind environment effects.

The results of this assessment indicate that the development site benefits from the shielding provided by the subject and neighbouring buildings to immediate direct wind effects within outdoor trafficable areas located downstream of the buildings. However, there are some outdoor trafficable areas that may be susceptible to wind effects that can potentially impact the local wind comfort and amenity, due to the interaction of the prevailing winds with the building morphology. It is expected that the wind effects identified in the report can be ameliorated and the local wind conditions enhanced with the consideration of the following treatment strategies into the design of the development:

Lower Ground to Ground Level Outdoor Areas

- The inclusion of densely foliating vegetation such as trees or shrubs/hedge planting within the proposed landscape planter areas within and around the subject development site as indicated in the architectural drawings; in particular within the tiered “The Corner” landscape planter area and around the corner areas of the Stages 01 and 02 Buildings.
- Outdoor seating areas are recommended to be located adjacent to the landscape planter areas; populated with densely foliating vegetation, to benefit from the wind mitigation provided by the vegetation. The inclusion of high-back seating in these areas would also be effective in wind mitigation and enhancing the local wind conditions.
- For outdoor seating areas along the Esplanade that are proposed to be located over 2m away from the landscape planter areas, the wind mitigation provided by the densely foliating vegetation is expected to be a minimal impact due to its large proximity to the seating areas. Localised wind mitigation features such as mobile screening/barrier or planter boxes populated with densely foliating vegetation are recommended to be

included around the outdoor seating area; with their most effective location along the eastern and western boundary of the seating areas.

- Areas intended for short duration stationary activities such as outdoor seating are recommended to be restricted/situated away from the corners of the proposed towers as these areas highly susceptibility to adverse wind conditions such as accelerating flows around the building; in particular the outdoor areas exposed to the prevailing easterly winds which are the strongest for the region.
- The inclusion of impermeable balustrades along the exposed perimeter edge of the public lookout.
- The inclusion of localised wind mitigation features such as screening or densely foliating vegetation within the public lookout area; in particular around areas intended for short duration stationary activities such as outdoor seating etc.

Level 2 Communal Outdoor Areas

- The inclusion of impermeable balustrades along the exposed perimeter edge of the communal outdoor areas.
- The strategic inclusion of densely foliating trees within the proposed landscape areas of the pool deck and fire pit. This is indicated in Figure 3.
- The inclusion of full-height porous screens to the soffit of the proposed Pavilion 2 canopy structure. This is indicated in Figure 3.
- The inclusion of impermeable screens at least 1.2m high along the eastern perimeter edge of the proposed pool deck. This is indicated in Figure 3.
- The inclusion of localised wind mitigation features such as screening or densely foliating vegetation within the various communal outdoor areas; in particular around areas intended for short duration stationary activities such as outdoor seating etc.
- Areas intended for short duration stationary activities such as outdoor seating are recommended to be restricted/situated away from the corners of the proposed towers as these areas highly susceptibility to adverse wind conditions such as accelerating flows around the building; in particular the outdoor areas exposed to the prevailing easterly winds which are the strongest for the region.

Private Balconies and Terraces

- The inclusion of full-height impermeable privacy/blade walls between the private balconies as indicated in the architectural drawings; in particular those located along the eastern and western aspects of the Stages 01 and 02 Buildings.
- The inclusion of impermeable balustrades along the exposed perimeter edges of the private balconies.



With the consideration of the abovementioned treatment strategies in the final design, it is expected that wind conditions for the various trafficable outdoor areas within and around the development will be suitable for their intended uses and their applicable criteria as detailed within the report.

Due to the overall massing of the subject development and the complexity of the building form, wind tunnel testing is recommended to be undertaken as part of the detailed design phase. This will provide a quantitative analysis of the wind conditions and determine the requirement for wind mitigation measures; including the optimisation of the size and extent of the treatments required to ensure suitable wind conditions are achieved at all outdoor pedestrian accessible locations within and around the development.

Note the densely foliating vegetation is to be of an evergreen species to ensure their effectiveness in wind mitigation throughout the year and the vegetation should be spaced such that the foliage is able to interlock between plants (where possible). Furthermore, the use of loose glass-tops and light-weight sheets or covers (including loose BBQ lids) is not appropriate on high-rise outdoor balconies or terraces. Lightweight furniture is not recommended unless it is securely attached to the balcony or terrace floor slab.

City of Stirling
17 Jan 2025
RECEIVED

CONTENTS

1	Introduction	1
2	Description of the Development and Surroundings	2
3	Regional Wind	4
4	Wind Effects on People	6
5	Results and Discussion	7
5.1	Lower Ground to Ground Level Areas	7
5.2	Level 2 Communal Outdoor Areas	10
5.3	Private Balconies and Terraces	12
6	References	13
7	Appendix – Wind Effects Glossary	14
7.1	Downwash and Upwash Effects	14
7.2	Funnelling/Venturi Effect	14
7.3	Gap Effect	15
7.4	Sidestream and Corner Effects	15
7.5	Stagnation	15

City of Stirling
17 Jan 2025
RECEIVED

1 INTRODUCTION

An opinion on the likely impact of the proposed design on the local wind environment affecting pedestrians within the critical outdoor areas within and around the subject development is presented in this report. The analysis of wind effects relating to the proposed development was carried out in the context of the predominant wind directions for the region, building morphology of the development and nearby buildings, and local land topography. The conclusions of this report are drawn from our extensive experience in the field of wind engineering and studies of wind environment effects.

No wind tunnel testing was undertaken for this assessment. Hence this report addresses only the general wind effects and any localised effects that are identifiable by visual inspection, and any recommendations in this report are made only in-principle.

City of Stirling
17 Jan 2025
RECEIVED

2 DESCRIPTION OF THE DEVELOPMENT AND SURROUNDINGS

The development site is bounded by the West Coast Highway to the east, Reserve Street to the south, the Esplanade to the west and residential buildings varying up to 7 storeys high abutting the site to the north. Surrounding the site is Scarborough beach to the west, with predominantly low-rise private residential housing/buildings along the remaining boundaries with intermittent medium-rise high residential buildings along the West Coast Highway corridor. A survey of the land topography indicates there is a general rise in elevation towards the east of the site. An aerial image of the subject site and the local surroundings is shown in Figure 1.

The existing site consists of bushland and the Reserve Street Scarborough parking site. The proposed development is comprised of two buildings detailed as follows:

- Stage 01 Building – Comprised of 12 tower levels atop of 4 podium levels on the Scarborough Beach frontage of the site.
- Stage 02 Building – Comprised of 16 tower levels atop of 3 podium levels on the West Coast Highway frontage of the site.

The critical outdoor trafficable areas associated with the proposed development, which are the focus of this assessment with regards to wind effects, are detailed as follows:

- Lower Ground to Ground Level pedestrian footpaths, Pocket Park and Public Lookout outdoor areas.
- The Level 02 Communal Outdoor Areas on the Stage 01 Building.
- Private residential balconies and terraces on the Stage 01 and 02 Buildings.

City of Stirling
17 Jan 2025
RECEIVED

Legend

Line thickness represents the magnitude of the regional wind from that direction

Line length represents the frequency that the regional wind occurs for that direction



Figure 1: Aerial Image of the Site Location

3 REGIONAL WIND

The Perth region is governed by three principal wind directions, and these can potentially affect the subject development. These winds prevail from the east, south-west and west. A summary of the principal time of occurrence of these winds throughout the year is presented in Table 1 below. This summary is based on an analysis of wind rose data obtained by the Bureau of Meteorology from Perth Airport, from 1944 to 2006. From this analysis, directional probabilities of exceedance and directional wind speeds for the Perth region are determined. The directional wind speeds and corresponding directional frequencies of occurrence are presented in Figure 2.

As shown in Figure 2, the easterly winds are the most frequent for the Perth region, and are also the strongest. The south-westerly winds occur most frequently during the warmer months of the year for the Perth region, and hence are usually welcomed within outdoor areas. South-westerly winds are also similar strength to the westerly winds, but not as strong as the easterly events. The south-westerly and westerly winds typically occur during the afternoon periods

Table 1: Principal Time of Occurrence of Winds for the Perth Region

Month	Easterly	South-Westerly	Westerly
January	X	X	
February	X	X	
March	X	X	X
April	X	X	X
May	X		X
June			X
July			X
August		X	X
September	X	X	X
October	X	X	X
November	X	X	X
December	X	X	

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

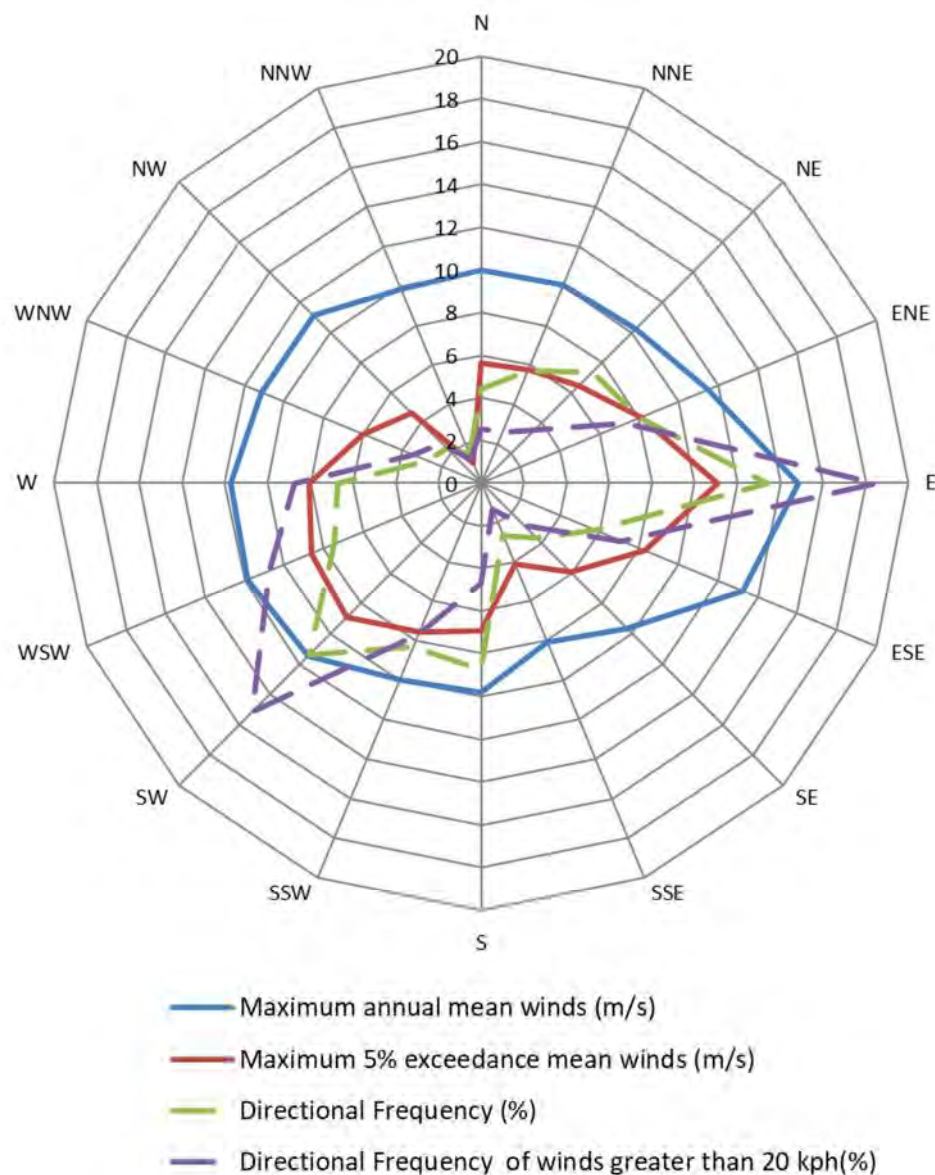


Figure 2: Annual and 5 % Exceedance Hourly Mean Wind Speeds, and Frequencies of Occurrence, for the Perth Region

4 WIND EFFECTS ON PEOPLE

The acceptability of wind in any area is dependent upon its use. For example, people walking or window-shopping will tolerate higher wind speeds than those seated at an outdoor restaurant. Various other researchers, such as A.G. Davenport, T.V. Lawson, W.H. Melbourne, and A.D. Penwarden, have published criteria for pedestrian comfort for pedestrians in outdoor spaces for various types of activities. Some Councils and Local Government Authorities have adopted elements of some of these into their planning control requirements.

For example, A.D. Penwarden (1973) developed a modified version of the Beaufort scale which describes the effects of various wind intensities on people. Table 2 presents the modified Beaufort scale. Note that the effects listed in this table refers to wind conditions occurring frequently over the averaging time (a probability of occurrence exceeding 5%). Higher ranges of wind speeds can be tolerated for rarer events.

Table 2: Summary of Wind Effects on People (A.D. Penwarden, 1973)

Type of Winds	Beaufort Number	Mean Wind Speed (m/s)	Effects
Calm	0	Less than 0.3	Negligible.
Calm, light air	1	0.3 – 1.6	No noticeable wind.
Light breeze	2	1.6 – 3.4	Wind felt on face.
Gentle breeze	3	3.4 – 5.5	Hair is disturbed, clothing flaps, newspapers difficult to read.
Moderate breeze	4	5.5 – 8.0	Raises dust, dry soil and loose paper, hair disarranged.
Fresh breeze	5	8.0 – 10.8	Force of wind felt on body, danger of stumbling
Strong breeze	6	10.8 – 13.9	Umbrellas used with difficulty, hair blown straight, difficult to walk steadily, wind noise on ears unpleasant.
Near gale	7	13.9 – 17.2	Inconvenience felt when walking.
Gale	8	17.2 – 20.8	Generally impedes progress, difficulty balancing in gusts.
Strong gale	9	Greater than 20.8	People blown over.

It should be noted that wind speeds can only be accurately quantified with a wind tunnel study. This assessment addresses only the general wind effects and any localised effects that are identifiable by visual inspection and the acceptability of the conditions for outdoor areas are determined based on their intended use (rather than referencing specific wind speeds). Any recommendations in this report are made only in-principle and are based on our extensive experience in the study of wind environment effects.

5 RESULTS AND DISCUSSION

The expected wind conditions are discussed in the following sub-sections of this report for the various outdoor areas within and around the subject development. The interaction between the wind and the building morphology in the area is considered and important features taken into account including the distances between the surrounding buildings and the proposed building form, as well as the surrounding landform. Note that only the potentially critical wind effects are discussed in this report.

For this assessment, the wind comfort criterion that were considered as part of this assessment were the following:

- Comfortable Walking Criterion (7.5m/s with a 5% probability of exceedance) for general circulation and pedestrian thoroughfares, e.g. footpaths, private balconies/terraces, through-site links etc.
- Short Exposure Criterion (5.5m/s with a 5% probability of exceedance) for stationary activities generally less than an hour, e.g. waiting areas, communal terraces, main entries, café seating etc.
- Long Exposure Criterion (3.5m/s with a 5% probability of exceedance) for stationary activities longer than an hour, e.g. outdoor cinemas, outdoor fine dining etc.

5.1 Lower Ground to Ground Level Areas

The podium build-form of the Stage 01 and 02 buildings, and the neighbouring medium-rise building to the north and south of the site can provide shielding to ground level direct wind effects; from the prevailing wind directions, to outdoor trafficable areas that are located downstream of the podium. Down-wash wind effects off the building façade are expected to be minimal on the outdoor trafficable areas due to tower setback from the podium edge. However, the development site is surrounded by open car-parking of Scarborough Beach and low-rise residential buildings to the east that will provide minimal shielding to the prevailing westerly to south-westerly, and easterly winds respectively. Furthermore, the interaction of the prevailing winds with the subject and neighbouring buildings may generate wind effects that can potentially impact the wind comfort and amenity within the outdoor trafficable areas that do not benefit from the immediate shielding provided by these buildings. This is summarised as follows:

- The Esplanade – The pedestrian footpath along the Esplanade is exposed to the direct wind effects from the prevailing south-westerly to westerly directions as it travels over the open terrain of Scarborough Beach. The outdoor trafficable areas around the northern corner of the Stage 01 building are also susceptible to accelerating flows around the Stage 01 building. The wind conditions at the southern corner intersection between the Esplanade and Reserve Street are expected to be similar to the existing

wind conditions due to the large separation distance of subject buildings to the pedestrian footpath.

- Pocket Park – The proposed Pocket Park located at the southern corner of the Stage 01 Building is exposed to direct wind effects from the prevailing south-westerly to westerly directions as it travels over the open terrain of Scarborough Beach and easterly winds as it travels along Reserve Street and side-streams along the podium façade. The Pocket park is also susceptible to the prevailing winds accelerating around the southern corner of the Stage 01 Building.
- Reserve Street – Due to the east to west/south-west alignment of Reserve Street, the pedestrian footpath along the street frontage is exposed to the prevailing winds travelling along the street; particularly from the south-westerly direction due to the rise in elevation that may induce the accelerated flow effects up the street. The corner intersection between Reserve Street and West Coast Highway is susceptible to accelerating flows around the southern corner of the Stage 02 building.
- West Coast Highway – The pedestrian footpath along the West Coast Highway frontage of the site is potentially exposed to direct wind effects from the prevailing easterly direction as it travels over the low-rise buildings to the east of the site, over the multi-lane highway and reattaching onto the pedestrian footpath.
- North-South Vehicular Lane between the Stage 01 and 02 Buildings – The pedestrian footpath along the proposed vehicular lane is well shielded by the Stage 01 and 02 Buildings, however it is susceptible to accelerating flows around the corners of the buildings.
- East-West Vehicular Lane along the northern boundary of the site – The pedestrian footpath along the proposed vehicular lane is exposed to the direct wind effects from the prevailing easterly and westerly directions travelling over West Coast Highway and Scarborough Beach respectively. Due to the Stage 02 Building's close proximity with the neighbouring medium-rise building to the north, the prevailing easterly winds may be accelerated along the vehicular lane due to a potential funnelling wind effect between the buildings.

It is expected the following treatment strategies to be effective in mitigating the abovementioned potential wind effects and enhance the local wind conditions along the various ground level pedestrian footpaths within and around the site, hence they are recommended to be considered in the design of the development:

- The inclusion of densely foliating vegetation such as trees or shrubs/hedge planting within the proposed landscape planter areas within and around the subject development site as indicated in the architectural drawings; in particular within the tiered "The Corner" landscape planter area and around the corner areas of the Stages 01 and 02 Buildings.

- Outdoor seating areas are recommended to be located adjacent to the landscape planter areas; populated with densely foliating vegetation, to benefit from the wind mitigation provided by the vegetation. The inclusion of high-back seating in these areas would also be effective in wind mitigation and enhancing the local wind conditions.
- For outdoor seating areas along the Esplanade that are proposed to be located over 2m away from the landscape planter areas, the wind mitigation provided by the densely foliating vegetation is expected to be a minimal impact due to its large proximity to the seating areas. Localised wind mitigation features such as mobile screening/barrier or planter boxes populated with densely foliating vegetation are recommended to be included around the outdoor seating area; with their most effective location along the eastern and western boundary of the seating areas.
- Areas intended for short duration stationary activities such as outdoor seating are recommended to be restricted/situated away from the corners of the proposed towers as these areas highly susceptibility to adverse wind conditions such as accelerating flows around the building; in particular the outdoor areas exposed to the prevailing easterly winds which are the strongest for the region.
- The inclusion of impermeable balustrades along the exposed perimeter edge of the public lookout.
- The inclusion of localised wind mitigation features such as screening or densely foliating vegetation within the public lookout area; in particular around areas intended for short duration stationary activities such as outdoor seating etc.

Note the densely foliating vegetation is to be of an evergreen species to ensure their effectiveness in wind mitigation throughout the year and the vegetation should be spaced such that the foliage is able to interlock between plants (where possible).

Due to the overall massing of the subject development and the complexity of the building form, wind tunnel testing is recommended to be undertaken as part of the detailed design phase. This will provide a quantitative analysis of the wind conditions and determine the requirement for wind mitigation measures; including the optimisation of the size and extent of the treatments required to ensure suitable wind conditions are achieved at all outdoor pedestrian accessible locations within and around the development.

5.2 Level 2 Communal Outdoor Areas

The proposed tower build-form of the Stages 01 and 02 buildings can provide shielding to direct wind effects within the communal outdoor areas located down-stream of the towers. Down-wash wind effects are expected to be minimal due to the aforementioned shielding provided by the Stage 02 tower to the prevailing easterly winds, the westerly winds down-washing off the western tower façade of the Stage 01 tower will be redirected onto the non-trafficable areas of the podium, and the relatively narrow projection and design of the Stage 01 tower to the prevailing south-westerly winds that are likely to side-stream along the tower façade than down-wash onto the communal outdoor space below. However due to the large extent of the communal space, there are outdoor areas that do not benefit from the shielding afforded by the towers and are exposed to a number of potential adverse wind effects summarised as follows:

- Direct wind effects as the prevailing winds travels over Scarborough Beach to the west of the site, and over surrounding low-rise buildings to the east of the site that is expected to provide minimal shielding at this elevated position.
- Corner wind effects as the prevailing winds accelerate around the corners of the towers; in particular around the eastern corner of the Stage 01 tower and western corner of the Stage 02 tower.
- Funnelling wind effects within the communal outdoor areas along the western boundary between the Stage 01 tower and the proposed pavilion.

It is expected the following treatment strategies to be effective in mitigating the abovementioned potential wind effects and enhance the local wind conditions on the podium rooftop, hence they are recommended to be considered in the design of the development:

- The inclusion of impermeable balustrades along the exposed perimeter edge of the communal outdoor areas.
- The strategic inclusion of densely foliating trees within the proposed landscape areas of the pool deck and fire pit. This is indicated in Figure 3.
- The inclusion of full-height porous screens to the soffit of the proposed Pavilion 2 canopy structure. This is indicated in Figure 3.
- The inclusion of impermeable screens at least 1.2m high along the eastern perimeter edge of the proposed pool deck. This is indicated in Figure 3.
- The inclusion of localised wind mitigation features such as screening or densely foliating vegetation within the various communal outdoor areas; in particular around areas intended for short duration stationary activities such as outdoor seating etc.
- Areas intended for short duration stationary activities such as outdoor seating are recommended to be restricted/situated away from the corners of the proposed towers as these areas highly susceptibility to adverse wind conditions such as accelerating

flows around the building; in particular the outdoor areas exposed to the prevailing easterly winds which are the strongest for the region.

Note the densely foliating vegetation is to be of an evergreen species to ensure their effectiveness in wind mitigation throughout the year and the vegetation should be spaced such that the foliage is able to interlock between plants (where possible).

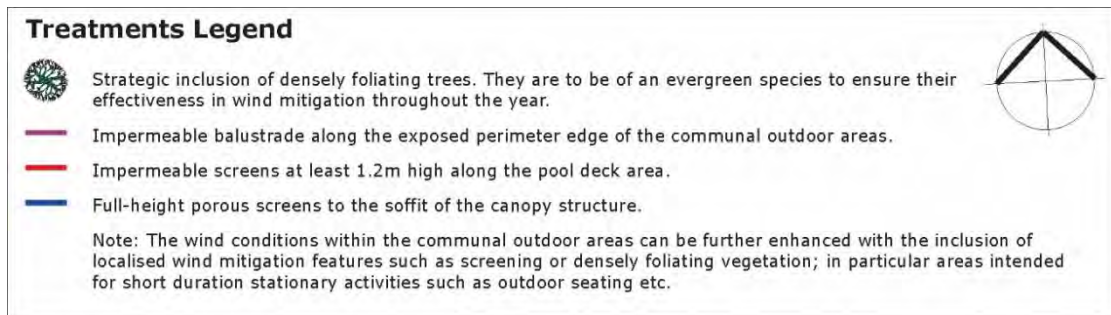


Figure 3: In-Principle Treatment Strategies for the Level 2 Communal Outdoor Areas

5.3 Private Balconies and Terraces

The wind conditions within the single aspect private balconies and terraces are expected to be suitable for their intended uses with the inclusion of the proposed balustrades and full-height privacy/blade walls along the exposed perimeter edges that are effective limiting the ability for the prevailing winds to side-stream across the tower facade and creating stagnation zones. Furthermore, the inclusion of densely foliating vegetation along the exposed perimeter edges of the private balconies and terraces are expected to be effective in further enhancing the local wind conditions within these areas; particularly if they are located along the western and eastern perimeter edges.

The double aspect wrap-around corner private balconies on both the Stage 01 and 02 towers however are exposed to adverse wind effects such as accelerating flows around the corners of the towers, side-stream wind effects along the tower façade, and direct wind effects due to the lack of shielding provided by the surrounding buildings at these elevated positions.

It is expected the following treatment strategies to be effective in mitigating the abovementioned potential wind effects and enhance the local wind conditions on the podium rooftop, hence they are recommended to be considered in the design of the development:

- The inclusion of full-height impermeable privacy/blade walls between the private balconies as indicated in the architectural drawings; in particular those located along the eastern and western aspects of the Stages 01 and 02 Buildings.
- The inclusion of impermeable balustrades along the exposed perimeter edges of the private balconies.

As a general note, the use of loose glass-tops and light-weight sheets or covers (including loose BBQ lids) is not appropriate on high-rise outdoor balconies or terraces. Lightweight furniture is not recommended unless it is securely attached to the balcony or terrace floor slab.

City of Stirling
17 Jan 2025
RECEIVED

Davenport, A.G., 1972, "An approach to human comfort criteria for environmental conditions". Colloquium on Building Climatology, Stockholm.

Lawson, T.V., 1973, "The wind environment of buildings: a logical approach to the establishment of criteria". Bristol University, Department of Aeronautical Engineering.

Lawson, T.V., 1975, "The determination of the wind environment of a building complex before construction". Bristol University, Department of Aeronautical Engineering.

Lawson, T.V., 1980, "Wind Effects on Buildings - Volume 1, Design Applications". Applied Science Publishers Ltd, Ripple Road, Barking, Essex, England.

Melbourne, W.H., 1978, "Criteria for Environmental Wind Conditions". *Journal of Wind Engineering and Industrial Aerodynamics*, vol. 3, pp241-249.

Penwarden, A.D. (1973). "Acceptable Wind Speeds in Towns", *Building Science*, vol. 8: pp259–267.

Penwarden, A.D., Wise A.F.E., 1975, "Wind Environment Around Buildings". Building Research Establishment Report, London.

City of Stirling
17 Jan 2025
RECEIVED

7 APPENDIX – WIND EFFECTS GLOSSARY

7.1 Downwash and Upwash Effects

The downwash wind effect occurs when wind is deflected down the building's windward facade causing accelerated wind speeds at pedestrian level. This can lead to other adverse effects as corner acceleration as the wind attempts to flow around the building, as seen in Figure A1. This can also lead to recirculating flow in the presence of a shorter upstream building, causing the local ground level wind flow to move towards the prevailing wind.

The upwash effect occurs near upper level edge of a building form as the wind flows over the top of the building. This has the potential to cause acceleration of winds near the leading edge, as well as potentially reattaching onto the roof area. This effect causes wind issues particularly near the leading edges of tall building and on the rooftop areas if there is sufficient depth along the wind direction. Upwash is more apparent in taller towers and podia.

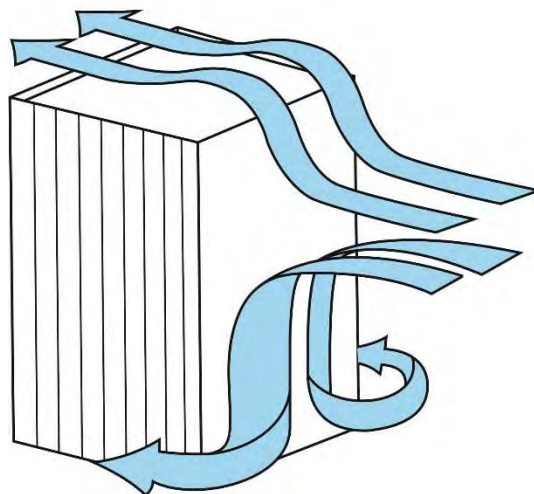


Figure A1: Downwash Leading to Corner Wind Effect, and Upwash Effects

7.2 Funnelling / Venturi Effect

Funnelling effects occur when the wind interacts with two or more buildings which are located adjacent to each other and the building form design results in a bottleneck, as shown in Figure A2. This can cause the wind to be forced through the gap between the buildings resulting in adverse wind conditions and pedestrian discomfort within the constricted space. Funnelling effects are common along pedestrian links and thoroughfares generally located between neighbouring buildings that have moderate gaps between them.

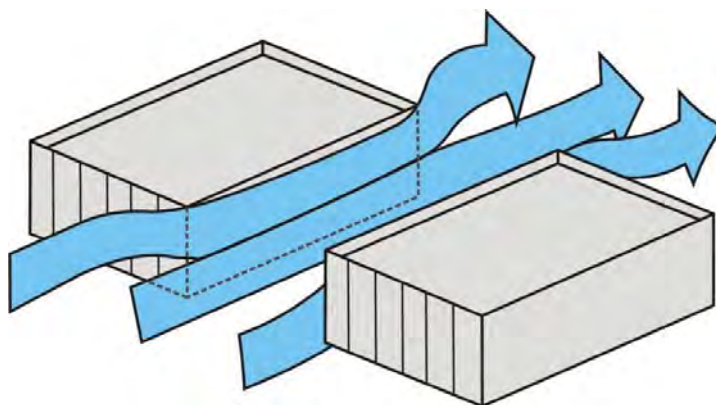


Figure A2: Funnelling / Venturi Wind Effect

7.3 Gap Effect

The gap effect occurs in small openings in the façade that are open to wind on opposite faces, as seen in Figure A3. This can involve a combination of funnelling and downwash effects. Presenting a small gap in the façade on the windward aspect as the easiest means through which the wind can flow through can result in wind acceleration through this gap. The pressure difference between the windward façade and the leeward façade also tends to exacerbate the wind flow through this gap.

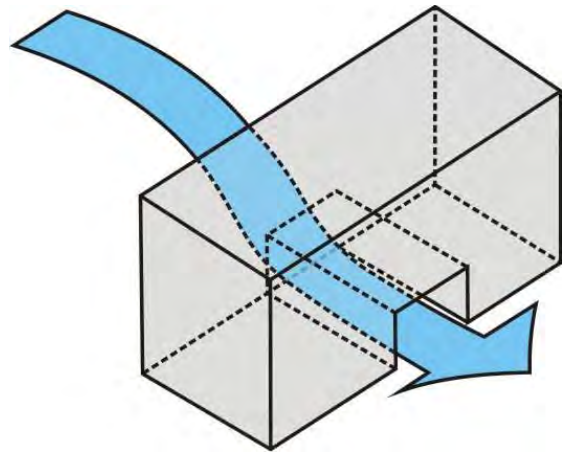


Figure A3: Gap Wind Effect

7.4 Sidestream and Corner Effects

The sidestream effect is due to a gradual accumulation of winds shearing along the building façade that eventuates in an acceleration corner effect. The flow is parallel to the façade and can be exacerbated by downwash effects as well, or due to corner effect winds reattaching on the façade. This is shown in Figure A4

The corner refers to the acceleration of wind at the exterior vertical edge of a building, caused by the interaction of a large building massing with the incident wind, with the flow at the corner being accelerated due to high pressure differentials sets up between the windward façade and the orthogonal aspects. It can be further exacerbated by downwash effects that build up as the flow shears down the façade.

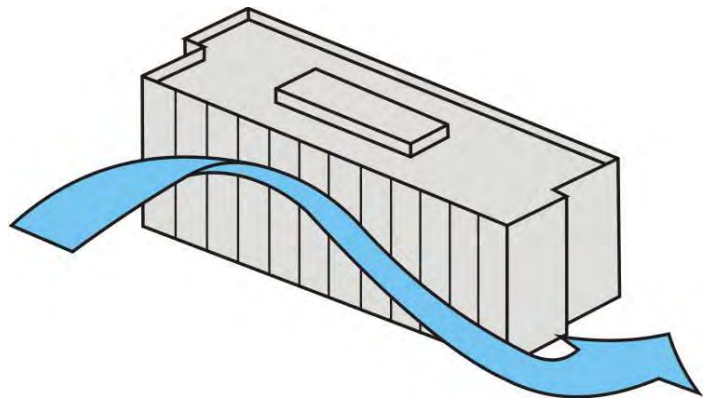


Figure A4: Sidestream and Corner Wind Effect

7.5 Stagnation

Stagnation in a region refers to an area where the wind velocity is significantly reduced due to the effect of the flow being impeded by the bluff body. For a particular prevailing wind direction, this is typically located near the middle of the windward face of the building form or over a short distance in front of the windward face of a screen or fence. Concave building shapes tend to create an area of stagnation within the cavity, and wind speeds are generally low in these areas.

CUNDALL

City of Stirling
17 Jan 2025
RECEIVED

The Dunes

Sustainable Design Assessment Report

Edge Visionary Living

Job No: 1028489
Doc Ref: 1028489-RPT-SY-001
Revision: C
Revision Date: 18 December 2024

Project title	The Dunes	Job Number
Report title	Sustainable Design Assessment Report	1028489

Document Revision History

Revision Ref	Issue Date	Purpose of issue / description of revision
—	11 March 2021	Issued for Development Approval
A	12 March 2021	Issued for Development Approval – Updated Renders
B	12 July 2021	Issued for Development Approval – Updated Renders
C	18 December 2024	Issued for Building Permit (Working Drawings Stage)

Document Validation (latest issue)

18/12/2024	18/12/2024	18/12/2024
		
X	X	X
Principal author	Checked by	Verified by
Signed by: Patrick Armstrong	Signed by: Curtis Gubb	Signed by: Ankita Gurav

City of Stirling
17 Jan 2025
RECEIVED

Executive summary

This report outlines the Ecological Sustainable Design (ESD) strategy for the proposed 'The Dunes' development at Lot 500 Reserve street, Scarborough, WA. The new 17-storey and 19-storey buildings comprise of four (4) commercial tenancy spaces and 222 apartments as well as related amenities.

The development location is part of the City of Stirling, and also lies within the Metropolitan Redevelopment Authority's (MRA) Scarborough Redevelopment Area, specifically in the northern gateway precinct. A key part of this redevelopment is integrating sustainable strategies and design into master planning and all new buildings.

The Development Policy 1: Green Building of the Scarborough Redevelopment Area, requires the proposed development to provide a Sustainable Design Assessment Report (SDAR). The report must be prepared by a suitably qualified professional to demonstrate that the proposed development has been designed to achieve ESD outcomes which are equivalent to a minimum 4-Star Green Star rated building. However, this development seeks to improve upon this and obtain a 5-star Green Star rating certified.

In addition, the MRA Scarborough Design Guidelines requires the development to achieve specific energy and water efficiency targets.

Table 1 below confirms that the proposed Dunes development responds to these requirements and outlines which sections of this report are relevant for each requirement.

Table 1 Scarborough Redevelopment Area ESD requirements

Development must demonstrate that:	Requirement will be met	Comments
Development Policy 1 Green Building: Sustainable Design Assessment Report to demonstrate the proposed development has been designed to achieve ESD outcomes which are equivalent to a minimum 4-star Green Star rated building.		The proposed development has been designed to exceed these requirements and deliver a 5-star Green Star certified building. Please refer to Section 9.3.
Scarborough Design Guidelines Chapter 4 Built Form Section 11 Environmental Sustainability: Energy Efficiency - All developments are to optimise the application of passive solar design including building orientation, shading, natural lighting and cross-flow ventilation. - The utilisation of natural light through the provision of windows, openings and skylights, which must be designed and oriented to minimise heat gain in summer months. - A minimum of 70% of all lighting throughout the building must be high-efficiency lighting (>70 lumens/watt).		The proposed development has been designed to achieve these requirements. Please refer to Section 2.2.
Scarborough Design Guidelines Chapter 4 Built Form Section 11 Environmental Sustainability: Water Efficiency - All fittings and appliances have a minimum star rating of 4 Stars in accordance with the Australian Government's Water Efficiency Labelling and Standards (WELS) scheme. - Install at least 5 Star rated dual flush toilets, 6 Star rated urinals or waterless urinals in accordance with the WELS scheme. - Rainwater retention is encouraged.		The proposed development has been designed to achieve these requirements. Please refer to Section 3.

Contents

1.0	Introduction	1	7.3	Light pollution	17
1.1	Project description	1	8.0	Construction	18
1.2	Sustainability requirements	2	8.1	Environmental management plan (EMP)	18
1.3	Policy details	2	8.2	Environmental management system (EMS)	18
1.4	Sustainability targets	4	8.3	Construction waste	18
2.0	Operational and embodied carbon	5	8.4	Building commissioning and tuning	18
2.1	Embodied carbon	5	9.0	Codes and Ratings	19
2.2	Operational energy efficiency	6	9.1	National Construction Code – Section J 2019	19
2.3	Commissioning and building tuning	8	9.2	NatHERS	19
2.4	On-site renewables	8	9.3	Green Star	20
2.5	Airtightness	8	10.0	References	21
3.0	Water efficiency	9			
3.1	Water fixtures & fittings	9			
3.2	Drip irrigation	9			
3.3	Stormwater management	10			
4.0	Indoor environmental quality	11			
4.1	Thermal comfort	11			
4.2	Glazing performance	11			
4.3	Emissions & toxicity	11			
4.4	Natural lighting and external views	12			
5.0	Transport	13			
5.1	Walkable neighbourhood	13			
5.2	Cyclist facilities	14			
5.3	Access to public transport	14			
6.0	Waste	15			
6.1	Construction and demolition waste	15			
6.2	Operational waste	15			
7.0	Land use and ecology	16			
7.1	Enhancing ecological value	16			
7.2	Heat island effect	17			

City of Stirling
17 Jan 2025
RECEIVED

Appendices

Appendix A	Green Star strategy
Appendix B	List of reference documents

Figures

Figure 1.1	Visualisation of The Dunes development	1
Figure 1.2	Scarborough Precinct Plan – development location shown in red.	3
Figure 2.1	Comparison of LED lighting with other conventional lighting system	5
Figure 3.1	Comparison of LED lighting with other conventional lighting system.	6
Figure 2.3	Building design showing balcony overhang.	7
Figure 2-4	Schematic of how smart metering can work. Figure is example only. Source: Freva.	7
Figure 3.2	Rooftop PV system	8
Figure 2.6	Continuous airtightness line of building details (example only).	8
Figure 4.2	Extract from the project landscape working drawings, showing an area to receive dripline.	9
Figure 4.2	Expected impacts of the stormwater treatment systems (Source: MUSIC Modelling Report).	10
Figure 2.2	Double glazing options are proposed for the development	11
Figure 2.3	Illustration of VOC sources within a typical building.	12
Figure 2.5	Daylight provision mark-up	12
Figure 6.1	Project location and neighbourhood.	13
Figure 2-10	Cyclist changeroom facilities will be provided.	14
Figure 5.3	Public transport routes available to occupants. Source: Cardno Sustainable Transport Plan.	14

Figure 6.1	Construction site impacts will be managed during the project.	15
Figure 7.1	Aerial photograph of The Dunes site (Source: Landgate's map Viewer Plus).	16
Figure 7.2	Render of the improved external landscape areas.	16
Figure 8.3	Design ideas included in the development – roof gardens, lighter coloured paving and landscaping	17
Figure 7.4	Early design markup of compliant heat island effect areas.	17
Figure 9.1	Project registration, taken from GBCA project database (online).	20

Tables

Table 1	Scarborough Redevelopment Area ESD requirements	1
Table 2	Development space allocation	1
Table 3	Project Information	2
Table 4	MRA's tier rating system	3
Table 5	Proposed water fittings WELS rating	9
Table 9.1	NatHERS target	19
Table 9.2	Green Star target	20
Table B.1	Drawings and models used for developing the analysis Error! Bookmark not defined.	

City of Stirling
17 Jan 2025
RECEIVED

1.0 Introduction

1.1 Project description

The proposed 'The Dunes' development, is a multi-unit residential mixed-use development within the Metropolitan Redevelopment Authority's (MRA) Scarborough Redevelopment Area. The project site is located at Lot 500 Reserve Street, Scarborough, falling within the north-western section of the gateway precinct of the redevelopment area.

The development consists of 2 buildings, containing 222 apartments with a mix of 1, 2, and 3 bedroom units as well as four (4) commercial tenancy spaces located on the Lower Ground (1 & 2) and Level 1 levels.

Table 2 Development space allocation

Space Type	Area / Number
Commercial tenancy	456m ²
Affordable	34 Units
1 Bed apartments	42 Units
2 Bed apartments	115 Units
3 Bed apartments	67 Units
Car parking	562 Bays

City of Stirling
17 Jan 2025
RECEIVED

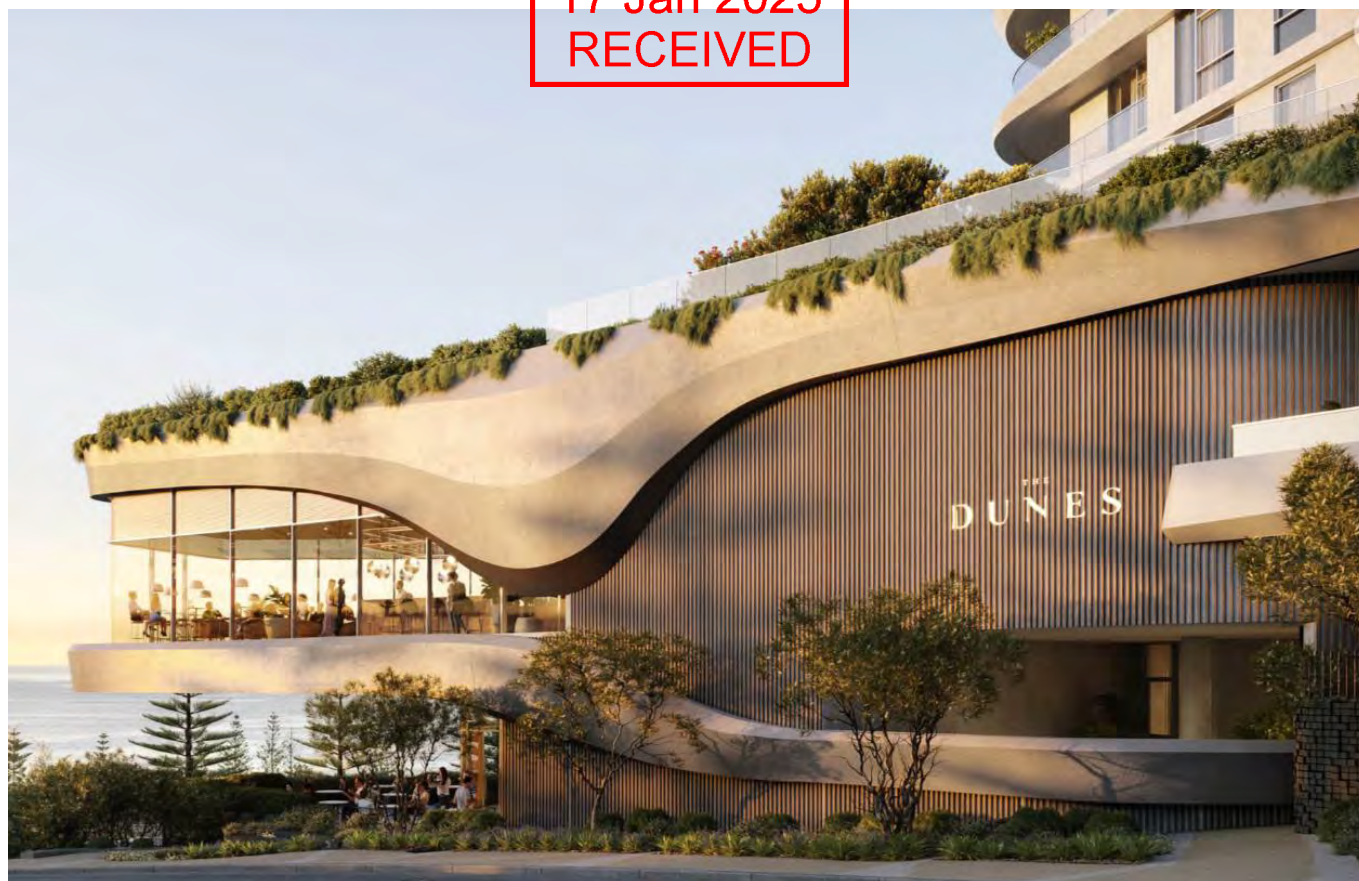


Figure 1.1 Visualisation of The Dunes development

1.2 Sustainability requirements

The development's Sustainability requirements are informed by the following documents:

- MRA's Scarborough Redevelopment Area Development Policy 1 – Green Building
- Scarborough Design Guidelines Chapter 4 Built Form Section 4.11 Environmental Sustainability.

City of Stirling
17 Jan 2025
RECEIVED

This report outlines how the development has been designed to meet the above requirements.

Below is an overview of the project as required by the MRA's Scarborough Redevelopment Area Development Policy 1 – Green Building:

Table 3 Project Information

Item	Detail
Project address	Lot 500 Reserve Street, Scarborough WA 6019
Project applicant / developer	Edge Visionary Living
Development approval details	N/A
Development approval sustainability requirements	4-star Green Star equivalency or SDAR report
Sustainability vision / general approach	See Sections 2.0 to 11.0 of this report

1.3 Policy details

1.3.1 MRA's Scarborough Redevelopment Area Development Policy 1 – Green Building

The purpose of the above Policy is to detail the requirements for the delivery of sustainable buildings that contribute towards a reduction in emissions, waste and operational costs, and to provide performance standards for the assessment of development applications for new buildings. There are three objectives of the Policy namely:

- To promote the sustainability of the Scarborough Redevelopment Areas through the development of environmentally sustainable buildings and precincts.
- To support and encourage innovative approaches to sustainable design, construction and management of buildings and precincts.
- To facilitate the design, construction and operation of environmentally sustainable buildings and precincts, that include efficient resource and energy use and reduce emissions and waste.

The Policy indicates that a Tier 3 development site within the Scarborough Redevelopment Area would need to either achieve a minimum 4-Star Green Star rating or a Sustainable Design Assessment Report that demonstrates that the development has been designed to achieve ESD outcomes which are equivalent to a 4-Star Green Star rated building.

Tier Rating System

The project is considered a **Tier 3** development. The below table outlines the Policy's tier rating system and the relevant requirements.

The table shows that a Tier 3 development site within the Scarborough Redevelopment Area must be designed to achieve an equivalency to a 4-Star Green Star building. The project is electing to provide a 'detailed report from a suitably qualified professional' to demonstrate compliance with this requirement at the 'Working Drawings' stage of the project.

The project is also currently targeting a 5-star Green Star Certification, which is in exceedance of the requirement.

Table 4 MRA's tier rating system

	Tier 1	Tier 2	Tier 3
Green Star rating	6-Star Green Star	5-Star Green Star	4-Star or Sustainable Design Assessment Report (SDAR) equivalency
Working Drawings	GBCA Registration and 'Design Review' certification from the GBCA.	GBCA Registration and 'Design Review' certification from the GBCA.	'Design Review' certification to be provided from the GBCA or a detailed report from a Suitably Qualified Professional
Practical Completion	'As Built' certification from the GBCA.	'As Built' certification from the GBCA.	'As Built' certification from the GBCA or a detailed report from a Suitably Qualified Professional

1.3.2 MRA's Scarborough Design Guidelines

The Scarborough Design Guidelines outline the design goals for buildings and development within the Precinct. These guidelines incorporate key design principles like innovation, functionality, efficiency, sustainability, and context responsiveness. Chapter 4, titled "Built Form," includes Section 4.11, which focuses on environmental sustainability.

The project is located within Area Code C of the Precinct, as shown in the below image.



Figure 1.2 Scarborough Precinct Plan – development location shown in red. .

City of Stirling
17 Jan 2025
RECEIVED

1.4 Sustainability targets

The development aims to integrate sustainable initiatives into the design, construction, and management of buildings and public spaces to minimize environmental impact. It will promote resource efficiency, reduce reliance on non-renewable resources, and minimize waste, pollution, and harmful emissions.

The development is designed to fulfil all requirements in terms of sustainable design and is aiming to achieve the following:

- Certified 5-star Green Star – Design & As-Built v1.3; and
- Average 7.7-star NatHERS rating for the residential components of the development.
- Meet or exceed all compliance requirements regarding Section J (Energy Efficiency) of the National Construction Code (NCC) 2019.

Sustainability initiatives present in the current design are detailed in the following sections, and address the following overarching sustainability themes:

- Operational and embodied carbon (including energy efficiency),
- Water efficiency and strategies to reduce potable water consumption,,
- Indoor environment quality,
- Transport,
- Waste,
- Land use & ecology,
- Construction,
- Codes and ratings.

City of Stirling
17 Jan 2025
RECEIVED

2.0 Operational and embodied carbon

Buildings consume considerable natural resources in their construction, operation, and demolition. This section of the report will provide details about the potential impacts caused by the building and how these impacts have been reduced when compared to typical buildings of this nature.

The proposed development will aim to reduce the total embodied carbon in the construction materials and aim to maximise the operational efficiency of the building's services. Furthermore, methods for maintaining high operational efficiency over the life of the building will be incorporated to ensure that the benefits are maximised.

2.1 Embodied carbon

Embodied energy refers to the total amount of energy required to produce a product or system, and includes energy inputs for raw material extraction, processing, manufacturing, and distribution. In doing so, it considers both direct and indirect energy inputs and is often used as a holistic measure of environmental impact.

The project will consider embodied energy of materials and products used in construction by conducting a whole-of-life, whole-of-life Life Cycle Assessment (LCA) in accordance with EN 15978.

To achieve this, several initiatives are currently present or being investigated for the design, as listed below.

- Steel
 - o Consider use of structural steel and reinforcement from a local manufacturer, and/or steel with an Environmental Product Declaration (EPD).
 - o Consider potential for structural design efficiencies to reduce overall structural steel tonnage.
 - o Consider use of steel fibre, or reduced reinforcement rates, to reduce overall reinforcement steel tonnage.
- Timber
 - o For sustainable timber, the project will use either recycled/reused timber or timber certified from a sustainable source. The target for the project is to meet a benchmark of at least 95% of timber used in the building and construction to be from a sustainable source or be reused.
- Polyvinyl chloride (PVC) products
 - o For permanent formwork, pipes, ducts, and cables, all PVC products will adhere to the Best Practice Guidelines for PVC. The project aims to ensure that at least 90% of PVC products comply with these guidelines, as stipulated by Green Star Credit 20 – Materials.



Figure 2.1 Comparison of LED lighting with other conventional lighting system

City of Stirling
17 Jan 2025
RECEIVED

2.2 Operational energy efficiency

The proposed development has considered the importance of reducing operational energy for both residential and non-residential components of the development.

2.2.1 Residential energy efficiency (NatHERS)

The thermal performance of the apartments within the development will be assessed under the Nationwide House Energy Rating Scheme (NatHERS). NatHERS is a tool to assess the energy usage of residential dwellings developed by the CSIRO.

For a multi-residential development, every apartment is investigated as a separate unit with its own rating before an overall average rating is calculated. The NatHERS tool considers a wide range of parameters like orientation, glazing, insulation, size of rooms and door openings, shading and awnings and ceiling fans.

The NCC requires a minimum of a 5-star NatHERS rating for the worst-performing apartment in the complex and an overall average of 6-star.

The proposed development is targeting to exceed these requirements by targeting a minimum of a 5.5-star rating and an overall average of 7.7-stars.

2.2.2 Building fabric

The proposed development will also investigate high performance glazing to all facades to prevent excessive summer heating while allowing useful passive solar gains in winter. A low glazing U-Value would minimize the conductive loss or gain of heat between the interior and exterior of the building.

All external walls, and internal walls to unconditioned areas, will feature insulation to minimise thermal losses and gains.

2.2.3 Lighting efficiency

Energy efficient lighting, such as LED fittings (>70 lumens per watt), will be integrated throughout the project. This includes the 'communal' corridors, stairwells, garage and external lighting. All common area lighting will also incorporate light controls such as occupancy sensing (PIRs) and time switch to reduce lighting consumption when lighting is not required.

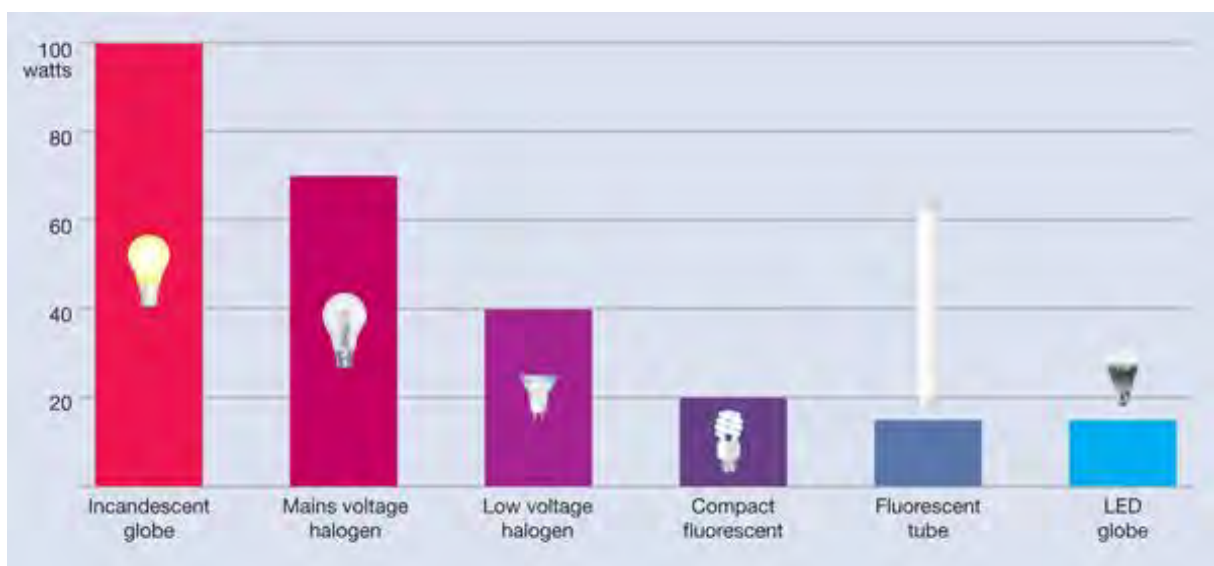


Figure 2.2 Comparison of LED lighting with other conventional lighting system.

2.2.4 Shade structures

Shading is a critical component of the building design. The development provides shading to the glazed facades by means of extended floor plates (refer image below).

Large overhangs, both vertical and horizontal, such as these will reduce the amount of direct solar radiation for all times during the year, and mitigate unwanted heat gains through the façade.



Figure 2.3 Building design showing balcony overhang.

2.2.5 Energy monitoring

Accurate collection of resource consumption rates is essential for measuring performance against sustainability targets. This is primarily achieved through smart energy and water meters that are integrated with a central data collection service.

For this project, metering will occur throughout the development and operate alongside a monitoring program, which together will enable high-quality data to be collected for all major uses and sources.

The meters and monitoring system will be designed to be capable of the following:

- Issue alerts when unusual usage occurs, which helps to identify leak and malfunctions.
- Provide continual information.
- Automatically generate monthly or quarterly usage reports
- Producing, as a minimum, a quarterly report that is automatically emailed to the facilities manager responsible for the building.

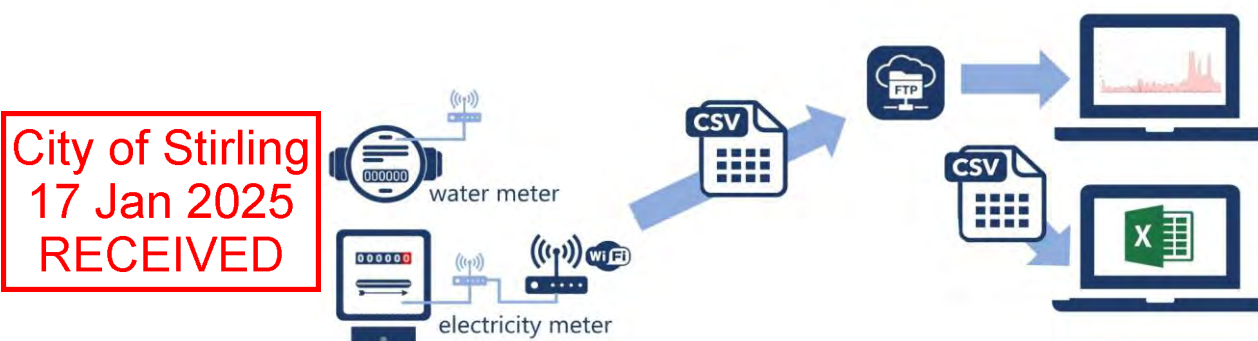


Figure 2-4 Schematic of how smart metering can work. Figure is example only. Source: Freva.

2.3 Commissioning and building tuning

Comprehensive pre-commissioning and commissioning activities will be undertaken for all building systems as a standard practice for the development.

Further to commissioning, seasonal building tuning would be considered on the building for at least 12 months following occupancy to ensure systems are performing to their design potential at full and part load conditions. Quarterly adjustments and measurement for the first 12 months after occupation and a review of building system manufacturer warranties will help improve on the building's energy performance.

2.4 On-site renewables

Solar Photovoltaic (PV) panels will be considered to be installed on the roof of the building to supply power for the common areas, including corridors, stairwells, gym, reception and parking.

A total of 325 panels are currently proposed between the Tower 1 and 2 rooftops. Based on an estimated capacity of 350 W per panel, this system would be around 110 kW total capacity (pending panel selections).

The development is also targeting a total reduction of peak electricity demand of 15% through on-site renewables.

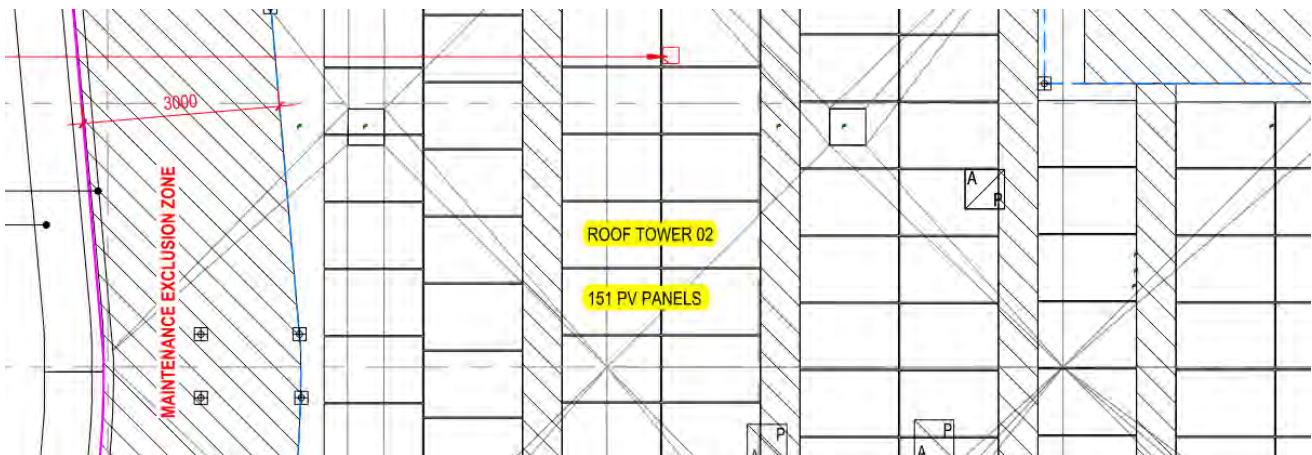


Figure 2.5 Rooftop PV system

2.5 Airtightness

Airtightness is a key building property that affects infiltration and exfiltration, which are the uncontrolled leakage of outdoor air through cracks and openings in the building thermal envelope.

The development will include measures to limit air leakage from the building envelope elements such as glazing systems and external walls.

The development is to target a maximum of $15\text{m}^3/\text{h.m}^2$ for air tightness.

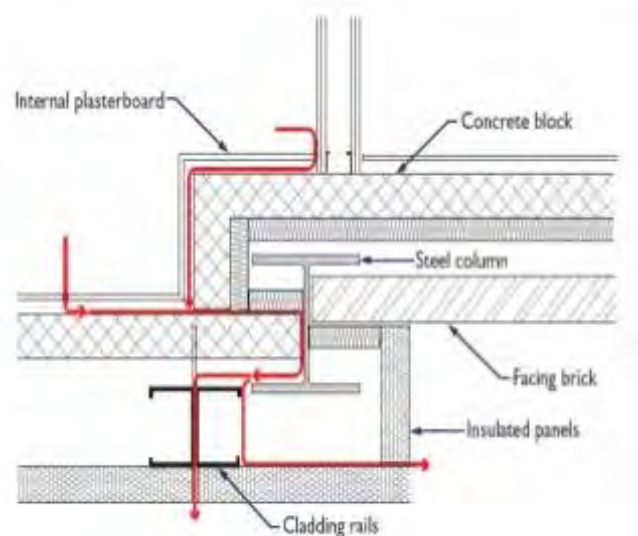


Figure 2.6 Continuous airtightness line of building details (example only).

City of Stirling
17 Jan 2025
RECEIVED

3.0 Water efficiency

Potable water is a precious resource that should be conserved and used wisely. This is especially true in Perth, where rainfall and surface run-off have decreased significantly since 1970 due to climate change. As a result, water resources within the State, including rivers, dams, and aquifers, are under pressure from over-extraction. Managing potable water demand within developments is essential to avoid this.

The following sections set out design strategies utilised for this development to reduce the building's water consumption as per MRA's Scarborough Redevelopment Area Design Guidelines Chapter 4 Built Form Section 11 Environmental Sustainability.

3.1 Water fixtures & fittings

Occupant consumption is a major contributor to potable water usage. The following water fixture WELS ratings will be considered to ensure the efficient use of potable water by building occupants (must be within 1-star).

Table 5 Proposed water fittings WELS rating

Fixture / Fitting Type	Green Star WELS Rating	MRA Development Guidelines Requirements (page 50)
Taps	5 star	4 Star
Urinals	5 star	6 Star
Toilets	4 star	5 Star
Showers	3 star	4 Star
Clothes Washing Machine	4 star	4 Star
Dishwasher	5 Star	4 Star

3.2 Drip irrigation

Landscape irrigation is responsible for a large proportion of potable water consumption. To reduce the amount of water used for the landscaped areas in various parts of the development, a drip system with moisture sensor control will be installed for irrigation. The use of hardy natives and other low-water use vegetation will also contribute to this reduction.

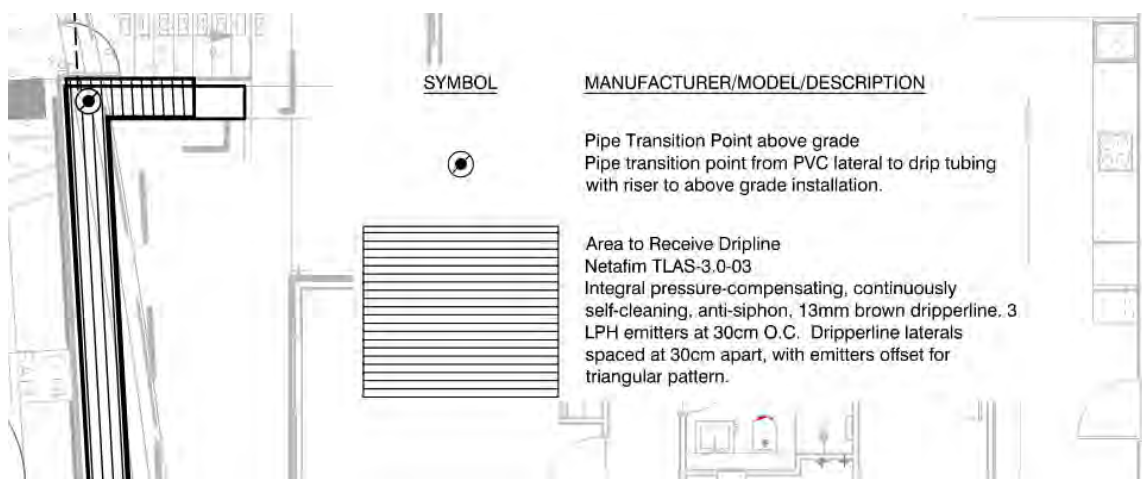


Figure 3.1 Extract from the project landscape working drawings, showing an area to receive dripline.

3.3 Stormwater management

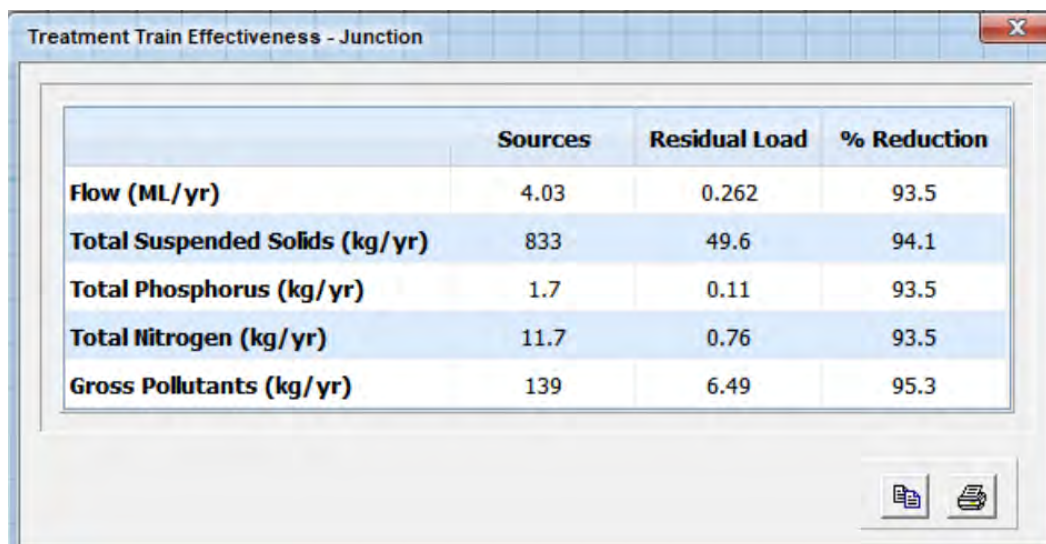
Stormwater is precipitation runoff over ground-level surfaces that does not soak into the ground but has not entered a waterway such as a stream or a lake.

The project has undertaken Model for Urban Stormwater Improvement Conceptualisation (MUSIC) modelling, which has confirmed the site's positive impact on stormwater.

The impacts of stormwater are managed on the site through the use of a below ground civil stormwater tank. The detention tank allows all collected stormwater to infiltrate, without causing damage to surrounding areas, whilst maintaining the structural integrity of the building's foundations.

This protects downstream waterways and waterbodies by significantly reducing the amount of surface water/runoff exiting the site and thus significantly reducing the amount of pollution runoff significantly as well.

A summary of the expected effectiveness of the stormwater treatment system is provided below.



	Sources	Residual Load	% Reduction
Flow (ML/yr)	4.03	0.262	93.5
Total Suspended Solids (kg/yr)	833	49.6	94.1
Total Phosphorus (kg/yr)	1.7	0.11	93.5
Total Nitrogen (kg/yr)	11.7	0.76	93.5
Gross Pollutants (kg/yr)	139	6.49	95.3

Figure 3.2 Expected impacts of the stormwater treatment systems (Source: MUSIC Modelling Report).

City of Stirling
17 Jan 2025
RECEIVED

4.0 Indoor environmental quality

The indoor environment quality (IEQ) within a building contributes significantly to user wellbeing and is therefore a critical part of any design. It comprises a range of factors, including but not limited to air quality, lighting, acoustics, and thermal comfort. Poor IEQ can result in a range of negative effects on human health and productivity, such as allergies, respiratory problems, fatigue, and decreased cognitive function.

The proposed development has considered the above and adopted several strategies to enhance indoor environment quality, as outlined in this section of the report.

4.1 Thermal comfort

The human body regulates its core temperature within a narrow range of 36 to 38 degrees. An indoor environment that does not support this range can affect mood, performance, and productivity. To control internal comfort and minimise excessive heat loss in winter and heat gains in summer, several strategies and performance metrics will be targeted for the proposed development, as listed below.

- Use of light-coloured exteriors and vegetation to reduce urban heat island effect and building cooling demand.
- Use of shading elements (i.e., overhanging balconies) to reduce unwanted heat gains through the façade.
- Façade design and glass selection is very important; heat gains and losses must be moderated, and thermal bridging should be avoided. Double glazing systems are considered for this development to improve the thermal performance of the building envelope.
- The high-performance glazing will additionally help to manage acoustic aspects of the building. Separated party walls between apartments will also reduce noise impacts from neighbouring flats.
- The façade should be well sealed to avoid draughts and air leakage.

City of Stirling
17 Jan 2025
RECEIVED

4.2 Glazing performance

The development will use high performance glazing, which enables solar heat gain to be reduced to help prevent summer heating, whilst still allowing passive heating in winter. The low U-value of the glazing would minimise the conductive loss or gain.

These result in an improved thermal comfort, improved energy rating of apartments, and a reduced operational carbon footprint of the development.

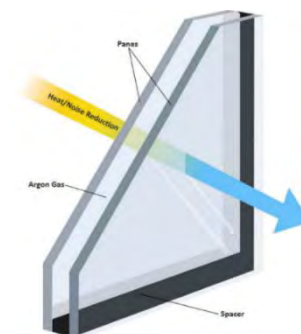


Figure 4.1 Double glazing options are proposed for the development

4.3 Emissions & toxicity

Volatile organic compounds (VOCs) are gases emitted by a wide array of products, such as paint, cleaning products, and building materials and furnishings. VOCs encompass a variety of chemicals, some of which may have short- and long-term adverse health effects.

To create a healthy indoor environment for all building occupants, the proposed development will aim to specify materials with low-VOC and low formaldehyde content to avoid contaminating the indoor air.

The development will specify materials with low emissions content including low-VOC and low formaldehyde content to avoid contaminating the indoor air. At least 95% of the internal finishes are to be low VOC and/or low formaldehyde.



Figure 4.2 Illustration of VOC sources within a typical building.

4.4 Natural lighting and external views

Like thermal comfort, the human body feels best when receiving natural levels of daylight and high-quality views of the outdoor environment. However, excessive light / glare is detrimental to user wellbeing and should be mitigated.

The development is designed such that every living space is designed to have large sliding doors to the balconies in addition to large full height windows to maximise daylight levels while shading devices are proposed to reduce glare. The location and height of the development offer extensive views over the Indian ocean and/or on-site vegetation.

The following design elements have been co-ordinated to maximise the daylighting and views potential:

- Large glazing extents with a moderate visual light transmittance (VLT) to allow daylight to penetrate the space.
- Light internal colours improve indoor lighting levels.
- Glazing positioned to enable high quality views to external environments throughout apartments.

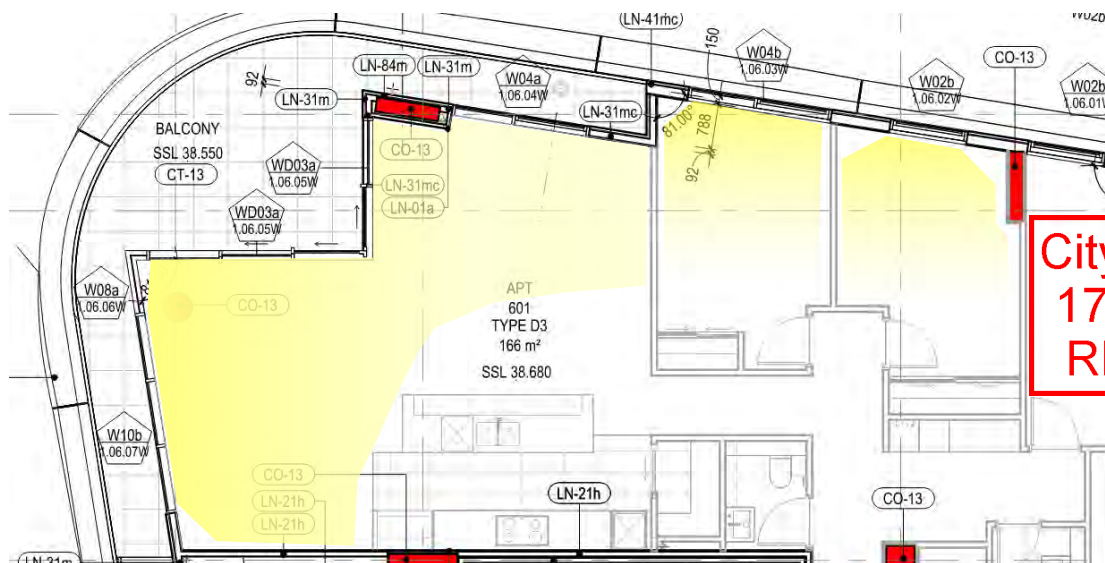


Figure 4.3 Daylight provision mark-up

5.0 Transport

The use of individual internal combustion vehicles directly contributes to climate change. This occurs both through the energy required to produce cars and transport infrastructure, and the direct emissions that result from car operations. Therefore, providing sustainable transportation options within new developments is an important way to reduce emissions and mitigate climate change.

To reduce reliance on fossil fuel-based transportation, it is important to maximise alternative transportation options. This may include initiatives that encourage building users to cycle, walk or utilize public transport.

The proposed development has considered the importance of sustainable transport early in the design process, and a Green Star Sustainable Transport Plan (File Reference: CW1200289-TR-RP-001-Green Star Travel Behaviour Plan-The Dunes Scarborough_final.docx) has been produced.

The Plan details several sustainable transport options that are supported within the development, with key initiatives detailed below.

5.1 Walkable neighbourhood

The proposed development is located at a convenient walking distance to the Esplanade Precinct which hosts a range of shops, supermarkets, services, employment and amenities to residents, visitors and workers. The development will also include private amenities for the residents such as gym, pool, dining/lounge, games room and rest areas.

The development area offers picnic tables, barbecues, toilets, cafes, outdoor exercise equipment and children's playgrounds with plenty of shaded rest areas.

The close proximity to these amenities will help the residents to avoid using private vehicles, and enables occupants to lead an active lifestyle.



Figure 5.1 Project location and neighbourhood.

5.2 Cyclist facilities

In the greater Perth area, 48% of all car trips are less than 5 km distance. Cars produce an average of 0.3 kg of CO₂ per km travelled, whereas a cyclist emits negligible greenhouse or other pollution.

For each kilometre a person cycles instead of driving, approximately 0.3 kgs of CO₂ are saved from being emitted to the environment.

To support cyclists, the proposed development will be including showers and changing facilities that are easily accessible, inclusive, and located in a safe and protected space as per Green Star requirements.

Additional facilities to encourage sustainable transport include the connectivity with surrounding cycle and walking paths.

Additional visitors bike racks may also be provided outside the building.



Figure 5-2 Cyclist facilities will be provided.

5.3 Access to public transport

With its location in Scarborough, the proposed development is located in close proximity to several public bus routes with West Coast Highway offering routes north-south and Scarborough Beach Road to the east. The closest bus station is just 150 m away, therefore easily accessible by foot or bicycle and the bus only takes 20 minutes to reach Stirling Train Station.



Figure 5.3 Public transport routes available to occupants. Source: Cardno Sustainable Transport Plan.

City of Stirling
17 Jan 2025
RECEIVED

6.0 Waste

The main objectives for the waste management strategies for construction and operational waste are to ensure that waste is avoided and recycled during design, construction and operation.

Waste within a building construction context can be avoided by encouraging the selection of lower-impact and long-term materials. Operational waste to landfill can be reduced by providing relevant and easily accessible facilities for recyclable waste and other waste that can be diverted from landfill such as organic waste, batteries or e-waste.

6.1 Construction and demolition waste

In 2014-15 Australia produced the equivalent of 565 kg per capita of municipal waste and 831 kg of construction and demolition waste. While around 60% of this waste is recycled, a large part still goes to landfill (Pickin & Randell, 2017).

A reduction of both construction and operational waste is therefore an important target of The Dunes development.

The proposed development has considered methods to ensure construction waste is managed responsibly on-site. Most notably, this includes targeting a minimum of 90% of construction and demolition waste to be diverted from landfill. This performance will be measured in monthly waste reports, and will enable compliance with Green Star Credit 22B – Construction and Demolition Waste.

The diversion of construction waste from landfill helps to promote circular economy principles within the building industry.



Figure 6.1 Construction site impacts will be managed during the project.

6.2 Operational waste

A dedicated waste storage area will be provided for the separation and storage of recyclable waste during operation, allowing for the different waste streams to be separated to match the local recycling scheme (Green Star Credit 8A).

At least three streams will be covered including landfill, recycling and a third stream which may be organic/food waste (Green Star Credit 8B).

City of Stirling
17 Jan 2025
RECEIVED

7.0 Land use and ecology

With continuously growing cities, urban ecology plays a large role in conserving biodiversity whilst also improving life quality for urban residents. High quality landscape design can protect and enhance biodiversity, through strategies such as the selection of native and indigenous plant species which have low water and fertiliser demand. Moreover, remnant plant communities that exist on any site should be managed and protected where possible.

The following section summarises the specific initiatives included in the design in relation to urban ecology.

7.1 Enhancing ecological value

The site was previously used as a parking and hardscape area with a small amount of trampled scrub and loose sand to the west. The aerial photo below illustrates the previous condition of the site.

The project will seek to improve the ecological value of the site (Green Star Credit 23.1 – Ecological Value), by incorporating landscaped areas throughout the building design and external areas. This includes placing trees and planters balconies and including planters and green walls on every level of the central staircase and around the community area on the third floor.

Native plant species will be preferred throughout the landscape design to align with the project's water efficiency aims.



Figure 7.1 Aerial photograph of The Dunes site (Source: Landgate's map Viewer Plus).



Figure 7.2 Render of the improved external landscape areas.

7.2 Heat island effect

The heat island effect describes the condition where urban areas have a higher average temperature than its rural surroundings owing to the make-up of the built environment. The use of light roof materials combined with shaded and landscaped areas can reduce the heat island effect significantly and contributes to further energy savings.

The development includes large vegetated areas on the ground floor and lower levels to minimise the heat island effect, and will specify light coloured external façade and roof elements. A total of 75% of the site area is targeted to reduce heat island impacts (Green Star Credit 25.1 – Heat Island Effect).



Figure 7.3 Design ideas included in the development – roof gardens, lighter coloured paving and landscaping



Figure 7.4 Early design markup of compliant heat island effect areas.

7.3 Light pollution

The building's design will ensure that external lighting impacts, which can have a detrimental effect on local wildlife and increase energy consumption, will be managed.

This will include the management of upward lighting and illuminance levels at the site boundary (Green Star Credit 27).

City of Stirling
17 Jan 2025
RECEIVED

8.0 Construction

Conducting the construction of new developments responsibly is an important way to incorporate sustainability into the built environment. This includes raising awareness of mental health and sustainability amongst on-site staff and the design team, as well as the responsible use of finishes and materials to minimize environmental impact.

Several responsible construction practices are targeted for the project, as detailed below.

8.1 Environmental management plan (EMP)

A project specific environmental management plan (EMP) will be developed and implemented. The purpose of the EMP is to manage environmental performance, conditions and impacts arising from demolition, excavation and construction.

The EMP must be compliant with best practice guidelines and must be implemented from the beginning of construction works, including any excavation and demolition.

8.2 Environmental management system (EMS)

The project will aim to demonstrate that a formalised systematic and methodical approach to planning, implementing and auditing is in place during construction, to ensure compliance with the EMP.

This is typically demonstrated under an ISO14001 certificate.

8.3 Construction waste

Refer Section 6.1 of this report for further detail.

8.4 Building commissioning and tuning

Refer Section 2.3 of this report for further detail.

City of Stirling
17 Jan 2025
RECEIVED

9.0 Codes and Ratings

The building will be subject to voluntary and mandatory building codes and metrics to measure the performance of the rating. This section of the report outlines the main codes and ratings and identifies the project's response.

9.1 National Construction Code – Section J 2019

The development is required to comply with the National Construction Code (NCC) Section J 2019 for Energy Efficiency. NCC Section J covers items including:

- Building fabric;
- External glazing;
- Building sealing;
- Air movement;
- Air conditioning;
- Artificial lighting and power;
- Hot water supply;
- Access to maintenance.

City of Stirling
17 Jan 2025
RECEIVED

For the commercial tenancies on the lower ground and 1st floors, a standard Section J assessment, including the NCC glazing calculator will be carried out. The application of an energy model approach may be considered to further optimise glazing and insulation.

9.2 NatHERS

Residential building compliance is achieved through a thermal modelling process defined as the Nationwide House Energy Rating Scheme (NatHERS). This process requires a minimum star rating to be achieved for the building's thermal comfort, which informs the energy efficiency of the building.

The Nationwide House Energy Rating Scheme (NatHERS) is a tool to assess residential dwellings' energy usage. For a multi-residential project such as The Dunes, every apartment is investigated as a separate unit with its own rating before an overall average rating is calculated. The NatHERS tool considers a wide range of parameters like orientation, glazing, insulation, size of rooms and door openings, shading and awnings and ceiling fans.

The National Construction Code (NCC) requires a minimum of a 5 Star NatHERS rating for the worst-performing apartment in the complex and an overall average NatHERS rating of 6 Stars. The proposed development is designed to exceed these requirements, reducing the building's average energy consumption by approximately 46%.

The proposed development is located at NatHERS Climate Zone 5 (Swanbourne).

Table 9.1 NatHERS target

NatHERS Requirement	Minimum NCC Requirement	Target for the proposed development
Worst case NatHERS rating	5 Stars	5.5 Stars
Overall average NatHERS rating	6 Stars	7.7 Stars
Estimated Average Energy Usage	39 MJ/m2	23 MJ/m2 (41% reduction)

9.3 Green Star

Green Star is a comprehensive sustainability assessment tool that evaluates a building's environmental impact across various indicators, including management, ecology, energy and water use, material selection, and waste production. The project is registered as an active Green Star project, refer below image.

Figure 9.1 Project registration, taken from GBCA project database (online).

Project	Location	Status	Green Star Rating*	Final Score*	Date Certified	Rating Tool
GS-6912DA The Dunes (Scarborough)	Scarborough WA 6019	REGISTERED				Design & As Built v1.3

The project is targeting a certified rating of 5 Star, which requires a minimum of 60 points to be achieved. The current status of the project's Green Star performance, including the expected points to be achieved for each credit is shown in Appendix A. Sufficient weighted credits have been selected to achieve this requirement rating, and further opportunities will be pursued during the later stages of the project. A summary of the building's anticipated Green Star performance is provided in the table below.

Table 9.2 Green Star target

Required Green Star Rating	Project Green Star Rating	Minimum points required for 5-star rating	Target for the proposed development
4 Star*	5 Star	60 Points	66 Points

*The project has elected to target a 5 Star certified Design & As Built rating.



10.0 References

Australian Bureau of Statistics. (2017). *4610.0 - Water Account, Australia 2015-16*. Retrieved 10 05, 2018, from <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/4610.0Main%20Features32015-16?opendocument&tabname=Summary&prodno=4610.0&issue=2015-16&num=&view=>

GHD, Canning Bridge Structure Plan Project Working Group. (2016). *Canning Bridge Activity Centre Plan*. Booragoon/South Perth: City of Melville, City of South Perth, Government of Western Australia.

International Energy Agency. (2018). *Global EV Outlook 2018*. (International Energy Agency) Retrieved 10 05, 2018, from <https://www.iea.org/gevo2018/>

Pickin, J., & Randell , P. (2017). *Australian National Waste Report 2016*. Docklands, Vic 3008: Department of the Environment and Energy and Blue Environment Pty Ltd.

City of Stirling
17 Jan 2025
RECEIVED

Appendix A Green Star strategy

Please see overleaf.

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

Cundall Johnston & Partners PTY

Level 2, 585 Hay St, Perth WA 6000

Tel: +61 (0)8 9421 3700

Asia Australia Europe MENA UK and Ireland

www.cundall.com

The Dunes Scarborough

Acoustic Specification

City of Stirling
17 Jan 2025
RECEIVED

Date: 20 December 2024

Prepared by: Jason & Benjamin Martis

Ref: 301250090

Stantec Australia Pty Ltd
Ground Floor, 226 Adelaide Terrace, Perth WA 6000
Tel: +61 8 6222 7000 Web: www.stantec.com

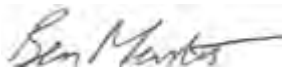
\\AU2011-NTAP01_CIFS02\SHARED_PROJECTS\301250090\PROJECT DOCUMENTATION\ACOUSTICS\DESIGN\SPECIFICATION\AC-SP-001_301250090_004A_JLM.DOCX

Revision

Revision	Date	Comment	Prepared By	Approved By
001	1/02/2023	Building Permit Issue for review	JLM	IK
002	10/03/2023	Tender Issue	JLM	IK
003	7/11/2024	Tender Issue – VE Works (Draft)	JLM	BEM
004	20/12/2024	Tender Issue – VE Works (preliminary)	JLM	BEM

Checked and approved by Project Technical Lead

Name: Benjamin Martis

Signature: 

City of Stirling
17 Jan 2025
RECEIVED

Contents

PART A.	Preliminaries	1
PART B.	Project Specific Information	2
B.1	Project Specific Quality Assurance Items – Quality Requirements	2
B.2	Applicable Standards	6
B.3	Architectural	8
B.4	External Noise Emissions	39
B.5	Mechanical Services	43
B.6	Hydraulic Services	56
B.7	Electrical Services	61
B.8	Technical Recommendations for Lift Services	62
B.9	Shop Drawings	62
B.10	Testing and Commissioning	62
PART C.	Technical	65
C.1	Extent of Works	65
C.2	Rules and Regulations	66
C.3	Requirements, Permits and Fees	66
C.4	Standards	66
C.5	Materials, Workmanship and Sundries	66
C.6	Manufacturer's Directions	67
C.7	Proprietary Brand Name References	67
C.8	Drawings	67
C.9	Co-ordination Generally	67
PART D.	Construction Details	68
PART E.	External Facade Markups	71
PART F.	Partition Markups	72
PART G.	Floor Markups	73

City of Stirling
17 Jan 2025
RECEIVED

PART A. Preliminaries

Refer to Head Contract for Preliminaries.

City of Stirling
17 Jan 2025
RECEIVED



PART B. Project Specific Information

B.1 Project Specific Quality Assurance Items – Quality Requirements

B.1.1 Introduction

This acoustic specification provides acoustic design advice for the proposed The Dunes Apartments located at Lot 500 Reserve St, Scarborough WA 6019. The design advice outlined in this acoustic services specification targets compliance with the requirements outlined by the National Construction Code 2019 (NCC 2019) for Class 1, 2 and 3 buildings, the Western Australian Environmental Protection (Noise) Regulation 1997 and relevant Australian Standards.

In addition, the projects aims to exceed the minimum performance requirements of NCC to meet a 5-star Greenstar rating as per the Green star Guidelines (Design & As Built v1.3).

An acoustic specification was previously issued by Stantec “AC-SP-001_301250090_002” issued 10th March 2023. This specification addresses the changes made to the project development since the previous assessment.

Drawings related to the proposed development have been examined and constitutes the basis of this documentation. The drawings include the following:

- Architectural drawings Issued 17th october 2024 provided by Hillam Architects; and
- Mechanical Services details provided by WSP Australia Pty Limited.

The work documented in this report was carried out in accordance with Stantec’s quality assurance system, which is certified to Australian Standard / NZS ISO 9001.

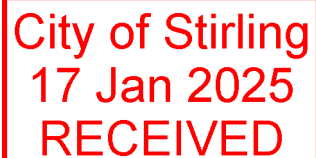
This specification sets out the following acoustic performance criteria and installation quality controls applicable to the works:

- Sound isolation performance for the building envelope;
- Sound isolation performance standards for general and residential areas;
- Background noise level compliance criteria, to be used as the basis for selection and installation of new building service systems and equipment, and for acceptance of commissioning of building service systems.

The NCC 2019 Amd. 1 sets out the following acoustic performance criteria and installation quality controls applicable to the works:

- Performance requirement for walls & floors constructions separating sole-occupancy units;
- Performance requirement for walls and floors constructions separating a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby and the like;
- Performance requirement for doors separating a sole-occupancy unit from a stairway, public corridor, public lobby and the like;
- Performance requirement for any forms of constructions separating ducts and water supply pipes from a separate occupancy;
- Performance requirement for any forms of constructions separating storm water pipes from a sole-occupancy unit.

This project is targeting a 5 Star Greenstar rating. In this regard, the Contractor shall comply with all requirements outlined in the ESD Specification. Any discrepancies or contradictions shall be superseded by the ESD Specification and raised as a query with the Principal in a timely manner.



B.1.2 Pricing Risks

The Contractor must take into account that the following documentation is representative of partial design completion, with further co-ordination and design activities required.

There are inherent risks associated with submitting costs based on this level of documentation which need to be considered, with an appropriate level of contingency allowed for by the tendering contractor. Listed below are activities still to be completed which may impact the final project costs. The list is not exhaustive but is intended to capture the main items for identification and consideration by the contractor. Gap items identified at this point are as follows:

- Co-ordination of services and architectural and mechanical review is ongoing. Incomplete co-ordination may also result in items relating to builders works, such as services penetrations;
- This specification and accompanying drawings are partially complete, identifying the design and installation intent and do not provide all the required information necessary for final pricing.
- The tendering subcontractors must allow suitable cost contingencies considering the completeness of the documentation to provide complete functional installations. Stantec is not liable for any increase in costs due to initial/outline pricing being based on this documentation that is not fully comprehensive.

B.1.3 National Construction Code (NCC) 2019 Amendment 1 Acoustic Performance Requirements

The National Construction Code 2019 Amendment 1 (NCC 2019 Amd. 1) outlines minimum requirements for inter-tenancy walls and floors/ceilings to maintain an acceptable standard of privacy. This includes the incorporation or penetration of building services through a floor or through partitions belonging to more than one sole-occupancy unit. The design of the development is based on NCC 2019 Amd. 1 acoustic performance requirements and other relevant Australian Standards.

The NCC 2019 Amd. 1 nominates required Weighted Sound Reduction Indexes (R_w) and spectrum adaptation factor (C_{tr}) for any forms of constructions of different space/activity types in adjoining units. The R_w and $R_w + C_{tr}$ are single number descriptors quantifying the noise attenuating performance of partitions for typical intrusive noises produced inside the residences. The higher the rating is, the greater the isolation provided by the partition becomes.

Spectrum adaptation factors are commonly used to compensate for the fact that certain type of sounds (low frequencies) are more readily transmitted through insulating materials than others. Typical use of C_{tr} factor for internal building elements is for music, home theatre, etc.

Spectrum adaptation factors have now been introduced for most building elements which require an airborne sound insulation rating. Therefore, both the C_{tr} factor and the R_w of the building elements will need to be considered in the design process.

B.1.4 Development Application Conditions of Approval

The following condition of approval on the Development Application are relevant to Acoustics:

Condition 14

An Acoustic and Vibration Attenuation Report and certification from a qualified acoustic consultant, confirming that the design and construction of the building will achieve an appropriate level of sound and vibration attenuation in accordance with Development Policy 3 - Sound and Vibration Attenuation, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note m).

Advice Note m)

With regard to Condition 14, the Acoustic and Vibration Report should be informed by the Acoustic Report prepared for the development by Stantec, Revision 4 dated 15 May 2020, and identify the location, extent and impact of all noise and vibration sources and confirm that the design of the building will achieve an

appropriate level of attenuation in accordance with Development Policy 3- Sound and Vibration Attenuation. In particular, the report should address:

- *Potential noise and vibration impacts from adjacent uses including traffic;*
- *Further detailed consideration of acoustic attenuation measures relative to the different land uses/elements of the proposal, including:*
 - o *Small Bar and Cafe/Restaurant operational noise, noting full details will be the responsibility of the future tenants;*
 - o *Communal areas, gym, pool operational noise; and*
 - o *Basement car parking.*
- *Mechanical service systems (such as exhaust systems and air-conditioning) selection, design and location to prevent emitted noise levels from exceeding the relevant decibel levels as provided by the Environmental Protection (Noise) Regulations 1997; and*
- *Confirmation that the design meets the maximum internal criteria for all bedrooms.*

Condition 15

A report and certification from a qualified acoustic consultant is to be submitted at practical completion stage and prior to occupation of the building, confirming that all recommendations of the Acoustic and Vibration Report integral to achieving compliance with Development Policy 3- Sound and Vibration Attenuation, have been implemented, to the satisfaction of the Authority. (Refer to Advice Note n).

Advice Note n)

With regard to Condition 15, the certification submitted at practical completion stage should include results of onsite testing to confirm appropriate levels of sound attenuation mitigation have been achieved.

This Acoustic Specification serves to address all DA Conditions pertaining to acoustics stipulated by the DevelopmentWA at the tender stage.

For Condition 14 Advice note m), the noise from any commercial spaces including wine bar or kiosk as well as communal spaces such as the gym and outdoor pool are to be the responsibility of the tenant or strata manager and will need to be managed to ensure noise generated does not significantly impact surrounding receivers. Additionally, as the basement carpark is expected to be fully enclosed, noise generated is expected to be largely contained, and therefore will not significantly impact the surrounding environment and achieve compliance to EPNR.

Condition 15 is to be addressed at the practical completion stage.

B.1.5 DevelopmentWA (Metropolitan Redevelopment Authority)

DevelopmentWA was formed through the merging of the Metropolitan Redevelopment Authority (MRA) and LandCorp in 2019. The project site is located within the Scarborough Redevelopment area as previously defined by the Metropolitan Redevelopment Authority (MRA). The acoustic criteria from the MRA documentation, published under that name and mentioned above, remain current. The project is required to comply with the requirements stated in the MRA Policy 3 - Sound and Vibration Attenuation (Policy).

The objective of the Policy is to:

- To facilitate sustainable mixed-use environments where a variety of carefully designed, constructed and managed land uses can successfully co-exist.
- To ensure appropriate noise and vibration attenuation measures are incorporated at the design and construction phase of new buildings, in the refurbishment of existing buildings and where appropriate, for changes in land use.
- To ensure noise emitting premises are well designed and effectively managed in order to minimise noise disturbance.
- To ensure mechanical, industrial and service equipment is appropriately designed, located and installed in order to minimise noise disturbance.

The MRA Policy 'sets out the standards and requirements for the following types of development with regard to sound and vibration attenuation' detailed above. There four development categories are as follows:

City of Stirling
17 Jan 2025
RECEIVED

- Noise sensitive development;
- Noise emitting development;
- Ventilation and mechanical equipment; and
- Vibration sensitive development.

The proposed mixed-use development shall be considered as noise emitting developments which contains ventilation and mechanical equipment. A summary of the requirements stated by the Policy states for noise emitting premises are detailed below:

- All noise emitting sources shall be identified and addressed. This may include machinery, equipment, service vehicles and deliveries, patrons, music, amplifiers and speakers;
- External noise sources shall be detailed (e.g. noise level, noise character, hours of operation); and
- Detailed assessment of all noise emitting sources and description of noise mitigation measures required to achieve compliance with the assigned level criteria determined under the Environmental Protection (Noise) Regulations 1997, and internal noise level criteria outlined in Australian Standard AS2107 Recommended design sound levels and reverberation times for building interiors.

B.1.6 Green Star Requirements (Design & As Built v1.3)

A summary of the Green Star targets (for residential areas) have been summarised in the following subsections. Stantec will coordinate with the relevant consultants regarding any potential treatments which are necessary for achieving the acoustic points being targeted.

The client has stated this project will target the available Green Star credits for acoustics and the performance of party walls and floors to be enhanced from a minimum NCC requirements to meet the Green Star performance targets.

B.1.6.1 Acoustic Separation

One (1) point is awarded where the project addresses noise transmission in enclosed spaces within the nominated area. For residential developments (bounding apartment construction):

- The inter-tenancy apartment construction to habitable areas results in airborne noise isolation standard of $R_w + C_{tr} > 55$; and
- All inter-tenancy walls should include Discontinuous Construction as defined by the Building Code of Australia
- Walls between apartments and public corridors results in airborne noise isolation standard of $R_w > 55$; and
- The floor construction above habitable rooms and wet areas of adjacent dwellings (i.e. floor cover) results in an impact isolation standard of $L_{n,W} + C_I < 55$.
- Apartment entry doors include acoustic seals and achieve laboratory acoustic rating of $R_w 30$.

Internal Noise Levels

One (1) point is awarded where project teams demonstrate that internal ambient noise levels in the nominated area are no more than 5 dB(A) above the lower figure in the range recommended in Table 1 of AS/NZS2107:2016. (i.e. for bedrooms within residential developments, this implies that internal noise levels shall not exceed $L_{eq} 40$ dB(A) during the night-time period).

Noise measurement and documentation must be provided by a qualified acoustic consultant and in accordance with AS/NZS 2107:2016.

Compliance shall be demonstrated through measurement, which must account for all internal and external noise including noise arising from building services equipment. Measurements shall be conducted in at least 10% of the spaces in the nominated area.

Stantec notes that Internal Noise Levels within an apartment is a combination of external noise break-in via the façade and noise generated by Air conditioning equipment.

The façade design considers achieving the targeted internal noise levels. However, it is expected that Fan Coil units will be located within the development. These units are difficult to attenuate noise as these units are typically bulkhead units with minimal or no duct work to provide any treatment.

Testing will be conducted at completion and therefore it is only possible to definitively find out if this credit can be achieved.

Targeting this credit will be reviewed at a later stage in the project prior to building permit.

B.1.7 Product Suitability

The contractor shall be responsible for satisfying themselves that any products are suitable for the proposed application and environmental conditions prior to submission for approval.

Any product references within this report are based on the acoustic or vibration performance only and their reference in this report does not infer they are acceptable for the environmental conditions likely to be encountered.

B.2 Applicable Standards

B.2.1 Sound Insulation

Sound insulation measurements in both laboratories and on-site shall be made in accordance with the AS ISO 140 series and rated in accordance with the AS ISO 717 series, with particular reference to the following;

- AS 1191: 2002– Acoustics – Method for laboratory measurement of airborne sound insulation of building elements (or ISO 140-1 and 140-3).
- AS ISO 140-4: 2006 – Measurement of sound insulation of buildings and of building elements – field measurements of airborne sound insulation between rooms.
- ISO 140-5: 1998 – Measurement of sound insulation of buildings and of building elements – field measurements of airborne sound insulation of façade elements and facades.
- AS ISO 140-6: 2006 – Measurement of sound insulation of buildings and of building elements – laboratory measurements of impact sound insulation of floors.
- AS/NZS ISO 140-7: 2006 – Measurement of sound insulation of buildings and of building elements – field measurements of impact sound insulation of floors.
- AS ISO 140-8: 2006 – Measurement of sound insulation of buildings and of building elements – laboratory measurements of the reduction of transmitted impact noise by floor coverings on a heavyweight standard floor.
- AS/NZS 2499:2000 – Acoustics - Laboratory measurement of room-to-room airborne sound insulation of a suspended ceiling with a plenum above it. (or ISO 140-9: 1994)
- AS/NZS ISO 717-1: 2004 – Acoustics – Rating of sound insulation in buildings and of building elements – Part 1: Airborne Sound Insulation
- AS ISO 717-2: 2004 – Acoustics – Rating of sound insulation in buildings and of building elements – Part 2: Impact Sound Insulation.
- ISO 140-14: 2006 – Acoustics – Measurement of sound insulation in buildings and of building elements – Part 18: Laboratory measurement of sound generated by rainfall on building elements
- ISO 10848 -1:2006 – Acoustics – Laboratory measurement of the flanking sound performance of airborne and impact sound between adjoining rooms – Part 1: Frame document.
- ISO 10848-2: 2006 – Acoustics – Laboratory measurement of the flanking sound performance of airborne and impact sound between adjoining rooms – Part 2: Application to light elements when the junction has a small influence.

- ISO 10848-3: 2006 – Acoustics – Laboratory measurement of the flanking sound performance of airborne and impact sound between adjoining rooms – Part 3: Application to light elements when the junction has a substantial influence.
- ISO 10848-4: 2006 – Acoustics – Laboratory measurement of the flanking sound performance of airborne and impact sound between adjoining rooms – Part 4: Application to junctions with at least one heavy element.

B.2.2 Acoustic Absorbers

Measurements of acoustic absorption shall be carried out in accordance with the following standards;

- AS ISO 354: 2006 – Acoustics - Measurement of sound absorption in a reverberation room
- AS ISO 11654: 2002 – Acoustics – Rating of sound absorption – materials and systems
- AS NZS 2460:2002 – Acoustics – Measurement of the reverberation times in rooms

B.2.3 Acoustic Testing of Building Services Plant & Equipment

Sound power levels produced by fans and air handling units shall be tested in accordance with one of the following standards as appropriate:

- ISO 10302-1: 2011 - Measurement of airborne noise emitted and structure-borne vibration induced by small air moving devices – Part 1: Airborne noise measurement.
- ISO 13347: 2004 - Industrial fans. Determination of fan sound power levels under standardized laboratory conditions.
- ISO 5136: 2003 - Acoustics. Determination of sound power radiated into a duct by fans and other air-moving devices. In-duct method.

The dynamic insertion loss and pressure drop performance of attenuators and silencers shall be tested in accordance with ISO 7235: 2003 - Acoustics. Laboratory measurement procedures for ducted silencers and air-terminal units. Insertion loss, flow noise and total pressure loss or AS 1277: 1983 - Acoustics – Measurement procedures for ducted silencers.

The sound absorption performance of duct linings shall be tested in accordance with the standards listed in 'Acoustic Absorbers' of this specification.

B.2.4 Noise Levels

Noise levels shall be measured in accordance with the following standards:

- Measurement equipment used to measure noise shall conform to Class 1 standard as defined in AS IEC 61672.1 and 2 (both 2004) Electro acoustics - Sound level meters – Part 1: Specifications, Part 2: Pattern evaluation tests.
- ASHRAE Recommended Procedure for Measuring the HVAC System - Induced Noise in a Room.

City of Stirling
17 Jan 2025
RECEIVED

B.3 Architectural

B.3.1 Sound Insulation Performance of the Building Envelope

B.3.1.1 Internal Noise Level Criteria

- The internal noise level criteria detailed in this section are based on the recommendations provided in the Australian/ New Zealand Standard AS/NZS 2107:2016 'Acoustics – Recommended design sound levels and reverberation times for building interiors' (AS2107).
- AS2107 provides recommended internal noise levels (defined as the equivalent continuous A-weighted sound pressure level — $L_{Aeq,t}$) for optimising the acoustic amenity in occupied spaces. The level of noise in an enclosed space typically consists of noise from building services and/or noise intrusion due to external sources (e.g. traffic). A summary of the recommended internal noise levels detailed in AS2107 is provided in Table 1.
- Supply and install the works to ensure noise break-in from external sources conforms to the internal noise level targets according to AS2107 presented in Table 1 below.

Table 1: Recommended maximum internal noise levels due to external noise break-in

Type of Occupancy/Activity	AS2107 Recommended Design Sound Level Range L_{eq} dBA
RESIDENTIAL BUILDINGS - Houses and apartments in inner city areas or entertainment districts or near major roads —	
Living areas (Houses and apartments near major roads)	35 – 45
Sleeping areas (Houses and apartments near major roads)	35 – 40
Wet areas including bathrooms, ensuites and laundries	35 – 45
Apartment common areas (e.g. foyer, lift lobby)	45 – 50
GENERAL AREAS –	
Managers office	40 – 45
Enclosed carpark	< 65
Gym	< 55
Games room Casual Lounge Sunset Bar Formal Kitchen, Dining and Lounge	< 50
Library Sandbox	40 – 45
Commerical Tenancies (Café, Kiosk, Winebar)	< 50

- The internal noise level criteria in AS2107 refer to the continuous equivalent (L_{Aeq}) levels for background noise. This document is a common reference for establishing satisfactory goals for quasi-static mechanical and external traffic noise ingress.

B.3.1.2 Reverberation Times

AS2107 provides recommended reverberation times for optimising the acoustic amenity in occupied spaces. The relevant reverberation times have been outlined in Table 2.

Table 2: Recommended reverberation times from AS2107

Type of Occupancy/Activity	AS2107 Recommended Design Sound Level Range L_{eq} dBA
RESIDENTIAL BUILDINGS - Houses and apartments in inner city areas or entertainment districts or near major roads —	
Living areas (Houses and apartments near major roads)	-
Sleeping areas (Houses and apartments near major roads)	-
Wet areas including bathrooms, ensuites and laundries	-
Apartment common areas (e.g. foyer, lift lobby, lounges, dining, games room)	See Note 1
GENERAL AREAS –	
Commerical Tenancies (Café, Kiosk, Winebar)	See Note 1
Managers office Sandbox	0.4 – 0.6
Enclosed carpark	-
Gymnasium	0.6 – 0.8
Casual Lounge Sunset Bar Formal Kitchen, Dining and Lounge	0.6 – 0.1
Games room	< 1.0
Library	< 0.6
Winebar	See Note 1

1) Reverberation time should be minimised as far as practicable for noise control.

City of Stirling
17 Jan 2025
RECEIVED

B.3.1.3 External Walls

- Based on the latest architectural layouts, it is evident that the building envelope will consist of a combination of solid and glazed elements. The noise intrusion has been calculated for all façade elements, which is relative to their surface area.
- Where solid elements are used as the external wall, the walls are required to achieve $R_w + C_{tr} 45$ as a minimum to result in acceptable internal noise levels.
- Typically, this can be achieved with the following configuration:
 - 110mm Concrete Panel
- Where lightweight construction is proposed, this will result in reduced acoustic performance specifically at the lower frequencies. As a result, this may have some impact on the recommended glazing types. The following constructions are recommended if lightweight walls are to be used (Table 3), to ensure compliance with the recommended internal noise levels for residential units as specified in SPP 5.4, which is to be read in conjunction with the mark up provided

Table 3: Lightweight External Wall Configurations

Reference	Airborne Sound Insulation Performance R_w	Configuration
 EX - 1	66 - 68	- Double 64mm steel studs with 20mm air gap in between both studs, Studs at 600mm centres with:- - Minimum 50 mm glasswool insulation within the cavity of each stud (min. density of 10 kg/m³); and - Two layers of 13mm thick sound rated plasterboard (min. surface mass 13kg/m²) to one side; - Two layers 9mm thick fibre cement (min. surface mass 14kg/m²) to the other side
 EX - 2	60 - 62	- Double 64mm steel studs with 20mm air gap in between both studs, Studs at 600mm centres with:- - Minimum 50 mm glasswool insulation within the cavity of each stud (min. density of 10 kg/m³); and - Two layers of 13mm thick Sound rated plasterboard (min. surface mass 13kg/m²) to one side; - One layer 9mm thick fibre cement (min. surface mass 14kg/m²) to the other side;
 EX - 3	50 - 52	92mm steels studs at 600mm centres, with: - - Minimum 100 mm glass wool insulation within the cavity (min. density of 10 kg/m³); and - Two layers of 13mm thick standard plasterboard to one side; - One layer 9mm thick fibre cement (min. surface mass 14kg/m²) to the other side;

Reference	Airborne Sound Insulation Performance R_w	Configuration
 EX - 4	44 - 46	92mm steel studs at 600mm centres, with: - - Minimum 100 mm glass wool insulation within the cavity (min. density of 10 kg/m³); and - One layer of 13mm thick standard plasterboard to one side; - One layer 9mm thick fibre cement (min. surface mass 14kg/m²) to the other side;

B.3.1.4 External Glazing

- External glazing at the façade shall comply with the acoustic performance requirements detailed in Table 4.
- Additionally, compliance to thermal requirements of the project is required. Builder to ensure both acoustic and thermal requirements are adhered prior to selecting of appropriate configuration of glass.
- Acoustic performance test certificates demonstrating compliance with the acoustic performance requirements detailed in Table 4 shall be provided by the builder prior to the procurement of glazing and associated façade extrusions.

Table 4: External glazing acoustic performance

Reference Code	Glazing Configuration	R_w	Spectrum Sound Transmission Loss (dB)					
			125 Hz	250 Hz	500 Hz	1k Hz	2kHz	4k Hz
 GT-1	6mm glass + 12mm air gap + 12.5mm Vlam Hush Glass	42	26	27	39	46	48	54
 GT-2	6mm toughened glass + 12mm air gap + 6.5mm Vlam Hush Glass	37	23	29	34	38	39	43
 GT-3	6mm glass + 12mm air gap + 6.38mm glass	39	26	26	35	43	44	48
 GT-4	6mm glass + 12mm air gap + 6mm glass	35	25	21	35	41	37	39

Note; The performance stated above is for glazing only. The overall performance which includes frame, seals and other hardware must not degrade the performance by more than 3dB.

Locations of the glazing configurations in Table 4 are shown in PART E.

B.3.1.5 Roof Construction

- Whilst it is not a mandatory requirement of the NCC, rain noise intrusion shall be considered with a view of ensuring an adequate level of amenity for occupants in apartment spaces below. Additionally, roof construction should be adequately designed to control external noise intrusion from noise sources identified in this report, as well as the proposed roof plant to satisfactorily provide internal noise levels which are compliant with the criteria established in this specification.
- Based on the latest architectural drawings, the roof is to be made of a minimum 200mm thick concrete slab. This will be adequate to control rain noise and the noise generated from the roof plant deck.

Where a lightweight roof is proposed, the following construction is adequate to fulfil the requirements.

One layer of Colorbond sheet metal or similar (0.42 mm); and

- 75 mm thick high-density Anticon insulation hard-fixed to the underside of roof and over steel purlins;
- Minimum ceiling cavity to be 300mm;
- Suspended ceiling system; and
- Min. 50 mm thick glass wool insulation (min. 11kg/m³ density) over one layer of 13 mm standard plasterboard

B.3.2 Sound Insulation Ratings for Internal Walls and Floors

B.3.2.1 Acoustic Performance Requirements for Multi-storey Buildings (Classes 2, 3 and 9c)

The National Construction Code (NCC 2019 Amd. 1) outlines minimum requirements for inter-tenancy walls and floors/ceilings to maintain an acceptable standard of privacy. This includes the incorporation or penetration of building services through a floor or through partitions belonging to more than one sole-occupancy unit.

Acoustic design of the development has based on NCC 2019 Amd. 1 acoustic performance requirements and other relevant Australian Standards.

NCC 2019 Amd. 1 nominates required Weighted Sound Reduction Indexes (R_w) and spectrum adaptation factor (C_{tr}) for any forms of constructions of different space/activity types in adjoining units. The R_w and $R_w + C_{tr}$ are single number descriptors quantifying the noise attenuating performance of partitions for typical intrusive noises produced inside the residences. The higher the rating is, the greater the isolation provided by the partition becomes.

Spectrum adaptation factors are commonly used to compensate for the fact that certain type of sounds (low frequencies) are more readily transmitted through insulating materials than others. Typical use of C_{tr} factor is for music, home theatre, etc.

Spectrum adaptation factors have now been introduced for most building elements which require an airborne sound insulation rating. Therefore, both the C_{tr} factor and the R_w of the building elements will need to be considered in the design process.

The acoustic provisions for inter-tenancy walls in Class 2, 3 buildings are outlined in the NCC 2019 Amd. 1. The following is an extract from Part F5 of Volume Two:

F5.2 Determination of airborne sound insulation ratings

A form of construction required to have an airborne sound insulation rating must –

- i have the required value for weighted sound reduction index (R_w) or weighted sound reduction index with spectrum adaptation term ($R_w + C_{tr}$) determined in accordance with AS/NZS 1276.1 or ISO 717.1 using results from laboratory measurements; or
- ii comply with Specification F5.2.

F5.3 Determination of impact sound insulation ratings

- (a) A floor in a building required to have an impact sound insulation rating must –

- i have the required value for weighted normalised impact sound pressure level with spectrum adaptation term ($L_{n,w}$) determined in accordance with AS/ISO 717.2 using results from laboratory measurements; or
 - ii comply with Specification F5.2.
- (b) A wall in a building required to have an impact sound insulation rating must –
 - i. for a Class 2 or 3 building be of discontinuous construction; and
- (c) For the purposes of this Part, discontinuous construction means a wall having a minimum 20 mm cavity between 2 separate leaves, and
 - i for masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
 - ii for other than masonry, there is no mechanical linkage between leaves except at the periphery.

F5.4 Sound insulation rating of floors

- (a) A floor in a Class 2 or 3 building must have an $R_w + C_{tr}$ (airborne) not less than 50 and an $L_{n,w}$ (impact) not more than 62 if it separates –
 - i sole-occupancy units; or
 - ii a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification.

F5.5 Sound insulation rating of walls

- (a) A wall in a Class 2 or 3 building must –
 - i have an $R_w + C_{tr}$ (airborne) not less than 50, if it separates sole-occupancy units; and
 - ii have an R_w (airborne) not less than 50, if it separates a sole-occupancy unit from a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification; and
 - iii comply with **F5.3(b)** if it separates:
 - a) a bathroom, sanitary compartment, laundry or kitchen in one sole-occupancy unit from a habitable room (other than a kitchen) in an adjoining unit; or
 - b) a sole-occupancy unit from a plant room or lift shaft.
- (b) A door may be incorporated in a wall in a Class 2 or 3 building that separates a sole-occupancy unit from a stairway, public corridor, public lobby or the like, provided the door assembly has an R_w not less than 30.
- (e) Where a wall required to have sound insulation has a floor above, the wall must continue to –
 - i the underside of the floor above; or
 - ii a ceiling that provides the sound insulation required for the wall.
- (f) Where a wall required to have sound insulation has a roof above, the wall must continue to –
 - i the underside of the floor above; or
 - ii a ceiling that provides the sound insulation required for the wall.

F5.6 Sound insulation rating of services

- (a) If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any-sole occupancy unit by construction with an $R_w + C_{tr}$ (airborne) not less than –

- i 40 if the adjacent room is a habitable room (other than kitchen); or
 - ii 25 if the adjacent room is a kitchen or non-habitable room.
- (b) If a storm water pipe passes through a sole-occupancy unit it must be separated in accordance with (a)(i) and (ii).

F5.7 Sound insulation of pumps

A flexible coupling must be used at the point of connection between the service pipes in a building and any circulating or other pump.

B.3.2.2 Inter-tenancy Walls and Floors

- The acoustic provisions for inter-tenancy walls and floors in Class 2, 3 Buildings are outlined in the National Construction Code, NCC 2019 Amd. 1. The requirements consist of airborne and impact sound insulation performance parameters which are summarised in Table 5.

Table 5: Sound insulation requirements in accordance with NCC 2019 Amd. 1 – Class 2 & 3

Construction	Condition	Deemed-to-Satisfy Requirements	Verification Requirements
Walls	<u>Airborne Sound Insulation</u>		
	Between sole-occupancy units	Minimum $R_w + C_{tr}$ 50	Minimum $D_{nT,w} + C_{tr}$ 45
	Between a sole-occupancy unit and a plant room, lift shaft, stairway corridor, public corridor or the like	Minimum R_{wv} 50	Minimum $D_{nT,w}$ 45
	<u>Impact Sound Insulation</u>		
	Between a laundry, kitchen, bathroom or sanitary compartment in a sole-occupancy unit, and a habitable room in an adjoining unit	Discontinuous construction ¹⁾	As deemed to satisfy
	Between a sole-occupancy unit and a plant room or lift shaft	Discontinuous construction ¹⁾	As deemed to satisfy
Floors	<u>Airborne Sound Insulation</u>		
	Between sole-occupancy units	Minimum $R_{wv} + C_{tr}$ 50	Minimum $D_{nT,w} + C_{tr}$ 45
	Between a sole-occupancy unit and a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification	Minimum $R_{wv} + C_{tr}$ 50	Minimum $D_{nT,w} + C_{tr}$ 45
	<u>Impact Sound Insulation</u>		
	Between sole-occupancy units	Maximum $L_{n,w}$ 62	Maximum $L_{nT,w}$ 62
	Between a sole-occupancy unit and a plant room, lift shaft, stairway, public corridor, public lobby or the like, or parts of a different classification	Maximum $L_{n,w}$ 62	Maximum $L_{nT,w}$ 62
Doors	<u>Airborne Sound Insulation</u>		
	Between a sole-occupancy unit and a stairway, public corridor, public lobby or the like	Minimum R_w 30	Minimum $D_{nT,w}$ 25

Construction	Condition	Deemed-to-Satisfy Requirements	Verification Requirements
Services	<u>Airborne Sound Insulation</u>		
	Between a habitable room (other than a kitchen) in a sole-occupancy unit and a duct, soil, waste or water supply pipe duct (if the duct or pipe is located in a wall or floor cavity and serves or passes through more than one sole-occupancy unit)	Minimum $R_w + C_{tr}$ 40	—
	Between a kitchen or non-habitable room in a sole-occupancy unit and a duct, soil, waste or water supply pipe duct (if the duct or pipe is located in a wall or floor cavity and serves or passes through more than one sole-occupancy unit)	Minimum $R_w + C_{tr}$ 25	—
	If a storm water pipe passes through a sole-occupancy unit (habitable room other than kitchen)	Minimum $R_w + C_{tr}$ 40	—
	If a storm water pipe passes through a sole-occupancy unit (kitchen or non-habitable room)	Minimum $R_w + C_{tr}$ 25	—

¹⁾ For the purposes of this Part, “discontinuous construction” means a wall having a minimum 20 mm cavity between 2 separate leaves.

- For masonry, where wall ties are required to connect leaves, the ties are of the resilient type; and
- For other than masonry, there is no mechanical linkage between leaves except at the periphery.

B.3.2.2.1 Intertenancy Wall Construction

B.3.2.2.1.1 Apartment Building

- Based on the feedback received from Client, it has been confirmed to target 5-star Green star rating for acoustic separation between sole occupancy units and corridors.
- Refer to Table 6 below for typical wall construction types for proposed development to achieve the target performance requirements for NCC and 5-star Greenstar compliance. For wall types not covered in this table, refer to relevant architectural drawings. Refer to PART F for wall mark-ups.
- Any alternative method of wall system proposed shall be verified by the acoustic engineer.

Table 6: Inter-tenancy wall construction

Colour code	Type	Proposed Configuration	Expected Performance
 PT - 1	Between Separate Tenancies	Two rows of min. 76 mm steel studs at 600 mm centres with — • an air gap not less than 20mm between the rows of studs; and • 75mm thick glasswool insulation (min. density 14 kg/m³) positioned between each stud; and • 2 layers of 16mm fire rated plasterboard (Min. 12.5kg/m² surface mass) to both sides.	$R_w + C_{tr} \geq 55$, <i>discontinuous</i>
 PT - 2	Bounding walls (Room to corridor)	Option 1 Minimum 64mm staggered steel studs in a 92mm base track with -	$R_w \geq 55$

Colour code	Type	Proposed Configuration	Expected Performance
		100 mm thick glass wool insulation with a density of 14 kg/m³, positioned between both studs; and - Two layers of 13mm fire rated plasterboard (Min. 10.5kg/m² surface mass) fixed to both sides Option 2 92mm thick steel Quiet stud, with – 100 mm thick glass wool insulation with a density of 14 kg/m³, positioned between studs; and - Two layers of 13mm fire rated plasterboard (Min. 10.5kg/m² surface mass) fixed to one side and one layer 13mm thick fire rated plasterboard to the other side	
 PT - 2	Bounding walls (Room to lift shaft, and plant rooms)	Minimum 125 mm thick concrete with — - a row of 64 mm steel studs at 600mm centres, spaced 20mm from concrete panel; and 70mm polyester insulation with a density of 9 kg/m³, positioned between studs; and - Two layers of 13mm standard plasterboard (Min. 8.4kg/m² surface mass) fixed to the outside face of the stud.	$R_w \geq 55$ <i>discontinuous</i>
 PT - 3	Habitable room (including open plan kitchen) to services that passes through more than one sole occupancy unit	Min. two layers of 13 mm standard rated plasterboard or 13 mm moisture resistant plasterboard on steel studs with – 20mm air-gap; and - minimum 75 mm glasswool batts (minimum density 14 kg/m³) to cavity; and - Acoustic rate pipe Rehau Rupiano plus or similar - All services within the riser to be lagged with min 25 mm glasswool or foam bonded to a loaded vinyl noise barrier layer (min. mass per unit area of 4.5kg/m², Pyrotek 4525C or equivalent). - Risers to be closed off at each floor level.	$R_w + C_{tr} 40$
 PT - 4	Non-habitable room (excluding open plan kitchen) to services that passes through more than one sole occupancy unit	Min. one layer 13 mm moisture resistant plasterboard on steel studs 20mm air-gap; and - minimum 75 mm glasswool batts (minimum density 14 kg/m³) to cavity - Risers to be closed off at each floor level.	$R_w + C_{tr} 25$

B.3.3 Party Wall Column/Blade Treatments

Based on the latest architectural drawings, structural columns may form part of the party walls between apartments certain locations. An example of this has been shown in Figure 1 below.

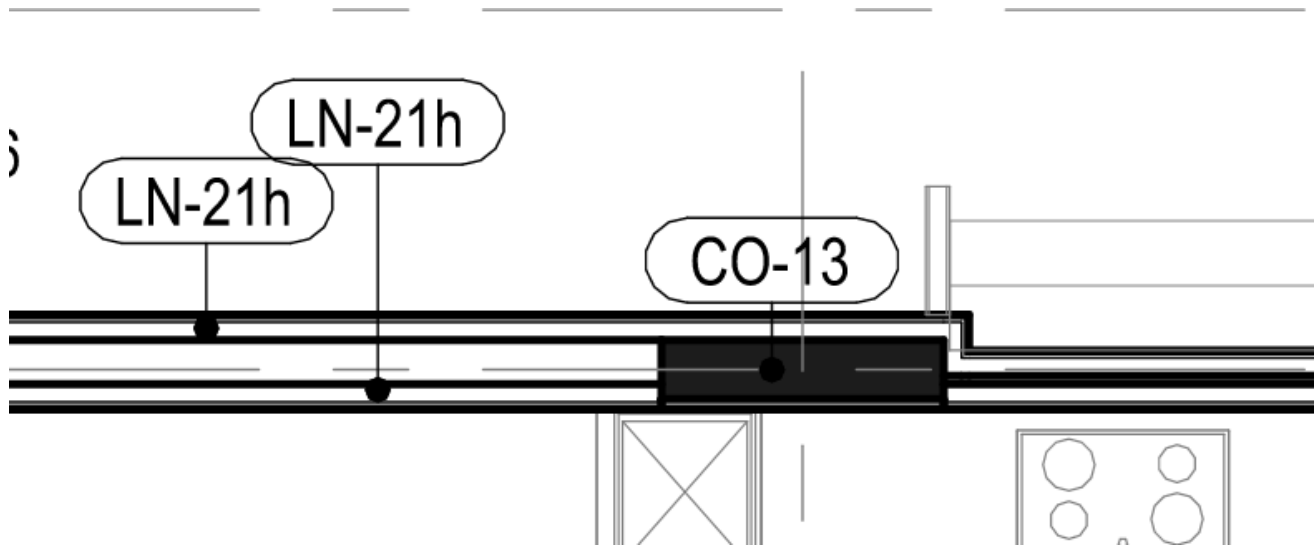


Figure 1: Structural column forming part of the intertenancy wall

Where a concrete column forms to achieve $R_w + C_{tr} \geq 55$ and be discontinuous based proposed wall construction details: the party wall, additional treatment is required to achieve the acoustic rating and discontinuity required for Green Star.

The following nominated construction is required:

Side 1

- 1x13mm standard plasterboard (or moisture resistant plasterboard) on 28mm furring channels;
- 25mm glass wool insulation 14 kg/m³ positioned within the cavity;
- Min. 250mm thick concrete

Side 2

- 20mm clear air gap;
- One row Independent 76mm steel studs at 600mm centres;
- 75mm glass wool insulation (14 kg/m³) positioned within the cavity;
- 1x13mm standard plasterboard (or moisture resistant plasterboard) fixed to the row of studs

Wall to be full height from slab to slab.

B.3.4 Party Wall separating SOU and Level 1 Wine bar

The level 1 commercial wine bar is expected to be used by residents and the public and is therefore may generate noise that is undesirable to the adjacent SOU. The location is shown in Figure 2.

City of Stirling
17 Jan 2025
RECEIVED

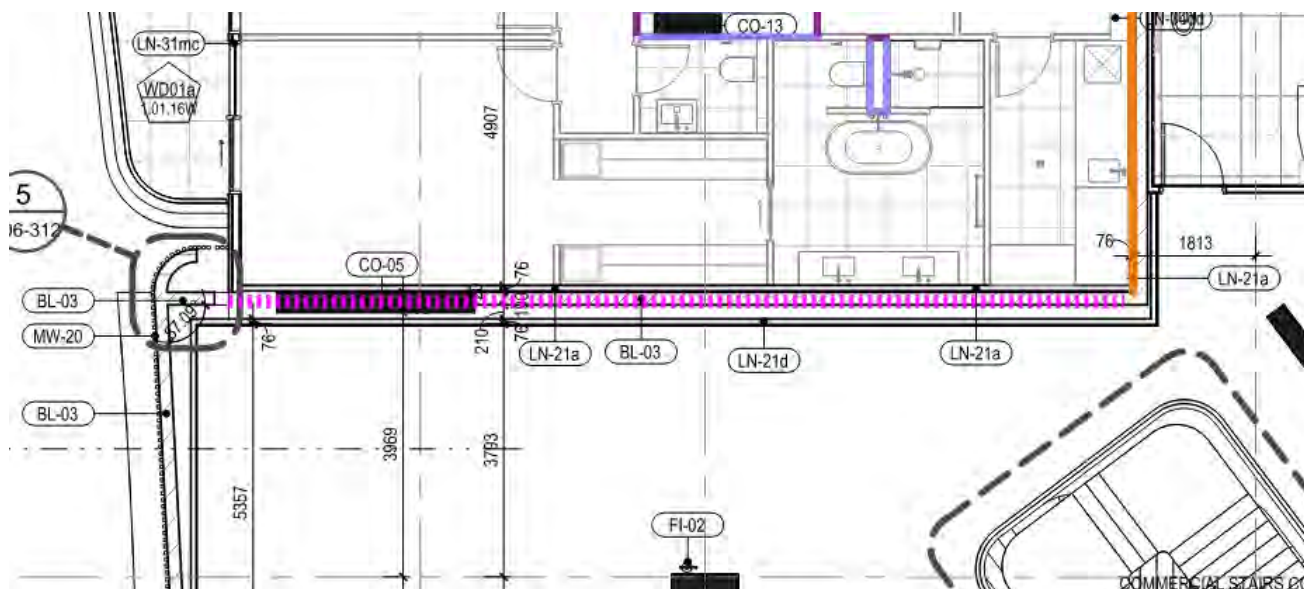


Figure 2: Level 1 Commercial Wine Bar

The wall separating the tenancy from the SOU is therefore recommended to be upgraded to the following construction to minimise noise disturbance from the wine bar:

Side One

- One layer of 13mm standard plasterboard
- One row 76mm steel studs;
- 75mm glass wool insulation (min. density 14 kg/m³) fixed in cavity;
- 20mm air gap; and
- 190 concrete block wall

Side Two

- 130mm air gap
- One row independent 76mm steel studs;
- Cavity filled with 100mm glasswool insulation (min. density 14kg/m³); and
- Two layers of 13mm sound rated plasterboard (min. surface mass 13kg/m²)

OR

Side One

- One layer of 13mm standard plasterboard
- One row 92mm steel studs;
- 90mm glass wool insulation (min. density 14 kg/m³) fixed in cavity; and
- 300 concrete wall

Side Two

- 20mm air gap
- One row independent 76mm steel studs;
- Cavity filled with 100mm glasswool insulation (min. density 14kg/m³); and
- Two layers of 13mm sound rated plasterboard (min. surface mass 13kg/m²)

Partition to extend from slab to slab or the underside of the roof, with penetrations to be treated sealing all gaps.

B.3.5 Party Wall separating SOU (penthouse) and Tower T1 and T2 Plant rooms

Mechanical Plant rooms are proposed on level 14 of Tower T1 and 16 of Tower T2 as shown in Figure 3.

City of Stirling
17 Jan 2025
RECEIVED

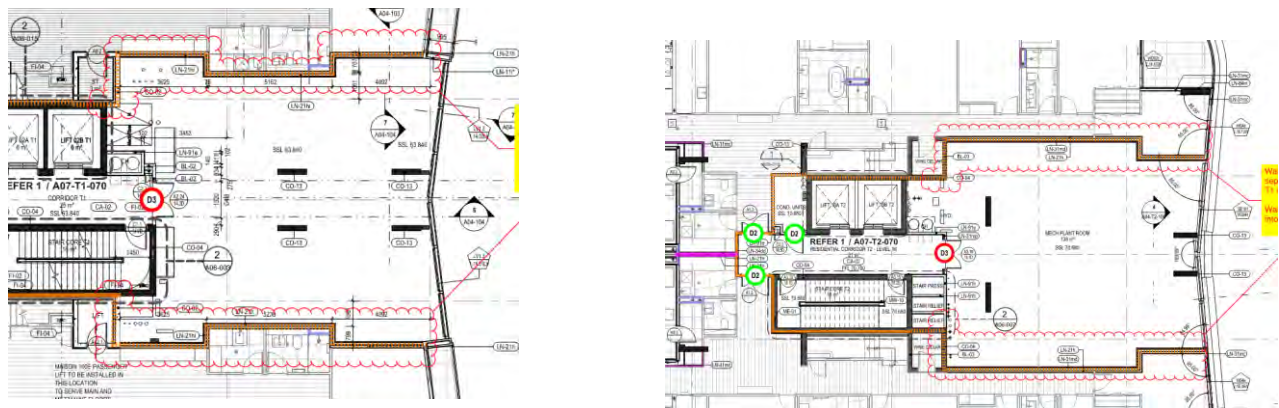


Figure 3: Mechanical plant room level 14 of Tower T1 and 16 of Tower T2

The separating walls are required to be discontinuous as per NCC requirement for walls separating apartments from mechanical plant rooms. Additionally, the walls need to be upgraded in order to achieve the design internal noise levels within The SOU's.

The separating wall construction to be as per minimum construction as shown in Figure 3:

Option 1

Two rows of min. 96 mm steel studs at 600 mm centres with —

- an air gap not less than 20mm between the rows of studs; and
- 75mm thick glasswool insulation (min. density 14 kg/m³) positioned between each stud; and
- 2 layers of 16mm fire rated plasterboard (Min. 12.5kg/m² surface mass) to both sides; and
- 2 layers 9mm thick compressed fibre cement (Min. 18.9kg/m² surface mass) to one side

Option 2

140mm thick core filled blockwork wall, with —

- One row of min. 64 mm steel studs at 600 mm centres
- an air gap not less than 20mm between the rows of studs and blockwork wall; and
- One layer of 13mm fire rated plasterboard (Min. 10.5kg/m² surface mass) fixed to the outside face of the row of studs

The door to the plant room be rated to a minimum of R_w 45 acoustically rated door for both options.

Note that an updated mechanical review of the Tower T1 and T2 plant rooms has not yet been completed. Once completed, a revised wall separating wall construction between the adjacent apartments and the plant rooms may be required.

B.3.5.1 Party Walls to Roof Over

NCC Part 5.5(f) states that where a separating wall that is required to have a minimum sound insulation performance has a floor or roof above, then that wall must continue to the underside of the floor/roof above, or, the roof or ceiling must have an equal sound insulation performance as the wall.

B.3.5.2 Intra-tenancy Walls

All intra-tenancy walls constructed around bathrooms, laundry, kitchens and any other room or riser containing soil, waste and storm water pipes serving a different tenancy in the ceiling space or riser shall be constructed to be of full height to the soffit slab above. Where full height walls are not practical, lagging of pipes in combination with insulation on plasterboard ceiling shall be considered to comply with the NCC requirements.

City of Stirling
17 Jan 2025
RECEIVED

It is noted that the Intra-tenancy walls are not generally required to be acoustically rated for compliance purposes. The client may wish to improve the acoustic amenity within the apartments by providing acoustic rated walls that meet an R_w45 rating.

R_w45 rated walls can be achieved by the following configuration;

- 2 layers of 13mm plasterboard + 64mm steel studs at 600mm centres with 50mm glasswool insulation + 1 layer of 13mm plasterboard

B.3.5.3 General Areas

Wall configurations for general areas have been provided below in Table 7 Locations have been provided in PART F.

Table 7: Dry Wall Constructions for general areas

Airborne Sound Insulation Performance (R_w)	Configuration
 PT - 5 R_w 50	92mm steel studs (0.55BMT) at 600mm centres, with; • Minimum 90mm glasswool insulation positioned between the row of studs (min. density of 14 kg/m³); • Two layers of 13mm thick fire rated plasterboard directly fixed to both sides of the row of studs. <u>OR</u> Two rows of 92mm steel studs at 600mm centres, with; • Minimum 20mm air gap between rows of studs • Two rows Minimum 90mm Bradford soundscreen positioned between the row of studs (min. density of 40 kg/m³); • One layer of 13mm thick standard plasterboard directly fixed to both sides of the row of studs Partition to extend slab to slab, cutting through ceiling. Any penetrations are to be treated by sealing gaps. Where discontinuous construction is required (see attached mark ups), a 20mm clear air gap must be maintained between rows of studs.
 PT - 6 R_w 45	64mm steel studs at 600mm centres, with; • Minimum 50mm glasswool insulation positioned between the row of studs (min density of 14 kg/m³); • Two layers of 13mm thick standard plasterboard directly fixed to one side • One Layer of 13mm thick standard plasterboard directly fixed to the other side Partition to extend slab to slab, cutting through ceiling. Any penetrations are to be treated by sealing gaps.

B.3.5.4 Glazed Partitions

Wall configurations for general areas have been provided below in Table 8. Locations have been provided in PART F.

Table 8: Glazed partition construction for general areas

Airborne Sound Insulation Performance (R_w)	Configuration
 GT - 1 R_w 35	10.38mm laminated glass. - Partition to extend to underside of ceiling. provide 5mm thick minimum foam/EPDM compressible strip (10mm wide minimum) between partition head and underside of ceiling, to be compressed by half when affixed. - Partition above ceiling to match wall type R_w 45
 GT - 2 R_w 37	10.5mm VLam Hush glass - Partition to extend to underside of ceiling. provide 5mm thick minimum foam/EPDM compressible strip (10mm wide minimum) between partition head and underside of ceiling, to be compressed by half when affixed. - Partition above ceiling to match wall type R_w 45

B.3.5.5 Technical Recommendations for Walls

Where a specific level of sound isolation is required between adjacent rooms, an acoustic rating is shown on architectural partition plans. The acoustic performance required by the installed walls and partitions, includes the effects of doors, glazing and penetration by services. Where no acoustic performance is shown there is no acoustic performance requirement associated with the partition.

Drywall Partitions

- Install sound rated partition walls where shown on the Contract drawings. The walls shall comprise steel studs, internal cavity absorption linings and plasterboard or similar sheeting as specified, or as shown on the Contract drawings.
- Preserve the sound reduction properties of sound rated partitions by sealing flanking sound transmission paths during installation including but not necessarily limited to junctions between partitions and other building surfaces, air gaps around door sets, cut-outs for services and the like.
- Tightly butt joint inner sheets for multiple layer plasterboard walls. Stagger joints between adjacent sheets. At corners or at locations where coinciding alignment of joints between sheets for cavity side, inner and face sheet linings cannot be avoided fully fill joints during each sheet fixing. Tape and set joints in face sheets.
- Refer to Section B.3.5.6.2 for Building Junction Seals and Insulation Specifications.
- Rectify audible sound leaks and similar evidence of deficiencies in performance of wall construction and seals to the satisfaction of the Construction Manager.
- Ensure that all walls presented in Table 6 above are full height construction – extending from the slab to the underside of the soffit. All partitions are to be sealed in accordance with manufactures recommendations to maintain the acoustic performance requirements.
- Timber battens and timber studs are acceptable in lieu of metal studs and furring channels. 15mm timber battens may replace 16mm furring channels, 30 mm timber batten may replace 30mm furring channel and 70mm timber stud may replace 64mm metal studs.
- For Bathrooms, Laundries, Kitchens and Risers – 6 mm fibrous cement sheeting is acceptable in lieu of 13mm Moisture Resistant (MR) plasterboard.



- Install acoustic bulkheads surrounding service pipes located in living, dining, kitchen, bedrooms and hallways as specified and sealed with an approved acoustic sealant at the junction with walls and soffit. Refer Contract drawings for details.

Masonry

- Masonry units must be laid with joint filled solid, including those between the masonry and any adjoining construction.
- Discontinuous construction is defined as a wall having a minimum 20mm cavity between 2 separate lining materials, and
 - for masonry, where wall ties are required to connect two lining material, the ties are of resilient type; and
 - for other than masonry, there is no mechanical connections between lining materials except at slab and soffit connection points.
- Fully fill all mortar beds and perpend to eliminate sound leakage. Work all joints with an ironing tool to a dense smooth finish.
- Provide a deflection head detail at all slab soffits. Unless otherwise specified or approved, seal the head gap with silicone or similar flexible sealant, installed in accordance with the sealant manufacturers' recommendations.
- Provide construction or expansion joints shall be the minimum dimension required to control or accommodate movement, filled using an approved filler. Seal all joints with silicone or similar flexible sealant to both finished faces of the wall, installed in accordance with the sealant manufacturers' recommendations.
- Rake out joints during construction and flush point to ensure that joints are uniformly sealed against noise penetration.
- Rectify audible sound leaks and similar evidence of deficiencies in performance of wall construction and seals to the satisfaction of the Construction Manager.
- Refer Building Junction Seals.

B.3.5.6 General Installation Requirements

B.3.5.6.1 Walls

To achieve the appropriate level of sound insulation, walls must –

- be constructed in accordance with the appropriate requirements contained in **F5.5**
- be sealed at the junction of sound insulated walls with any perimeter walls and roof cladding,
- The forms of construction must be installed as follows:
- **Masonry** – Units must be laid with all joints filled solid, except for adequately sound insulated articulation joints, including those between the masonry and any adjoining construction.
- **Concrete panels / slabs** – Joints between panels or slabs and any adjoining construction must be filled solid.
- **Sheeting Materials** –
 - if one layer is required on both sides of a wall, it must be fastened to the studs with joints staggered on opposite sides (see Figure 14 in PART D);
 - if two layers are required, the second layer must be fastened over the first layer so that the joints do not coincide with those of the first layer (see Figure 14 in PART D); and
 - joints between sheets or between sheets and any adjoining construction must be taped and filled solid.
- **Timber or steel-framed construction** – perimeter framing members must be securely fixed to the adjoining structure and–

- bedded in resilient compound; or
- the joints must be caulked so that there are no voids between the framing members and the adjoining structure.

B.3.5.6.2 Technical Recommendations for Penetrations and Junction Co-ordination

- Acoustically seal all service penetrations passing through sound-rated partitions.
- Seal sound rated partitions at the building façade junction so as to maintain the acoustical performance of the partitions. Obtain approval for the proposed seal method before proceeding with the works.
- Install all partition and ceiling constructions so as to ensure that audible sound leakage through building discontinuities is minimal. In particular, ensure that gaps between a partition head and the existing ceiling system are acoustically sealed. Obtain approval for the proposed seal method before proceeding with the works.
- Unless instructed otherwise by the Architect, terminate building partitions at window mullions. For full-height walls, ensure that an airtight seal is achieved at the junction between the partitions and the façade within concealed areas above the ceiling line.
- Provide prepared penetrations for electrical services as required by the electrical drawings or specifications.
- Make good all penetrations due to minor services (hydraulic services, cables) so that the sound isolation quality of the wall is not degraded and that audible sound leakage at the penetration does not occur. Tightly pack insulation around cables and seal with approved sealant (refer Section B.3.9.7).
- Where services carry vibration or noise, provide an oversized penetration which shall be packed with fibreglass and sealed using a silicone or similar flexible sealant to both finished faces of the penetration, installed in accordance with the sealant manufacturers' recommendations. Where the gap between the service and the surrounding structure is larger than 15 mm, provide a metal flashing cover over the fibreglass filler and seal using a flexible sealant. Ensure that the metal flashing does not transfer vibration into the adjacent structure. Ensure that the required overall sound insulation of the partition is maintained.
- Where an acoustically rated form of construction (i.e. inter-tenancy walls and floors) is to be penetrated by duct work, pipe work, electrical services or the like, the Contractor shall comply with the requirements set out in the subsequent sections
- In all cases the penetrations shall be acoustically sealed so that the acoustic rating of the form of construction being penetrated shall comply with the ratings specified in Table 5.
- If not stated otherwise, and notwithstanding the above, a construction separating two units of a separate occupancy and any penetrations therein, shall comply with the minimum requirements set out in the National Construction Code (NCC) 2019.
- Penetrations shall be sized for pipes passing through building slabs or walls to allow a uniform clearance of 10-15mm around the item and this space shall be packed through its depth with polyester fibre or equivalent. The joints on both sides shall be sealed using an approved acoustic sealant 12mm minimum depth. Penetrations made through slabs should be sealed for the full depth of the penetration with a cement grout to achieve an airtight seal.
- Any alternative sealing details utilised shall be designed to maintain the acoustic rating of the walls, ceilings and floors that they penetrate. Alternative details shall be submitted to the acoustic consultant for review and approval.
- All gaps around perimeter of inter-tenancy walls, ceilings and adjoining constructions shall be acoustically sealed using an approved acoustic sealant.
- The perimeter of all acoustically treated tiled floor areas shall be isolated from the adjoining wall construction with 5 mm gap. The gap shall be filled with an approved acoustic floor underlay or acoustic sealant.
- Inter-tenancy walls shall be constructed as specified in Table 6 alternative wall systems shall be submitted to the acoustic consultant for review and approval.

- All R_w and $R_w + C_{tr}$ values presented in this document refer to laboratory tested values.
- When testing in-situ, $D_{n,T,w}$ and $D_{n,T,w} + C_{tr}$ values shall be obtained.
- Where plasterboard, fibrous cement cladding, render or other treatments are proposed for masonry walls, these treatments must cover the walls within the ceiling cavity and are to be full-height, from slab to soffit. Gaps between the wall cladding and adjoining constructions such as the soffit are to be sealed.
- Acoustic insulation material located in the ceiling space may be cut around access panels.
- Skirting boards and kitchen cupboards shall be separated from tiled floors with a minimum gap of 4-6mm. The gap shall be filled with a flexible sealant.
- All inter-tenancy, intra-tenancy and corridor walls are to be built full-height from slab to soffit in their entirety.
- Blockwork of sound rated walls shall be full-height from slab to underside of roof.
- Hydraulic and electrical services such as hot and cold water pipes, gas pipes, and electrical conduit shall be mounted to the independent stud side of the inter-tenancy wall using noggings

B.3.6 Floors/Ceilings Construction

B.3.6.1 Apartment Building

- Where a hard flooring finish is located above habitable spaces of an apartment located directly below, the floor shall be acoustically treated to limit footfall impact noise and comply with the NCC 2019 Amd. 1 acoustic performance requirements.
- Table 9 presents the complete floor/ceiling system proposed for the development including acoustic treatment to provide structure borne attenuation produce by occupants on the floor directly above.
- Airborne sound insulation and impact isolation acoustic performance is expected to achieve the targeted 5-star Greenstar certification.
- Airborne acoustic performance is also required to achieve NCC 2019 Amd. 1 acoustic performance requirements.

City of Stirling
17 Jan 2025
RECEIVED

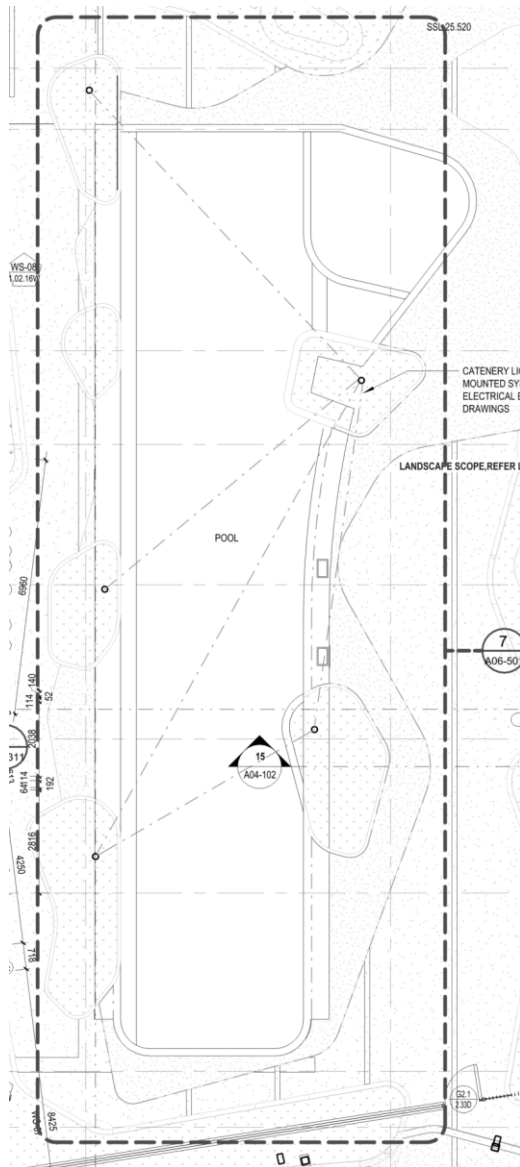
City of Stirling
17 Jan 2025
RECEIVED

Table 9: Floor/ceiling construction

Floor/Ceiling System Description						
Source Room (Unit above)	Sole-occupancy unit (Habitable) Bedroom/Living/Bathroom	Library Reading Room Games Room Casual/Lounge Sunset Lounge Formal Kitchen, Dining and Lounge Sandbox	Sole-occupancy unit (Habitable) Bathroom	Sole-occupancy unit (Habitable) Living Room	Sole-occupancy unit (Habitable) Bedroom	Balcony
Receiver Room (Unit below)	Carpark	Sole-occupancy unit (Habitable) Bedroom/Living/Bathroom	Sole-occupancy unit (Habitable) Livingroom/Bedroom/Bathroom	Sole-occupancy unit (Habitable) Bathroom	Sole-occupancy unit (Habitable) Livingroom/Bedroom	Sole-occupancy unit (Habitable) Bedroom/Living room
Floor Finish	Carpet, Timber or Tile	Carpet; OR Tiles/Timber	Tile	Timber	Carpet	Tiles
Adhesive	Refer to manufacturer's specification					
Acoustic Isolation (underlay)	No acoustic underlay required	Foam underlay under carpet; OR Tiles with 4.5mm Regupol 4515 underlay; OR 5mm thick Regupol K225 under timber	4.5mm Regupol 4515 underlay or approved equivalent	5mm thick Regupol K225 under timber or approved equivalent	Carpet on foam underlay	Pedestals on balconies to be provided with 4.5mm Regupol 4515 underlay
Adhesive for Acoustic Isolation (underlay)	Refer to manufacturer's specification					
Floor construction	Minimum 200 mm concrete slab					210mm concrete slab
Ceiling cavity insulation	None	50mm glass wool Insulation (14kg/m³)				
Ceiling cavity	None	Minimum 150mm air gap				
Ceiling construction	Exposed slab	13mm standard plasterboard ceiling suspended on light steel grid	13mm moisture resistant plasterboard or standard plasterboard ceiling suspended on light steel grid	13mm moisture resistant plasterboard ceiling suspended on light steel grid	13mm standard plasterboard ceiling suspended on light steel grid	13mm standard plasterboard ceiling suspended on light steel grid
Airborne Acoustic Performance	NCC $R_w + C_{tr} 50$	Green Star 5 star $R_w + C_{tr} > 55$	Green Star 5 star $R_w + C_{tr} > 55$	Green Star 5 star $R_w + C_{tr} > 55$	Green Star 5 star $R_w + C_{tr} > 55$	Green Star 5 star $R_w + C_{tr} > 55$
Impact Acoustic Performance	-	Green Star 5 star $L_{nT,W} + C_i < 55$	Green Star 5 star $L_{nT,W} + C_i < 55$	Green Star 5 star $L_{nT,W} + C_i < 55$	Green Star 5 star $L_{nT,W} + C_i < 55$	Green Star 5 star $L_{nT,W} + C_i < 55$

B.3.6.2 Level 2 Swimming Pool

Based on the latest architectural drawings, a communal pool deck is proposed on level 2 as shown in Figure 4.



City of Stirling
17 Jan 2025
RECEIVED

Figure 4: level 2 Swimming pool location

As the swimming pool is located above the bedrooms and living rooms of the apartment units, an adequate level of vibration isolation efficiency will be required.

Stantec's preferred method of acoustic treatment is to incorporate spring isolation considering the pool is located 1-2m lateral distance from the nearest apartments above.

The client has advised that the pool will incorporate an Embelton multi-plate rubber bearing (MPRB) system due to the following external considerations:

- Buildability;
- Waterproofing of the sub-structure;
- Access to the springs;
- Impacts access to springs has on the landscaping;

- Impacts access to springs has on the podium design and paving;
- Impacts that access to the springs has on waterproofing.

Stantec notes that the proposed MPRB system has a significantly lower predicted vibration isolation efficiency than the preferred spring system.

The nominated MPRB system to be incorporated as per the suppliers specification.

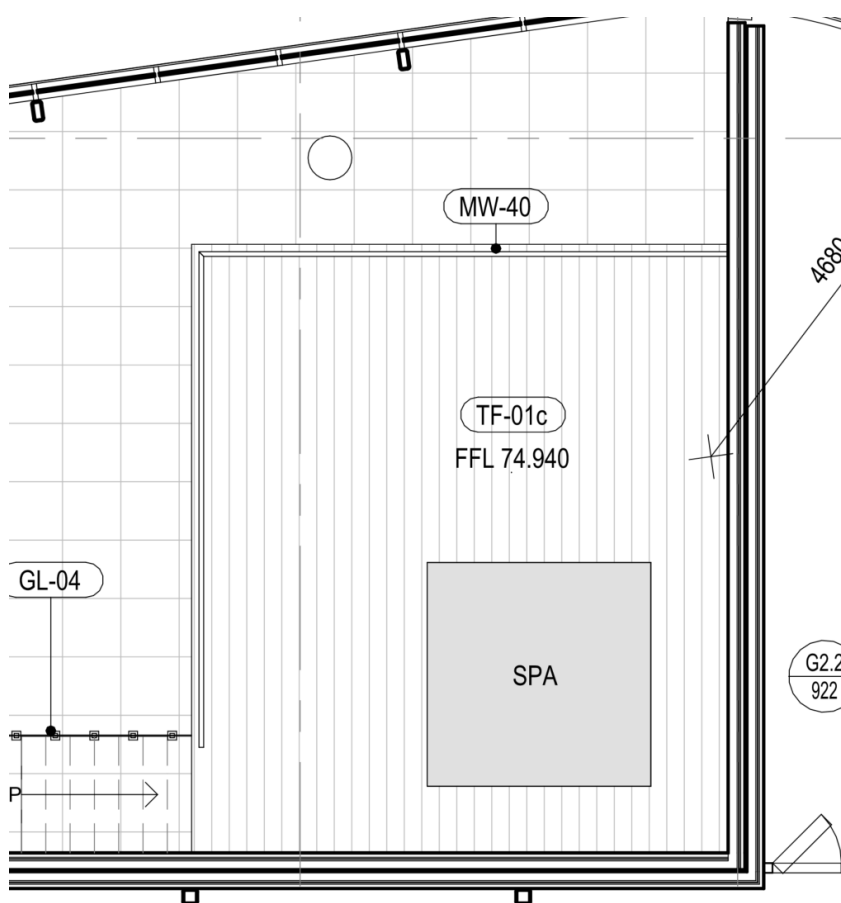
At post completion of the pool, acoustic testing to be conducted in apartments below to ensure diving/jumping into the pool will be compliant to the acoustic design requirements and not considered intrusive to the apartments below. Once tests are completed, noise management measures are to be identified, including (but not limited to):

- No diving or jumping into pool; and/or
- Pool not to be used between 10pm-7am.

Noise management measures to be enforced by strata management.

B.3.6.2.1 Level 15 (T1) and Level 17 (T2) Spa

It is also noted that the apartments on level 15 (Tower T1) and level 17 (Tower T2) are to contain outdoor spa areas as shown in Figure 5.



City of Stirling
17 Jan 2025
RECEIVED

Figure 5: level 15 and 17 Swimming pool location

While not required by NCC, it is recommended that the spa is provided with impact isolation treatment with the spa (pool) to be placed on springs/appropriate vibration isolation to minimize noise being transmitted within the apartment below.

B.3.6.3 Level 2 Gym

As shown in Figure 6 a gym is expected to be located on level 2 of the west tower within the project development.

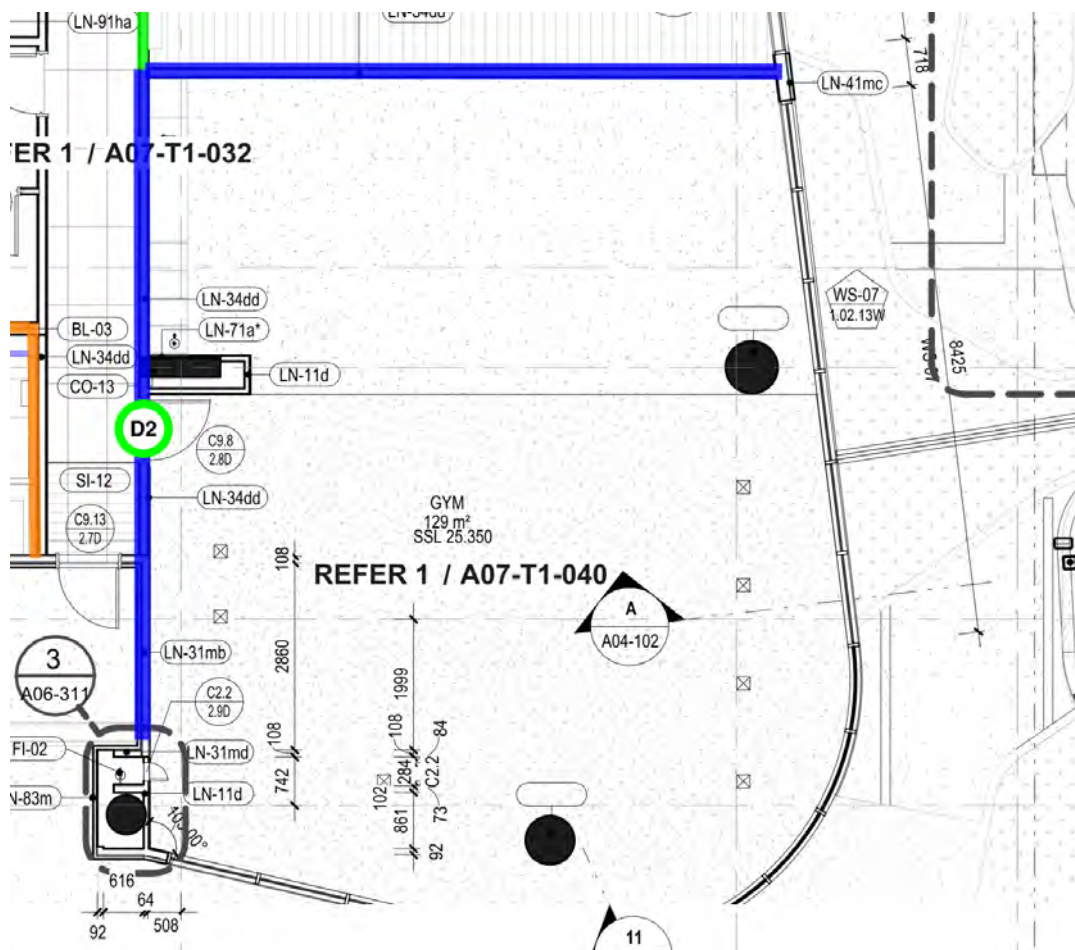


Figure 6: Level 2 Gym

- Activities in the Gym room may often result in structure-borne noise transfer within the building, where they are not treated. Mitigation strategies for structure-borne noise in buildings are almost always more effective and inexpensive when implemented at the source, which is why floor coverings and underlays are often the most appropriate means of isolating vibration, particularly in gymnasiums and fitness centers.
- The table below details the various acoustic treatments recommended for the respective equipment expected to be housed within the gym. Detailing around the edges where the acoustic treatment touches the structural elements will have to be isolated using a resilient seal. Alternative solutions for acoustic treatment must be approved by the acoustic engineer prior to installation.
- Based on the latest architectural layouts, it is not expected that there will be a functional activities area (e.g. battle ropes, medicine ball drops or free weights). These activities have very high vibration impact levels and will therefore require additional treatments should they be provided. This will typically require a spring isolated floor system that achieves a 15-25mm static deflection. Should this be incorporated, the acoustic engineer is to be advised for review.

City of Stirling
17 Jan 2025
RECEIVED

Table 10: Level 2 Gym Vibration Treatments

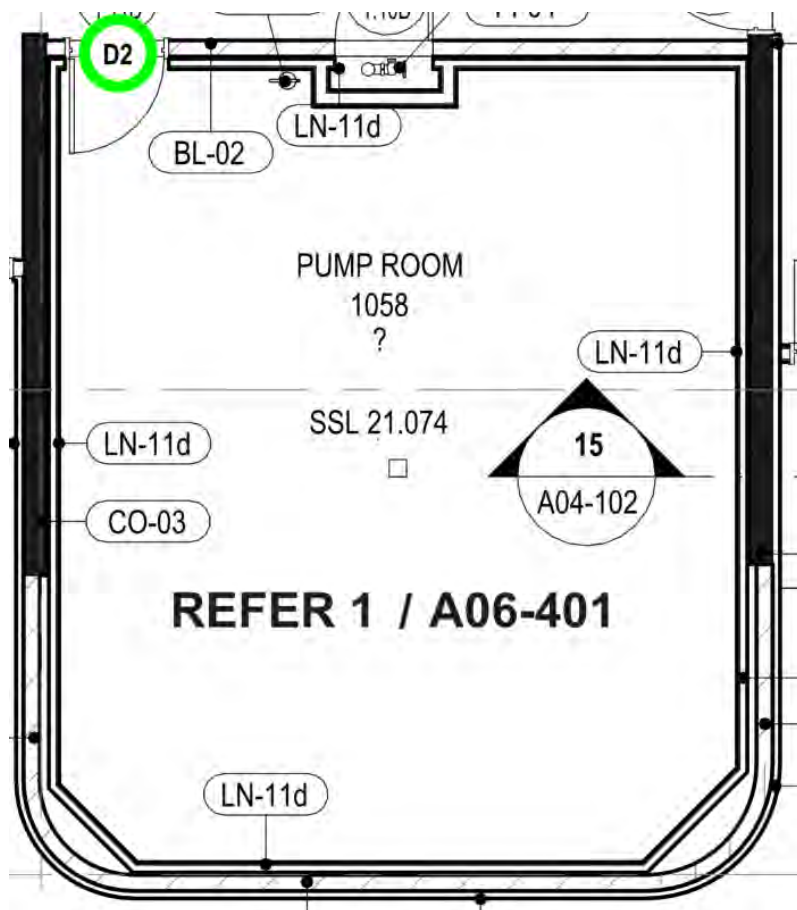
Area	Recommended Floor System
General Gym Floor Treatments	• <i>Regupol FX50 + 8mm Regupol Everoll</i> underlay to be provided to the entire gym floor.
Pin loaded Machines	• In addition to the general gym flooring treatments, pin loaded machines will require the following treatments: - Install 2 springs under the weight plates, to take the impact of weights when dropped in machines. The spring selection shall achieve a minimum isolation efficiency of 98% under load. The recommended spring types are 'Embelton XS' or similar and approved. - The springs will have to be selected by the supplier of the springs based on the maximum load in each machine, travel distance when the weight is dropped to take the impact. The selected of springs on each machine shall achieve the static deflection without bottoming out.
Cardio Machines	• All cardio machines shall be provided with rubber feet and in-built isolation.

Alternative solutions for acoustic treatment must be approved by acoustic engineer prior to installation.

B.3.6.4 T1 - Level 1 Fire Pump Room

the fire pump room is expected to be located on Level 1 of the west tower as shown in Figure 11.

City of Stirling
17 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED

Figure 7: T1 - Level 1 Fire Pump Room Location

To ensure noise generated from the Fire pump equipment is minimized, the following treatments are to be incorporated into the design of the pump room:

The Floors:

- Regupol Regufoam Sound 10 (17mm thick); and
- Min. 55mm thick screed
- Resilient isolation layers must be installed in strict accordance with manufacturer's details with appropriate edge detailing applied to avoid 'shorting' the resilient layer at junction of the block work.

Walls:

In addition to the proposed concrete walls, a dry wall lining with the following configuration is to be incorporated:

- 20mm air gap + 64mm steel stud + 75mm glasswool insulation (14kg/m^3) + One layer of 13mm soundchek plasterboard (min. weight 13kg/m^2)
- This lining is to be provided inside the plant room
- Where the plasterboard lining connects to the soffit it needs to be provided with 20mm EPDM foam between the drywall lining and soffit
- Dry wall lining to be installed on the floating floor as recommended above
- Door – Rw 40 rated acoustic door
- Ceiling/Soffit: Minimum 200mm concrete slab adequate

B.3.6.4.1 Curved Walls

It is noted that the fire pump room is proposed to have curved walls. Curved partitions are built using flexible plasterboard (6.5mm thick) which have surface mass(4.3kg/m²) well below the standard plasterboard. Additional layers of plasterboard will be required to match the weight of nominated plasterboard weights on the partition. An example of number of additional boards for standard and soundchek plasterboard have been provided.

- | | |
|--|--|
| <ul style="list-style-type: none"> • 2 layers of 13mm standard plasterboard (16.9kg/m²) • 2 layers of 13mm soundchek standard plasterboard (26kg/m²) | <p>4 layers of 6.5mm thick curved plasterboard</p> <p>Or</p> <p>2 layers of 6.5mm thick curved plasterboard with 4mm thick mass loaded vinyl(8kg/m²), Pyrotek wavebar or similar in between plasterboard layers</p> <p>2 layers of 6.5mm thick curved plasterboard with 2 layers of 4mm thick mass loaded vinyl(8kg/m²), Pyrotek wavebar or similar in between plasterboard layers</p> |
|--|--|

B.3.6.5 Level 1 (T1) Pool Pump Room

The pool pump room is expected to be located on level 1 of Tower T1 as shown in Figure 8.

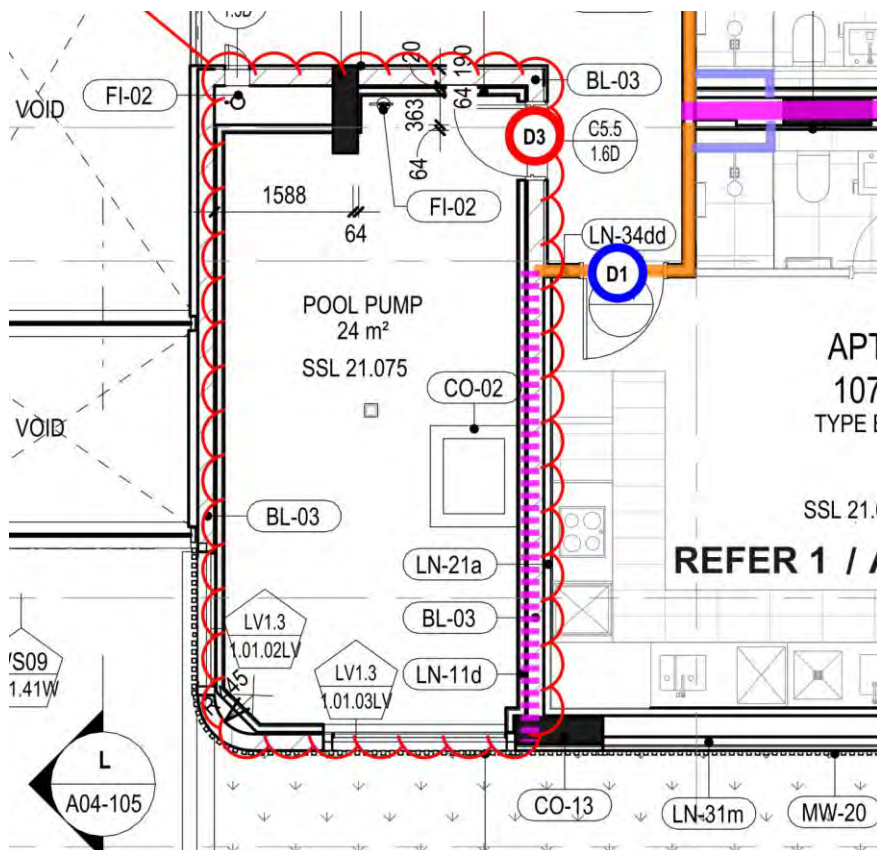


Figure 8: Level 1 (T1) Pool Pump Room

To ensure noise generated from the pool pump equipment is minimized, the following treatments are to be incorporated into the design of the pool pump room:

Floor

- Regupol Regufoam Sound 10 (17mm thick); and

- Min. 55mm thick screed
- Resilient isolation layers must be installed in strict accordance with manufacturer's details with appropriate edge detailing applied to avoid 'shorting' the resilient layer at junction of the block work.

Walls

Add additional dry wall lining with the following configuration:

- 20mm air gap + One row 64mm steel studs + 75mm glasswool insulation (14kg/m³) + Two layers of 13mm soundchek plasterboard(min. weight 13kg/m²)
- This lining is to be provided inside the plant room
- Where the plasterboard lining connects to the soffit it needs to be provided with 20mm EPDM foam between the drywall lining and soffit
- Dry wall lining to be installed on the floating floor as recommended above
- Door – Minimum R_w 45 rated acoustic door

Louvres

- Any openings will generally be required to incorporate acoustically rated louvres to mitigate noise emissions to the adjacent apartments and achieve compliance to EPNR. This to be reviewed once a complete acoustic review of the plant equipment has been conducted.

B.3.6.6 Ground Floor transport corridor

The proposed road used for traffic to be incorporated into the development has the potential to transfer undesirable vibration throughout the structure. Control of vibration from traffic such as trucks and cars passing over the road section will require consideration. The location of the road has been shown in Figure 9.

City of Stirling
17 Jan 2025
RECEIVED

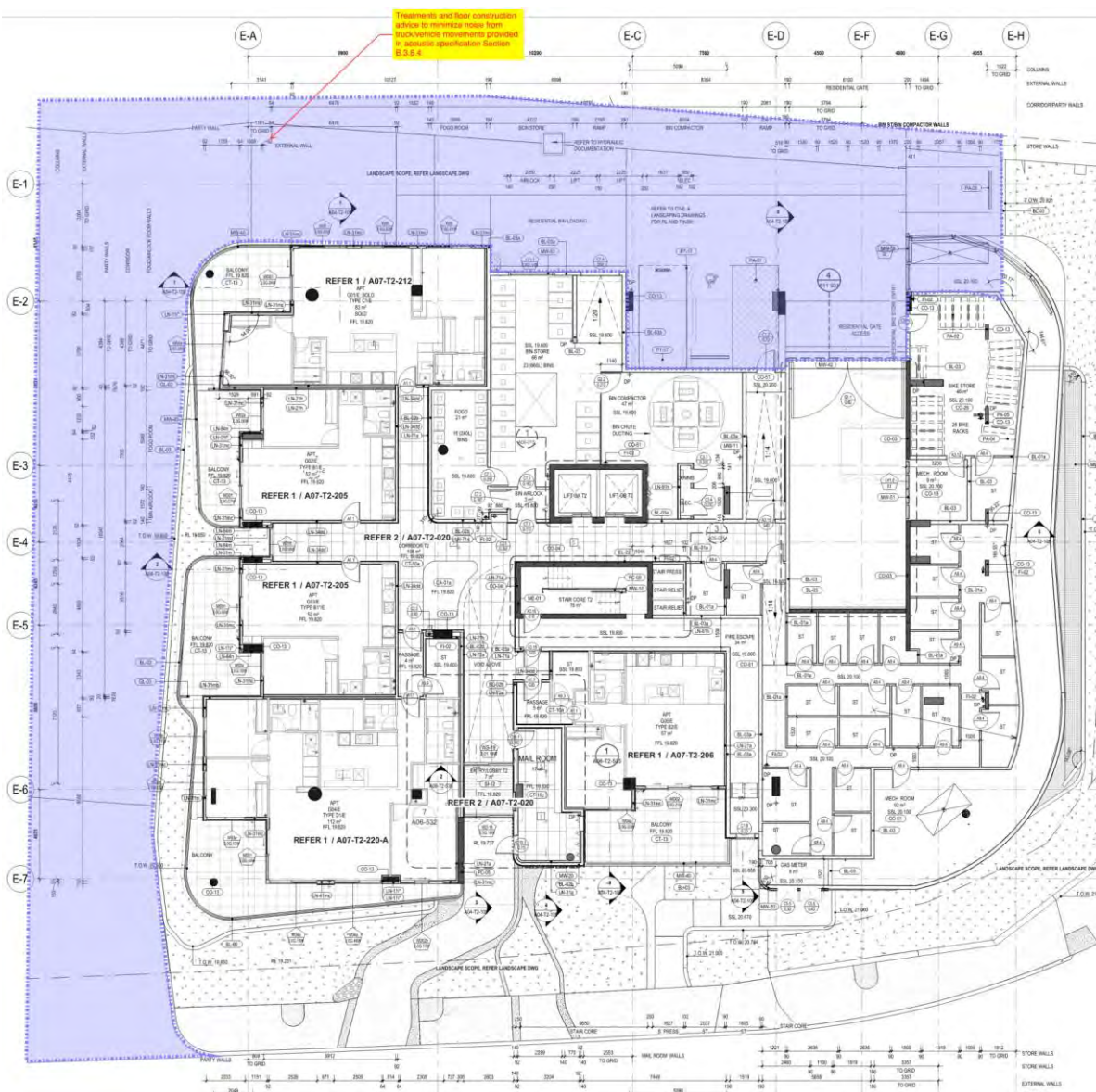


Figure 9: Ground floor driveway passing through project lot

The following general recommendations to control vibrations caused by traffic usage has been summarised below. Note that specialist advice should be sought to ensure no structural damage is caused to the project development.

- The floor slab must made as stiff as possible to keep the natural frequency as low as possible.
- There is the potential for vibration transfer into the structure when vehicles use the road and as such it is recommended that provide a floating floor slab minimum thickness of 150mm or greater depending on the load of the vehicles. Example resilient materials suppliers – Getzner, Regupol
- The selected resilient material should be turned up around the edge of the slab to avoid bridging via the upstand walls / kerbs alternatively neoprene perimeter isolation boards are installed, minimum 20mm thick 20kPa. Perimeter isolation material should extend to the top of floating floor, cut short and the sealed using non-setting elastomeric mastic.
- Material used for this resilient layer would need to be selected based on typical loads of the cars / vehicles likely to use this road plus the self-weight of the slab.
- Example products – Regupol Sound and Drain 22 or similar

The following ground floor driveway floor build-up as shown in Figure 10 is expected to comply with the design requirements stated above:

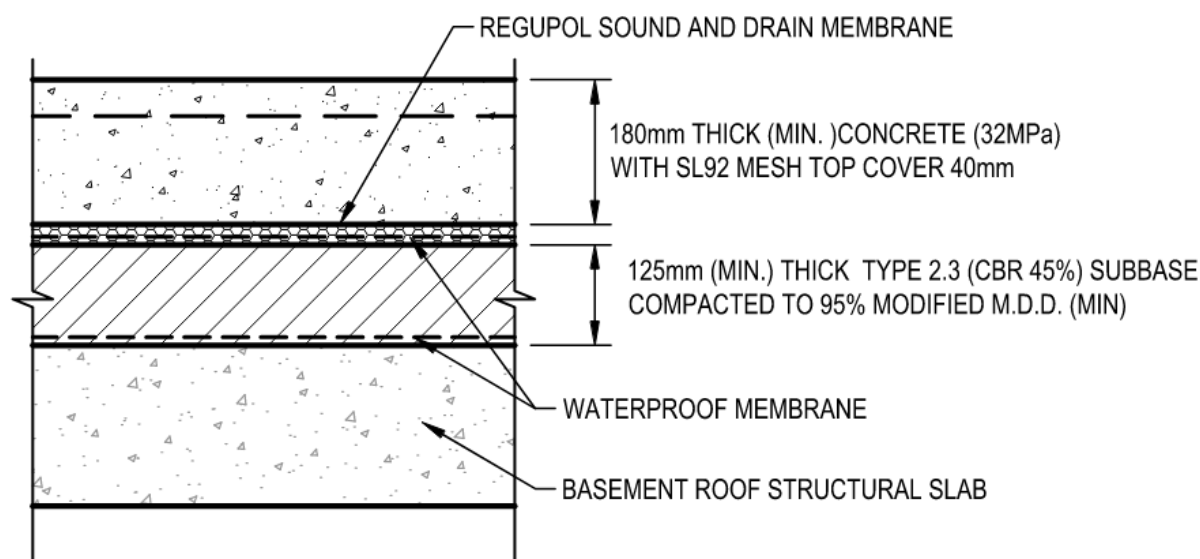


Figure 10: Ground floor driveway floor build-up section detail

In addition to the design requirements stated above, the following design points should be incorporated where feasible:

- Transitions in gradients are smooth and not made of straight sections.
- Avoid manholes and drainage channels in the trafficable routes, or where required ensure they are smooth and screwed down types to avoid the lid bounce effects.
- Avoid speed bumps etc although care must be taken to avoid speeding.

B.3.6.7 Technical Recommendations for Floors

- Ensure that joints between concrete slabs (in-situ) or concrete panels (pre-cast) are filled solid.
- Supply and install impact noise reduction substrates beneath tiling in wet areas where located above or immediately adjacent to habitable room.
- The Contractor shall provide resilient underlay under tiled floors in order to achieve the acoustic performance requirements presented in Table 5. The acoustic underlay is specified in of this report.
- Utilise an impact isolation interlayer equal to Cproducts as indicated in Table 9 or equivalent.
- Obtain approval for any resilient support fixing type.
- Install resilient support mountings in full accordance with the manufacturers' recommendations and instructions.
- Install impact isolation substrates in full accordance with the manufacturer's recommendations and instructions.
- Skirting board shall be installed clear off the floor to avoid bridging between the floor and perimeter walls.
- All access panels located within ceilings of apartments should be acoustically rated (minimum R_w 30).

B.3.7 Door Construction

As per NCC requirements, acoustic treatment to doors separating a sole-occupancy-unit from a common corridor is required. The full door construction (including frame, seals etc.) must achieve a minimum R_w 30 rating. An acoustic test certificate stating the acoustic performance of the proposed door/frame system must be supplied to the acoustic consultant for approval before installation.

- There are no acoustic requirements in the NCC for internal doors within the same sole-occupancy unit (e.g. living room to bathroom etc.).
- To ensure the acoustic performance of the door is not compromised, acoustically rated doors shall not have air relief door grilles or be undercut. Acoustic air transfer ducts must be used if return air is required.

Refer to PART F for locations of doors.

B.3.7.1 Entry door sets/ R_w 35 rated door

R_w 35 door is typically a well fitted solid core door set where the door is sealed effectively around its perimeter in a substantial frame with an effective stop. A 60-minute fire door set can generally be suitable. The typical construction of the acoustic door is detailed below:

- The door leaf generally has particle cores or laminated softwood cores, with a minimum mass per unit area of 29 kg/m² and a minimum thickness of 50-54 mm.
- Frames for these doors have a minimum recommended section of 90 mm x 40 mm with a stop of at least 15 mm.
- Compression or wipe seals should be used around the door's perimeter, with a threshold seal beneath. A drop-down or wipe type threshold seal is suitable. Examples of seals would be Raven RP78Si for the perimeter and RP38Si for the bottom seal.

B.3.7.2 R_w 40 and R_w 45 rated door

- Proprietary door, frame and seals achieving the acoustic rating.
- Example suppliers Pyropanel or Sontron. Acoustic test certificate to be provided for alternative selections.

B.3.7.3 Bin Chute Deflectors

- Based on the latest architectural drawings, bin chutes are proposed to be implemented within the development.
- the deflector at the bottom of the bin chute shall not be fixed to the chute or the structure of the building. For the purposes of minimising bin chute deflector noise the following treatments shall be applied:
 - Install all brackets connecting the deflector to building structure using neoprene mountings with captive steel inserts, correctly selected for the weight of the deflector; and
 - Isolate the deflector from the soffit using neoprene mountings with captive steel inserts, correctly selected for weight of the deflector.

B.3.7.4 Technical Recommendations for Doors

Refer to architectural drawings for schedule and requirements for doors and acoustic seals not covered above.

- Approved door suppliers – Pyropanel

B.3.8 Services

- Services must not be chased into concrete or masonry elements.
- A door or panel required to have a certain $R_w + C_{tr}$ that provides access to a duct, pipe or other service must–
 - not open into any habitable room (other than a kitchen); and
 - be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10 mm, be fitted with a sealing gasket along all edges and be constructed of –
 - i wood, plasterboard or blockboard not less than 33 mm thick; or
 - ii compressed fibre reinforced cement sheeting not less than 9 mm thick; or
 - iii other suitable material with a mass per unit area not less than 24 kg/m²

- A water supply pipe must –
 - only be installed in the cavity of discontinuous construction; and
 - in the case of a pipe that serves only one sole-occupancy unit, not be fixed to the wall leaf on the side adjoining any other sole-occupancy unit and have a clearance of 10 mm to the other wall leaf.
- Electrical outlets must be offset from each other –
 - in masonry walling, not less than 100 mm; and
 - in timber or steel framed walling, not less than 300 mm

B.3.8.1.1 Technical Recommendations for Services

- A door or panel required to have a certain $R_w + C_{tr}$ that provides access to a duct, pipe or other service must –
- not open into any habitable room (other than a kitchen); and
- be firmly fixed so as to overlap the frame or rebate of the frame by not less than 10mm, be fitted with a sealing gasket along all edges and be constructed of –
 - wood, particleboard or block board not less than 33mm thick; or
 - compressed fibre reinforced cement sheeting not less than 9mm thick; or
 - other suitable material with a mass per unit area not less than 24kg/m².

B.3.9 Approved Suppliers (Product Specification)

B.3.9.1 Plasterboard

Where plasterboard is specified in this document approved products for use are:

Standard Plasterboard:

1. 13mm thick CSR Gyprock CD (8.5 kg/m²)
2. 13mm thick Boral Standard Core (8.6 kg/m²)
3. 13mm thick Lafarge MastaShield (8.2 kg/m²)

High density Plasterboard:

1. 13 mm thick CSR Gyprock SoundChek 13 (13 kg/m²)
2. 13 mm thick Boral SoundStop (11.2 kg/m²)
3. 13 mm thick Knauf SoundShield (12.3 kg/m²)

Impact-Resistant Plasterboard:

1. 13mm thick Gyprock Impactchek (10.5 kg/m²)
2. 13mm thick Boral Impactstop (11.2 kg/m²)
3. 13mm thick Lafarge Toughline (11.1 kg/m²)

Moisture-Resistant Plasterboard:

1. 13mm thick CSR Gyprock Aquachek (10.4 kg/m²)
2. 13mm thick Boral Wet Area Board (9.4 kg/m²)
3. 13mm thick Lafarge Watershield (9.7 kg/m²)

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

Fire-Resistant Plasterboard:

1. 13 mm thick CSR Gyprock Fyrcheck (10.4 kg/m²)
2. 16 mm thick Boral FireSTOP Board (10.5 kg/m²)
3. 15 mm thick Knauf FireShield (10.4 kg/m²)

B.3.9.2 Concrete Blocks

Concrete Blocks approved for use are:

1. 140mm, 190mm thick Boral Besser Blocks
2. 140mm, 190mm Adbri Masonry (formerly C&M Masonry) Concrete Blocks.

B.3.9.3 Acoustic Insulation

- The following insulation specifications provide insulation quality controls for acoustic applications. Refer to architectural specifications for insulation material specifications.

<u>Description</u>	Insulation to partition and wall cavities and cable penetrations			
<u>Materials:</u>	Front Facing	:	nil	
	Rear Facing	:	nil	
	Insulation	:	Type	: Martini MAB, Fibreglass
			Thickness	: 30, 50, 64, 75, 92mm, or equivalent. As shown on architectural drawings
			Density	: Nominal 11 kg/m ³ uncompressed

<u>Installation:</u>	Fixing	:	Ensure insulation does not slump
----------------------	--------	---	----------------------------------

B.3.9.4 Insulation Contained Within Ceiling Cavities:

<u>Description</u>	Insulation to partition and wall cavities and cable penetrations			
<u>Materials:</u>	Front Facing	:	nil	
	Rear Facing	:	nil	
	Insulation	:	Type	: Martini MAB, or equivalent
			Thickness	: 50mm. As shown on architectural drawings
			Density	: Nominal 25kg/m ³ uncompressed

<u>Installation:</u>	Fixing	:	Ensure insulation does not slump
----------------------	--------	---	----------------------------------

B.3.9.5 General Building Insulation:

<u>Description:</u>	Insulation to roof areas			
<u>Materials:</u>	Front Facing	:	non-perforated sisalation integral with bulk insulation	
	Rear Facing	:	nil required	
	Insulation	:	Type	: Bradford Glasswool Anticon Roofing Blanket, or equivalent
			Thickness	: As specified in architectural drawings but not less than 75mm
			Density	: Nominal 11 kg/m ³ uncompressed

Installation: Fixing : Continuous blanket insulation laid over purlins and compressed between deck and purlins.

B.3.9.6 Acoustic Underlay

Where acoustic underlay is specified in this document approved products for use are:

1. Regupol 4515 (4.5mm thick)
2. Embelton Impactamat (5mm thick)
3. Damtec Standard Acoustic Underlay (4-5 mm thick)

B.3.9.7 Acoustic Sealant

Where acoustic sealant is specified in this document, the material shall be a flexible non-hardening compound (flexible non-hardening acrylic or polyurethane). Approved products are:

1. Tremco Fyrethane (minimum specific gravity 1.5)
2. Pyropanel Multiflex (minimum specific gravity 1.5)
3. Bostik 5634 (minimum specific gravity 1.5)
4. Bostik Firecaulk (minimum specific gravity 1.5)
5. Tremco Dymeric (minimum specific gravity 1.5)
6. Sikaflex 1A (minimum specific gravity 1.5)

City of Stirling
17 Jan 2025
RECEIVED

Alternative materials and design details are permitted provided they have equivalent technical specifications as outlined above and are submitted to the Acoustic Consultant for review and approval.

B.3.10 Reverberation Time

Reverberation control is generally achieved by the incorporation of carpets, acoustic ceiling tiles or perforated ceiling materials, absorption acoustic panels to walls and soft furnishings. Larger spaces such as the Gym, Formal kitchen, dining and lounge are recommended to implement absorptive treatments to reduce noise build up due to reverberation.

Reverberation time criteria are based on the requirements of the Australian and New Zealand Standard AS/NZS 2107:2016 "Acoustics – Recommended design sound levels and reverberation times for building interiors" (AS2107).

Therefore, the following treatments detailed in

Table 11 are recommended to be implement in the aforementioned spaces to achieve the AS2107:2016 design reverberation times.

Table 11: Reverberation treatments

Level	Area	Surface Finish		AS2107 Criteria, s	Treatment
Lower Ground 1	Sanbox	Ceiling	Plasterboard	0.4 – 0.6	<u>Ceiling</u> Incorporate soffit insulation with min. NRC 0.70 50mm thick to the ceilings. Example product Martini Absorb HD50.
		Floor	Carpet		
		Walls	Plasterboard + Glazing		
Level 2 (West Tower)	Formal Kitchen, Dining & Lounge	Ceiling	Fibre Cement	0.6 – 0.1	
		Floor	Timber		
		Walls	Plasterboard + Glazing		
		Ceiling	Fibre Cement	0.6 – 0.1	

Level	Area	Surface Finish		AS2107 Criteria, s	Treatment
	Sunset Lounge	Floor	Tile		City of Stirling 17 Jan 2025 RECEIVED
		Walls	Plasterboard + Glazing		
	Library	Ceiling	Fibre Cement	< 0.6	
		Floor	Timber + carpet		
		Walls	Plasterboard + Glazing		
	Casual Lounge	Ceiling	Fibre Cement	0.6 – 0.1	
		Floor	Tiles		
		Walls	Plasterboard + Glazing		
	Games Room	Ceiling	Fibre Cement	< 1.0	
		Floor	Timber		
		Walls	Plasterboard + Glazing		
	Gym	Ceiling	Fibre Cement	0.6 – 0.8	
		Floor	Carpet + Concrete		
		Walls	Plasterboard + Glazing		

B.4 External Noise Emissions

- Environmental noise impacts resulting from the development are addressed through the Environmental Protection Act 1986 with the prescribed standards detailed in the Environmental Protection (Noise) Regulations 1997 (EPNR). Compliance to relevant noise limits outlined in the regulation is compulsory. This section discusses the relevant noise criteria at nearest noise sensitive receiver.
- The EPNR establishes the maximum permissible noise emission levels (assigned levels) to be received at all adjacent noise-sensitive premises during specific periods of the day as a result of the cumulative noise emissions from all sources proposed for the project site. Compliance to relevant noise limits outlined in the EPNR is compulsory.
- The EPNR states that noise emissions from any premises are considered not to significantly contribute to the noise at a receiver if the noise emissions are 5 dB or below the assigned levels.
- The nearest noise sensitive receiver to the project site is the 5 Reserve St with the applicable assigned levels summarised in Table 12.

Table 12: Assigned Levels

Type of premises receiving noise	Time of day	Assigned Level (dB)		
		LA10	LA1	L _{Amax}
Noise sensitive premises: Highly sensitive area	0700 to 1900 hours Monday to Saturday	51	61	71
	0900 to 1900 hours Sunday & public holidays	46	56	71
	1900 to 2200 hours all days	46	56	61
	2200 hours on any day to 0700 hours Monday to Saturday, and 0900 hours Sunday & public holidays	41	51	61

Type of premises receiving noise	Time of day	Assigned Level (dB)		
		L _{A10}	L _{A1}	L _{Amax}
Noise sensitive premises: any area other than highly sensitive areas	All Hours	60	75	80
Commercial premises	All Hours	60	75	80
Industrial and utility premises	All Hours	65	80	90

B.4.1.1 Noise Character Adjustment

- Regulation 7 states that the noise character must be “free” of annoying characteristics, namely —
 - Tonality, e.g. whining, droning;
 - Modulation, e.g. like a siren; and
 - Impulsiveness, e.g. banging, thumping.
- Regulation 9 (1) establishes the methodology for determining noise characteristics. If these characteristics cannot be reasonably and practicably removed, a series of adjustments to the measured levels are required, indicated in Table 13

Table 13: Noise character adjustment

Adjustment where noise emission is not music these adjustments are cumulative to a maximum of 15 dB			Adjustment where noise emission is music	
Where tonality is present	Where modulation is present	Where impulsiveness is present	Where impulsiveness is not present	Where impulsiveness is present
+ 5 dB	+ 5 dB	+ 10 dB	+ 10 dB	+ 15 dB

B.4.1.2 Noise Emissions Mechanical Services

It is important that noise emissions from the site do not present any form of tonality, modulation or impulsiveness (as defined by the EPNR).

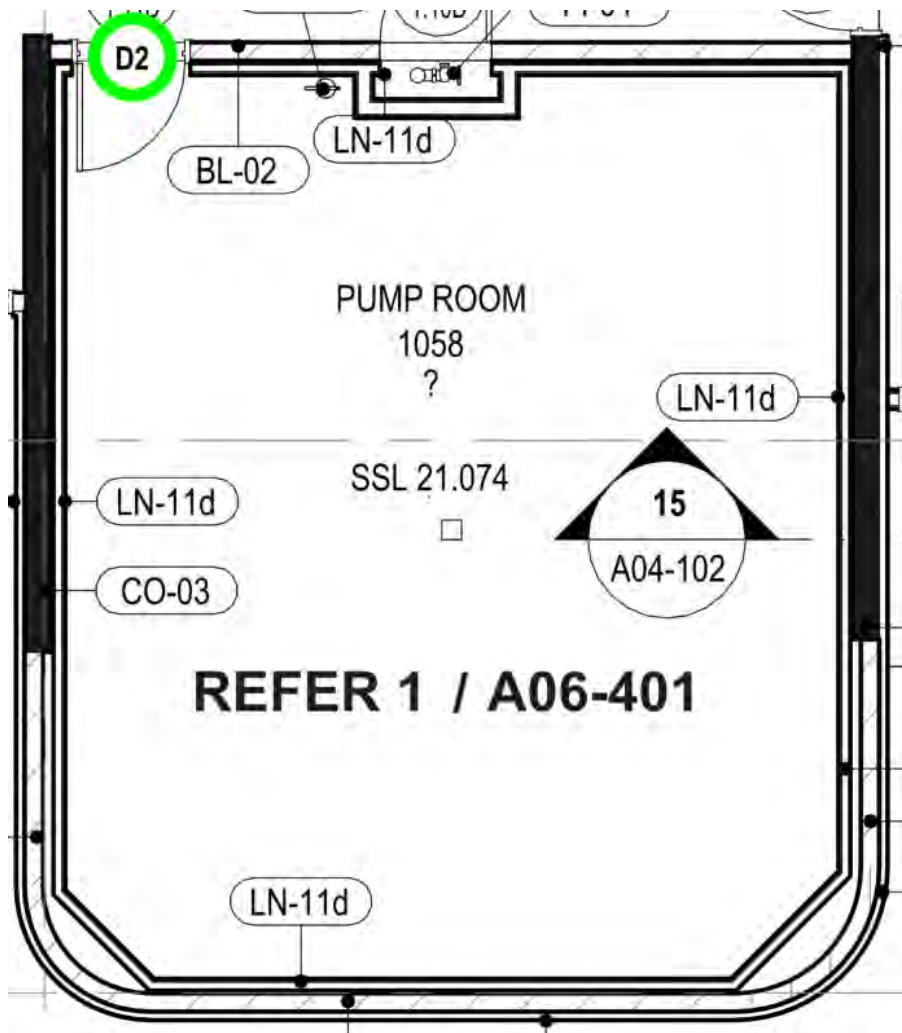
Given that data from mechanical plant manufacturers is generally limited to broadband data or in 1/1 octave band value, it is not possible to objectively determine tonality, as it is described in the EPNR. 1/3 octave band data is required yet is typically unavailable.

Therefore, a 5 dB penalty shall be conservatively applied to noise levels when assessing noise emissions from proposed mechanical plant.

B.4.2 T1 - Level 1 Fire Pump Room

the fire pump room is expected to be located on Level 1 of the west tower as shown in Figure 11.

City of Stirling
17 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED

Figure 11: T1 - Level 1 Fire Pump Room Location

The pump model details and sound data has been provided by the fire protection engineer and is summarised below:

- Fire Protection Pumpset: APFHC-KR10140-DEHC-EI-71326 – SPL 114dB(A) at 1m
- Relay Pumpset: APFH-KR018060-DC-FBR-EI-71148 – SPL 92dB(A) at 1m

The following acoustic treatment is required to achieve compliance to the EPNR at nearest sensitive receivers and to achieve acceptable internal noise levels within the adjacent enclosed areas:

- Pump Acoustic Enclosure: Nominated Fire pump selections as above with EnviroPac Class 1 Sound Attenuation Enclosure
- Muffler: Super Critical Grade Muffler
- Fire Pump Room Exhaust Fans and Make up Fans:
 - GEF-FP-01 (Outlet): Ductwork to be internally lined with 50mm thick insulation for the first 5m
 - MEF-FP-01 (Inlet): Ductwork to be internally lined with 50mm thick insulation for the first 5m

It is required that monthly tests are carried out between 7am – 5pm Monday – Saturday as the assigned noise levels are the least strict during this time period.

It is also recommended that the corridors adjacent to the fire pump room are unoccupied during testing. Residents of the apartment should be notified ahead of time prior to testing of the fire pump.

Note that if the fire pump is to operate without the incorporation of the EnviroPac Class 1 Sound Attenuation Enclosure, All adjacent transient corridors will be required to be completely unoccupied due to excessive noise levels. Additionally, all adjacent apartments including Apartment 106, 107, 108, 109 and 110 as well as apartments G07, G08, G09 and G10 to be notified ahead of time of pump testing and apartments be unoccupied as noise levels would exceed the design internal noise levels with respective apartments.

City of Stirling
17 Jan 2025
RECEIVED

B.5 Mechanical Services

B.5.1 Scope and terminology

- The requirements of this Acoustic Specification are in addition to those set out in the Mechanical Specifications.
- Where any conflict arises with requirements stated in other contract documentation (including but not limited to drawings, schedules and specifications) the Contractor shall seek written clarification from the construction manager.
- In any cases where the requirements of this specification appear unclear, written confirmation of the requirements shall be sought from Stantec.
- Mechanical layouts and unit selection has been provided by the mechanical engineer
- a complete acoustic review of the mechanical services to be conducted prior to issue of building permit and acoustic treatments will be provided where necessary to achieve compliance at all nearby external receivers and maintain appropriate noise levels within the development.

B.5.2 Roof Plant

As per the latest proposed mechanical design, a roof plant is proposed the east and west tower as shown in Figure 12.

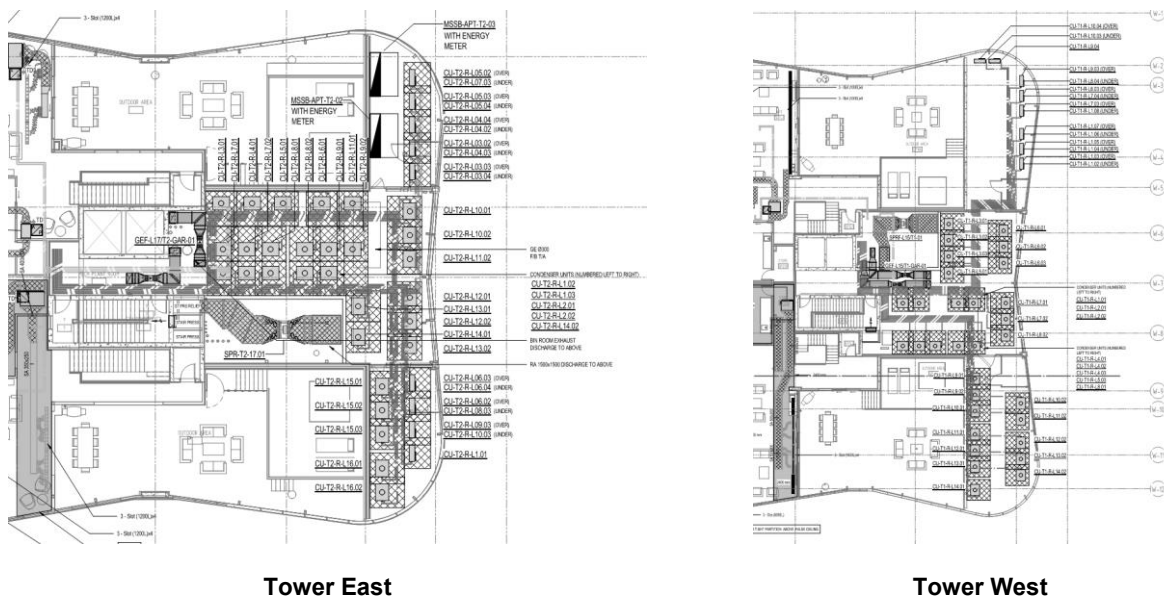


Figure 12: Roof Plant – East and West Tower

Mechanical layouts and unit selection has been provided by the mechanical engineer. A noise emission assessment has been carried out for the present-day scenario.

Noise levels are generally complaint to the relevant EPNR assigned noise levels at all nearby recievers. Therefore, no further treatment is required.

B.5.3 Internal Noise Levels

- Supply and install the works so that noise from the building mechanical services conforms to the internal background noise level criteria according to AS2107 presented in Table 14. Noise emissions from the development shall also comply with the EPNR external noise limits assigned to the development.

City of Stirling
17 Jan 2025
RECEIVED

Table 14: Recommended maximum internal noise levels due to external noise break-in

Type of occupancy/activity	Recommended design sound level, L_{eq} dB(A)
RESIDENTIAL BUILDINGS - Houses and apartments in inner city areas or entertainment districts or near major roads —	
Sleeping areas (night-time)	35 – 40
Living areas	35 – 45
Work areas	35 – 45
Apartment common areas (e.g. foyer, lift lobby)	45 – 50
General Areas	
General Office Areas	40 – 45
Art Gallery	40 – 45
Enclosed Carpark	< 65
Amenities	45 – 55
Café/Deli	< 50
Wine Bar	
Aging in Place	40 – 45
Medical Tenancy	
Art Gallery	
Public Gym	45 – 50
Multi-Purpose Room	
Billards Room	
Classroom	35 – 45
Library Reading Room	40 – 45
Golf Simulation Room	
Theatre	30 – 35

The internal noise level criteria in AS2107 refer to the continuous equivalent (L_{Aeq}) levels for background noise. This document is a common reference for establishing satisfactory goals for quasi-static mechanical and external traffic noise ingress.

B.5.4 Apartment Fans and FCU

Typical FCU and fans units for the apartments have been provided below based on the unit information provided by the mechanical engineer.

The following acoustic treatments should generally be incorporated:

- All FCU hard ductwork to be internally lined with 50mm thick insulation where possible
- All bulkheads to be provided with a 50mm thick insulation blanket. Access panels to be constructed of one layer 13mm thick sound rated plasterboard
- Toilet extract fans to be acoustically lagged.
 - The acoustic lagging to consist of 50mm thick convoluted foam externally finished with a flexible loaded vinyl wrapping material having a surface mass not less than 6 kg/m² minimum 3mm thick. Seal all joints and junctions within or at the edges of the wrapping with an adhesive tape approved by the vinyl material supplier. Ceilings to be provided with a 75mm thick insulation blanket localised to these areas.

Should the layouts change, the acoustic engineer is to be notified and a review of the updated layout will be conducted.

B.5.5 General Treatments

Air conditioning ductwork layout will affect sound isolation and privacy management from two aspects:

Air conditioning commonly establishes the threshold for background noise levels within rooms.

Ducts form potential flanking paths for sound that may adversely affect partition sound isolation performance.

The following general treatments will be required:

- design the air distribution system to minimize flow resistance and turbulence
- balance systems with minimum throttling
- design fans to run generally at low speed
- use acoustic flexible duct where flexible duct is required
- No air relief door grilles are to be located in acoustically rated doors, where ventilation is required between spaces, transfer grilles with cushion heads are to be used. Transfer grille cushion heads are to be specified - with a minimum internal lining of 25mm.

B.5.5.1 Internal duct insulation

All FCUs should have a minimum of 2000mm of acoustic lining (internal) prior to any branch duct or run out duct.

Internal insulation to be minimum 50mm thick and shall be “Bradford Supertel” semi-rigid fibreglass batt of 32 kg/m³ density or approved equivalent. The insulation shall be placed on the inside of the duct with adjacent sides overlapping at all corners and with all joints tightly butted. All joints in insulation panels shall be made with a minimum 50 mm lap of foil in the direction of air flow to prevent the air stream lifting the leading edge. Acoustic properties of the insulation systems shall be as detailed in Table 15.

Table 15: Minimum required attenuation static insertion losses (dB), for each frequency band (Hz)

Insulation	125	250	500	1000	2000	4000
Perforated foil faced – 50mm	0.23	0.71	0.99	1.09	0.97	0.97
Perforated metal clad – 50mm	0.20	0.73	1.0	0.99	0.89	0.90

B.5.5.2 Acoustic lagging

Case radiated breakout noise from the units supplying the apartments above sensitive spaces will require to be mitigated by acoustically lagging the units. The acoustic lagging to be constructed of the following:

The acoustic lagging to consist of 50mm thick convoluted foam externally finished with a flexible loaded vinyl wrapping material having a surface mass not less than 6 kg/m². Seal all joints and junctions within or at the edges of the wrapping with an adhesive tape approved by the vinyl material supplier.

1.1.1.1 Services Penetrations

Penetrations through acoustic rated walls shall be sealed to ensure that the sound insulation and noise criteria performance requirements of this specification are not compromised.

Holes in walls, floors, façades etc. for penetrations shall be sized to accommodate ducts with the minimum clearance that is practicable.

Once ductwork or pipework is installed, the hole around it shall be sealed according to the details shown on the building services contract drawings (or equivalent detail agreed in writing by the client's representative).

Acoustic lagging shall be absent as ducts and pipes pass through the thickness of the wall, floor or façade and, where permissible, thermal lagging shall also be removed.

1.1.1.2 Making Good of Holes

Ensure that all holes through building elements are made in such a way that the sound insulation and noise criteria performance requirements of this specification are not compromised.

Holes made in building elements shall be made good. This shall be done by filling or covering the hole with a material of the same mass per unit area as the Building Element through which the hole has been made, using a method that ensures that no material can fall into cavities or bridge Isolation Boundaries.

B.5.6 Vibration Isolation

Acceptable vibration levels from mechanical plant will be achieved with conventional design methodology and mechanical services specifications. The mechanical and hydraulic services must be suitably isolated to prevent structure borne noise transmitting into the building. Detailed treatment recommendations for varying types of equipment have been derived from the ASHRAE guidelines and are provided in Table 16.

B.5.6.1 Pool Pump room

Pool pump and associated pipework is required to be isolated from the building structure in accordance with treatments provided in Table 16.

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

Table 16: Vibration Isolation Treatment Recommendations

Equipment Type	Shaft Power kW & Other	RPM	Floor Span												Reference Notes
			Slab on Grade			Up to 6 m			6 to 9 m			9 to 12 m			
			Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	
Refrigeration Machines and Chillers															
Reciprocating	All	All	A	2	6.4	A	4	19	A	4	38	A	4	64	2,3,12
Centrifugal,	All	All	A	1	6.4	A	4	19	A	4	38	A	4	38	2,3,4,8, 12
Screw	All	All	A	1	25	A	4	38	A	4	64	A	4	64	2,3,4,12
Absorption	All	All	A	1	6.4	A	4	19	A	4	38	A	4	38	
Air-cooled recip.,	All	All	A	1	6.4	A	4	38	A	4	38	A	4	64	2,4,5,12
Air-cooled screw	All	All	A	4	25	A	4	38	B	4	64	B	4	64	2,4,5,8,12
Air Compressors and Vacuum Pumps															
Tank-mounted	≤ 7.5	All	A	3	19	A	3	19	A	3	38	A	3	38	3,15
	≥ 11	All	C	3	19	C	3	19	C	3	38	C	3	38	3,15
Tank-mounted	All	All	C	3	19	C	3	19	C	3	38	C	3	38	3,15
Base-mounted	All	All	C	3	19	C	3	19	C	3	38	C	3	38	3,14,15
Large	All	All	C	3	19	C	3	19	C	3	38	C	3	38	3,14,15
Pumps															
Close-coupled	≤ 5.6	All	B	2	6.4	C	3	19	C	3	19	C	3	19	16
	≥7.5	All	C	3	19	C	3	19	C	3	38	C	3	38	16
Large inline	3.7 to 19	All	A	3	19	A	3	38	A	3	38	A	3	38	
	≥22	All	A	3	38	A	3	38	A	3	38	A	3	64	
End suction and	≤ 30	All	C	3	19	C	3	19	C	3	38	C	3	38	16
	37 to 93	All	C	3	19	C	3	19	C	3	38	C	3	64	10,16
	≥110	All	C	3	19	C	3	38	C	3	64	C	3	89	10,16
Packaged pump systems	All	All	A	3	19	A	3	19	A	3	38	C	3	64	
Cooling Towers															
	All	Up to 300	A	1	6.4	A	4	89	A	4	89	A	4	89	5,8,18

Floor Span																
Equipment Type	Shaft Power kW & Other	RPM	Slab on Grade			Up to 6 m			6 to 9 m			9 to 12 m			Reference Notes	
			Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm		
		301 to 500	A	1	6.4	A	4	64	A	4	64	A	4	64	5,18	
		501 and up	A	1	6.4	A	4	19	A	4	19	A	4	38	5,18	
Boilers																
Fire-tube	All	All	A	1	6.4	B	4	19	B	4	38	B	4	64	4	
Water-tube,	All	All	A	1	3	A	1	3	A	1	3	B	4	6.4		
Axial Fans, Plenum Fans, Cabinet Fans, Fan Sections, Centrifugal Inline Fans																
Up to 560 mm diameter	All	All	A	2	6.4	A	3	19	A	3	19	C	3	19	4,9	
610 mm diameter and up	≤ 500 PaSP	Up to 300	B	3	64	C	3	89	C	3	89	C	3	89	9,8	
		300 to 500	B	3	19	B	3	38	C	3	64	C	3	64	9,8	
		501 and up	B	3	19	B	3	38	B	3	38	B	3	38	9,8	
	≥501 PaSP	Up to 300	C	3	64	C	3	89	C	3	89	C	3	89	3,8,9	
		300 to 500	C	3	38	C	3	38	C	3	64	C	3	64	3,8,9	
		501 and up	C	3	19	C	3	38	C	3	38	C	3	64	3,8,9	

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

Floor Span																
Slab on Grade						Up to 6 m			6 to 9 m			9 to 12 m				
Equipment Type	Shaft Power kW & Other	RPM	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Reference Notes	
Centrifugal Fans																
Up to 560 mm diameter	All	All	B	2	6.4	B	3	19	B	3	19	B	3	38	9,19	
610 mm diameter and up		Up to 300	B	3	64	B	3	89	B	3	89	B	3	89	8,19	
		300 to 501	B	3	38	B	3	38	B	3	64	B	3	64	8,19	
		501 to 300	B	3	19	B	3	19	B	3	19	B	3	38	8,19	
		Up to 300	C	3	64	C	3	89	C	3	89	C	3	89	2,3,8,9,19	
		300 to 501	C	3	38	C	3	38	C	3	64	C	3	64	2,3,8,9,19	
		501 to 300	C	3	25.4	C	3	38	C	3	38	C	3	64	2,3,8,9,19	
		All	A	1	6.4	A	1	6.4	A	1	6.4	A	1	6.4		
		All	A	1	6.4	A	1	6.4	B	4	38	D	4	38		
		All	A	3	19	A	3	19	A	3	19	A/D	3	38		
		All	A	1	6.4	A	4	19	A	4	38	A/D	4	38		
Packaged AH, AC, H and V Units																
All	≤7.5	All	A	3	19	A	3	19	A	3	19	A	3	19	19	
	≤11	Up to 301	A	3	19	A	3	89	A	3	89	C	3	89	2,4,8,19	
	≤1 kPa	301 to 501	A	3	19	A	3	64	A	3	64	A	3	64	4,19	
		501 to 301	A	3	19	A	3	38	A	3	38	A	3	38	4,19	
	>1 kPa	Up to 301	B	3	19	C	3	89	C	3	89	C	3	89	2,3,4,8,9	
	>1 kPa	301 to 501	B	3	19	C	3	38	C	3	64	C	3	64	2,3,4,9	
		501 to 301	B	3	19	C	3	38	C	3	38	C	3	64	2,3,4,9	

Equipment Type	Shaft Power kW & Other	RPM	Floor Span													Reference Notes
			Slab on Grade			Up to 6 m			6 to 9 m			9 to 12 m				
			Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm	Base Type	Isolator Type	Min. Defl. mm		
Packed Rooftop Equipment	All	All	A/D	1	6.4	D	3	19			See Reference Note 17			5,6,8,17		
Ducted Rotating Equipment																
Small fans, fan-powered	≤300L/s	All	A	3	12.7	A	3	12.7	A	3	12.7	A	3	12.7	7	
	≤30L/s	All	A	3	19	A	3	19	A	3	19	A	3	19	7	
Engine-Driven	All	All	A	3	19	V	3	38	C	3	64	C	3	89	2,3,4	

Base Type:

- A. No Base, isolators attached directly to equipment (Note 28)
- B. Structural steel rails or base (Notes 29 and 30)
- C. Concrete inertia base (Note 31)

Isolator Types:

- 1. Pad, rubber, or glass fibre (Notes 20 and 21)
- 2. Rubber floor isolator or hanger (Notes 20 and 25)
- 3. Spring floor isolator or hanger (Notes 22,23 and 26)
- 4. Restrained spring isolator (Notes 22 and 24)
- 5. Thrust restraint (Note 27)
- 6. Air spring (Note 25)

City of Stirling
17 Jan 2025
RECEIVED

Notes for Table 47: Selection Guide for Vibration Isolation

These notes are keyed to the column titled Reference Notes in Table 47 and to other reference numbers throughout the table. Although the guide is conservative, cases may arise where vibration transmission to the building is still excessive. If the problem persists after all short circuits have been eliminated, it can almost always be corrected by altering the support path (e.g., from ceiling to floor), increasing isolator deflection, using low-frequency air springs, changing operating speed, improving rotating component balancing, or, as a last resort, changing floor frequency by stiffening or adding more mass. Assistance from a qualified vibration consultant can be very useful in resolving these problems.

Note 1. Isolator deflections shown are based on a reasonably expected floor stiffness according to floor span and class of equipment. Certain spaces may dictate higher levels of isolation. For example, bar joist roofs may require a static deflection of 38 mm over factories, but 64 mm over commercial office buildings.

Note 2. For large equipment capable of generating substantial vibratory forces and structure-borne noise, increase isolator deflection, if necessary, so isolator stiffness is less than one-tenth the stiffness of the supporting structure, as defined by the deflection due to load at the equipment support.

Note 3. For noisy equipment adjoining or near noise-sensitive areas, see the section on Mechanical Equipment Room Sound Isolation.

Note 4. Certain designs cannot be installed directly on individual isolators (type A), and the equipment manufacturer or a vibration specialist should be consulted on the need for supplemental support (base type).

Note 5. Wind load conditions must be considered. Restraint can be achieved with restrained spring isolators (type 4), supplemental bracing, snubbers, or limit stops. Also see Chapter 55.

Note 6. Certain types of equipment require a curb mounted base (type D). Airborne noise must be considered.

Note 7. See section on Resilient Pipe Hangers and Supports for hanger locations adjoining equipment and in equipment rooms.

Note 8. To avoid isolator resonance problems, select isolator deflection so that resonance frequency is 40% or less of the lowest normal operating speed of equipment (see Chapter 8 in the 2009 ASHRAE Handbook—

Fundamentals). Some equipment, such as variable-frequency drives, and high-speed equipment, such as screw chillers and vaneaxial fans, contain very-high-frequency vibration. This equipment creates new technical challenges in the isolation of high-frequency noise and vibration from a building's structure. Structural resonances both internal and external to the isolators can significantly degrade their performance at high frequencies. Unfortunately, at present no test standard exists for measuring the high-frequency dynamic properties of isolators, and commercially available

Note 13. Compressors: The two basic reciprocating compressors are (1) single- and double-cylinder vertical, horizontal or L-head, which are usually air compressors; and (2) Y, W, and multihead or multicylinder air and refrigeration compressors. Single- and double-cylinder compressors generate high vibratory forces requiring large inertia bases (type C) and are generally not suitable for upper-story locations. If this equipment must be installed in an upper-story location or at-grade location near noise-sensitive areas, the expected maximum unbalanced force data must be obtained from the equipment manufacturer and a vibration specialist consulted for design of the isolation system.

Note 14. Compressors: When using Y, W, and multi-head and multicylinder compressors, obtain the magnitude of unbalanced forces from the equipment manufacturer so the need for an inertia base can be evaluated.

Note 15. Compressors: Base-mounted compressors through 4 kW and horizontal tank-type air compressors through 8 kW can be installed directly on spring isolators (type 3) with structural bases (type B) if required, and compressors 10 to 75 kW on spring isolators (type 3) with inertia bases (type C) with a mass 1 to 2 times the compressor mass.

Note 16. Pumps: Concrete inertia bases (type C) are preferred for all flexible-coupled pumps and are desirable for most close-coupled pumps, although steel bases (type B) can be used. Close-coupled pumps should not be installed directly on individual isolators (type A) because the impeller usually overhangs the motor support base, causing the rear mounting to be in tension. The primary requirements for type C bases are strength and shape to accommodate base elbow supports. Mass is not usually a factor, except for pumps over 55 kW, where extra mass helps limit excess movement due to starting torque and forces. Concrete bases (type C) should be designed for a thickness of one-tenth the longest dimension with minimum thickness as follows: (1) for up to 20 kW, 150 mm; (2) for 30 to 55 kW, 200 mm; and (3) for 75 kW and up, 300 mm.

Pumps over 55 kW and multistage pumps may exhibit excessive motion at start-up ("heaving"); supplemental restraining devices can be installed if necessary. Pumps over 90 kW may generate high starting forces; a vibration specialist should be consulted.

Note 17. Packaged Rooftop Air-Conditioning Equipment: This equipment is usually installed on low-mass structures that are susceptible to sound and vibration transmission problems. The noise problems are compounded further by curb-mounted equipment, which requires large roof openings for supply and return air. The table shows type D vibration isolator selections for all spans up to 6 m, but extreme care must be taken for equipment located on spans of over 6 m, especially if construction is open web joists or thin, low-mass slabs.

products are not tested to determine their effectiveness for high frequencies. To reduce the chance of high-frequency vibration transmission, add a 25 mm thick pad (type 1, Note 20) to the base plate of spring isolators (type 3, Note 22, 23, 24). For some sensitive locations, air springs (Note 25) may be required. If equipment is located near extremely noise-sensitive areas, follow the recommendations of an acoustical consultant.

Note 9. To limit undesirable movement, thrust restraints (type 5) are required for all ceiling-suspended and floor-mounted units operating at 500 Pa or more total static pressure.

Note 10. Pumps over 55 kW may need extra mass and restraints.

Note 11. See text for full discussion Isolation for Specific Equipment

Note 12. Refrigeration Machines: Large centrifugal, screw, and reciprocating refrigeration machines may generate very high noise levels; special attention is required when such equipment is installed in upper-story locations or near noise-sensitive areas. If equipment is located near extremely noise-sensitive areas, follow the recommendations of an acoustical consultant.

City of Stirling
17 Jan 2025
RECEIVED

The recommended procedure is to determine the additional deflection caused by equipment in the roof. If additional roof deflection is 6 mm or less, the isolator should be selected for 10 times the additional roof deflection. If additional roof deflection is over 6 mm, supplemental roof stiffening should be installed to bring the roof deflection down below 6 mm, or the unit should be relocated to a stiffer roof position.

For mechanical units capable of generating high noise levels, mount the unit on a platform above the roof deck to provide an air gap (buffer zone) and locate the unit away from the associated roof penetration to allow acoustical treatment of ducts before they enter the building. Some rooftop equipment has compressors, fans, and other equipment isolated internally. This isolation is not always reliable because of internal short-circuiting, inadequate static deflection, or panel resonances. It is recommended that rooftop equipment over 135 kg be isolated externally, as if internal isolation was not used.

Note 18. Cooling Towers: These are normally isolated with restrained spring isolators (type 4) directly under the tower or tower dunnage. High-deflection isolators proposed for use directly under the motor-fan assembly must be used with extreme caution to ensure stability and safety under all weather conditions. See Note 5.

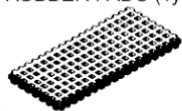
Note 19. Fans and Air-Handling Equipment: Consider the following in selecting isolation systems for fans and air-handling equipment:

1. Fans with wheel diameters of 560 mm and less and all fans operating at speeds up to 300 rpm do not generate large vibratory forces. For fans operating under 300 rpm, select isolator deflection so the isolator natural frequency is 40% or less than the fan speed. For example, for a fan operating at 275 rpm, $0.4 \times 275 = 110$ rpm. Therefore, an isolator natural frequency of 110 rpm or lower is required. This can be accomplished with a 75 mm deflection isolator (type 3).
2. Flexible duct connectors should be installed at the intake and discharge of all fans and air-handling equipment to reduce vibration transmission to air duct structures.
3. Inertia bases (type C) are recommended for all class 2 and 3 fans and airhandling equipment because extra mass allows the use of stiffer springs, which limit heaving movements.
4. Thrust restraints (type 5) that incorporate the same deflection as isolators should be used for all fan heads, all suspended fans, and all base-mounted and suspended air-handling equipment operating at 500 Pa or more total static pressure. Restraint movement adjustment must be made under normal operational static pressures.

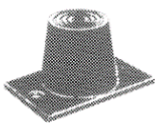
Vibration Isolators: Materials, Types, and Configurations

Notes 20 through 32 include figures to assist in evaluating commercially available isolators for HVAC equipment. The isolator selected for a particular application depends on the required deflection, life, cost, and compatibility with associated structures.

RUBBER PADS (Type 1)



RUBBER MOUNTS (Type 2)



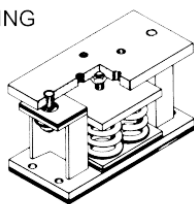
GLASS FIBER PADS (Type 1)



SPRING ISOLATOR (Type 3)



RESTRAINED SPRING ISOLATOR (Type 4)



AIR SPRINGS



ROLLING LOBE



BELLOWS

Note 20. Rubber isolators are available in pad (type 1) and molded (type 2) configurations. Pads are used in single or multiple layers. Molded isolators come in a range of 30 to 70 durometer (a measure of stiffness). Material in excess of 70 durometer is usually ineffective as an isolator. Isolators are designed for up to 13 mm deflection, but are used where 8 mm or less deflection is required. Solid rubber and composite fabric and rubber pads are also available. They provide high load capacities with small deflection and are used as noise barriers under columns and for pipe supports. These pad types work well only when they are properly loaded and the mass load is evenly distributed over the entire pad surface. Metal loading plates can be used for this purpose.

Note 21. Glass fiber with elastic coating (type 1). This type of isolation pad is precompressed molded fiberglass pads individually coated with a flexible, moisture-impervious elastomeric membrane. Natural frequency of fiberglass vibration isolators should be essentially constant for the operating load range of the supported equipment. Mass load is evenly distributed over the entire pad surface. Metal loading plates can be used for this purpose.

Note 22. Steel springs are the most popular and versatile isolators for HVAC applications because they are available for almost any deflection and have a virtually unlimited life. Spring isolators may have a rubber acoustical barrier to reduce transmission of high-frequency vibration and noise that can migrate down the steel spring coil. They should be corrosion-protected if installed outdoors or in a corrosive environment. The basic types include the following:

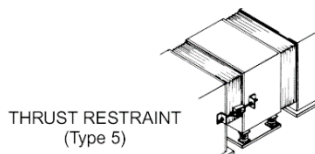
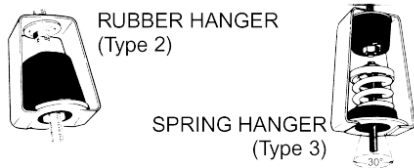
Note 23. Open spring isolators (type 3) consist of top and bottom load plates with adjustment bolts for leveling equipment. Springs should be designed with a horizontal stiffness of at least 80% of the vertical stiffness (k_x/k_y) to ensure stability. Similarly, the springs should have a minimum ratio of 0.8 for the diameter divided by the deflected spring height.

Note 24. Restrained spring isolators (type 4) have hold-down bolts to limit vertical as well as horizontal movement. They are used with (a) equipment with large variations in mass (e.g., boilers, chillers, cooling towers) to restrict movement and prevent strain on piping when water is removed, and (b) outdoor equipment, such as condensing units and cooling towers, to prevent excessive movement due to wind loads. Spring criteria should be the same as open spring isolators, and restraints should have adequate clearance so that they are activated only when a temporary restraint is needed.

Closed mounts or housed spring isolators consist of two telescoping housings separated by a resilient material. These provide lateral snubbing and some vertical damping of equipment movement, but do not limit the vertical movement. Care should be taken in selection and installation to minimize binding and short-circuiting.

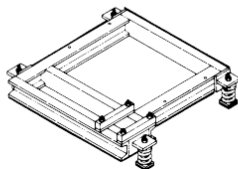
Note 25. Air springs can be designed for any frequency, but are economical only in applications with natural frequencies of 1.33 Hz or less (150 mm or greater deflection). They do not transmit high-frequency noise and are often used to replace high-deflection springs on problem jobs (e.g., large transformers on upper-floor installations). A constant air supply (an air compressor with an air dryer) and levelling valves are typically required.

City of Stirling
17 Jan 2025
RECEIVED

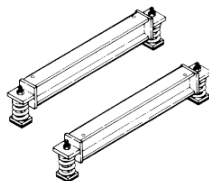


DIRECT ISOLATION (Type A)

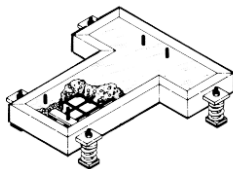
STRUCTURAL BASES (Type B)



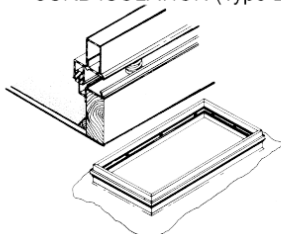
STRUCTURAL RAILS (Type B)



CONCRETE BASES (Type C)



CURB ISOLATION (Type D)



Note 26. Isolation hangers (types 2 and 3) are used for suspended pipe and equipment and have rubber, springs, or a combination of spring and rubber elements. Criteria should be similar to open spring isolators, though lateral stability is less important. Where support rod angular misalignment is a concern, use hangers that have sufficient clearance and/or incorporate rubber bushings to prevent the rod from touching the housing. Swivel or traveller arrangements may be necessary for connections to piping systems subject to large thermal movements. Pre-compressed spring hangers incorporate some means of pre-compression or preloading of the isolator spring to minimize movement of the isolated equipment or system. These are typically used on piping systems that can change mass substantially between installation and operation.

Note 27. Thrust restraints (type 5) are similar to spring hangers or isolators and are installed in pairs to resist the thrust caused by air pressure. These are typically sized to limit lateral movement to 6.4 mm or less.

Note 28. Direct isolation (type A) is used when equipment is unitary and rigid and does not require additional support. Direct isolation can be used with large chillers, some fans, packaged air-handling units, and air-cooled condensers. If there is any doubt that the equipment can be supported directly on isolators, use structural bases (type B) or inertia bases (type C), or consult the equipment manufacturer.

Note 29. Structural bases (type B) are used where equipment cannot be supported at individual locations and/or where some means is necessary to maintain alignment of component parts in equipment. These bases can be used with spring or rubber isolators (types 2 and 3) and should have enough rigidity to resist all starting and operating forces without supplemental hold-down devices. Bases are made in rectangular configurations using structural members with a depth equal to one-tenth the longest span between isolators. Typical base depth is between 100 and 300 mm, except where structural or alignment considerations dictate otherwise.

Note 30. Structural rails (type B) are used to support equipment that does not require a unitary base or where the isolators are outside the equipment and the rails act as a cradle. Structural rails can be used with spring or rubber isolators and should be rigid enough to support the equipment without flexing. Usual practice is to use structural members with a depth one-tenth of the longest span between isolators, typically between 100 and 300 mm, except where structural considerations dictate otherwise.

Note 31. Concrete bases (type C) are used where the supported equipment requires a rigid support (e.g., flexible-coupled pumps) or excess heaving motion may occur with spring isolators. They consist of a steel pouring form usually with welded-in reinforcing bars, provision for equipment hold-down, and isolator brackets. Like structural bases, concrete bases should be sized to support piping elbow supports, rectangular or T-shaped, and for rigidity, have a depth equal to one-tenth the longest span between isolators. Base depth is typically between 150 and 300 mm unless additional depth is specifically required for mass, rigidity, or component alignment.

Note 32. Curb isolation systems (type D) are specifically designed for curb-supported rooftop equipment and have spring isolation with a watertight, and sometimes airtight, assembly. Rooftop rails consist of upper and lower frames separated by nonadjustable springs and rest on top of architectural roof curbs. Isolation curbs incorporate the roof curb into their design as well. Both kinds are designed with springs that have static deflections in the 25 to 75 mm range to meet the design criteria described in type 3. Flexible elastomeric seals are typically most effective for

Weatherproofing between the upper and lower frames. A continuous sponge gasket around the perimeter of the top frame is typically applied to further weatherproof the installation.

City of Stirling
17 Jan 2025
RECEIVED

B.6 Hydraulic Services

B.6.1 Acoustic Separation of Services (NCC 2019 Amd. 1)

F5.6 Sound insulation rating of services

(a) If a duct, soil, waste or water supply pipe, including a duct or pipe that is located in a wall or floor cavity, serves or passes through more than one sole-occupancy unit, the duct or pipe must be separated from the rooms of any-sole occupancy unit by construction with an $R_w + C_{tr}$ (airborne) not less than –

- (i) 40 if the adjacent room is a habitable room (other than kitchen); or
- (ii) 25 if the adjacent room is a kitchen or non-habitable room.

(b) If a storm water pipe passes through a sole-occupancy unit it must be separated in accordance with (a)(i) and (ii).

Table 17 summarises the minimum acoustic performance requirements for a construction separating hydraulic pipes from a sole occupancy unit:

Table 17: Minimum acoustic performance of constructions separating sole-occupancy from hydraulic pipes

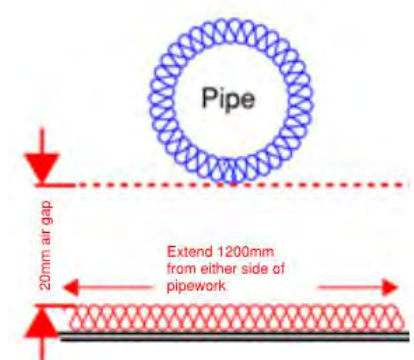
Room Type	$R_w + C_{tr}$
Habitable area (other than kitchen)	40
Habitable areas (Open plan kitchen / living)	40
Non-habitable areas (Kitchen, laundry, bathrooms, etc)	25

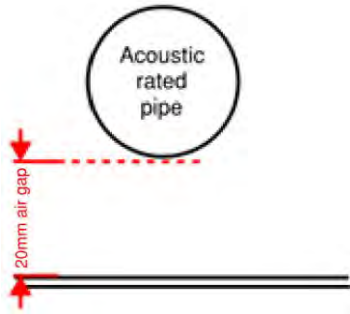
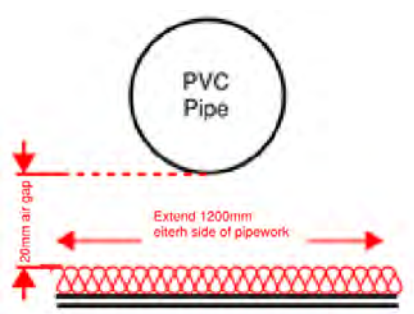
Ducts, soil, waste or water supply pipes (including those in risers, ceiling and wall cavities) that serve or pass through more than one sole-occupancy unit must be separated from the room of any sole-occupancy unit by construction not less than –

- $R_w + C_{tr}$ 40 if the adjacent room is a habitable room (other than an enclosed kitchen); or
- $R_w + C_{tr}$ 25 if the adjacent room is non-habitable room or an enclosed kitchen.

Wall constructions details achieving the above-mentioned $R_w + C_{tr}$ ratings can be found in section B.3.2.2. Where hydraulic services run in ceiling of sole occupancy units, refer to the below tables for ceiling construction to achieve the required acoustic separation.

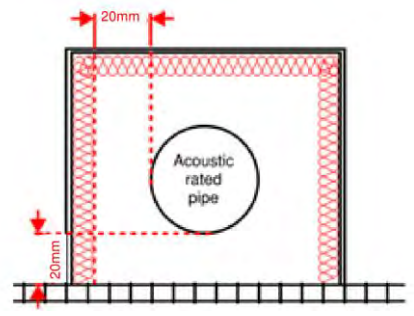
Table 18: Ceiling constructions for hydraulic services noise

Services Concealment Treatment	Ceiling Lining	Insulation	Pipe/Pipe Lagging	Max No. of Downlights per 5m ²	$R_w + C_{tr}$
	1 layer of 13mm plasterboard 20mm air gap to be provided between the pipework and ceiling/insulation.	Min 75 mm thick glass wool batts, min density 14kg/m ³ . Installed to a min distance of 1200 mm either side of pipe.	Min. 25 mm glasswool or foam bonded to a loaded vinyl noise barrier layer (min mass per unit area of 4.5kg/m ² , Pyrotek 4525C or equivalent). Alternatively use acoustic rated pipe- Rehau Rupiano plus ,	5	≥ 40 (Habitable Rooms)

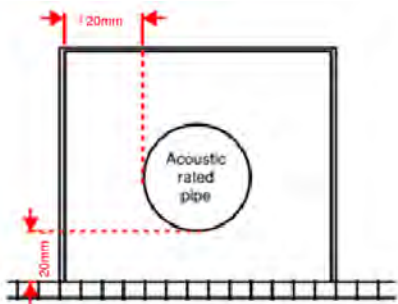
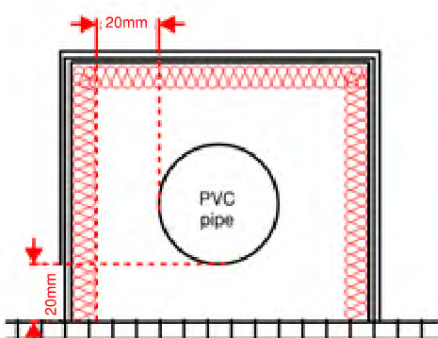
Services Concealment Treatment	Ceiling Lining	Insulation	Pipe/Pipe Lagging	Max No. of Downlights per 5m ²	R _w + C _{tr}
			valsir Triplus or similar		
 Acoustic rated pipe 20mm air gap	1 layer of 13mm plasterboard	Not required.	Acoustic rated pipe- Rehau Rupiano Plus, Valsir Triplus or similar ⁽¹⁾ .	2	≥ 25 (Non-Habitable Rooms)
 PVC Pipe 20mm air gap Extend 1200mm either side of pipework		Min 75 mm thick glass wool batts, min density 14kg/m ³ . Installed to a min distance of 1200 mm either side of pipe.	PVC pipes (Alternative)		

Note: 1) Installation of acoustic rated pipe work must be in strict accordance to manufacturers recommendations.

Table 19: Riser constructions for services noise

Services Concealment Treatment	Insulation	Pipe/Pipe Lagging	R _w + C _{tr}
 20mm 20mm Acoustic rated pipe	Min 75 mm thick glass wool batts, min density 14kg/m ³ . 25mm air gap to be provided between the pipework and riser wall/insulation.	Acoustic rated pipe- Rehau Rupiano Plus , Valsir Triplus or similar ⁽¹⁾ . Alternatively, where PVC pipes are being used, provide min. 25 mm glasswool or foam bonded to a loaded vinyl noise barrier layer (min mass per unit area of 4.5kg/m ² , Pyrotek 4525C or equivalent).	≥ 40 (Habitable Rooms)

City of Stirling
17 Jan 2025
RECEIVED

Services Concealment Treatment	Insulation	Pipe/Pipe Lagging	$R_w + C_{tr}$
	Not required. 20mm air gap to be provided between the pipework and riser wall.	Acoustic rated pipe- Rehau Rupiano Plus , Valsir Triplus or similar⁽¹⁾.	≥ 25 (Non-Habitable Rooms)
	Min 75 mm thick glass wool batts, min density 14kg/m³. Installed to a min distance of 1200 mm either side of pipe. 20mm air gap to be provided between the pipework and riser wall/insulation.	PVC pipes (Alternative)	

Note: 1) Installation of acoustic rated pipe work must be in strict accordance to manufacturers recommendations.

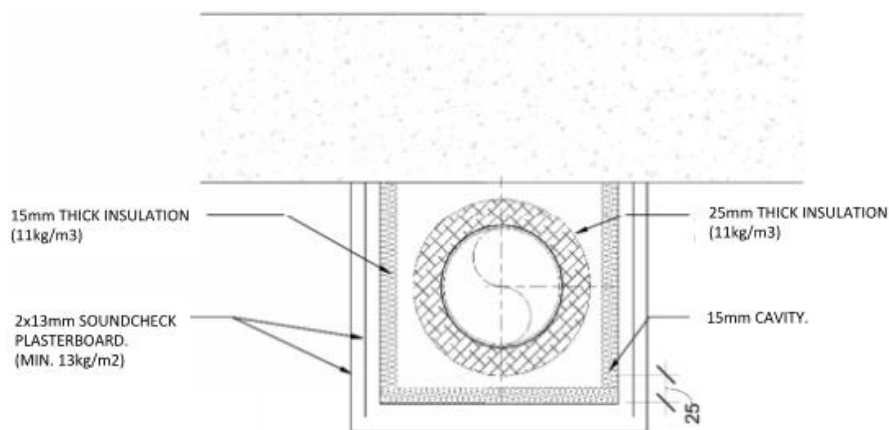


Figure 13: Acoustic Treatment for Stormwater (Syphonic Pipework)

All pipes should be secured in cavities, voids or service risers using resilient pipe clip connections which incorporate an isolating rubber or neoprene collar, to avoid introducing pipe-borne noise into the surrounding structural elements.

Furthermore, all pipe runs connected to hydraulic circulation pumps or similar plant equipment must be connected via flexible couplings to avoid the introduction of structure borne noise through rigid connections.

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

B.6.2 Noise Control Measures

B.6.2.1 General Construction Techniques

- All soil, waste, storm water pipes and downpipes shall be manufactured from PVC material or equivalent, unless where acoustically rated pipes such as REHAU Raupiano Plus or Valsir Silere/Triplus are used as shown on Hydraulic drawings.
- All mains hydraulic pipes and mains gas pipes located above apartment ceilings are to be acoustically lagged with an approved acoustic pipe lagging material (Pyrotek 4525C) or equivalent.
- There must be a minimum of 10mm clearance between any walls, ceilings or risers supporting structure and any hydraulic pipes.
- Refer to Section B.6.2.1 for acoustic treatment to soil, waste, water supply and storm water pipes within the development.
- All downpipes located in the cavity of external walls and internal walls should be installed using appropriate acoustic measures.
- All soil, waste and stormwater pipes in ceiling cavities of apartments shall be acoustically lagged with an approved acoustic pipe lagging material (type Pyrotek 4525C), except when REHAU Raupiano Plus or Valsir Silere/Triplus are used above kitchen/living areas. In conjunction a ceiling shall be constructed as outlined in Section B.3.6.
- Install and supply REHAU Raupiano Plus or Valsir Silere/Triplus acoustic hydraulic pipes with approved external lagging material (type Pyrotek 8025C) or equivalent for hydraulic services passing above bedrooms.
- Install and supply REHAU Raupiano Plus or Valsir Silere/Triplus acoustic hydraulic pipes with approved external lagging material (type Pyrotek 8025C) or equivalent for hydraulic services passing 500mm from any return air grilles.
- Acoustic treatment to PVC soil and waste pipes and storm water pipes passing through non-habitable spaces of units shall consist of a combination of the lagging of any enclosed soil and waste-water pipes using an approved acoustic lagging material (type Pyrotek 4525C). In conjunction a ceiling or riser shaft shall be constructed as outlined in Section □
- Acoustic treatment to hydraulic soil, waste pipes and stormwater pipes passing through habitable spaces of units shall consist of a combination of the lagging of any enclosed soil and waste pipes using an approved acoustic pipe lagging material. In conjunction a ceiling or riser shaft shall be constructed as outlined in Section □.
- Supply and install all access panels with a minimum acoustic performance of $R_w + C_{tr} 25$.
- Where possible, waste pipes shall not be fixed to the walls of the riser shaft but shall be fixed to slab edges.
- Supply and install supporting vibration isolation hangers for all hydraulic piping located above habitable spaces with a diameter greater than 40mm.
- When hydraulic services are running within cavity such as hot and cold water pipes, gas pipes, all pipes shall be mounted to the studs on cavity side of the inter-tenancy wall.
- Reticulation water pipes shall not be chased into sound rated walls.
- Penetrations shall be sized for pipes passing through building slabs or walls to allow a uniform clearance of 10mm around the pipes and this space shall be packed through its depth with polyester insulation or equivalent. Both side of the penetration shall be sealed with an approved sealant.
- Penetrations made through slabs should be sealed for the full depth of the penetration with a cement grout to achieve an airtight seal around the hydraulic services.
- Hot and cold transfers servicing one apartment and passing through another shall be acoustically lagged using an approved acoustic pipe lagging material.

- All rainwater tank pumps shall be vibration isolated from concrete slab and adjoining apartment wall. Pumps shall not be rigidly fixed to apartments walls.
- Water velocities in hot and cold water pipes shall not exceed 1.5m/s.
- Supply and install vibration isolation to all pumps in accordance with manufacturers' data. Provide vibration isolation data to acoustic engineer for review and approval.
- Provide sample or details of shower crates to acoustic engineer for review and approval.

B.6.3 Approved Suppliers (Product Specification)

B.6.3.1 Acoustic Pipe Lagging Material

1. Pyrotek Soundlag 4525C or 8025C
2. Acoustica Acoustiflex PL5/15

B.6.3.2 Rw + Ctr 25 Rated Access Panels

1. Trafalgar APT/WW 30
2. Rondo Panther SRAP 30
3. Bowman hinged access panel system

Alternative materials and design details are permitted provided they have equivalent technical specifications as outlined above and are submitted to the Acoustic Consultant for review and approval.

City of Stirling
17 Jan 2025
RECEIVED

B.7 Electrical Services

B.7.1 Electrical Services in Walls

- Locate electrical outlets to be offset from each other on both sides of the wall –
 - in masonry walls, not less than 100mm; and
 - in timber or steel frame walls, not less than 300mm.
- Electrical outlets include general power and telecommunication outlets, MATV and data outlets, light switches and wall mounted lights.
- Install back-to-back electrical outlets within internal walls when required.
- Supply and Install fireboxes for acoustic purposes to both outlets, when back to back electrical outlet can't be avoided within party walls. Fireboxes must achieve a minimum of Rw45.
- Where electrical services penetrate plant room walls or floors, an inter-tenancy wall or floor/ceiling or a riser shaft wall, the penetration shall be acoustically treated so that it does not degrade the sound isolation rating of the subject partition. All services penetration shall also comply with NCC 2019 Amd. 1.
- All electrical penetrations shall be sized for cables and conduits passing through building slabs, plasterboard or masonry walls to allow a uniform clearance of 10mm around the item and this gap shall be sealed using an approved acoustic sealant.
- Any alternative sealing details utilised shall be designed to maintain the acoustic rating of the walls, ceilings and floors that they penetrate. Alternative details shall be submitted to the acoustic consultant for approval.
- No services shall be fixed in the 20mm discontinuous separating zone between the masonry and the separate stud of inter-tenancy walls.
- Supply and install cable, conduit and the like to concrete or masonry elements in ensuring that the cable or conduit is located within the furring channels.
- Services must not be chased into concrete or masonry elements of sound rated walls.

B.7.2 Electrical Services in Ceilings

- Cable penetrations through plasterboard ceiling from surface mounted lights, smoke detectors, etc. shall be sealed using an approved acoustic sealant.
- Supply and install LED downlights specified and as shown on Electrical drawings.
- A maximum of two penetrations for recessed down lights is permitted in a 5m² ceiling.
- Supply and install LED downlights to ceiling and ensure that the maximum diameter of penetrations for down lights don't exceed 95mm. Locate down lights penetrations at least 600mm from waste pipes.
- If higher concentrations of lights are required, all down lights shall be acoustically treated. Acoustic down light treatment will consist of either down lights purchased with an acoustic can fitted or custom-made galvanised box around the down lights.

City of Stirling
17 Jan 2025
RECEIVED



B.8 Technical Recommendations for Lift Services

Ensure physical separation is maintained between any element forming enclosure to, or support for, lifts and any adjacent habitable room.

B.9 Shop Drawings

Submit for review, comprehensive installation and manufacturing drawings, with notes and/or specifications and/or catalogue pamphlets (hereinafter called shop drawings):

- As required for the execution of the works
- Detailing all works to be carried out by other trades

Submit with the shop drawings a list of all deviations from the specification requirements for equipment and the installation. Should such a list not be provided, the Contractor shall be responsible for full compliance with the specification, irrespective of any review by the Engineer.

Submit a schedule of shop drawings listing the drawings to be submitted for review, update the schedule to show the date of submission and return of each drawing and resubmit the schedule when drawings are added to the list.

Take account of site dimensions, actual dimensions and access requirements for installation and servicing of the equipment supplied, and co-ordinate shop drawings with the building structure, finishes and other services in accordance with the design details and general arrangements shown on the contract drawings.

Comply with Statutory Authorities and show sufficient information to verify that the equipment can be installed, operated, adjusted and maintained in the manner for which the system was designed.

Show all building details such as columns, stairways, floors, lifts, etc., numbered in accordance with the Architectural drawings and identify services and plant by the same numbering as used on the drawings. Dimensioning of services where required to be co-ordinated with other structures, finishes and services shall be taken from the nearest determinable structural elements of the building, e.g., column centre lines, building centre lines. Metric units of measurement to be used throughout.

If alternative procedures are not specified elsewhere, submit in the form of one reproducible transparency in a scale of 1:50 and on standard sheet sizes as agreed for the project.

Take all responsibility for, and pay for, all alterations of the works due to any discrepancies, errors or omissions in the shop drawings or other information supplied under the contract, whether such prints of drawings or information have been reviewed or not, provided that such discrepancies, errors or omissions are not due to inaccurate or incomplete information provided for the works.

Shop drawings shall be reviewed marked where alterations are desired, and returned within 14 working days, unless specified elsewhere, of receipt. Where marked to be resubmitted, amend the originals as required and cloud the parts of the drawing altered as a consequence of the last revision and resubmit a plain paper or transparent print for review.

Submitted shop drawings that are not in accordance with the specification and drawings or shop drawings that are substantially inadequate and which necessitate the Engineer expending substantial time in marking up the shop drawings, will incur charges at the Engineer's current hourly rates and such charges will be deducted from the contract amount.

B.10 Testing and Commissioning

Prior to practical completion, test and commission all installed equipment and systems to verify that they operate correctly and function in accordance with the manufacturer's requirements, this specification and meet the acoustic performance requirements presented in this specification.

Submit before commencement of commissioning, a program itemising the systems and the proposed dates for conducting acceptance tests in accordance with the program.

Notify the Engineer one week prior to the proposed date of tests which shall be performed and require witnessing.



Perform tests on dates as agreed.

Submit details of the proposed commissioning procedures and methods of measurement. Commissioning procedures and measurement methods which are not approved or not in accordance with methods detailed in this specification will not be accepted as evidence that the systems have been correctly commissioned.

Operate all systems and equipment to the extent required for final installation, adjust and calibrate controls and instruments and rectify all faults.

Arrange for the setting up of major equipment provided for these works to be supervised by the manufacturer's representative, who shall remain on site until the equipment is operating satisfactorily.

Co-ordinate manufacturer's representatives so that testing is carried out according to the approved program.

Prepare Inspection and Test Reports which are appropriate to each test. Document and record the results of commissioning tests on the Inspection and test reports. Sample Inspection and Test Reports may be available from the Engineer for some tests. These are indicative only of the test and records required for the project. Make such modifications and additions which are necessary to meet the requirements of the project.

When a system is operating satisfactorily, submit a copy of the test results on the standard test forms. Test forms shall be neatly hand written or typed and incorporated within the Operation and Maintenance manual.

Ensure that acceptance tests are witnessed when the test results are considered to be satisfactory. Two acceptance tests of each system will be witnessed if necessary. If the equipment fails the second test, witnessing of further tests will be charged at the Engineer's current hourly rates plus expenses and such charges will be deducted from payments otherwise due to the Contractor.

Ensure that all instruments have been calibrated by an independent certified testing authority within 6 months of the date of use and a current calibration certificate is available for inspection. Instruments shall not be used to measure quantities which are outside their accurate measuring range. If there is reasonable doubt as to the accuracy of an instrument, the instrument shall be re-calibrated or alternatively, quantities measured with the disputed instrument shall be re-measured with another approved instrument.

B.10.1.1 Airborne Sound Insulation

Airborne sound insulation testing for building elements such as walls and floors must be conducted following the standards:

- International Standard ISO 140.4-2006: "*Acoustics – Measurement of sound insulation in buildings and of buildings elements Part 4: Field measurements of airborne sound insulation between rooms*".
- International Standard ISO 717.1:2004: "*Acoustics – Rating of sound insulation in buildings and of buildings elements – Part 1: Airborne sound insulation*".

The Contractor should make allowance to test at least 10% of walls relating to sound rated spaces. The walls that will be tested will be agreed together with the client, the project manager and acoustic engineer.

The Contractor should demonstrate compliance by testing walls and floors according to the nominated standards in this document and report the weighted difference level ($D_{n,Tw}$) for each nominated spaces when fully completed prior to handover.

B.10.1.2 Impact Sound Insulation

Impact sound insulation testing for building elements such as walls and floors must be conducted following the standards:

- International Standard ISO 140.7-1998: "*Acoustics – Measurement of sound insulation in buildings and of buildings elements Part 7: Field measurements of impact sound insulation of floors*".

The Principal should make allowance to test at least 10% of floors relating to sound rated spaces. The floors that will be tested will be agreed together with the client, the project manager and acoustic engineer.



The Principal should demonstrate compliance by testing walls and floors according to the nominated standards in this document and report the weighted difference level (L_n, T_w) for each nominated spaces when fully completed prior to handover.

B.10.1.3 Internal Background Noise Levels

Background noise levels testing and measurements must be conducted following the standards:

AS/NZS 2107:2016: *“Acoustics – Recommended design sound levels and reverberation times for building interiors”*.

The Contractor shall conduct acoustic testing and measurements of internal background noise levels. The internal background noise levels being composed of the external noise intrusion through the building façade and internal noise associated with the building air-conditioning system.

The Contractor should make allowance to test at least 10% of spaces. The rooms that will be tested will be agreed together with the client, the project manager and acoustic engineer.

The following room should be tested as a priority and based on their acoustic sensitivity:

- Bedrooms
- Living rooms

Measurements shall be conducted in single octave band frequency ranging from 63Hz to 8 KHz for a minimum duration of 60 seconds and at a minimum distance of 0.5m of the boundary walls of each space. It is recommended to conduct an average of four measurements at four different locations within each room.

B.10.1.4 External Noise Emission (Local Council / DoP Conditions of Consent)

The external noise emission measurements and assessment must be concluded following the following standards and guidelines:

- AS 1055:1997: *“Acoustics – Description and measurements of environmental noise”*; and
- WA Environmental Protection (Noise) Regulations 1997.

The Contractor shall undertake and complete verification testing of external noise emission associated with the operation of the building services plant from the site.

The external noise measurements should include the measurements of mechanical plant operating under typical conditions.

The testing needs to be conducted at the boundary of the nearest sensitive receivers which may include residential, commercial or industrial premises.

The results of external testing must be presented into a report demonstrating compliance with the Council Conditions of Consent. The report will also require presenting the sensitive receivers at which the measurements were conducted.

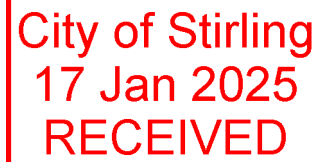
All measurements will require to be conducted for a period of not less than 15 minutes at each sensitive receiver's locations.

B.10.1.5 Compliance Report

The Contractor is to provide the following compliance reports:

Report and certification demonstrating that the building achieves the performance criteria presented in the acoustic specification.

Report demonstrating that the noise associated with the operation of the stadium complies with the Council / Department of Planning (DoP) Conditions of Consent.



PART C. Technical

C.1 Extent of Works

The extent of work covered by these documents includes the co-ordination of works by a number of trades affecting the acoustic performance of the completed works.

The following list identifies the work to be undertaken by the contractor. The listed items are not intended to limit or exclude any items required by the contract documents.

The contract acoustic co-ordination work shall comprise the provision of the following major items:

- Supply and install acoustically rated walls and partitions in accordance with the specifications.
- Supply, install and commission proprietary sound rated doors and sound rated windows to the residential apartments as specified and where shown on the drawings.
- Provide certified acoustic sound transmission loss test data for sound rated doors.
- Provide certified acoustic sound transmission loss test data for sound rated windows.
- Supply and install resilient membranes within upper floor wet areas, kitchen areas and habitable areas where these are located above wet and habitable areas.
- Co-ordinate work between trades.
- Supply and install acoustic treatment to mechanical equipment as required to comply with specified background noise levels.
- Re-align, and acoustically treat, ductwork where ductwork conflicts with or penetrates through sound rated partitions.
- Externally insulate ductwork, pipe work and equipment as specified and/or shown on the drawings.
- Vibration isolate equipment and systems as required.
- Acoustically seal all service penetrations passing through full height and sound rated partitions.
- Ensure all thermal or acoustic insulation materials, other than those that are fully enclosed within partition linings, are physically secured so as not to be dislodged during normal use and maintenance of the building.
- Install all partition and ceiling constructions so as to ensure that audible sound leakage through building discontinuities is minimal. In particular, ensure that gaps between a partition head and ceiling system are acoustically sealed. Obtain approval for the proposed seal method before proceeding with the works.
- Seal sound rated partitions at the building façade junction so as to maintain the acoustical performance of the partitions. Obtain approval for the proposed seal method before proceeding with the works.
- Select and install electrical lighting equipment so as the overall acoustic performance of the floor/ceiling system complies with the performance requirements nominated within this specification.
- Select mechanical services equipment so as to comply with the specified background noise levels in areas of occupancy.
- Supply and install acoustic attenuators to mechanical services systems where specified.
- Supply and install acoustically insulated ductwork as shown on the mechanical drawings and as required.
- Supply and install vibration isolation mounts to all mechanical and rotating equipment.
- Provide return air penetrations, to be installed at slab soffit level generally above door locations, where necessary to provide return air relief from enclosed rooms to corridor space.

- Supply and install acoustic wrapping and enclosures to hydraulic services waste pipes where these pipes are located or pass over noise sensitive spaces.
- Select materials and build walls so as to achieve the design intent performance described in Quality Requirements Part B.1.
- Commission and test building services systems. This includes the following:
 - Air balancing of all outlets where necessary to conform with specified noise levels
 - Optimise operating duty for air handling plant and equipment

C.2 Rules and Regulations

The work covered in this contract shall conform with the Statutory Requirements and Regulations of all controlling Authorities and all relevant Australian Standards and Codes of Practice.

C.3 Requirements, Permits and Fees

Perform all work in accordance with the current amendments of the National Code of Construction (NCC). References herein to codes and standards shall be to the version adopted by the NCC and the State Authority administering that code.

Comply with the requirements of authorities having jurisdiction over any part of the works including requirements for ladders, stairs, platforms, safety access and scaffolding.

Make all applications and pay all fees required by any such Authority. Prepare and submit applications including those which are required to be signed by the Principal or Tenant.

C.4 Standards

Work not covered by the requirements of Regulatory Authorities or this specification shall comply with the appropriate publication of Standards Australia.

Wherever a Standard or Code of Practice is referred to in this specification, it will imply the latest issue and/or revision applicable at the time of tender.

C.5 Materials, Workmanship and Sundries

Provide all materials, fittings, accessories and apparatus of new manufacture complying with the relevant standard.

Submit for approval, prior to commencing the installation, samples of all accessories, fittings and apparatus which are proposed to be employed in the work, and only install such approved items. Failure to comply with this provision may result in the unconditional rejection of such items when inspected on site.

Provide all materials, new, clean and free from corrosion unless otherwise specified

Select and install material to prevent corrosion of the material or any other proximal material through galvanic action. Application of approved coatings suitable for the installation conditions may be used to prevent corrosion or galvanic interaction where material selection is not a practical means of achieving this objective.

Ensure that materials subject to exposure to the elements are suitable for long term, 20-year minimum exposure without degradation of performance.

All work shall be performed by experienced tradesmen.

City of Stirling
17 Jan 2025
RECEIVED

C.6 Manufacturer's Directions

Apply, install, connect, erect, adjust, use, clean and condition, manufactured articles, materials and equipment in strict conformity with manufacturers' printed directions. Retain manufacturers' directions for such articles on site for future reference.

Notify the Engineer where there is conflict between the manufacturer's printed directions and the specification.

C.7 Proprietary Brand Name References

Any reference in the specifications to proprietary brand names or to a particular manufactured product without the use of/or approved equal means that the particular article or product is the only one to be supplied or used.

Ensure that the referenced or proprietary brand equipment to be installed complies in every respect with the specification requirements and if any discrepancies exist, advise the specific deviations from the specification requirements and prior to ordering, the discrepancy must be resolved in accordance with the contract.

C.8 Drawings

The accompanying drawings do not purport to show all the structural and architectural details. Any information involving accurate measurement of the works shall be taken from the architectural and structural drawings and at the site.

All drawings are only diagrammatic in relation to position of building elements and equipment, therefore co-ordinate all trades to ensure that building components and services equipment are installed so as not to interfere with the specified acoustic performance of the works.

Cross sections, elevations and three dimensional views are a general representation only and may not include all details.

C.9 Co-ordination Generally

Before commencement of any works, examine the progress of other trades and report at once any defect or interference affecting the works.

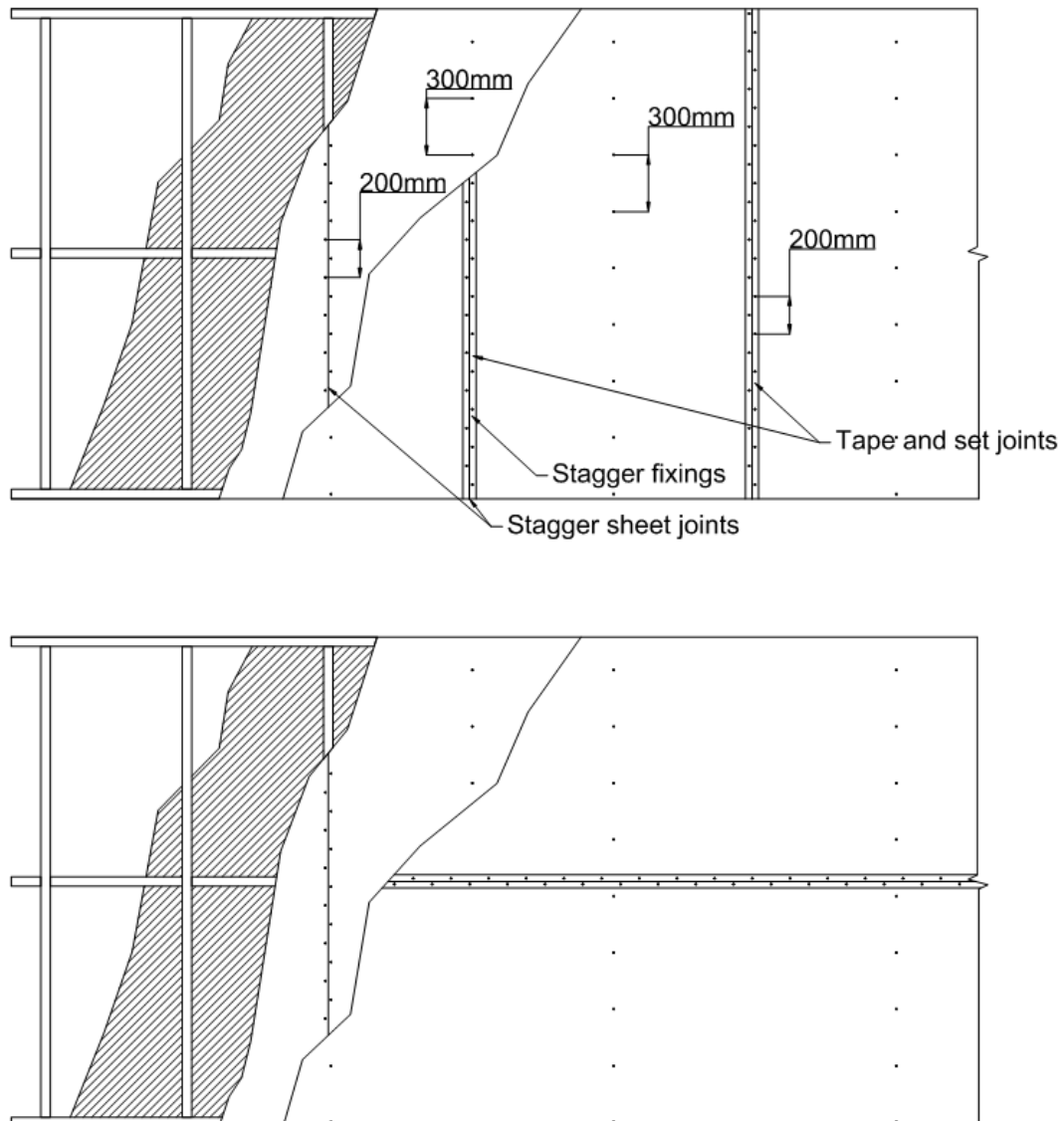
Claims for variations, extensions of time, delay, disruption or other items, will not be allowed for failure to co-ordinate the works.

Any equipment that is installed without due regard to other trades, shall be relocated at no additional cost.

City of Stirling
17 Jan 2025
RECEIVED

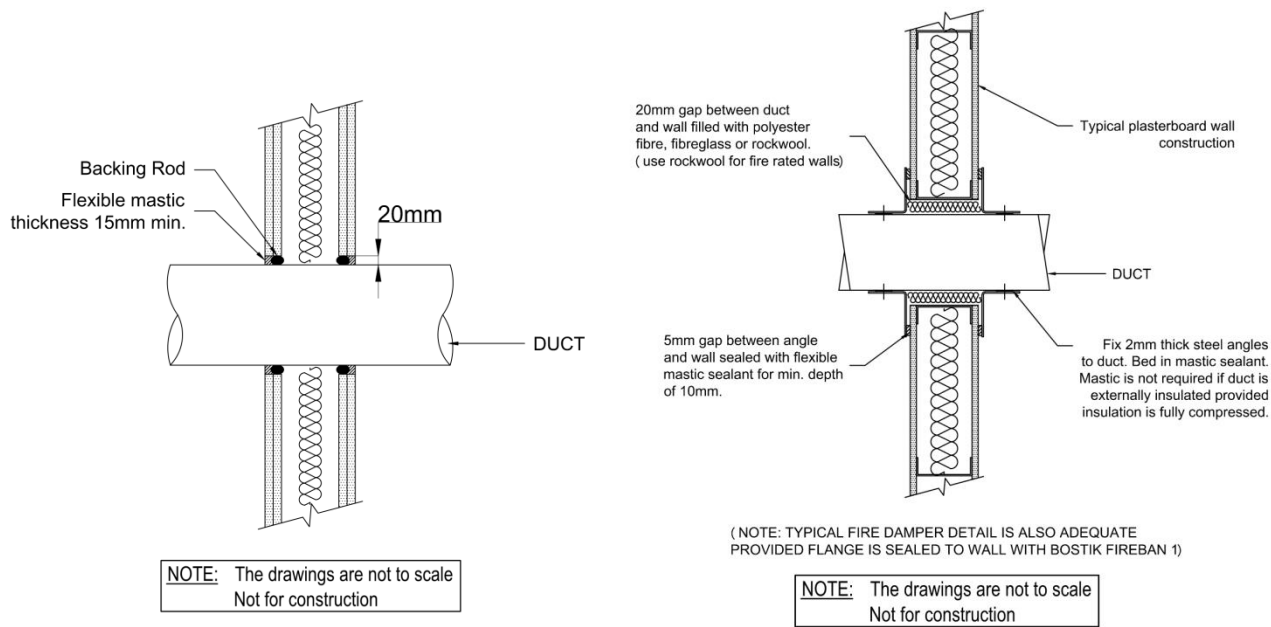
PART D. Construction Details

Figure 14: Typical installation of plaster sheets for sound insulation



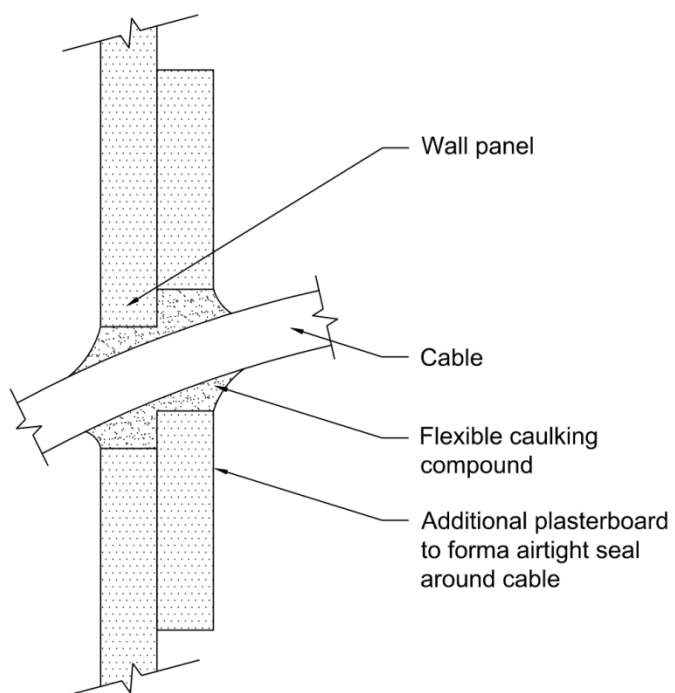
City of Stirling
17 Jan 2025
RECEIVED

Figure 15: Duct penetration details



City of Stirling
17 Jan 2025
RECEIVED

Figure 16: Cable penetration details

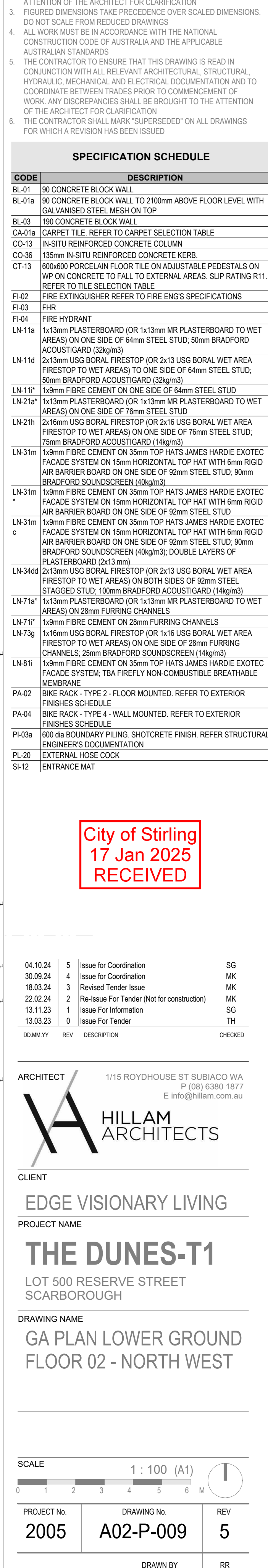


NOTE: The drawings are not to scale
Not for construction

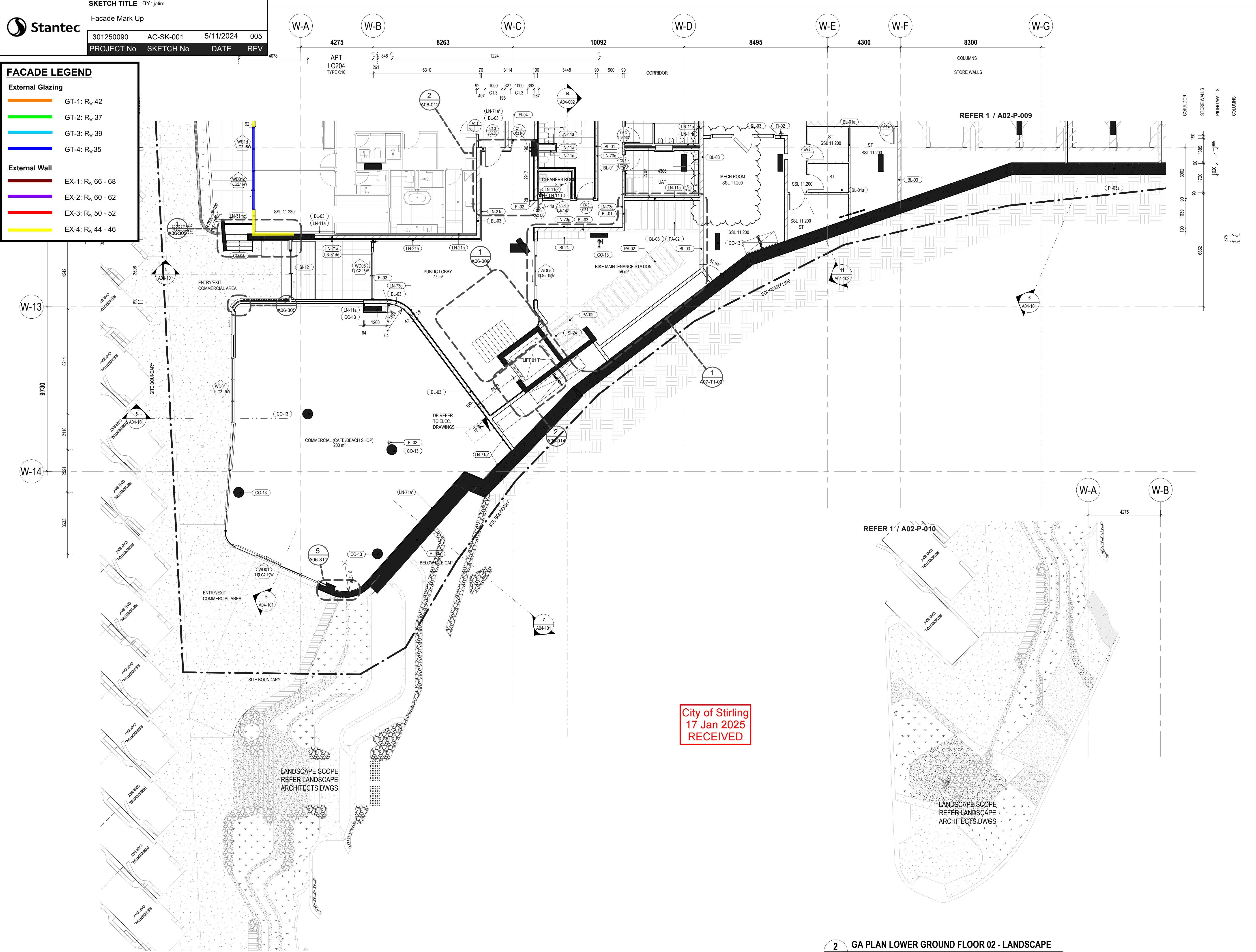
City of Stirling
17 Jan 2025
RECEIVED

PART E. External Facade Markups

City of Stirling
17 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01	90 CONCRETE BLOCK WALL
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 54mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (14kg/m³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (14kg/m³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m³)
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-12	ENTRANCE MAT
SI-24	LOCKERS. REFER TO INTERIOR AMENITIES ACCESSORIES SCHEDULE

04.10.24 6 Issue for Coordination SG

30.09.24 5 Issue for Coordination MK

13.05.24 4 Issue for Coordination Only HN

18.03.24 3 Revised Tender Issue MK

22.02.24 2 Re-Issue For Tender (Not for construction) MK

13.11.23 1 Issue For Information SG

DO MAY YY REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA P (08) 6380 1877 E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND FLOOR 02 - SOUTH WEST

SCALE 1 : 100 (A1)

PROJECT No 2005

DRAWING No A02-P-010

REV 6

DRAWN BY RR

© Hillam Architects Pty Ltd

Stantec

SKETCH TITLE

BY: jalim

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

J

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

CODE

DESCRIPTION

BL-01a

90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP

CO-03

200mm IN-SITU REINFORCED CONCRETE WALL

CO-13

IN-SITU REINFORCED CONCRETE COLUMN

FI-02

FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS

FI-03

FHR

FI-04

FIRE HYDRANT

PI-03a

600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

04.10.24

4

Issue for Coordination

SG

30.09.24

3

Issue for Coordination

MK

18.03.24

2

Revised Tender Issue

MK

22.02.24

1

Re-issue For Tender (Not for construction)

MK

13.03.23

0

Issue For Tender

TH

DO

MM

YY

REV

DESCRIPTION

CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 02 - EAST

SCALE

1 : 100 (A1)

PROJECT No

DRAWING No

REV

2005

A02-P-011

4

DRAWN BY

RR

© Hillam Architects Pty Ltd

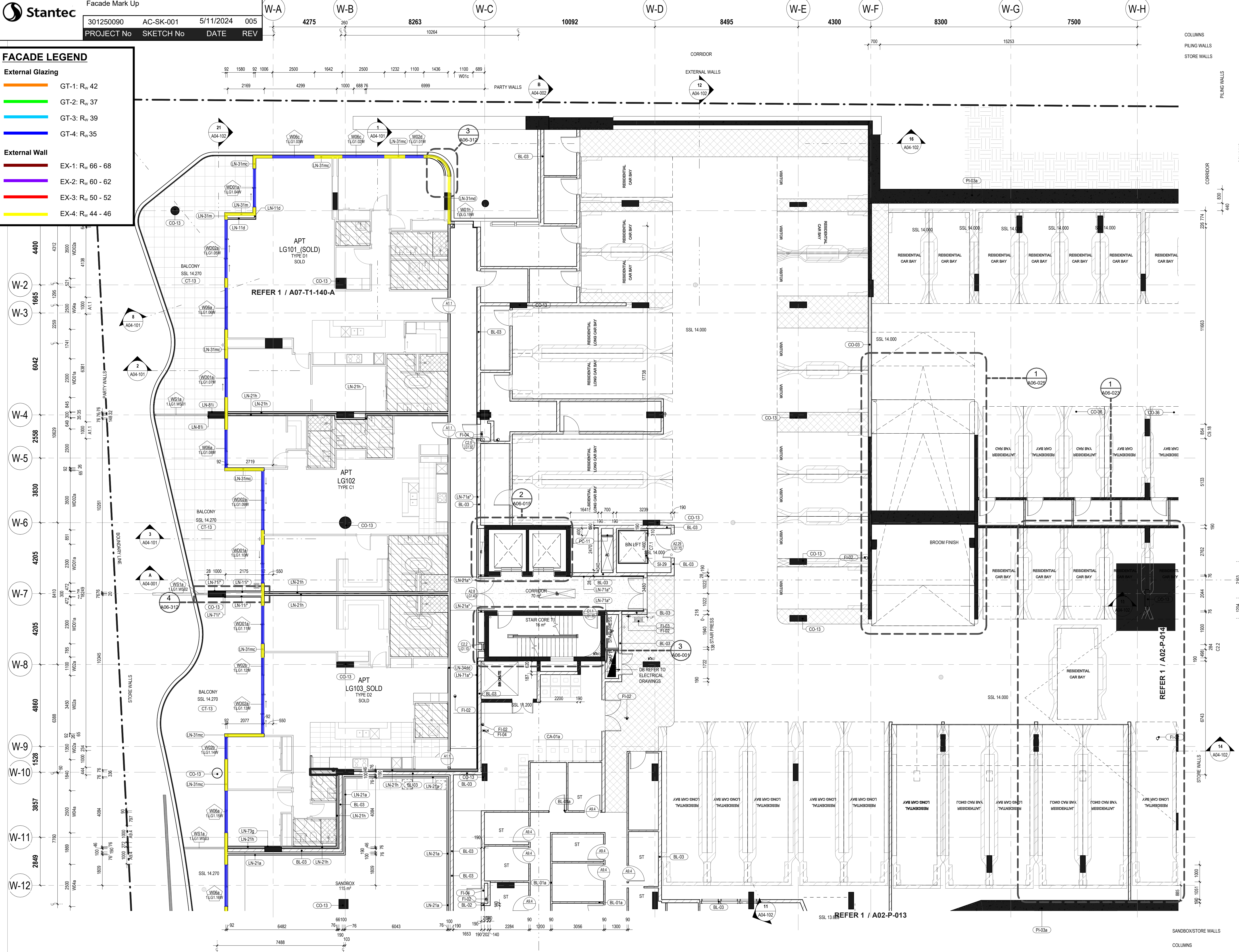
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FIRE
FI-04	FIRE HYDRANT
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³); 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11f	1x13mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³); 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 90mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³); 1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-71a*	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM; TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE
PC-11	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-29	BIN LIFT. REFER TO FINISHES SCHEDULE FOR DETAILS.

City of Stirling
17 Jan 2025
RECEIVED

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 01 - NORTH WEST

SCALE 1 : 100 (A1)

PROJECT No 301250090
DRAWING No A02-P-012
REV 4

DRAWN BY RR

Hillam Architects Pty Ltd

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

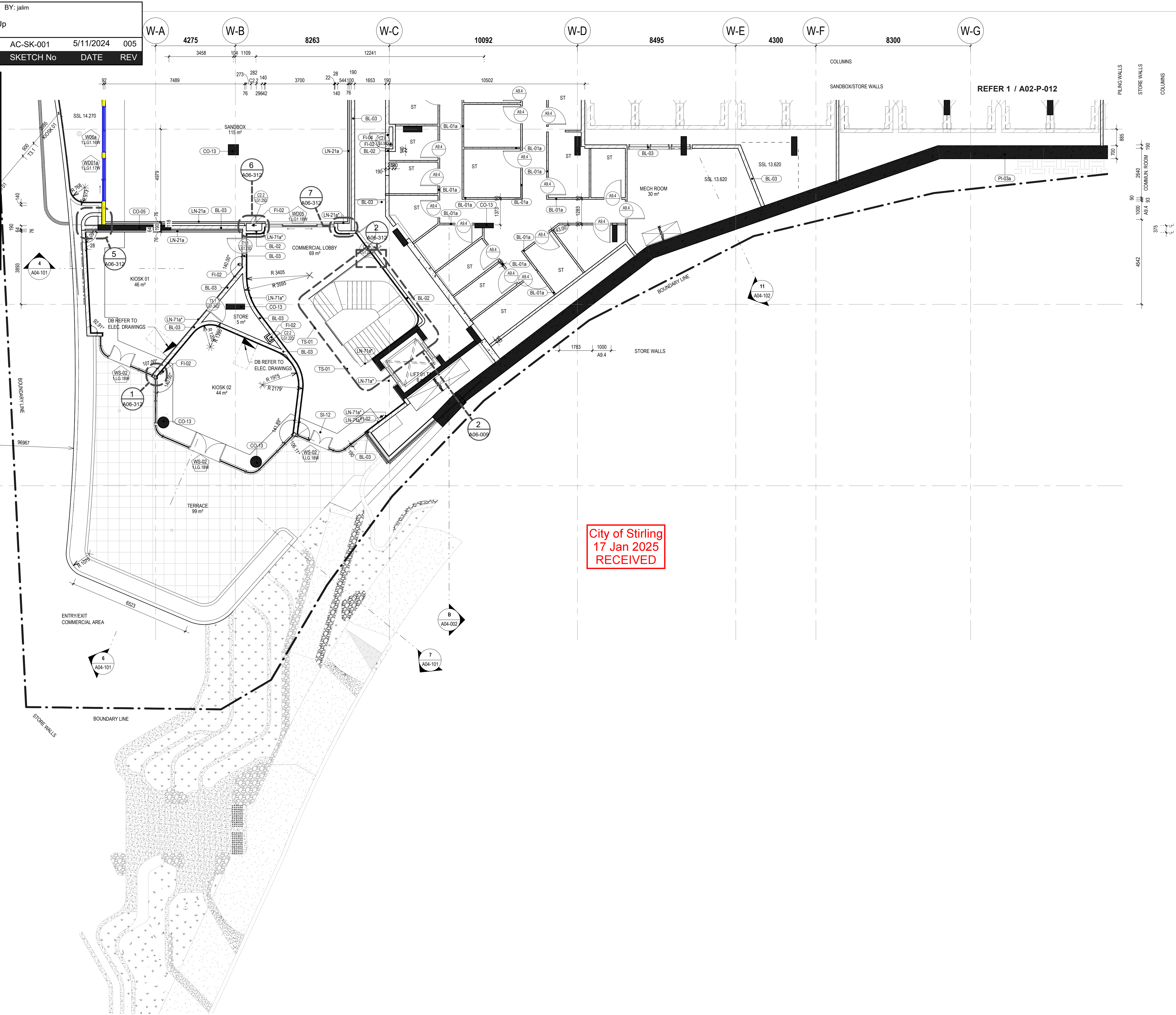
External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ²)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-12	ENTRANCE MAT
TS-01	BLACK URETHANE WARNING TACTILE INDICATORS

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

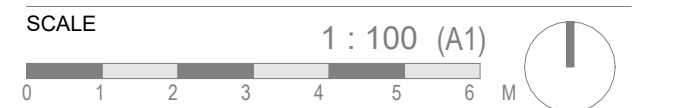
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 01 - SOUTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-013	4
DRAWN BY		RR

FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PI-03a	800 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 01 - EAST

SCALE

1 : 100 (A1)



PROJECT No	DRAWING No	REV
2005	A02-P-014	4

DRAWN BY RR



- | SPECIFICATION SCHEDULE | |
|------------------------|--|
| CODE | DESCRIPTION |
| BL-03 | 190 CONCRETE BLOCK WALL |
| CO-03 | 200mm IN-SITU REINFORCED CONCRETE WALL |
| CO-13 | IN-SITU REINFORCED CONCRETE COLUMN |
| CO-62 | 230mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOFS |
| FI-02 | FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS |
| FI-03 | FHR |
| PI-03a | 600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION |

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

SCALE 1 : 100 (A1)



DRAWN BY	Author
----------	--------

Stantec

SKETCH TITLE

BY: jalim

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
MW-20	ALUMINUM BATTENS 60x50 REFER TO ARCADE DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-06	250mm REINFORCED PRECAST CONCRETE WALL

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN GROUND FLOOR-
SOUTH WEST

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T1-102	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

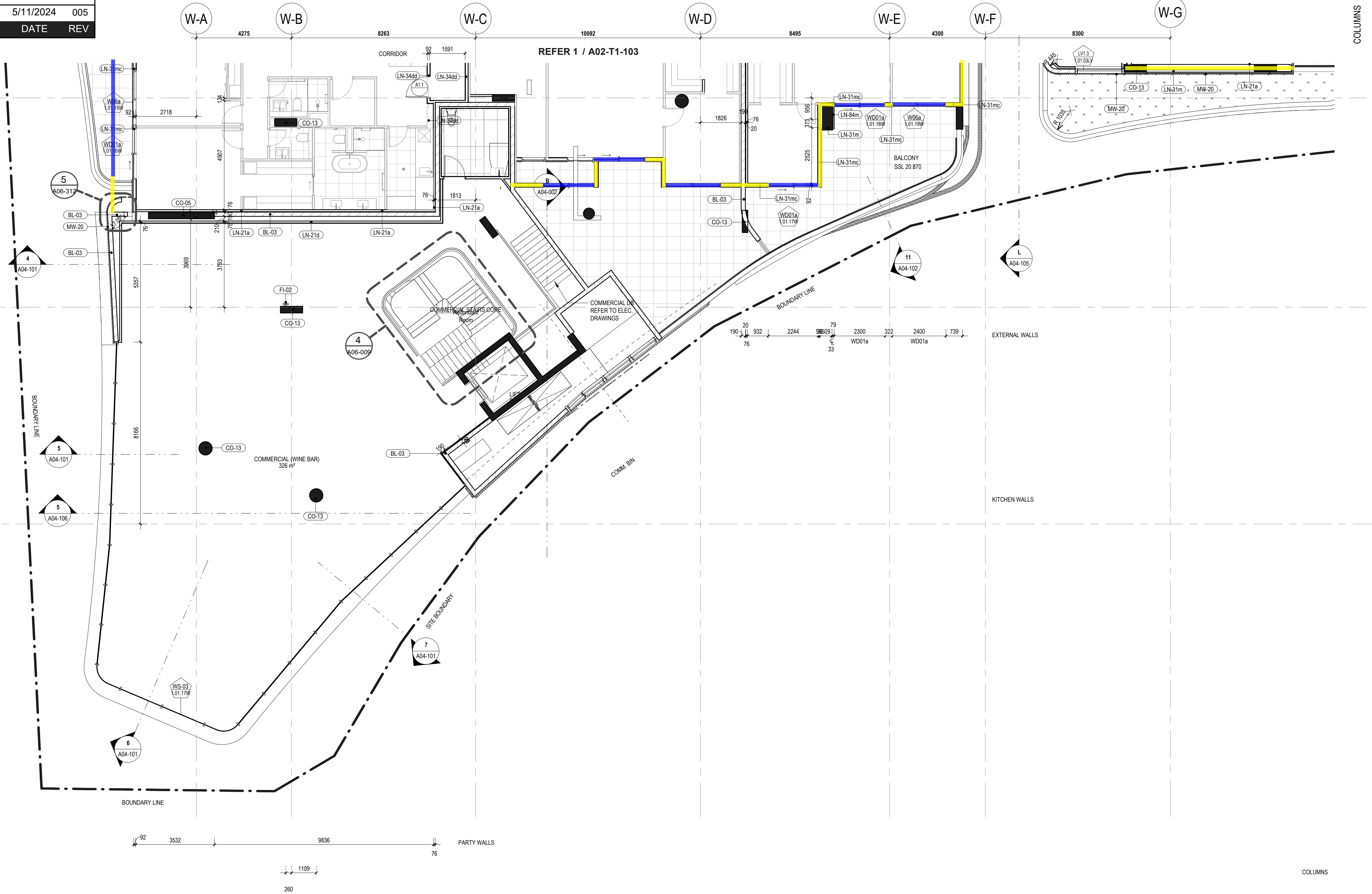
External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-31m	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNSCREEN (40kg/m3)
LN-31mc	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-84m	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	TH
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

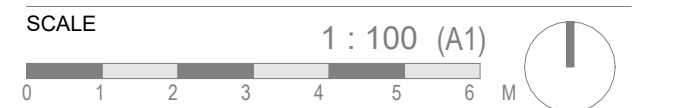
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 01 - SOUTH
WEST



PROJECT No	DRAWING No	REV
2005	A02-T1-104	4
DRAWN BY		RR

SKETCH TITLE

BY: jalim

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

Stantec

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

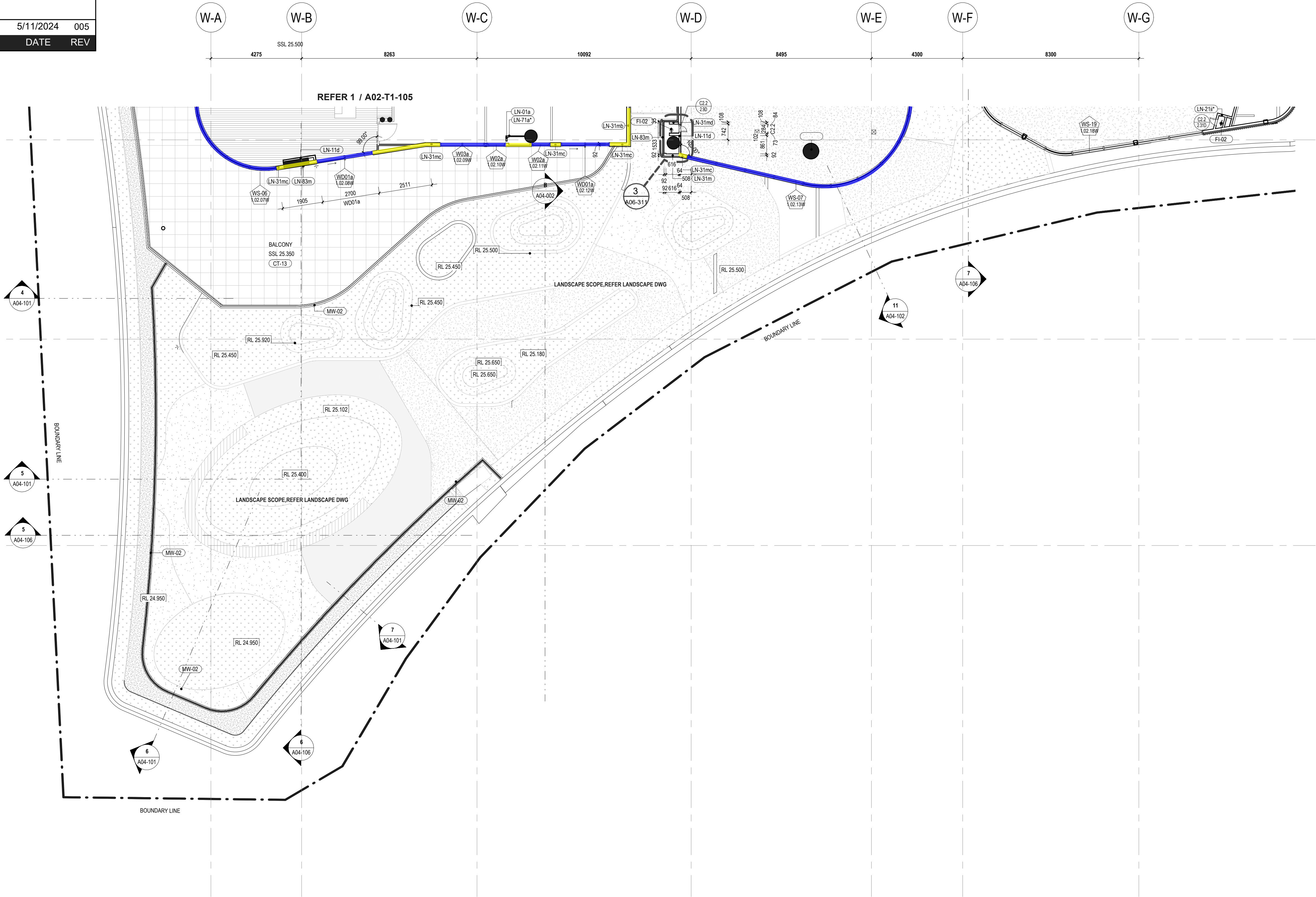
External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11 REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a*	1x9mm COMPRESSED FIBRE CEMENT ON BOTH SIDE OF 76mm STEEL STUD
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLURRING CHANNELS
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
MW-02	GLASS BALUSTRADE - 1200H

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

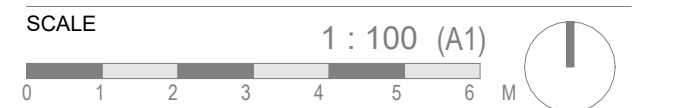
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 02 - SOUTH
WEST



PROJECT No	DRAWING No	REV
2005	A02-T1-106	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

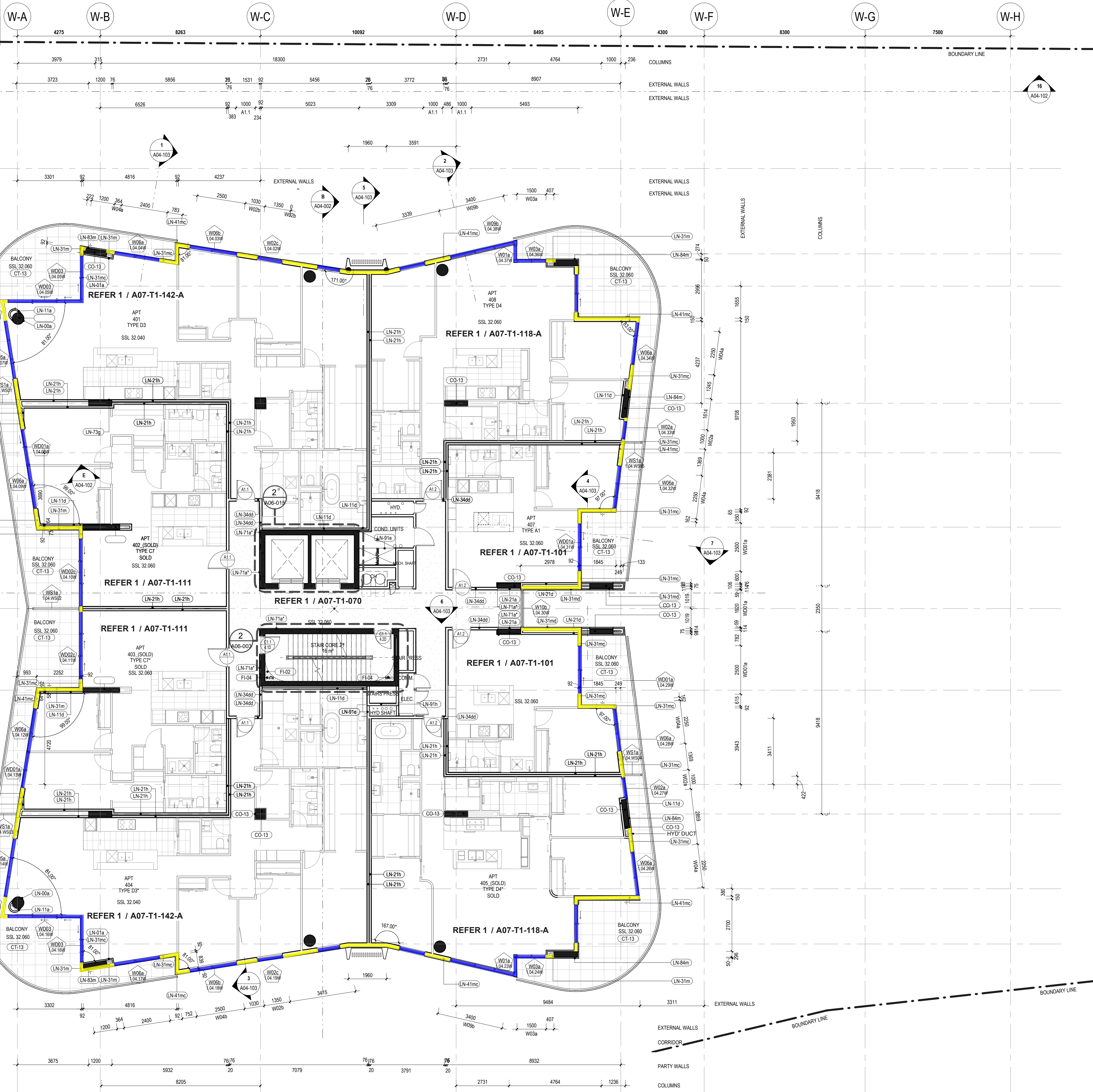
FACADE LEGEND

External Glazing

- GT-1: R_w 42
GT-2: R_w 37
GT-3: R_w 39
GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
EX-2: R_w 60 - 62
EX-3: R_w 50 - 52
EX-4: R_w 44 - 46



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK AND PRECEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm BRADFORD ACOUTSIGARD (32kg/m ³)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUTSIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUTSIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUTSIGARD (14kg/m ³)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUTSIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUTSIGARD (14kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUTSIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³), 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS. 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACOUTSIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACOUTSIGARD (11kg/m ³)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DDMMYY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN LEVEL 04

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T1-108	4
DRAWN BY	RR	

SKETCH TITLE BY: jalim

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK AND PRECEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6.

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm BRADFORD ACOUTIGARD (32kg/m3)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUTIGARD (14kg/m3)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUTIGARD (14kg/m3)
LN-31m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS. 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACOUTIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACOUTIGARD (11kg/m3)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DDMMYY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM

ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 05-06

SCALE		
1 : 100 (A1)		
0 1 2 3 4 5 6 M		
PROJECT No	DRAWING No	REV
2005	A02-T1-108	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PRECEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6.

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD ACOUSTIGARD (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/OF ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLURRING CHANNELS
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)

04.10.24

10.09.24

18.03.24

22.02.24

13.03.23

4

3

2

1

0

Issue for Coordination

Issue for Coordination

Revised Tender Issue

Re-issue For Tender (Not for construction)

Issue For Tender

SG

MK

MK

MK

TH

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 07

SCALE

1 : 100 (A1)

0

1

2

3

4

5

6

M

PROJECT No

DRAWING No

REV

2005

A02-T1-111

4

DRAWN BY

RR

© Hillam Architects Pty Ltd

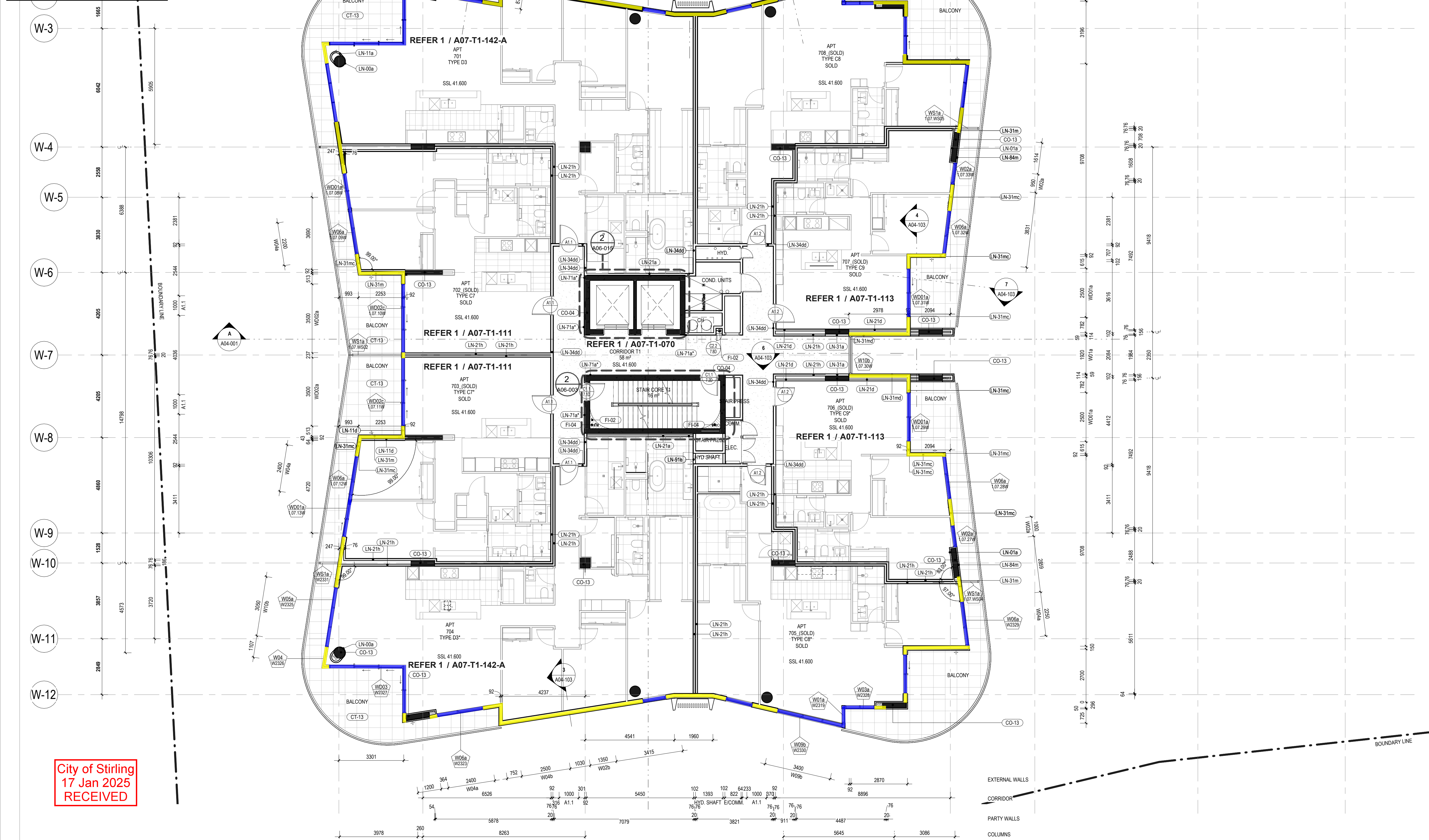
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



City of Stirling
17 Jan 2025
RECEIVED

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLIAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLIAM ARCHITECTS.
2. THIS DRAWING IS TO BE USED ONLY FOR THE PROJECT ON SITE OR OFF SITE. BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION SHOP DRAWINGS, ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
3. THIS DRAWING'S SCALE PRECEDES OVER SCALED DIMENSION. DO NOT SCALE FROM REDUCED DRAWINGS.
4. THIS DOCUMENT MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS.
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND SANITARY DRAWINGS AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
6. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED.

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS. SLP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLP RATING REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REF. TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (or 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 11mm STEEL STUD, 50mm BRADFORD ACUSTIGUARD ACUSTIGUARD (32mg/s)
LN-11a	1x13mm PLASTERBOARD (or 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 46mm STEEL STUD, 50mm BRADFORD ACUSTIGUARD (32mg/s)
LN-11a	1x13mm USG BORAL FIRESTOP (or 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 46mm STEEL STUD, 50mm BRADFORD ACUSTIGUARD (32mg/s)
LN-21a	1x13mm PLASTERBOARD (or 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 15mm STEEL STUD, 75mm BRADFORD ACUSTIGUARD (14mg/s)
LN-21d	2x13mm USG BORAL FIRESTOP (or 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACUSTIGUARD (14mg/s)
LN-21h	2x16mm USG BORAL FIRESTOP (or 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACUSTIGUARD (14mg/s)
LN-31a	1x13mm PLASTERBOARD (or 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 30mm BRADFORD SOUNDSCREEN (40kg/s)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE OCEANIC SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIN ARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 30mm BRADFORD SOUNDSCREEN (40kg/s)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE OCEANIC SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIN ARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 30mm BRADFORD SOUNDSCREEN (40kg/s). DOUBLE LAYERS OF PLASTERBOARD (2x13mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE OCEANIC SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIN ARRIER BOARD, 16mm USG BORAL FIRESTOP OR 16mm USG WET AREA FIRESTOP/ moisture RESISTANT PLASTERBOARD TO WET AREAS ON TOP OF ONE SIDE OF 102mm CH STEEL STUD, 30mm BRADFORD SOUNDSCREEN (40kg/s). DOUBLE LAYERS OF PLASTERBOARD (2x13mm)
LN-34ad	2x13mm USG BORAL FIRESTOP (or 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 52mm STEEL STUD, 100mm BRADFORD ACUSTIGUARD (14mg/s)
LN-71a	1x13mm PLASTERBOARD (or 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm PURRING CHANNELS
LN-84a	1x13mm PLASTERBOARD (or 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm PURRING CHANNELS
LN-91a	2x13mm USG BORAL FIRESTOP (or 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACUSTIGUARD (11mg/s)
LN-91b	2x16mm USG BORAL FIRESTOP (or 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACUSTIGUARD (11mg/s)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



HILLAM
ARCHITECTS

CLIENT _____

EDGE VISIONARY LIVING

PROJECT NAME _____

THE DUNE9 T1

THE DUNES-11
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN LEVEL 08-10

SCALE 1 : 100 (A1)



0 1 2 3 4 5 6 M

PROJECT No.	DRAWING No.	REV
-------------	-------------	-----

2005	A02-T1-111	4
------	------------	---

[illegible]

DRAWN BY	RR
----------	----

© Hillam Architects Pty Ltd

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE	
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL	
CO-13	IN-SITU REINFORCED CONCRETE COLUMN	
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS	
FI-04	FIRE HYDRANT	
LN-00a	1x13mm PLASTERBOARD LINING	
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)	
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS	
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m ³)	
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT	
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	

DATE	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN LEVEL 11

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T1-115	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

City of Stirling
17 Jan 2025
RECEIVED

SKETCH TITLE

BY: jalim

Facade Mark Up

301250090 AC-SK-001 5/11/2024 005

PROJECT No

SKETCH No

DATE

REV

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

W-3
W-4
W-5
W-6
W-7
W-8
W-9
W-10
W-11
W-12

City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE	
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL	
CO-13	IN-SITU REINFORCED CONCRETE COLUMN	
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS	
FI-04	FIRE HYDRANT	
LN-01a	1x15mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)	
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD	
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)	
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS	
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)	
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT	
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
ME-08	FULL HEIGHT MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION	

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 13

SCALE

1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T1-117	4

DRAWN BY RR

© Hillam Architects Pty Ltd

SKETCH TITLE BY: jalim

Stantec

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

W-3

W-4

W-5

W-6

W-7

W-8

W-9

W-10

W-11

W-12

GENERAL NOTES

1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6.

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-02	150mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21hi	2x9mm FIBRE CEMENT ON 2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21i	1x9mm FIBRE CEMENT ON ONE SIDE OF 76mm STEEL STUD
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)

City of Stirling

17 Jan 2025

RECEIVED

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 14

SCALE

1 : 100 (A1)

0

1

2

3

4

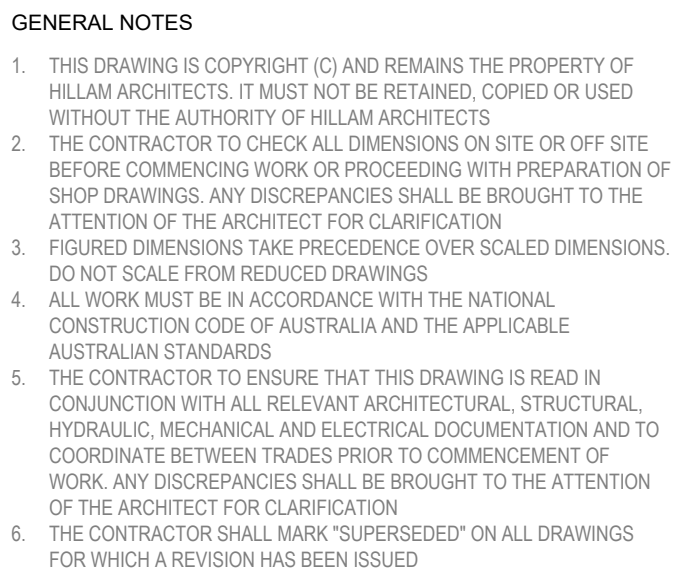
5

6

M

PROJECT No	DRAWING No	REV
2005	A02-T1-118	4
DRAWN BY		RR

© Hillam Architects Pty Ltd



City of Stirling
17 Jan 2025
RECEIVED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



HILLAM
ARCHITECTS

CLIENT

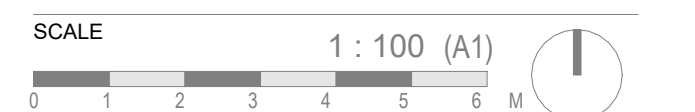
EDGE VISIONARY LIVING

PROJECT NAME _____

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 15



PROJECT No.	DRAWING No.	REV
2005	A02-T1-119	4
DRAWN BY		RR



SKETCH TITLE BY: jalim

Facade Mark Up

301250090	AC-SK-001	5/11/2024	005
PROJECT No	SKETCH No	DATE	REV

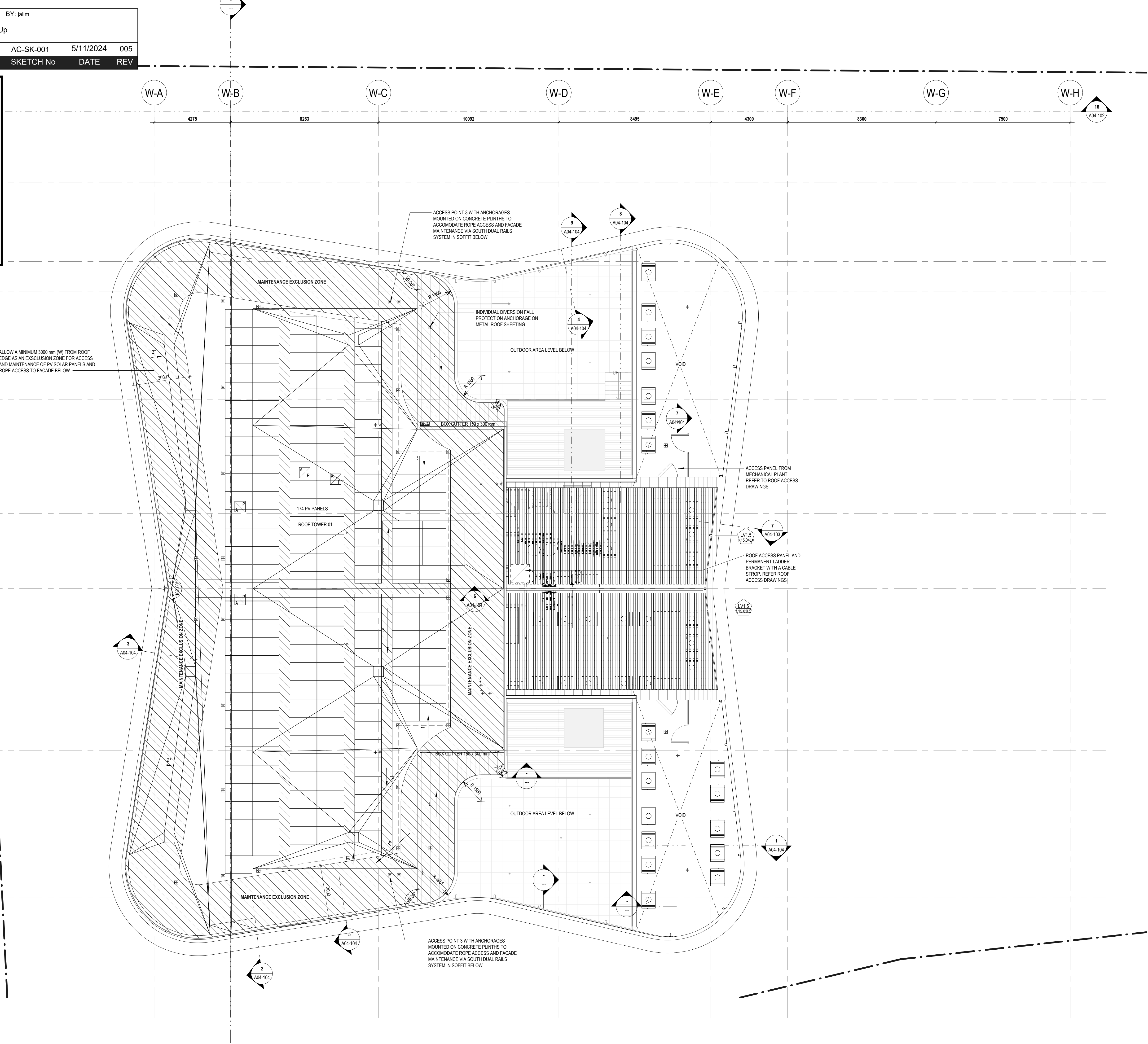
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
------	-------------

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA ROOF PLAN

SCALE	1 : 100 (A1)
0 1 2 3 4 5 6 M	

PROJECT No	DRAWING No	REV
2005	A02-T1-121	4

DRAWN BY RR

© Hillam Architects Pty Ltd

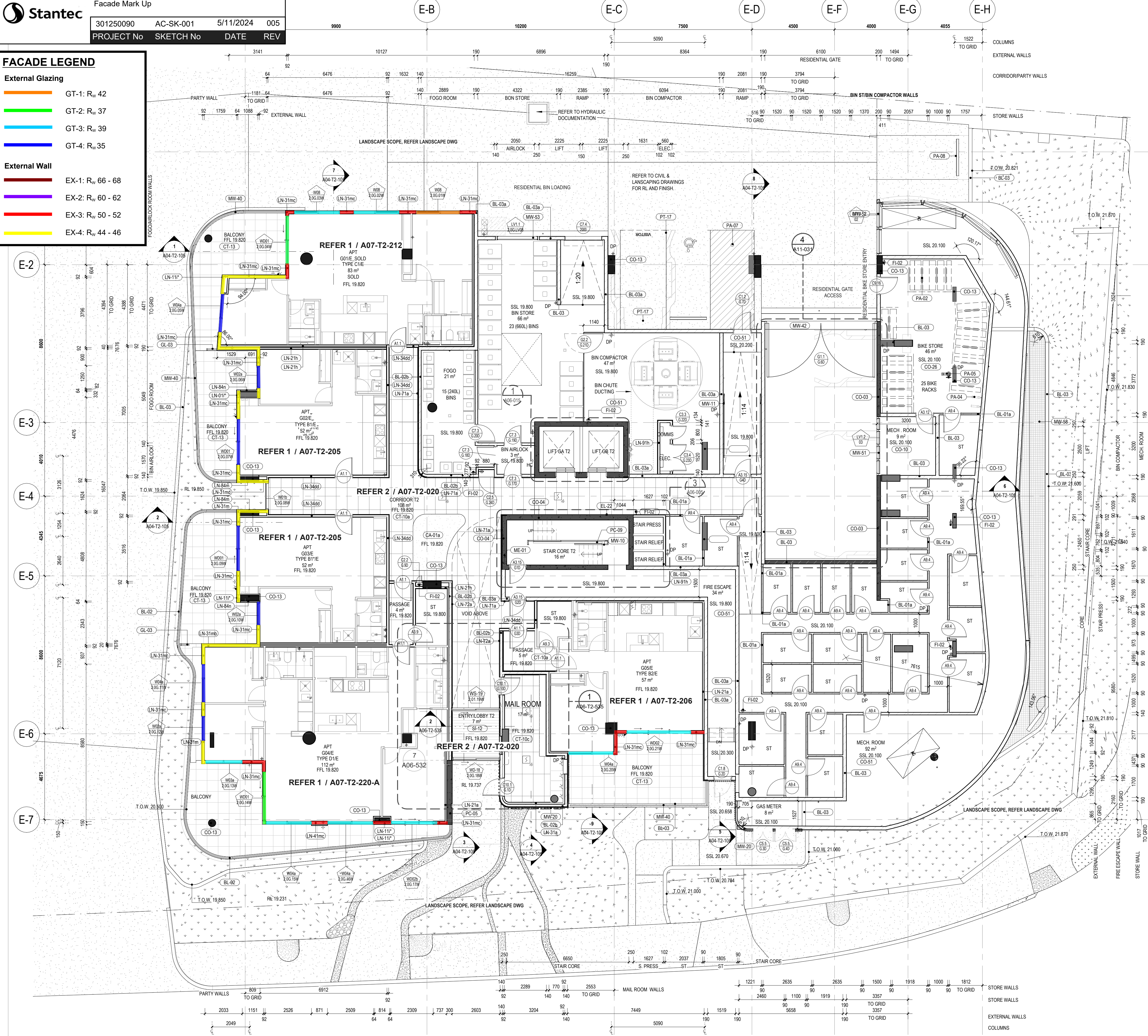
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



SPECIFICATION SCHEDULE

CODE	DESCRIPTION
LN-84n	1x3mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (14kg/m ³).
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS' DOCUMENTATION.
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH.
MW-11	STEEL HANDRAIL - WALL MOUNTED WITH HDG FINISH.
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS - VERTICAL WITH POWDERCOAT FINISH.
MW-40	ALUMINIUM PALASADE FENCE - WALL MOUNTED 700H POWDERCOAT FINISH.
MW-42	CARPARK ENTRY GATES. CUSTOM FRAMED POWDERCOATED STEEL FABRICATE.
MW-51	ACOUSTIC LOUVRE - TYPE 2 (200mm).
MW-52	ACOUSTIC LOUVRE - TYPE 3 (300mm).
MW-53	2-STAGE LOUVRE.
MW-58	METAL MESH GRILL.
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE.
PA-04	BIKE RACK - TYPE 4 - WALL MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE.
PA-05	BIKE MAINTENANCE STATION. REFER TO EXTERIOR FINISHES SCHEDULE.
PA-07	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE.
PA-08	PRE-CAST CONCRETE WHEEL STOP. REFER TO EXTERIOR FINISHES SCHEDULE.
PC-05	200mm REINFORCED PRECAST CONCRETE WALL.
PC-09	78mm SPEED PANEL.
PT-17	CARPARK LINE MARKING PAINT.
SI-12	ENTRANCE MAT.

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS.
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS.
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS.
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED.

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP.
BL-02	140 CONCRETE BLOCK WALL.
BL-02b	140 CONCRETE BLOCK WALL REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK.
BL-03	190 CONCRETE BLOCK WALL.
BL-03a	CARPET TILE. REFER TO CARPET SELECTION TABLE.
CA-01a	200mm IN-SITU REINFORCED CONCRETE WALL.
CO-03	230mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS.
CO-04	230mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS.
CO-10	600x1200 CERAMIC FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WHERE APARTMENT AREA BELOW. SLIP RATING R11. REFER TILE SELECTION TABLE.
CO-13	600x1200 CERAMIC FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WHERE APARTMENT AREA BELOW. SLIP RATING R9. REFER TILE SELECTION TABLE.
CT-10c	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE.
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE.
EL-22	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS.
FI-02	BALCONY GLASS SCREEN GENERALLY.
GL-03	1x3mm FIBRE CEMENT ON ONE SIDE OF 51mm STEEL STUD.
LN-01*	1x3mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD.
LN-11*	1x3mm FIBRE CEMENT ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD ACOUSTIGARD (14kg/m ³).
LN-21a	1x3mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³).
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³).
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-31m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-31mb	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-31mb	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-31mc	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-31md	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³).
LN-41mc	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).
LN-71a	2x13mm MR PLASTERBOARD TO WET AREAS).
LN-72a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm PURRING CHANNELS, 25mm BRADFORD ACOUSTIGARD (14kg/m ³).
LN-84n	1x3mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³).

DATE	REV	DESCRIPTION	CHECKED
04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
22.05.23	1	Issue For Information	JG
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

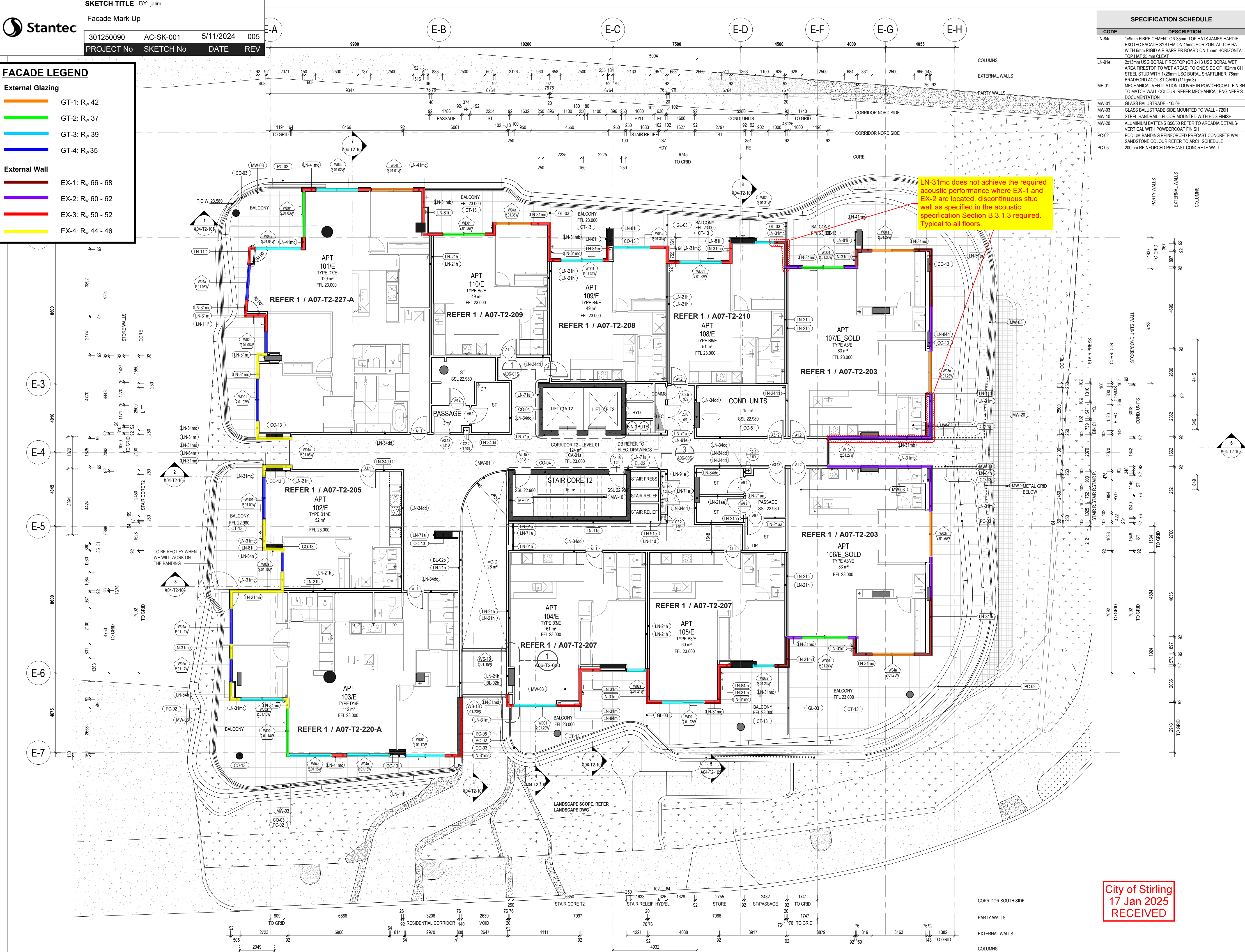
GA PLAIN GROUND FLOOR

CONSTRUCTION DOCUMENTATION

SCALE 1:100 (A1)

PROJECT No. 2005 DRAWING No. A02-T2-201 REV 5

DRAWN BY RR



City of Stirling
17 Jan 2025
RECEIVED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
LN-84n	1x3mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 12mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m3)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-03	GLASS BALUSTRADE SIDE MOUNTED TO WALL - 720H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS. VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE
PC-05	200mm REINFORCED PRECAST CONCRETE WALL

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-02b	140 CONCRETE BLOCK WALL. REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-51	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
EL-22	
GL-03	BALCONY GLASS SCREEN GENERALLY
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm
LN-11c	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-21b	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21n	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 1x16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS. 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS. 90mm BRADFORD SOUNDSCREEN (40kg/m3). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3). 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLOORING CHANNELS. 25mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM. TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT

DO/MW/Y	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	SG
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA LEVEL 01

CONSTRUCTION
DOCUMENTATION



PROJECT No	DRAWING No	REV
2005	A02-T2-202	4
DRAWN BY		RR

Stantec

SKETCH TITLE

BY: jalim

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-S1	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
EL-22	
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACoustIGARD (32g/m3)
LN-11i	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACoustIGARD (14g/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31i	1x9mm FIBRE CEMENT ON ONE SIDE OF 92mm STEEL STUD
LN-31h	2x16mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACoustIGARD (14g/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3), 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURROG CHANNELS, 25mm BRADFORD ACoustIGARD (14g/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACoustIGARD (11g/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACoustIGARD (11g/m3)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS 850/200 CLIP. REFER TO ARCADIA DETAILS - VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL
PC-09	SAUCER SHOWER PAN TO ARCH SCHEDULE SG
PC-09.09.24	78mm SPC Description MK
18.03.24	2 Revised Tender Issue MK
22.02.24	1 Re-issue For Tender (Not for construction) MK
13.03.23	0 Issue For Tender TH
DO/M/Y/Y	REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA LEVEL 03

CONSTRUCTION
DOCUMENTATION

SCALE
1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-204	4

DRAWN BY RR

© Hillam Architects Pty Ltd

Stantec

SKETCH TITLE

BY: jalim

Facade Title Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6.

THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-S1	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
EL-22	
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACoustIGARD (32g/m3)
LN-11i	1x13mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACoustIGARD (14g/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31i	1x13mm FIBRE CEMENT ON ONE SIDE OF 92mm STEEL STUD
LN-31h	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40g/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACoustIGARD (14g/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40g/m3), 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURROG CHANNELS, 25mm BRADFORD ACoustIGARD (14g/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACoustIGARD (11g/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACoustIGARD (11g/m3)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS 850/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL
PC-09.09.24	768mm SPREADER
18.03.24	2 Revised Tender Issue
22.02.24	1 Re-issue For Tender (Not for construction)
13.03.23	0 Issue For Tender
DO/M/Y/Y	REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA LEVEL 04-06

CONSTRUCTION
DOCUMENTATION

SCALE
1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-204	4

DRAWN BY RR

© Hillam Architects Pty Ltd



- FOR FUTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES TO

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 07

CONSTRUCTION DOCUMENTATION

SCALE 1 : 100 (A1)



PROJECT No.	DRAWING No.	REV
2005	A02-T2-208	4

DRAWN BY	RR
----------	----



SKETCH TITLE BY: jalim

Facade Mark Up

301250090 AC-SK-001 5/11/2024 005
PROJECT No SKETCH No DATE REV

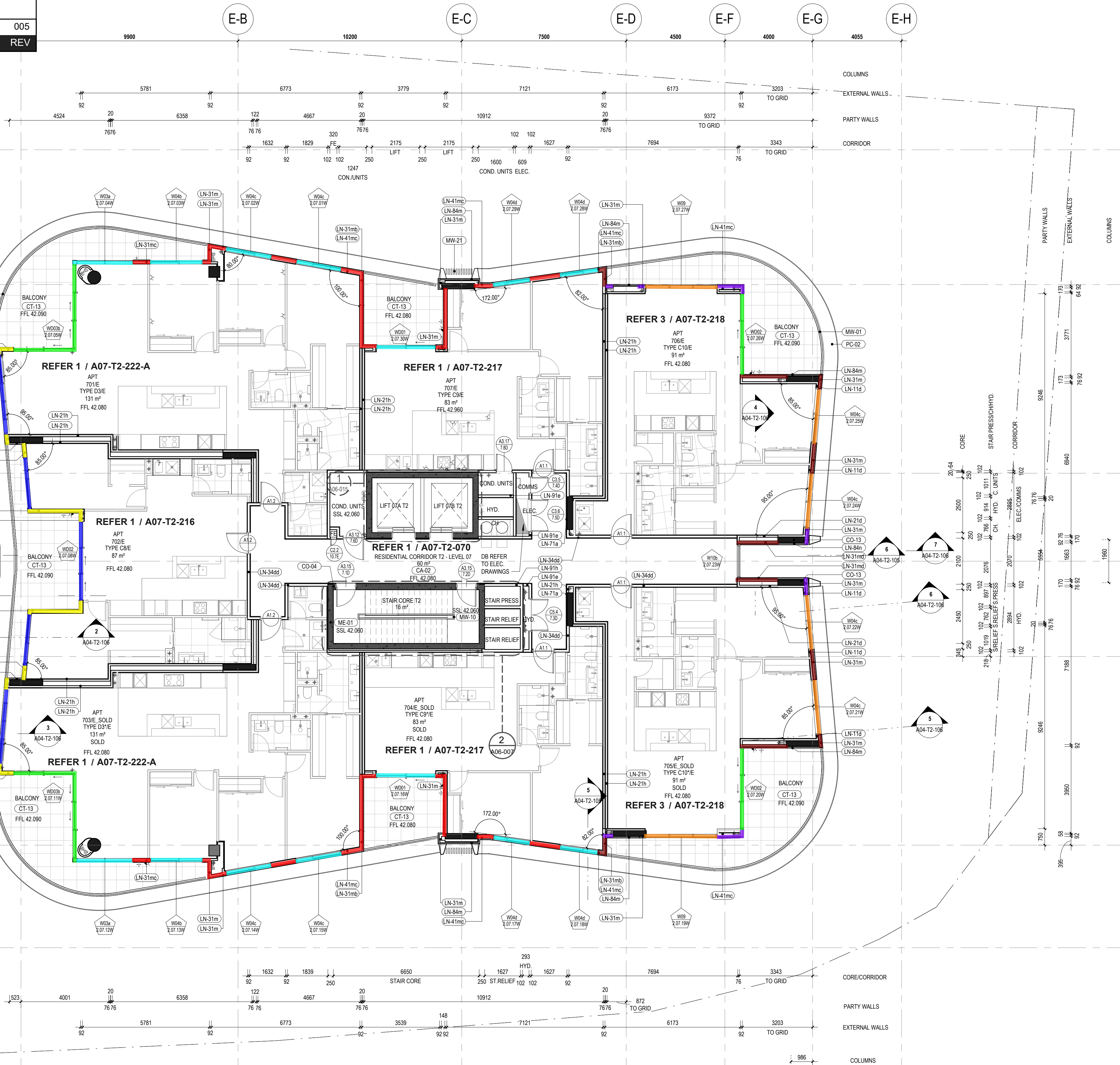
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	800x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP OR CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m b	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m c	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84h	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

DATE	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 08-10

CONSTRUCTION DOCUMENTATION

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-208	4

DRAWN BY RR



SKETCH TITLE BY: jalim

Facade Mark Up

301250090	AC-SK-001	5/11/2024	005
PROJECT No	SKETCH No	DATE	REV

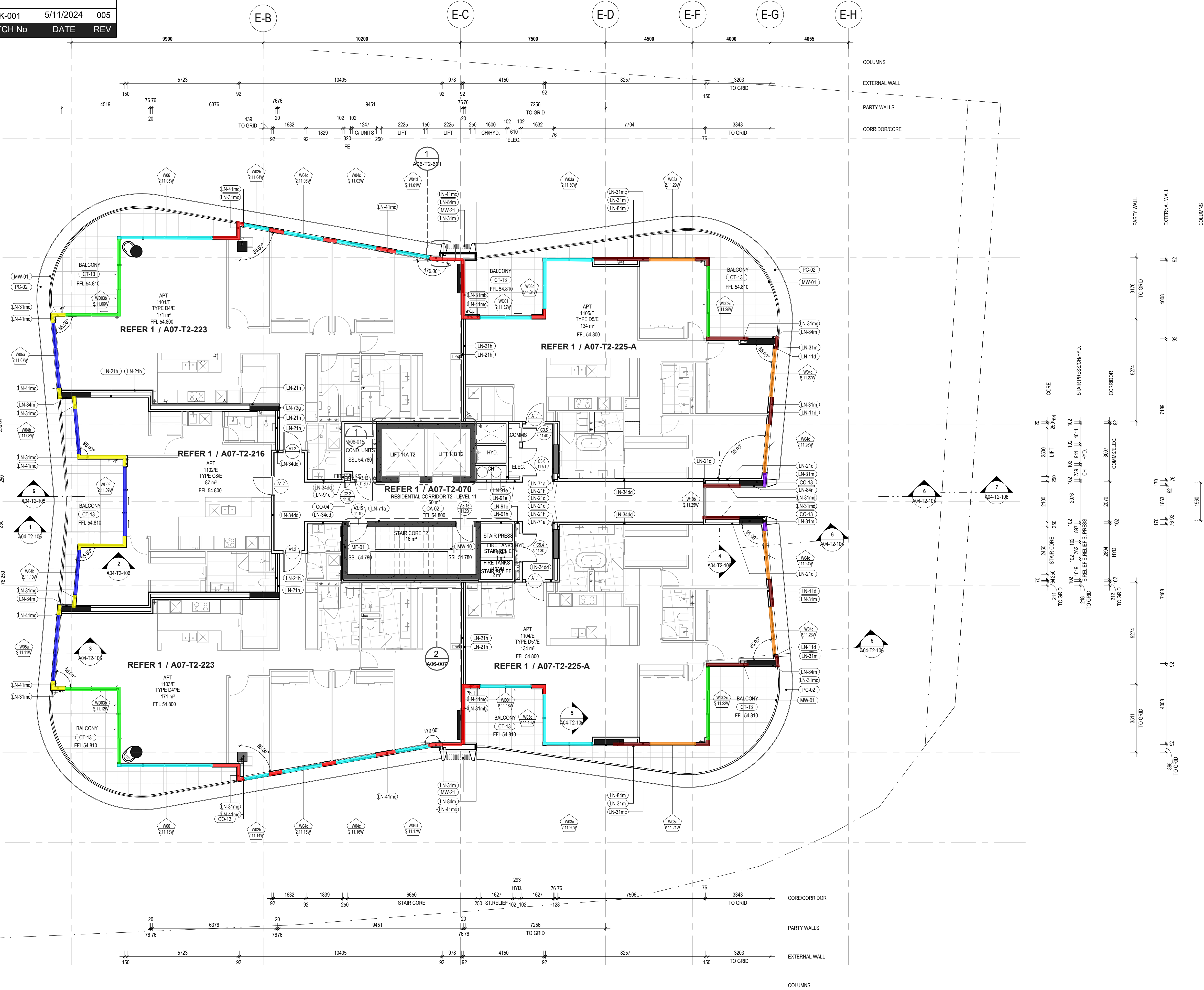
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS); ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84n	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DOMMY REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 11

CONSTRUCTION DOCUMENTATION

SCALE 1:100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-212	4

DRAWN BY RR

© Hillam Architects Pty Ltd

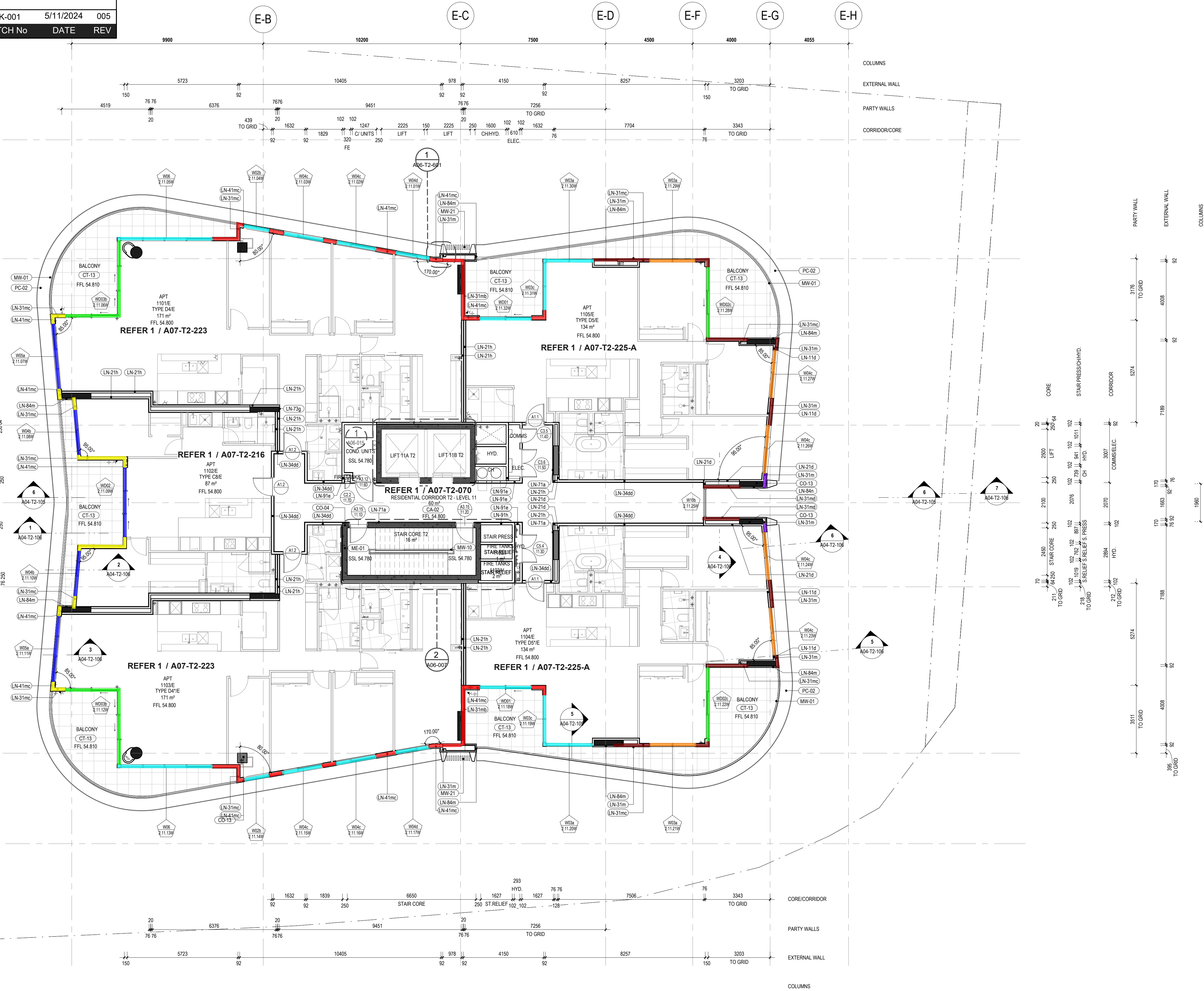
FACADE LEGEND

External Glazing

- GT-1: R_w 42
GT-2: R_w 37
GT-3: R_w 39
GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
EX-2: R_w 60 - 62
EX-3: R_w 50 - 52
EX-4: R_w 44 - 46



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS. 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS. 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84n	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 12-14

CONSTRUCTION
DOCUMENTATION

SCALE 1:100 (A1)

PROJECT No 2005
DRAWING No A02-T2-212
REV 4

DRAWN BY RR

SKETCH TITLE

BY: jalim

Facade Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

DATE

REV

FACADE LEGEND

External Glazing

GT-1: R_w 42

GT-2: R_w 37

GT-3: R_w 39

GT-4: R_w 35

External Wall

EX-1: R_w 66 - 68

EX-2: R_w 60 - 62

EX-3: R_w 50 - 52

EX-4: R_w 44 - 46

GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS OF ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 20mm FURRING CHANNELS. 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-84n	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAPTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAPTLINER. PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA LEVEL 15

CONSTRUCTION
DOCUMENTATION

SCALE
1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-216	4

DRAWN BY RR

© Hillam Architects Pty Ltd

City of Stirling
17 Jan 2025
RECEIVED

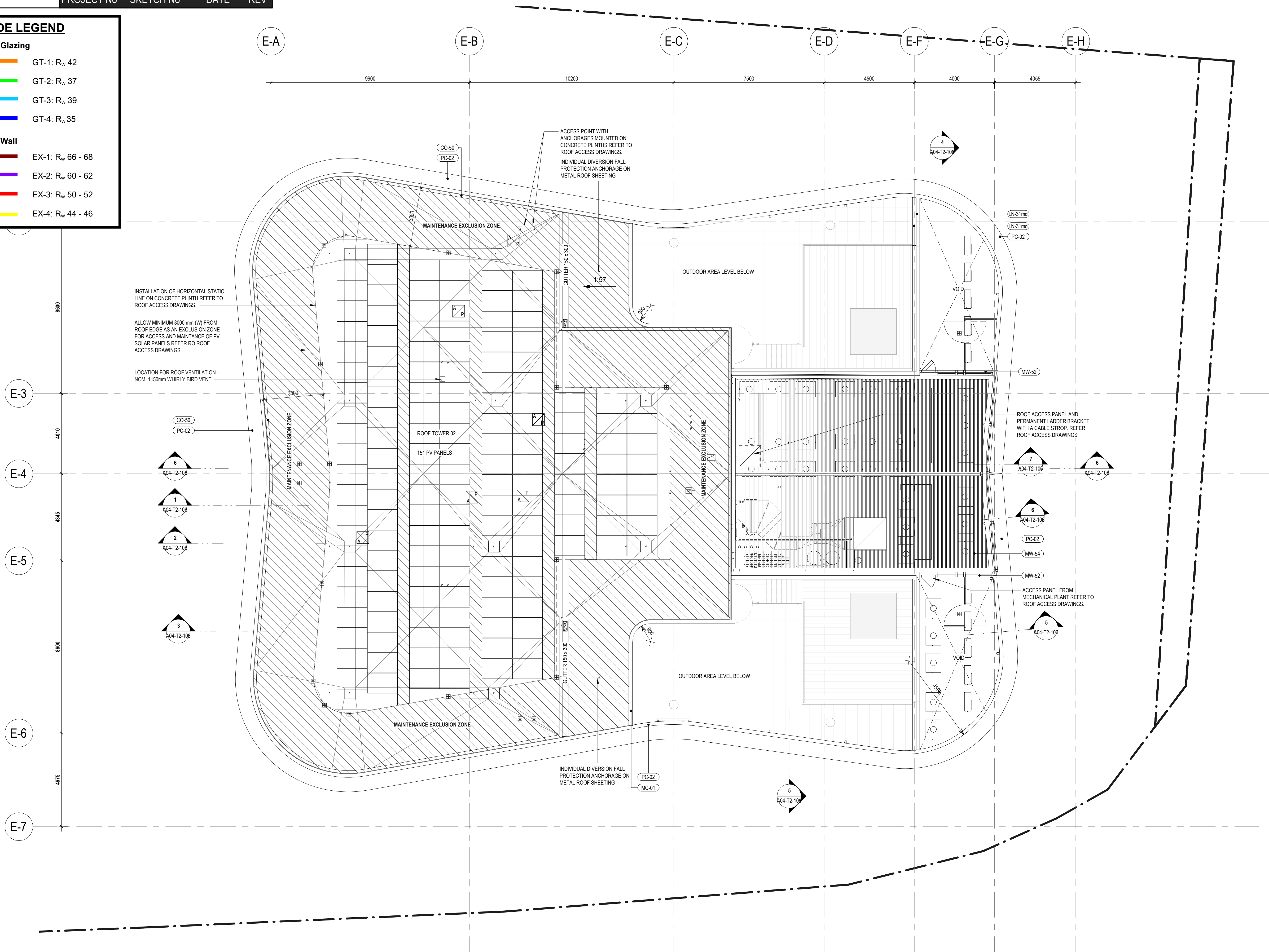
FACADE LEGEND

External Glazing

- GT-1: R_w 42
- GT-2: R_w 37
- GT-3: R_w 39
- GT-4: R_w 35

External Wall

- EX-1: R_w 66 - 68
- EX-2: R_w 60 - 62
- EX-3: R_w 50 - 52
- EX-4: R_w 44 - 46



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-50	100mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH.
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS. JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS OF ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm).
MC-01	MAXLINE COLORBOND METAL SHEET WALL CLADDING BY REVOLUTION ROOFING ON 35mm FURRING CHANNELS ON 92mm STEEL STUD FRAMING. TBA FIREFLY NON-COMBUSTIBLE BREATHABLE MEMBRANE. 90mm BRADFORD ACOUSTIGARD (20kg/m3).
MW-52	ACOUSTIC LOUVRE - TYPE 3 (300mm)
MW-54	LOUVRE BLADE
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA ROOF LEVEL

CONSTRUCTION
DOCUMENTATION

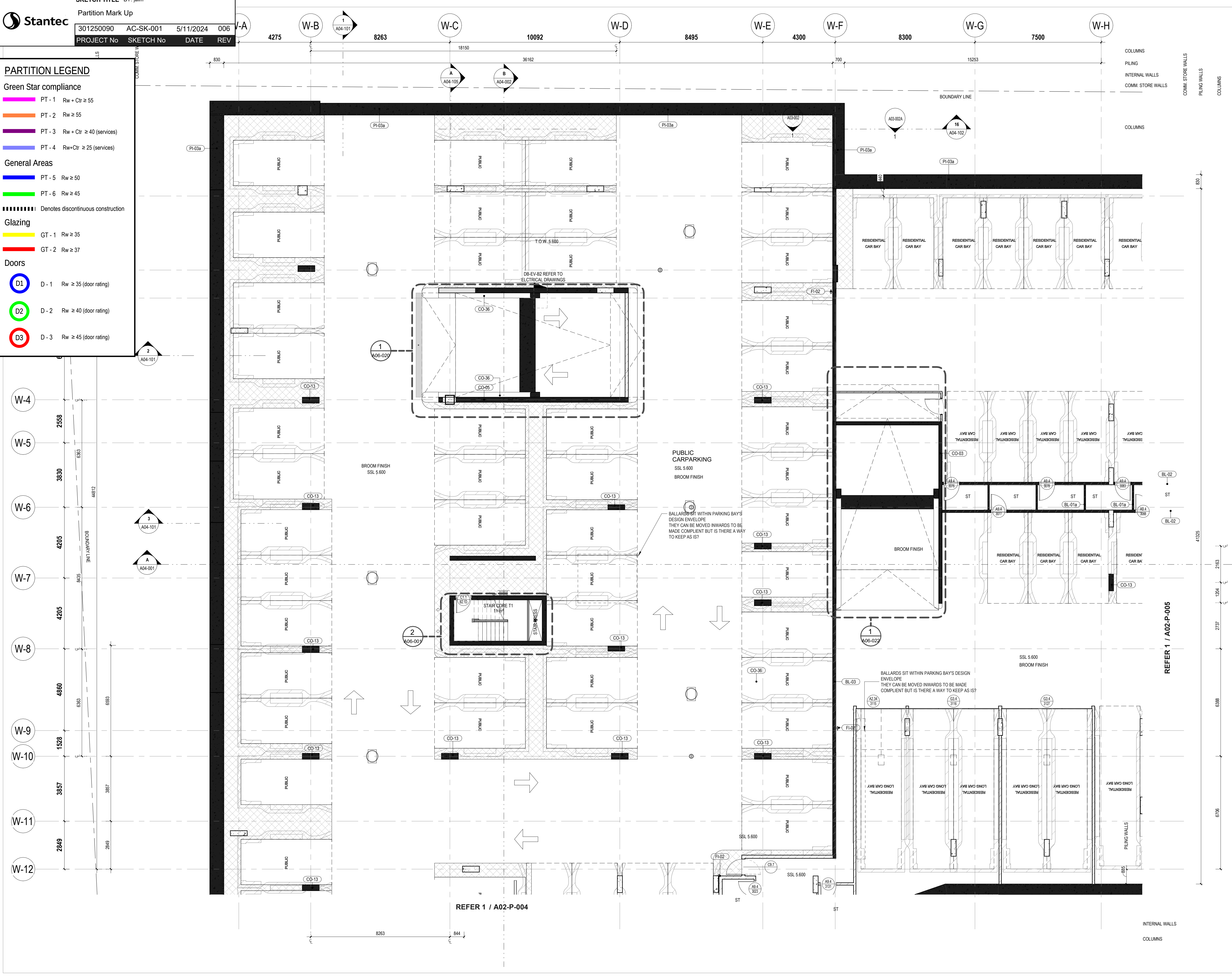
SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-219	4

DRAWN BY RR

PART F. Partition Markups

City of Stirling
17 Jan 2025
RECEIVED



© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

- PT - 1
- Rw + Ctr ≥ 55
- PT - 2
- Rw ≥ 55
- PT - 3
- Rw + Ctr ≥ 40 (services)
- PT - 4
- Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5
- Rw ≥ 50
- PT - 6
- Rw ≥ 45

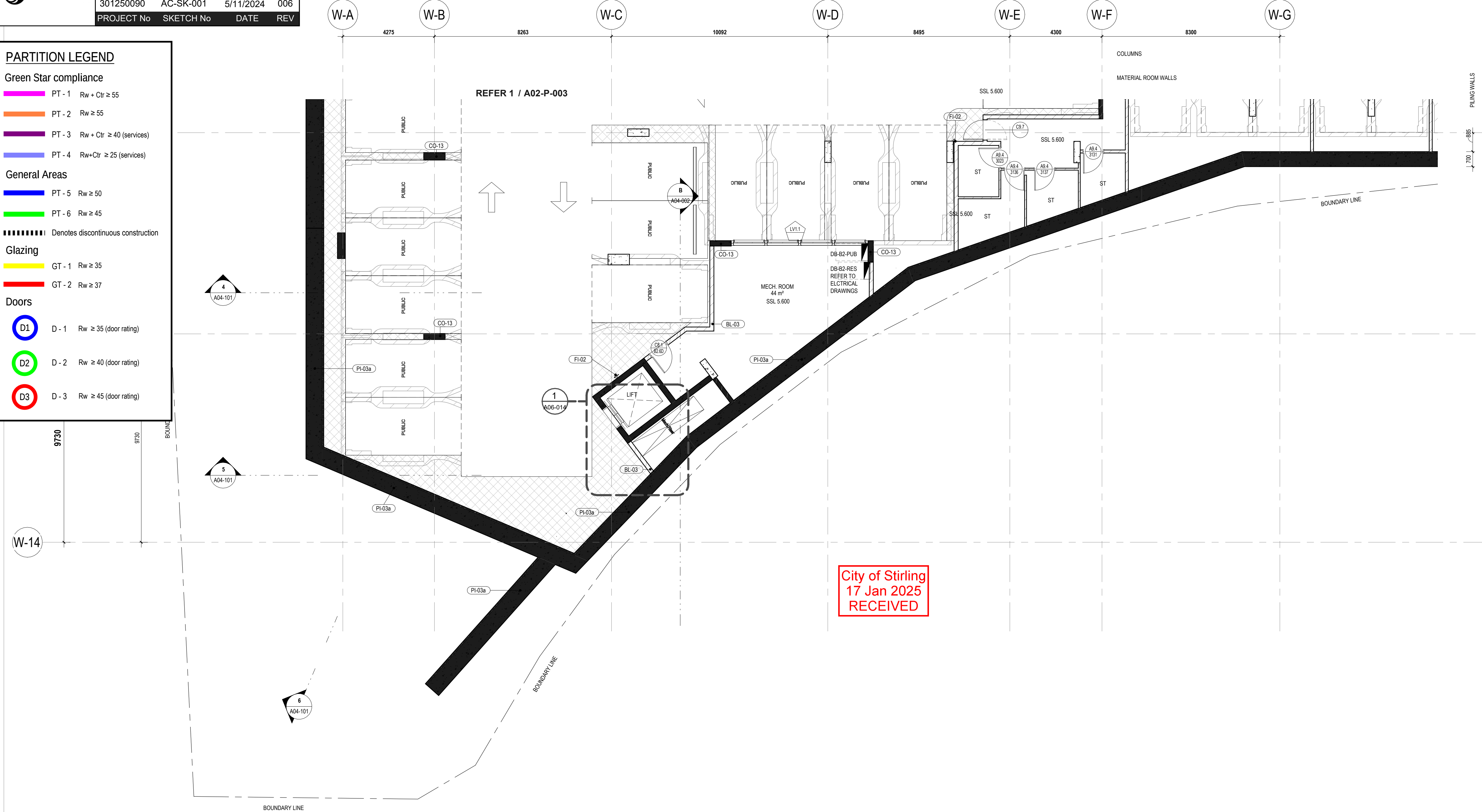
Denotes discontinuous construction

Glazing

- GT - 1
- Rw ≥ 35
- GT - 2
- Rw ≥ 37

Doors

- D - 1
- Rw ≥ 35 (door rating)
- D - 2
- Rw ≥ 40 (door rating)
- D - 3
- Rw ≥ 45 (door rating)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
29.05.23	1	Issue For Tender	JG
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

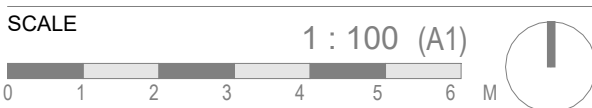
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 02 -
SOUTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-004	5

DRAWN BY RR

SKETCH TITLE BY: jalim

Stantec

Partition Mark Up

301250090

AC-SK-001

5/11/2024

006

PROJECT No

SKETCH No

DATE

REV

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

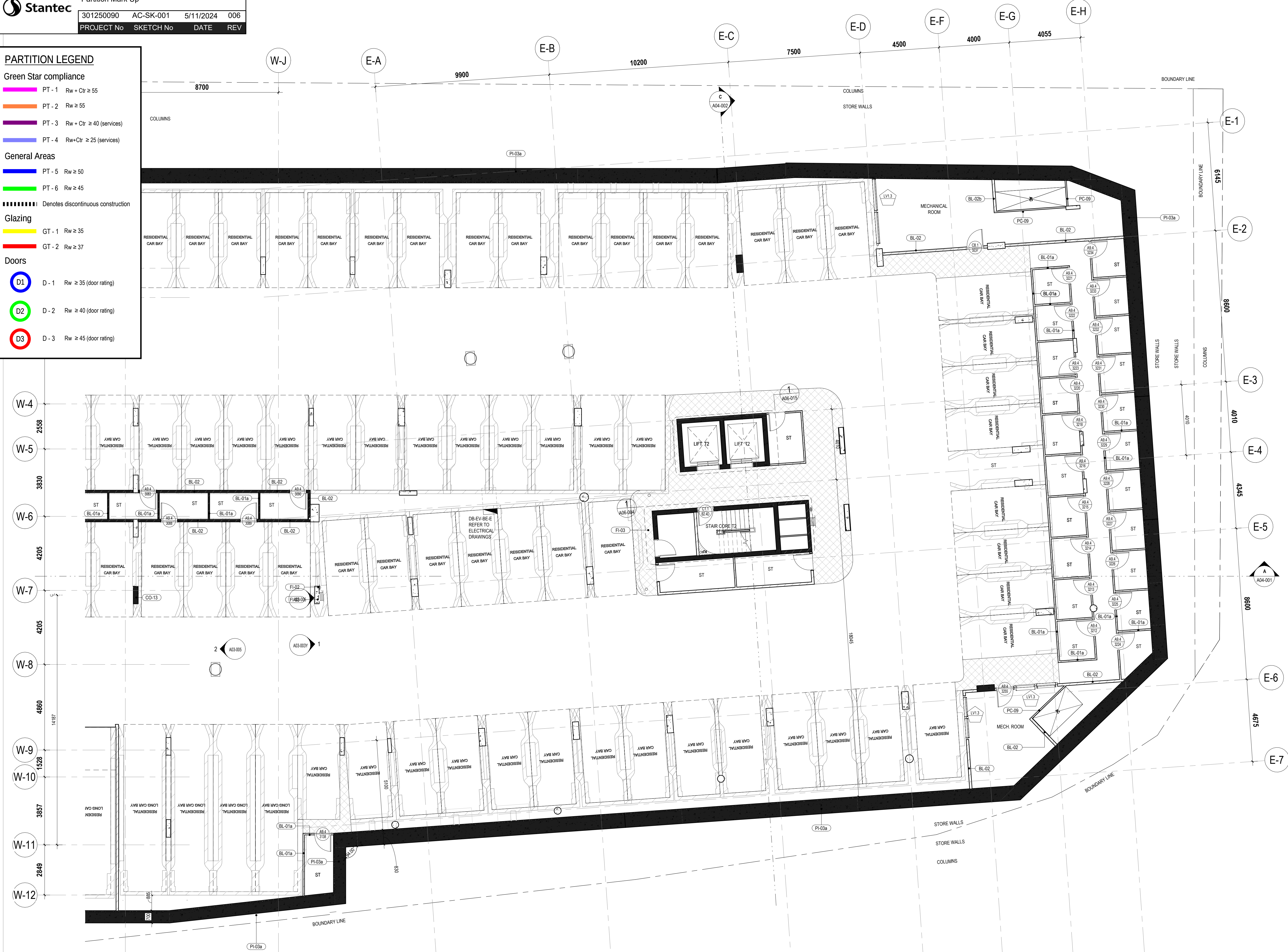
D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



- GENERAL NOTES
1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6.

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-02b	140 CONCRETE BLOCK WALL REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-03	FHR
PC-09	78mm SPEED PANEL
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling

17 Jan 2025

RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA

P (08) 6380 1877

E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

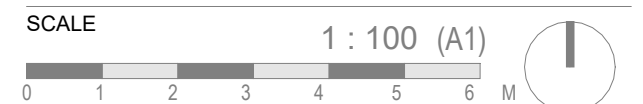
THE DUNES-T1

LOT 500 RESERVE STREET

SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 02 - EAST



PROJECT No	DRAWING No	REV
2005	A02-P-005	4

DRAWN BY

RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

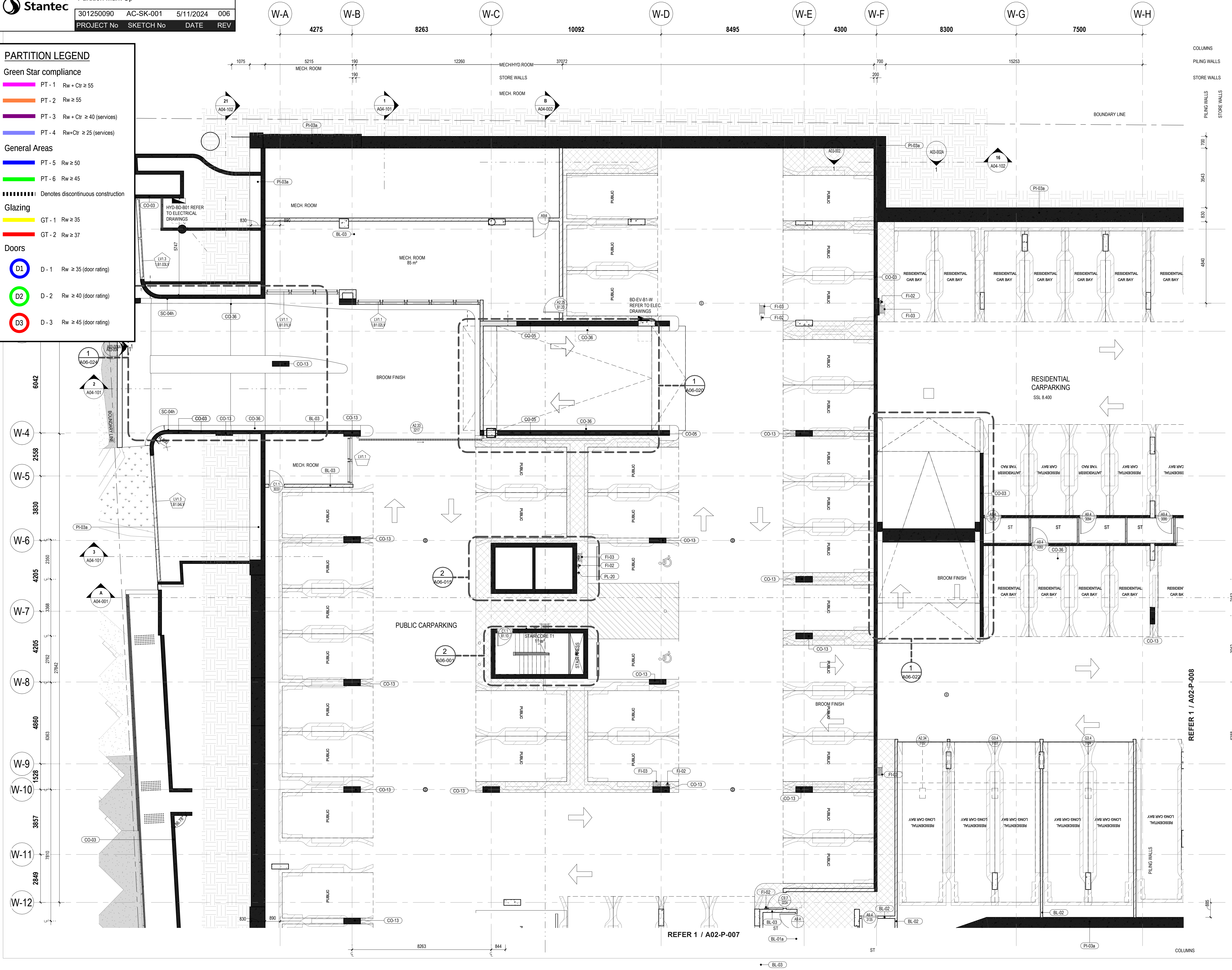
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
PL-20	EXTERNAL ROSE COCK
SC-04h	300x300 NANO HYDROPHILIC CERAMIC REFER TO STONE SELECTION TABLE

City of Stirling
17 Jan 2025
RECEIVED

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	5			Issue for Coordination	SG
30.09.24	4			Issue for Coordination	MK
18.03.24	3			Revised Tender Issue	MK
22.02.24	2			Re-issue For Tender (Not for construction)	MK
22.08.23	1			Issue For Information	JG
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



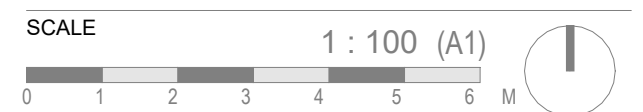
CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN BASEMENT 01 - NORTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-006	5

DRAWN BY RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

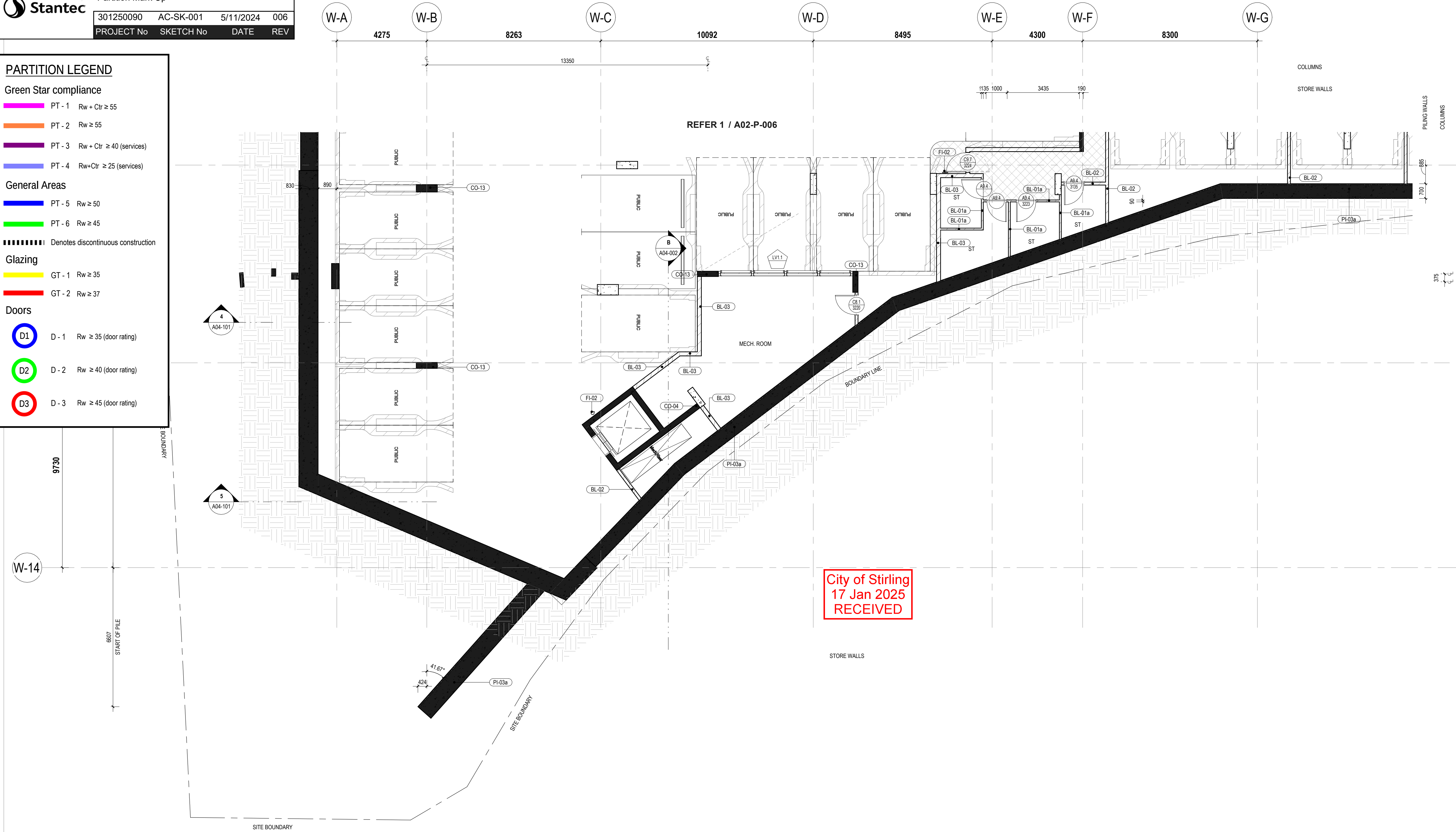
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

04.10.24	6	Issue for Coordination	SG
30.09.24	5	Issue for Coordination	MK
13.05.24	4	Issue for Coordination Only	HN
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-Issue For Tender (Not for construction)	MK
29.05.23	1	Issue For Tender	JG
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

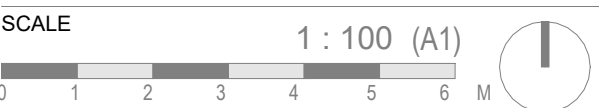
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 01 -
SOUTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-007	6

DRAWN BY RR

SKETCH TITLE BY: jalim

Stantec

Partition Mark Up

301250090

AC-SK-001

5/11/2024

006

PROJECT No

SKETCH No

DATE

REV

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

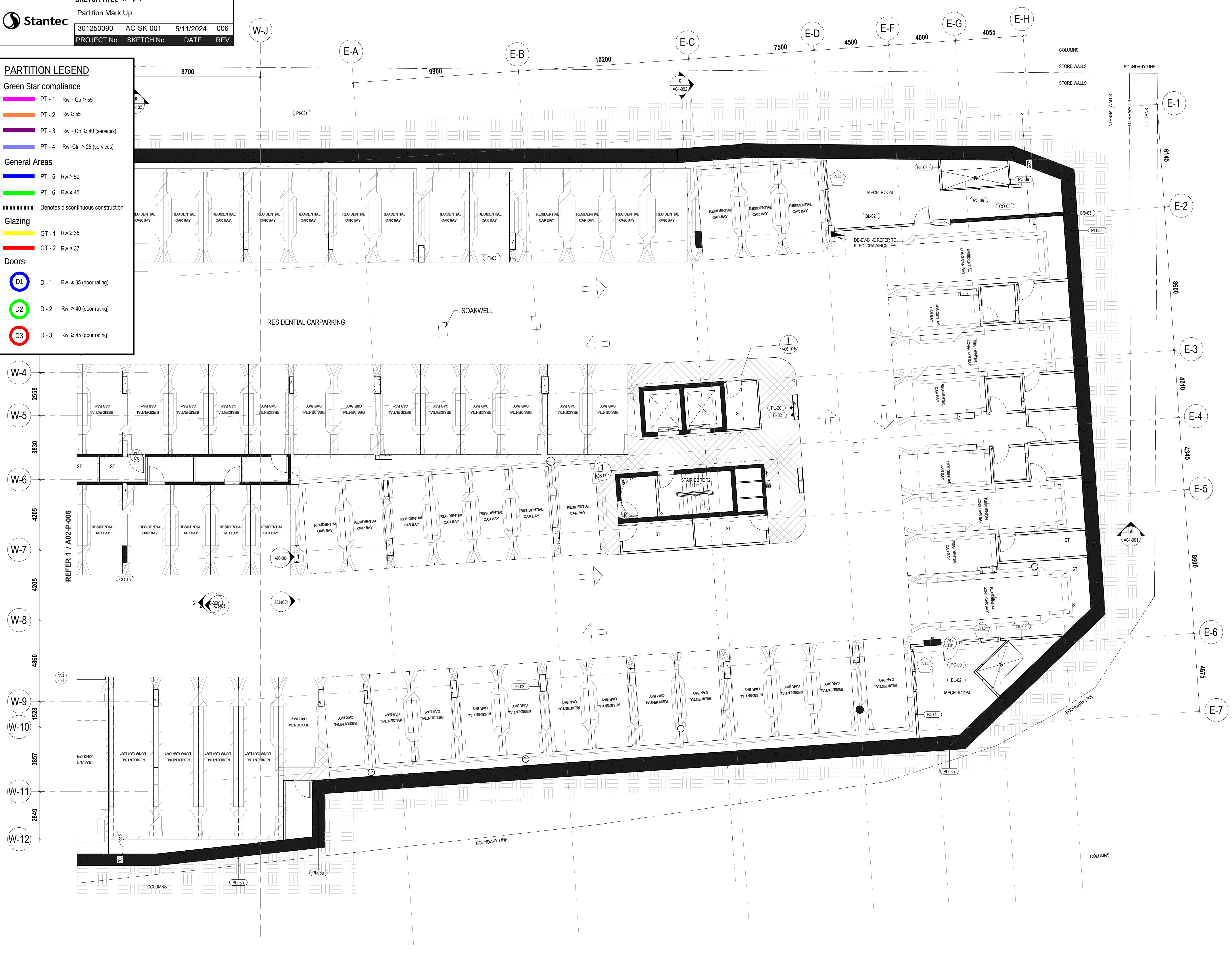
D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
BL-02b	140 CONCRETE BLOCK WALL, REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PC-09	78mm SPEED PANEL
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
PL-20	EXTERNAL HOSE COCK

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hllam.com.au



CLIENT

EDGE VISIONARY LIVING

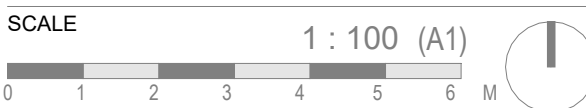
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 01 -
EAST



PROJECT No	DRAWING No	REV
2005	A02-P-008	4

DRAWN BY RR



SKETCH TITLE BY: jalm
Partition Mark Up
301250090 AC-SK-001 5/11/2024 006
PROJECT No SKETCH No DATE REV

PARTITION LEGEND

Green Star compliance

- PT - 1 R_w + C_{tr} ≥ 55
- PT - 2 R_w ≥ 55
- PT - 3 R_w + C_{tr} ≥ 40 (services)
- PT - 4 R_w + C_{tr} ≥ 25 (services)

General Areas

- PT - 5 R_w ≥ 50
- PT - 6 R_w ≥ 45

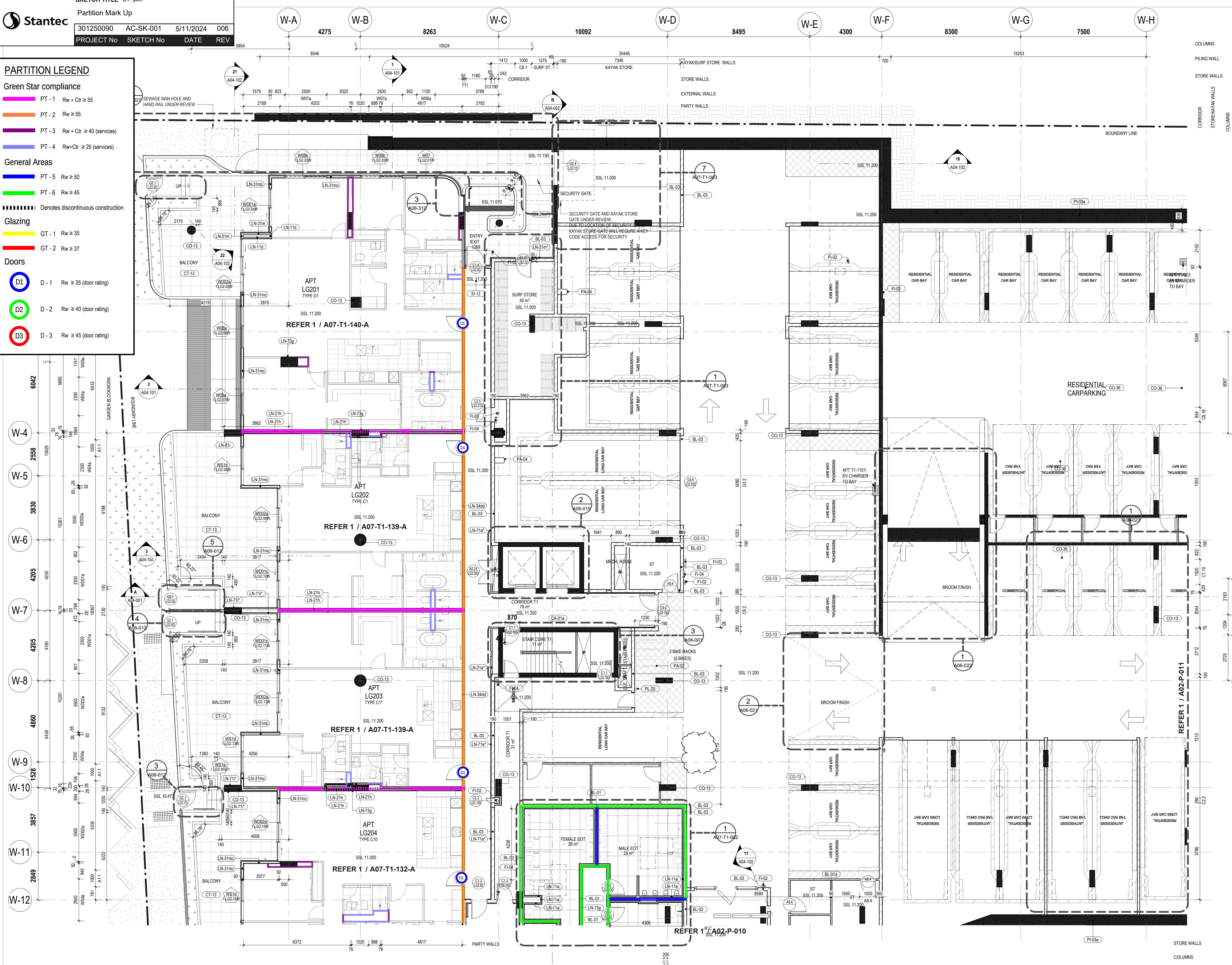
Denotes discontinuous construction

Glazing

- GT - 1 R_w ≥ 35
- GT - 2 R_w ≥ 37

Doors

- D - 1 R_w ≥ 35 (door rating)
- D - 2 R_w ≥ 40 (door rating)
- D - 3 R_w ≥ 45 (door rating)



- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
BL-01	90 CONCRETE BLOCK WALL	
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP	
BL-03	190 CONCRETE BLOCK WALL	
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE	
CO-13	IN-SITU REINFORCED CONCRETE COLUMN	
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB	
CT-13	800x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS	
FI-03	FIRE HYDRANT	
FI-04	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-11a	1x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-11d	1x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-21a	1x13mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD	
LN-21a*	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-21h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS	
LN-71*	1x9mm FIBRE CEMENT ON 28mm FURRING CHANNELS	
LN-73g	1x13mm USG BORAL FIRESTOP (OR 1x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m ³)	
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM, TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE	
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE	
PA-04	BIKE RACK - TYPE 4 - WALL MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE	
PI-03a	600 BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION	
PL-20	EXTERNAL HOSE COCK	
SI-12	ENTRANCE MAT	

04.10.24 5 Issue for Coordination SG

30.09.24 4 Issue for Coordination MK

18.03.24 3 Revised Tender Issue MK

22.02.24 2 Re-issue For Tender (Not for construction) MK

13.11.23 1 Issue For Information SG

13.03.23 0 Issue For Tender TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

City of Stirling
17 Jan 2025
RECEIVED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
**GA PLAN LOWER GROUND
FLOOR 02 - NORTH WEST**

SCALE 1 : 100 (A1)

PROJECT No 2005 DRAWING No A02-P-009 REV 5

DRAWN BY RR

© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

PT - 1 Rw + Ctr ≥ 55

PT - 2 Rw ≥ 55

PT - 3 Rw + Ctr ≥ 40 (services)

PT - 4 Rw + Ctr ≥ 25 (services)

General Areas

PT - 5 Rw ≥ 50

PT - 6 Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1 Rw ≥ 35

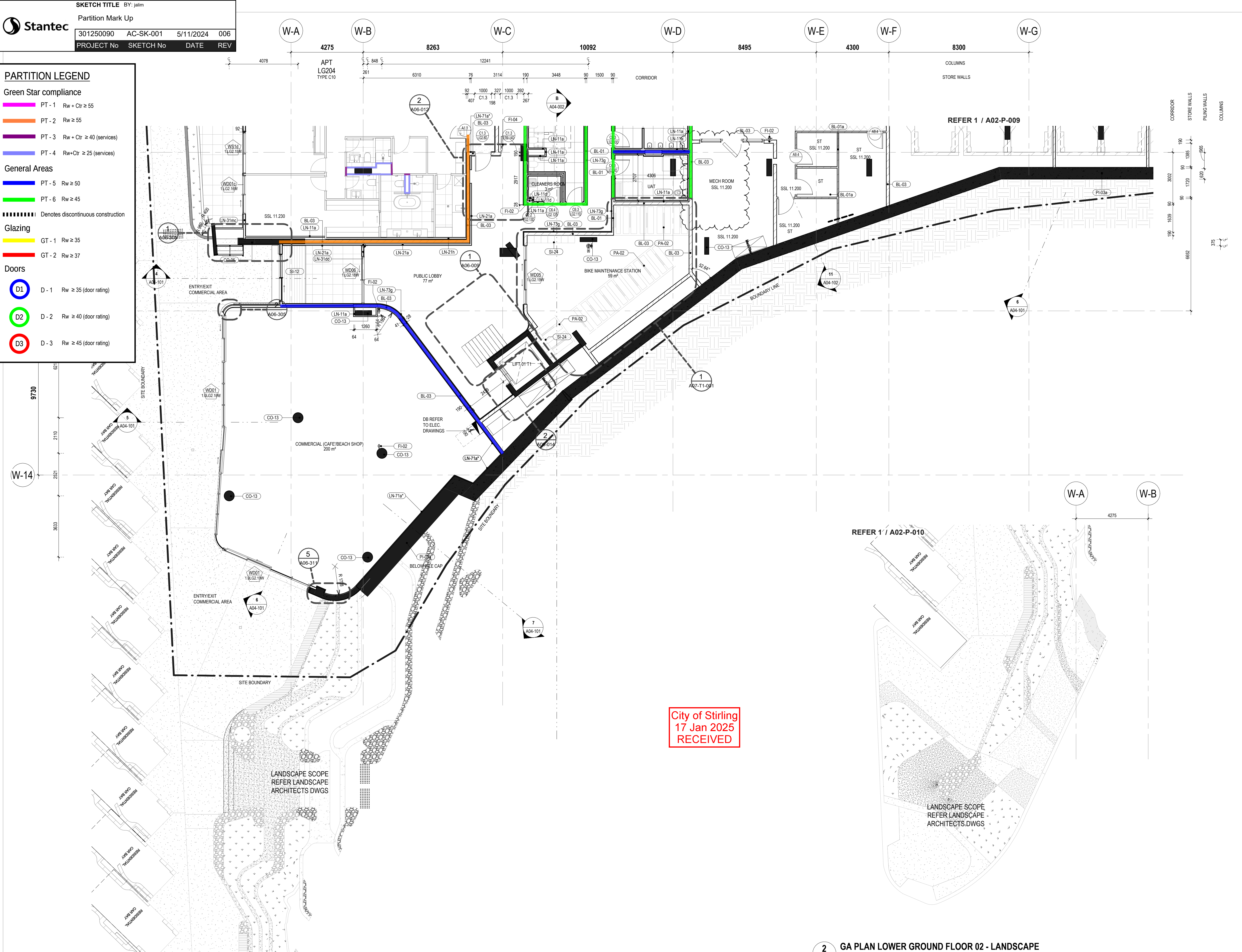
GT - 2 Rw ≥ 37

Doors

D - 1 Rw ≥ 35 (door rating)

D - 2 Rw ≥ 40 (door rating)

D - 3 Rw ≥ 45 (door rating)



GENERAL NOTES	
1.	THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2.	THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3.	FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4.	ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5.	THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6.	THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01	90 CONCRETE BLOCK WALL
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 54mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-31mc	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m3)
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-12	ENTRANCE MAT
SI-24	LOCKERS. REFER TO INTERIOR AMENITIES ACCESSORIES SCHEDULE

04.10.24	6	Issue for Coordination	SG
30.09.24	5	Issue for Coordination	MK
13.05.24	4	Issue for Coordination Only	HN
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
13.11.23	1	Issue For Information	SG
DDMMYY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

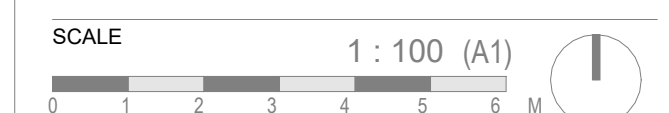
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 02 - SOUTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-010	6
DRAWN BY		RR

Stantec

SKETCH TITLE

BY: jalm

Partition Mark Up

301250090 AC-SK-001 5/11/2024 006

PROJECT No

SKETCH No

DATE

REV

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D - 1

Rw ≥ 35 (door rating)

D - 2

Rw ≥ 40 (door rating)

D - 3

Rw ≥ 45 (door rating)

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
FI-04	FIRE HYDRANT
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG		
30.09.24	3	Issue for Coordination	MK		
18.03.24	2	Revised Tender Issue	MK		
22.02.24	1	Re-issue For Tender (Not for construction)	MK		
13.03.23	0	Issue For Tender	TH		
DO	MM	YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 02 - EAST

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-P-011	4

DRAWN BY RR

© Hillam Architects Pty Ltd



Partition Mark Up
301250090 AC-SK-001 5/11/2024 006
PROJECT No SKETCH No DATE REV

- PARTITION LEGEND**
- Green Star compliance**
- PT - 1 R_w + C_{tr} ≥ 55
 - PT - 2 R_w ≥ 55
 - PT - 3 R_w + C_{tr} ≥ 40 (services)
 - PT - 4 R_w + C_{tr} ≥ 25 (services)
- General Areas**
- PT - 5 R_w ≥ 50
 - PT - 6 R_w ≥ 45
- Denotes discontinuous construction
- Glazing**
- GT - 1 R_w ≥ 35
 - GT - 2 R_w ≥ 37
- Doors**
- D - 1 R_w ≥ 35 (door rating)
 - D - 2 R_w ≥ 40 (door rating)
 - D - 3 R_w ≥ 45 (door rating)



- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FIRE
FI-04	FIRE HYDRANT
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11f	1x13mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS; ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 90mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-71f	1x9mm FIBRE CEMENT ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM; TBA FIREFLY NON-COMBUSTIBLE BREATHABLE MEMBRANE
PC-11	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-29	BIN LIFT. REFER TO FINISHES SCHEDULE FOR DETAILS.

City of Stirling
17 Jan 2025
RECEIVED

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



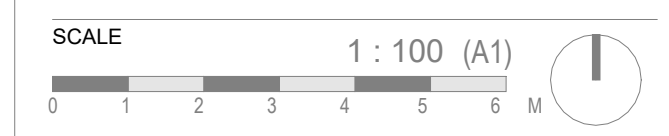
CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
**GA PLAN LOWER GROUND
FLOOR 01 - NORTH WEST**



PROJECT No	DRAWING No	REV
2005	A02-P-012	4
DRAWN BY		RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

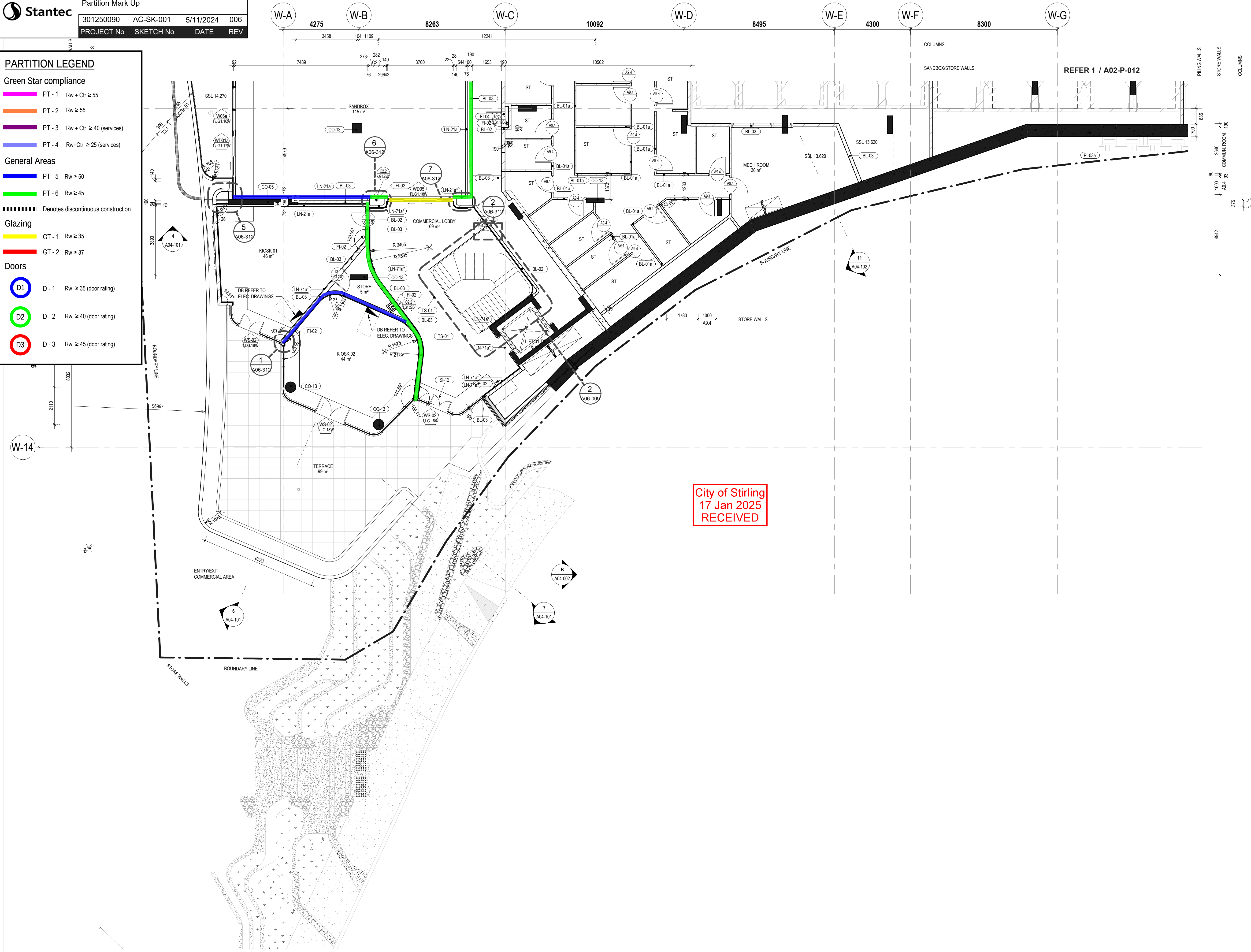
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ²)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-12	ENTRANCE MAT
TS-01	BLACK URETHANE WARNING TACTILE INDICATORS

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

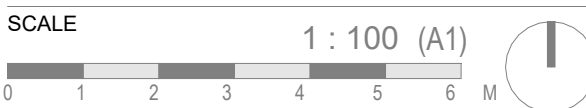
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 01 - SOUTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-013	4
DRAWN BY	RR	

SKETCH TITLE

BY: jallm

Partition Mark Up

301250090

AC-SK-001

5/11/2024

006

PROJECT No

SKETCH No

DATE

REV

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



- GENERAL NOTES
1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6.

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PI-03a	800 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling

17 Jan 2025

RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA

P (08) 6380 1877

E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

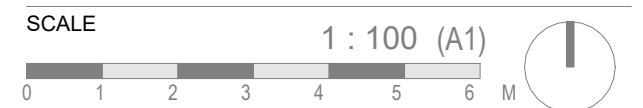
LOT 500 RESERVE STREET

SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND

FLOOR 01 - EAST



PROJECT No	DRAWING No	REV
2005	A02-P-014	4

DRAWN BY

RR

PARTITION LEGEND

Green Star compliance

- PT - 1
- Rw + Ctr ≥ 55
- PT - 2
- Rw ≥ 55
- PT - 3
- Rw + Ctr ≥ 40 (services)
- PT - 4
- Rw+Ctr ≥ 25 (services)

General Areas

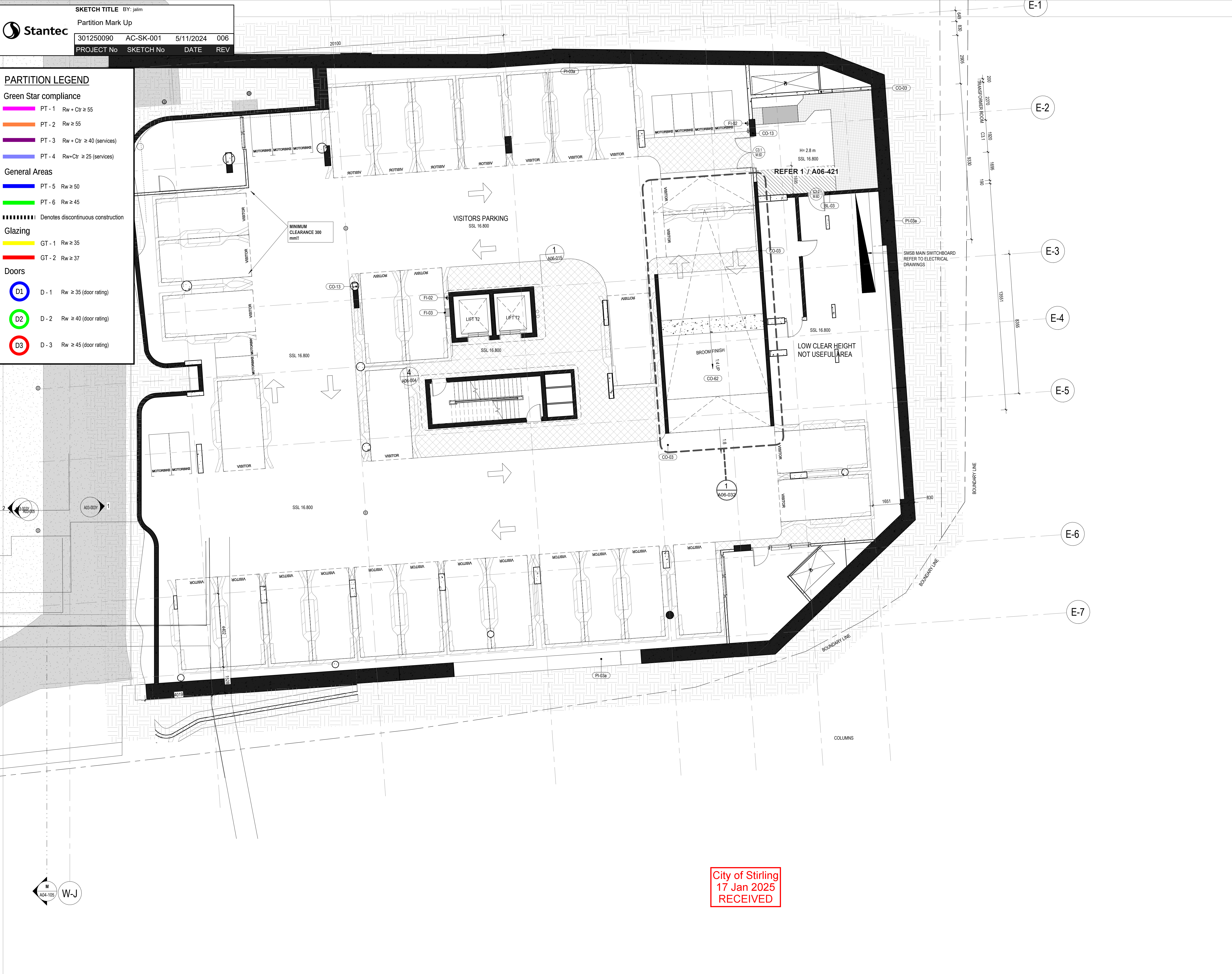
- PT - 5
- Rw ≥ 50
- PT - 6
- Rw ≥ 45
-
- Denotes discontinuous construction

Glazing

- GT - 1
- Rw ≥ 35
- GT - 2
- Rw ≥ 37

Doors

- D1
- D - 1
- Rw ≥ 35 (door rating)
- D2
- D - 2
- Rw ≥ 40 (door rating)
- D3
- D - 3
- Rw ≥ 45 (door rating)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-03	180 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-62	230mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

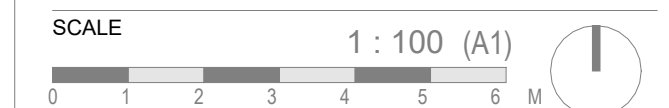
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

MEZZANINE LEVEL



PROJECT No	DRAWING No	REV
2005	A02-P-015	4

DRAWN BY Author

© Hillam Architects Pty Ltd

City of Stirling
17 Jan 2025
RECEIVED

© Hillam Architects Pty Ltd

© Hillam Architects Pty Ltd

Green Star compliance

- PT - 1 $Rw + Ctr \geq 55$
- PT - 2 $Rw \geq 55$
- PT - 3 $Rw + Ctr \geq 40$ (services)
- PT - 4 $Rw + Ctr \geq 25$ (services)

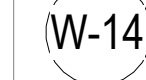
PT - 5 $R_w \geq 5$

■ PT - 6 $R_w \geq 45$
 ■■■■■■■■ Denotes discontinuous construction

GT - 1 $R_w \geq 35$

GT - 2 $R_w \geq 37$

	D - 1	Rw ≥ 35 (door rating)
	D - 2	Rw ≥ 40 (door rating)
	D - 3	Rw ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILL ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED FOR OTHER THAN THE PROJECT FOR WHICH IT WAS PREPARED. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION. THE CONTRACTOR SHALL TAKE ALL DIMENSIONS FROM THE SCALED DIMENSIONS. DO NOT WORK FROM REDUCED DRAWINGS.
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS.
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION.
- THE CONTRACTOR SHALL MARK "ISSUED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN SUPERSEDED.

SPECIFICATION SCHEDULE

[illegible]

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN GROUND FLOOR -
SOUTH WEST

SCALE

1 : 100 (A1)



PROJECT No. 2005	DRAWING No. A02-T1-102	REV 4
DRAWN BY		RR

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

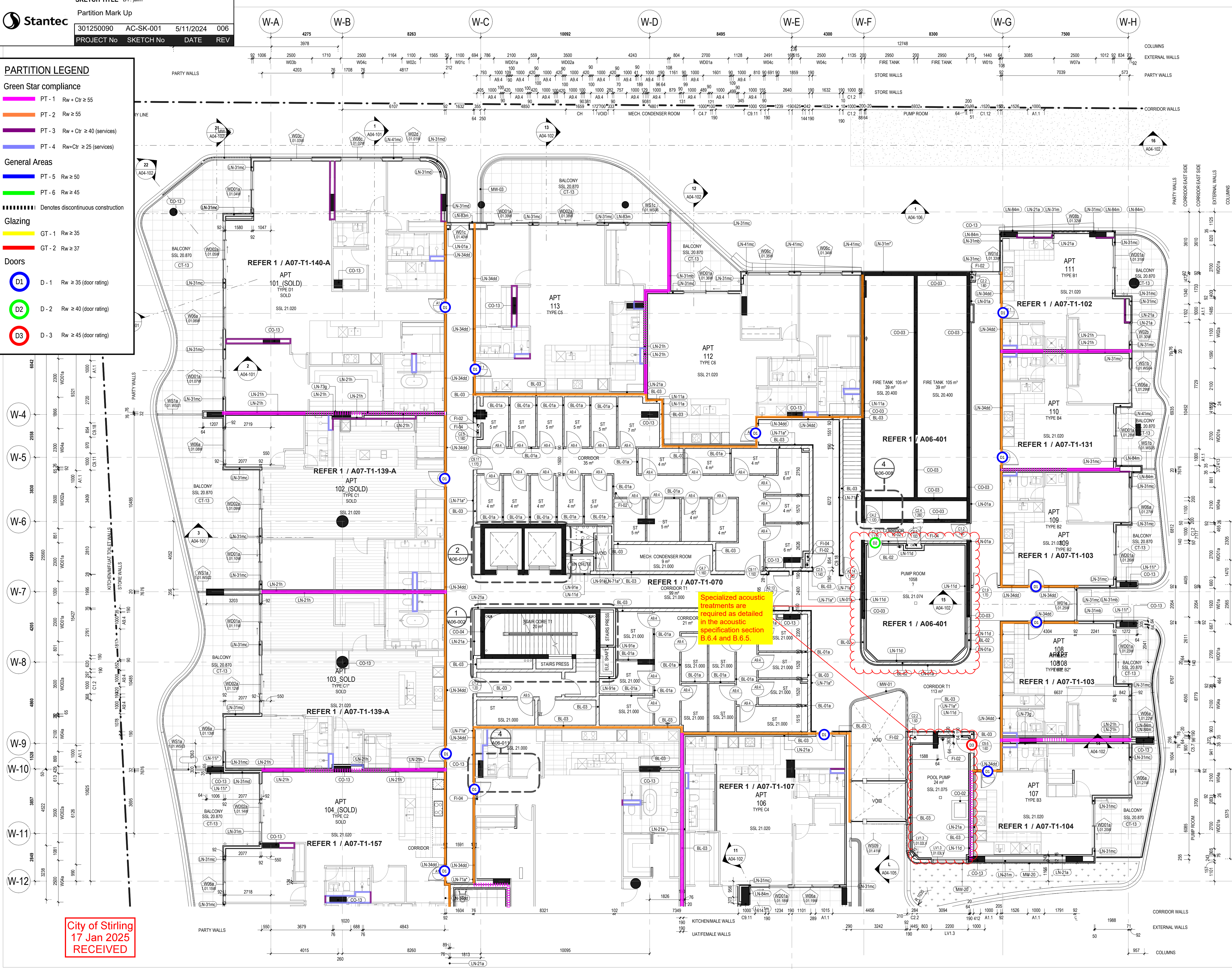
D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw + Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

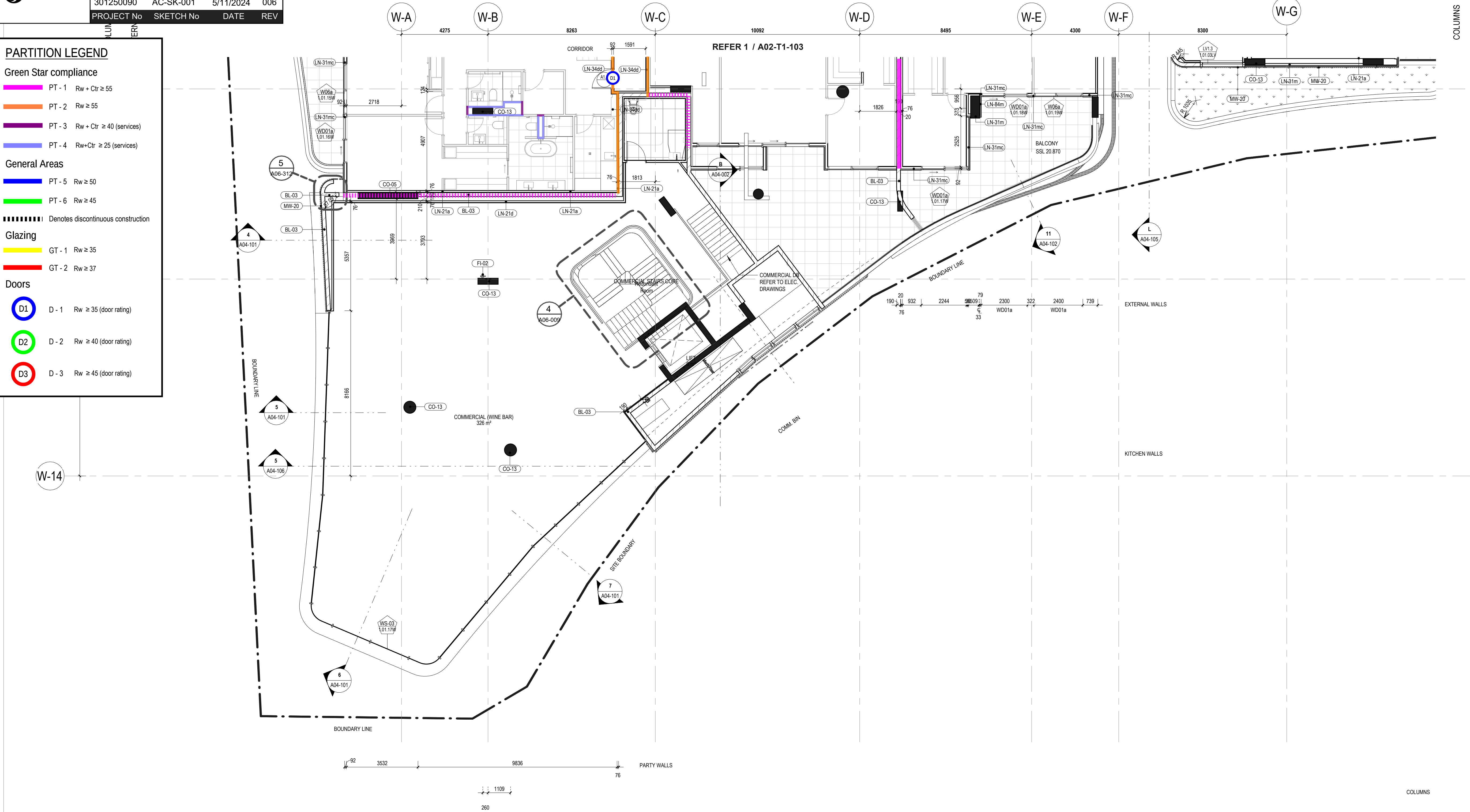
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACoustIGARD (14kg/m³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACoustIGARD (20kg/m³)
LN-31m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m³)
LN-31mc	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACoustIGARD (14kg/m³)
LN-84m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

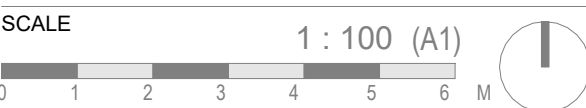
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 01 - SOUTH
WEST



PROJECT No	DRAWING No	REV
2005	A02-T1-104	4
DRAWN BY		RR

City of Stirling
17 Jan 2025
RECEIVED

Stantec

SKETCH TITLE

BY: jalm

Partition Mark Up

301250090 AC-SK-001 5/11/2024 006

PROJECT No

SKETCH No

DATE

REV

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)

GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-10c	600x600 PORCELAIN FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WHERE APARTMENT AREA BELOW. SLIP RATING R9. REFER TILE SELECTION TABLE
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
CT-15a	1200x600 CERAMIC OR PORCELAIN WALL TILE ON PLASTERBOARD LINING ON METAL STUD. REFER TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON BOTH SIDES OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21i	14mm COMPRESSED FIBRE CEMENT ON BOTH SIDE OF 76mm STEEL STUD
LN-31aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m b	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m c	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m e	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 14mm FIBRE CEMENT
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41m c	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-83m	14mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x2mm USG BORAL FIRESTOP LINER; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-91i	14mm COMPRESSED FIBRE CEMENT ON BOTH SIDES OF 102mm CH STEEL STUD
MW-02	GLASS BALUSTRADE (Not for construction)
MW-20	ALUMINUM BATTENS REFER TO ARCHITECT DETAILS
MW-41	ALUMINUM PALASADE FENCE - FLOOR MOUNTED 1200H POWDERCOAT FINISH
SE-05	SHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER
SM-01	ARCHITECT MAT 1/15 ROYDHOUSE ST SUBIACO WA P (08) 6380 1877 E info@hllam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 02 - NORTH WEST

SCALE

1 : 100 (A1)

PROJECT No

2005

DRAWING No

A02-T1-105

REV

4

DRAWN BY

RR

HILLAM ARCHITECTS

© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

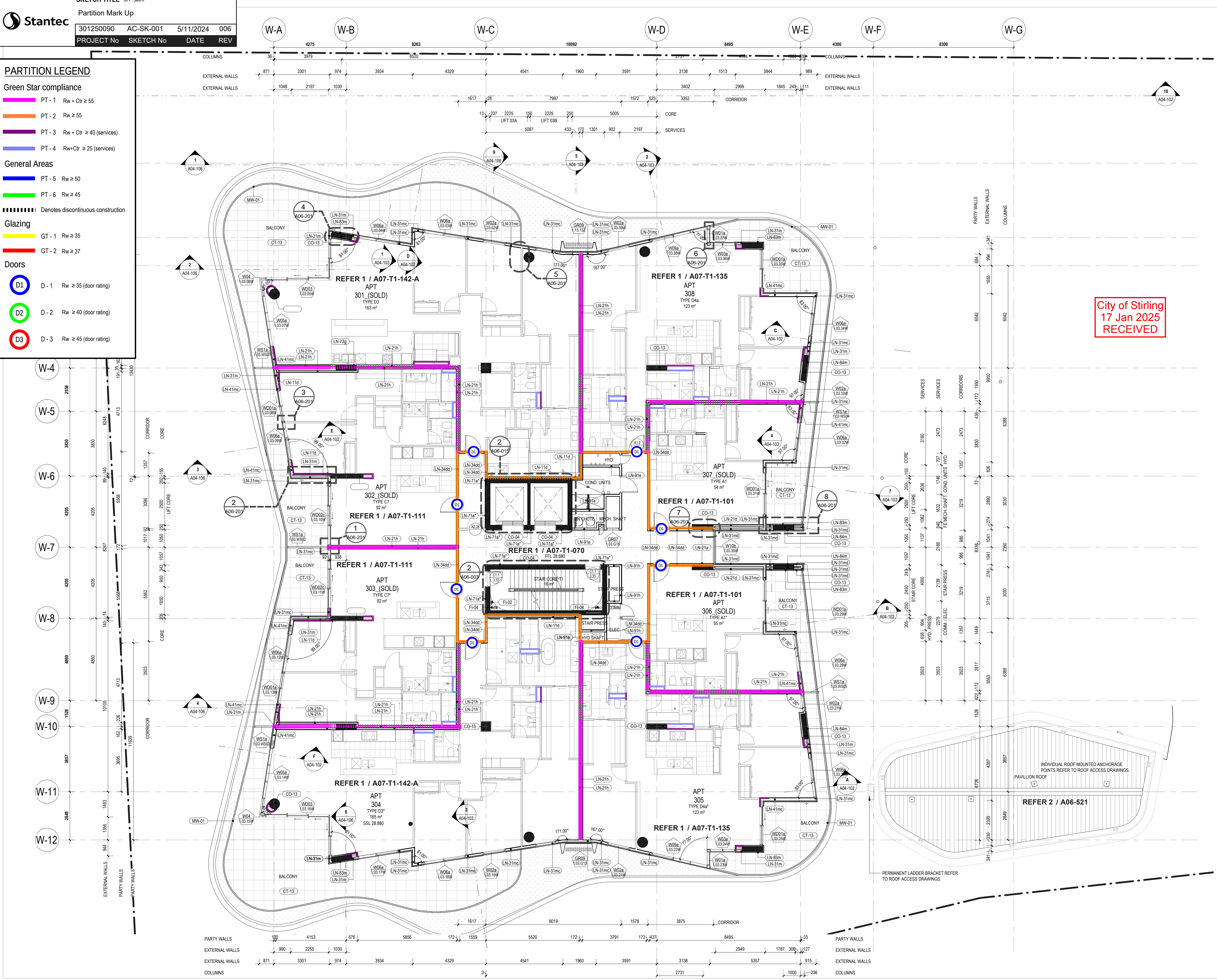
D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR EXCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)
MW-01	GLASS BALUSTRADE - 1050H

04.10.24

4

Issue for Coordination

SG

30.09.24

3

Issue for Coordination

MK

18.03.24

2

Revised Tender Issue

MK

22.02.24

1

Re-issue For Tender (Not for construction)

MK

13.03.23

0

Issue For Tender

TH

DO NOT REV

REV

DESCRIPTION

CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBICAO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 03

SCALE

1 : 100 (A1)

PROJECT No

2005

DRAWING No

A02-T1-107

REV

4

DRAWN BY

RR

© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

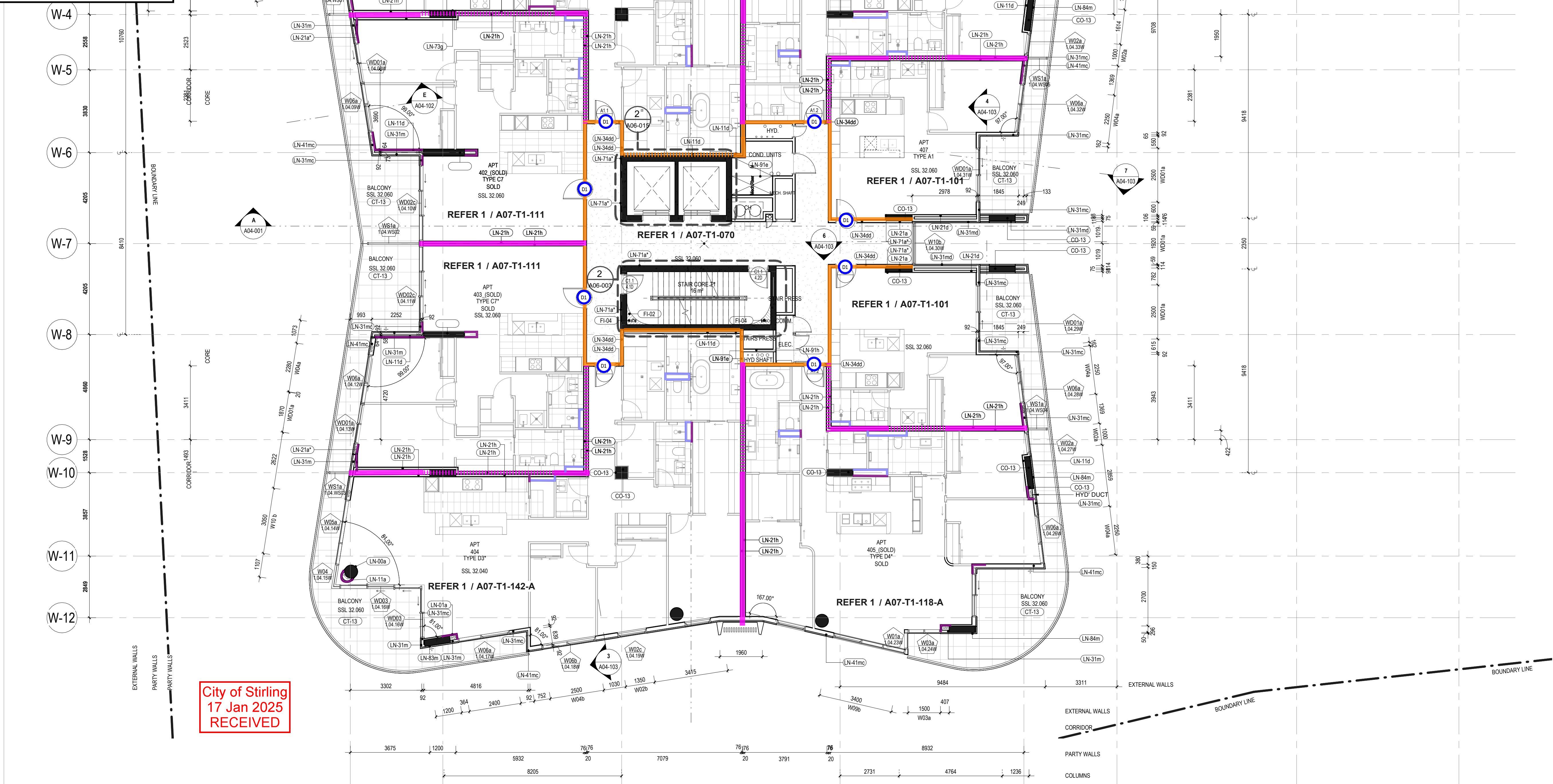
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK AND PRECEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm BRADFORD ACoustIGARD (32kg/m3)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACoustIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACoustIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACoustIGARD (14kg/m3)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACoustIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACoustIGARD (14kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACoustIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS. 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACoustIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACoustIGARD (11kg/m3)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO NOT REV	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 04

SCALE



PROJECT No	DRAWING No	REV
2005	A02-T1-108	4
DRAWN BY		RR

City of Stirling
17 Jan 2025
RECEIVED

GA Plans level 5-6

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLIAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLIAM ARCHITECTS.
2. THIS DRAWING IS TO BE USED ONLY ON THE SPECIFIC SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. THIS DRAWING'S SCALE PRECEDES OVER SCALED DIMENSION DO NOT SCALE FROM REDUCED DRAWINGS
4. THIS DOCUMENT MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL, PLUMBING, SANITARY AND VENTILATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CT-13	INSITU REINFORCED CONCRETE COLUMN
CT-13	600x900 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLP RATING REFER TO TILE SELECTION TABLE
F-102	FIRE RISK FIRE RESISTANCE RATING TO FIRE ENDS SPECIFICATIONS
FL-004	FIRE HYDRANT
LN-018	1x13mm PLASTERBOARD LINING
LN-018a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WE AREAS) ON ONE SIDE OF 15mm STUD STEEL; 50mm BRADFORD AUSTGARD (14kg/m ²)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WE AREAS) ON ONE SIDE OF 64mm STUD STEEL; 50mm BRADFORD AUSTGARD (32kg/m ²)
LN-11a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STUD STEEL; 50mm BRADFORD AUSTGARD (32kg/m ²)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WE AREAS) ON ONE SIDE OF 76mm STUD STEEL; 75mm BRADFORD AUSTGARD (14kg/m ²)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WE AREAS) ON ONE SIDE OF 76mm STUD STEEL
LN-21a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STUD STEEL; 75mm BRADFORD AUSTGARD (20kg/m ²)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STUD STEEL; 75mm BRADFORD AUSTGARD (14kg/m ²)
LN-31m	19mm FIBRE CEMENT ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD ON ONE SIDE OF 92mm STUD STEEL; 90mm BRADFORD SOUNDSCREEN (40kg/m ²)
LN-31mc	19mm FIBRE CEMENT ON 15mm HORIZONTAL TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD ON ONE SIDE OF 92mm STUD STEEL; 90mm BRADFORD SOUNDSCREEN (40kg/m ²)
LN-31mc	19mm FIBRE CEMENT ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD ON ONE SIDE OF 92mm STUD STEEL; 90mm BRADFORD SOUNDSCREEN (40kg/m ²)
LN-31md	19mm FIBRE CEMENT ON 35mm TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD; 16mm USG BORAL FIRESTOP (OR 16mm USG BORAL FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STUD STEEL; 100mm BRADFORD AUSTGARD (14kg/m ²)
LN-31md	19mm FIBRE CEMENT ON 35mm TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD; 16mm USG BORAL FIRESTOP (OR 16mm USG BORAL FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STUD STEEL; 100mm BRADFORD AUSTGARD (14kg/m ²)
LN-34dd	19mm FIBRE CEMENT ON 35mm TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD; 16mm USG BORAL FIRESTOP (OR 16mm USG BORAL FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STUD STEEL; 100mm BRADFORD AUSTGARD (14kg/m ²)
LN-41mc	19mm FIBRE CEMENT ON 35mm TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD; 16mm USG BORAL FIRESTOP (OR 16mm USG BORAL FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STUD STEEL; 100mm BRADFORD AUSTGARD (14kg/m ²)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WE AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD AUSTGARD (11kg/m ²)
LN-83m	19mm FIBRE CEMENT ON 35mm TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD
LN-84a	19mm FIBRE CEMENT ON 35mm TOP HATS HATS HARDIE EXCISE FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIR ARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL; 102mm USG BORAL SHAFTLINER; 75mm BRADFORD AUSTGARD (11kg/m ²)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL; 102mm USG BORAL SHAFTLINER; 75mm BRADFORD AUSTGARD (11kg/m ²)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME _____

THE DUNES-T1

LOT 500 RESERVE STREET

DRAWING NAME

GA PLAN LEVEL 05-06

SCALE 1 : 100 (A1)



0 1 2 3 4 5 6 M

A circular arrow with a vertical line through its center, indicating a 90-degree turn.

PROJECT No.	DRAWING No.	REV
2005	A02-T1-108	4

© Hiram Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

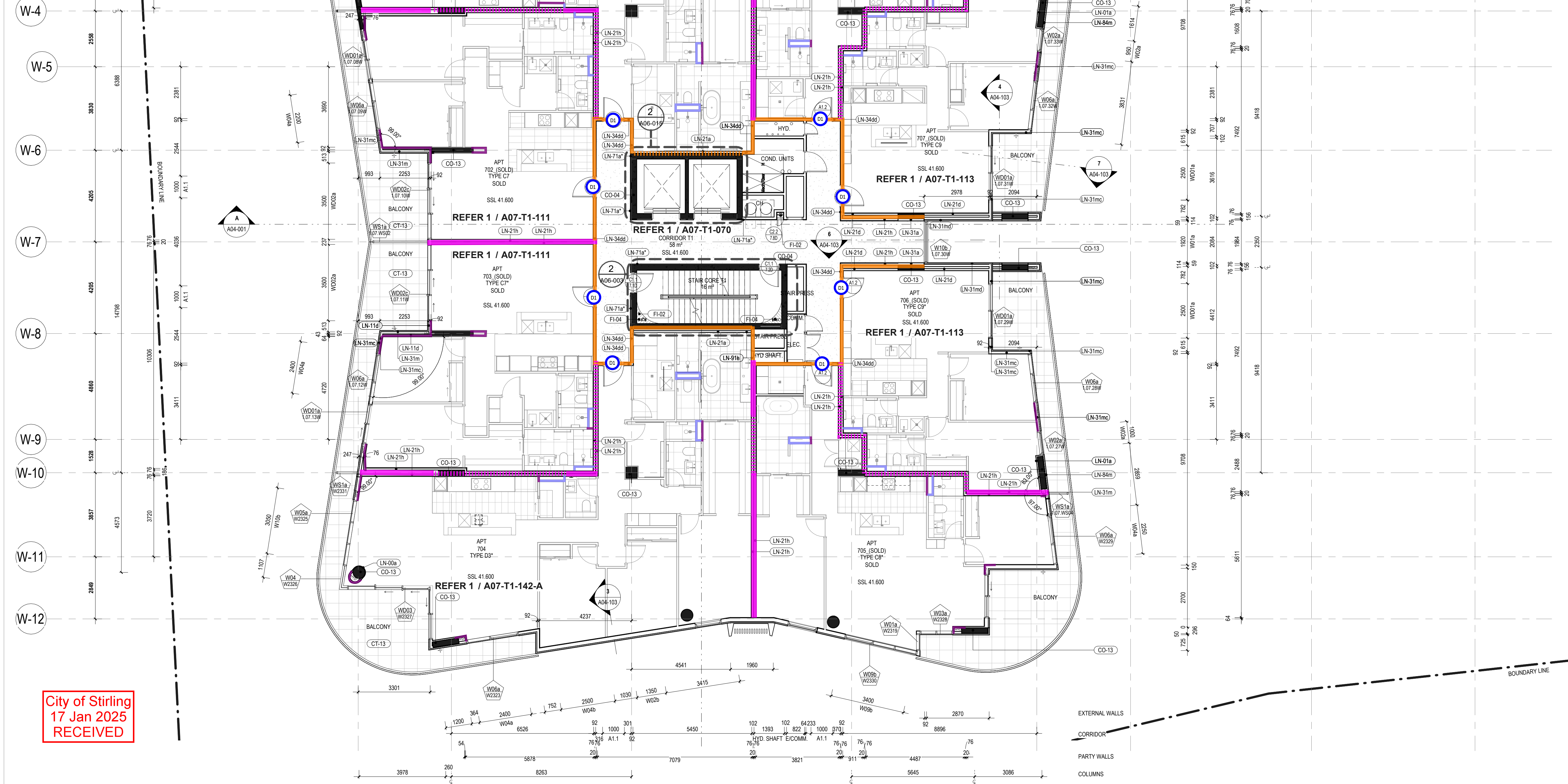
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PRECEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-21h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD ACOUSTIGARD (40kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/OF ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLURRING CHANNELS
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)
LN-91h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO/MA/Y/Y	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

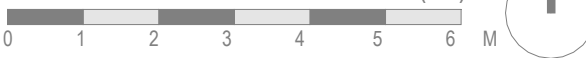
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 07

SCALE

1 : 100 (A1)



PROJECT No	DRAWING No	REV
2005	A02-T1-111	4
DRAWN BY		RR



© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

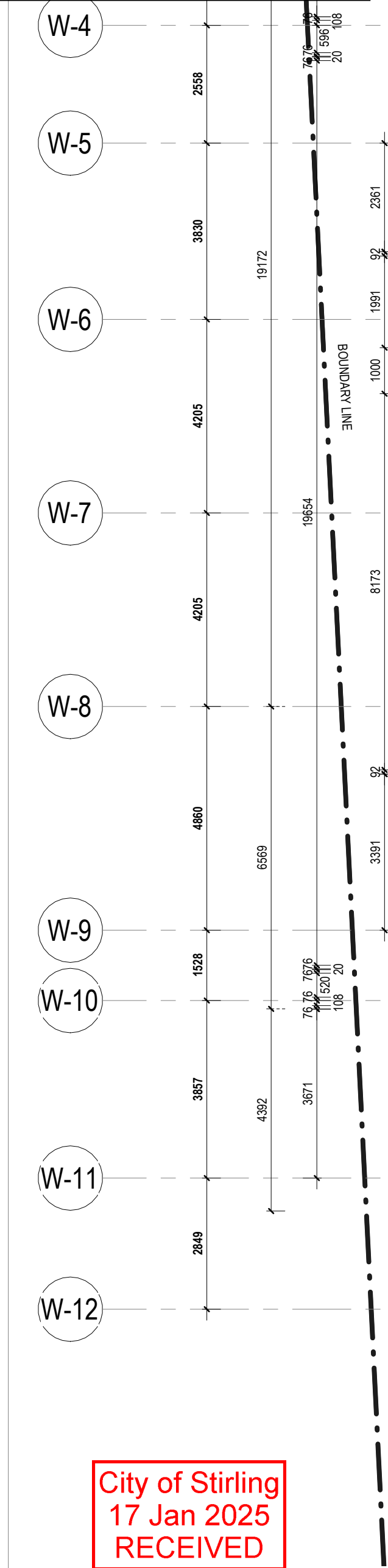
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m3)

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



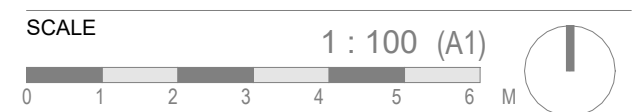
CLIENT

EDGE VISIONARY LIVING

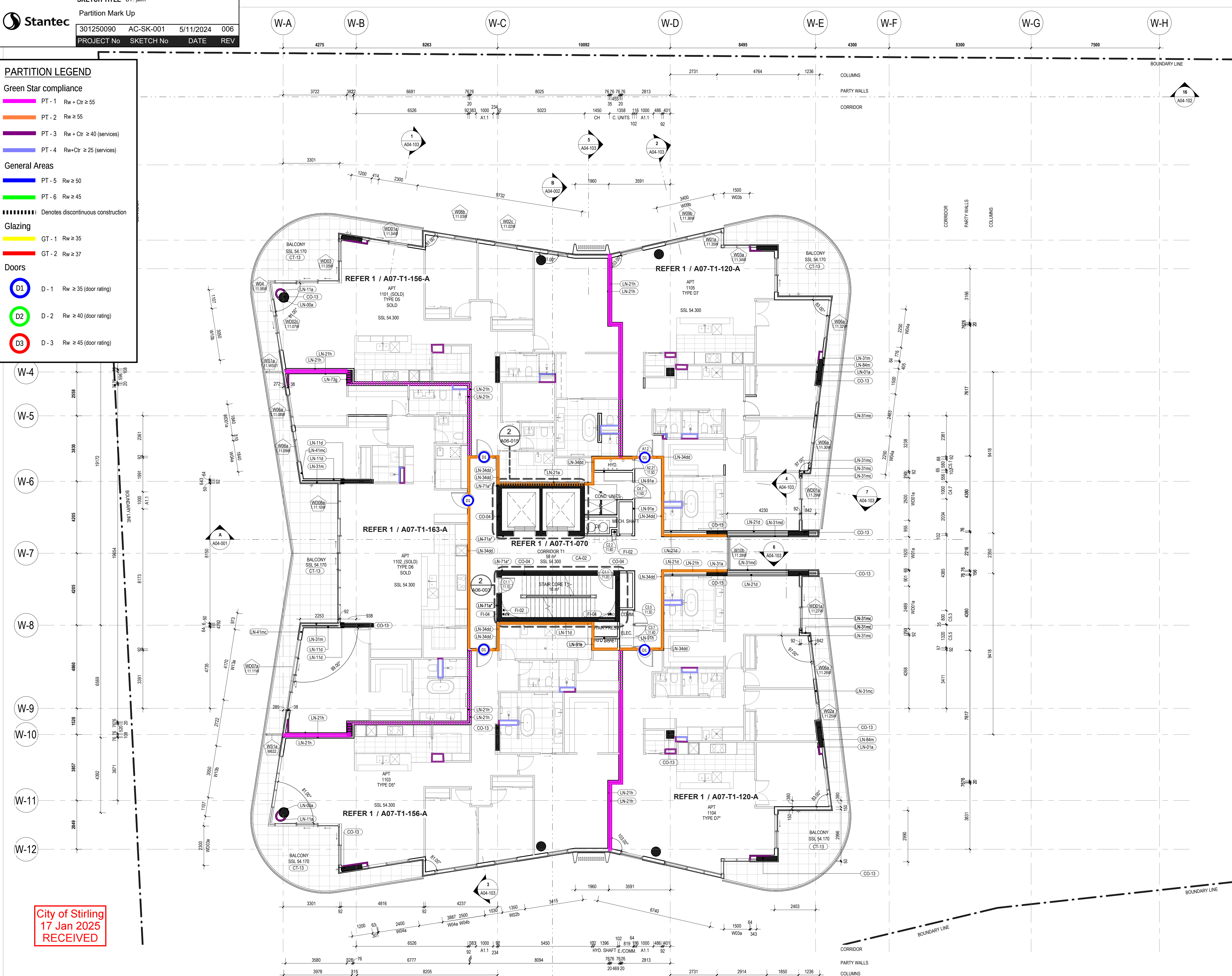
PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN LEVEL 11



PROJECT No	DRAWING No	REV
2005	A02-T1-115	4
DRAWN BY		RR



City of Stirling
17 Jan 2025
RECEIVED

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)

W-4

W-5

W-6

W-7

W-8

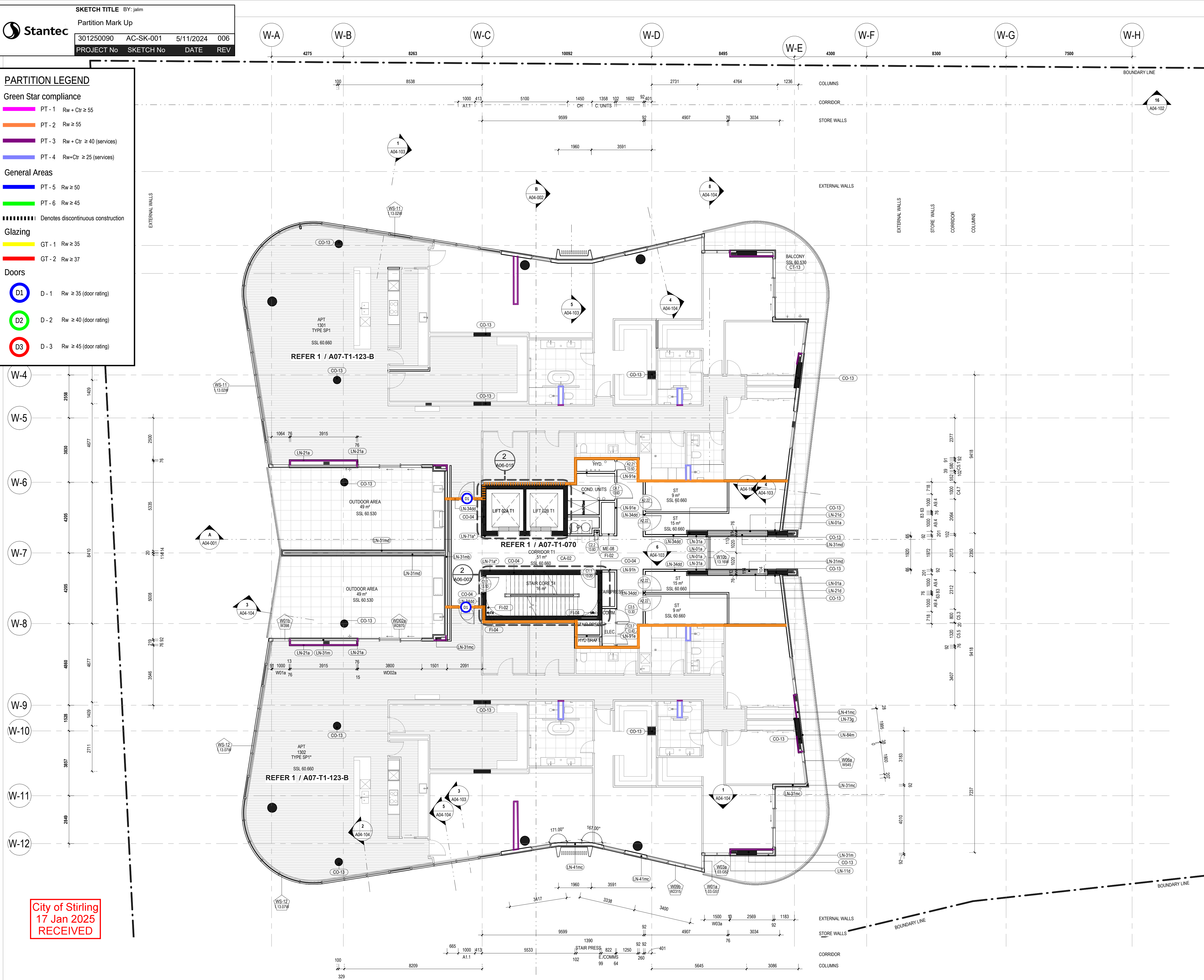
W-9

W-10

W-11

W-12

City of Stirling
17 Jan 2025
RECEIVED



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD ACOUSTIGARD (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-08	FULL HEIGHT MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO/REV	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



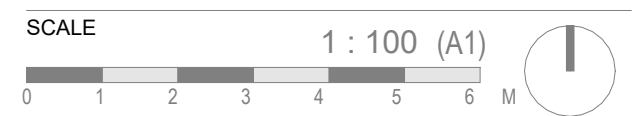
CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN LEVEL 13



PROJECT No	DRAWING No	REV
2005	A02-T1-117	4
DRAWN BY		RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

Doors

- D1

D - 1

Rw ≥ 35 (door rating)
- D2

D - 2

Rw ≥ 40 (door rating)
- D3

D - 3

Rw ≥ 45 (door rating)

W-4

W-5

W-6

W-7

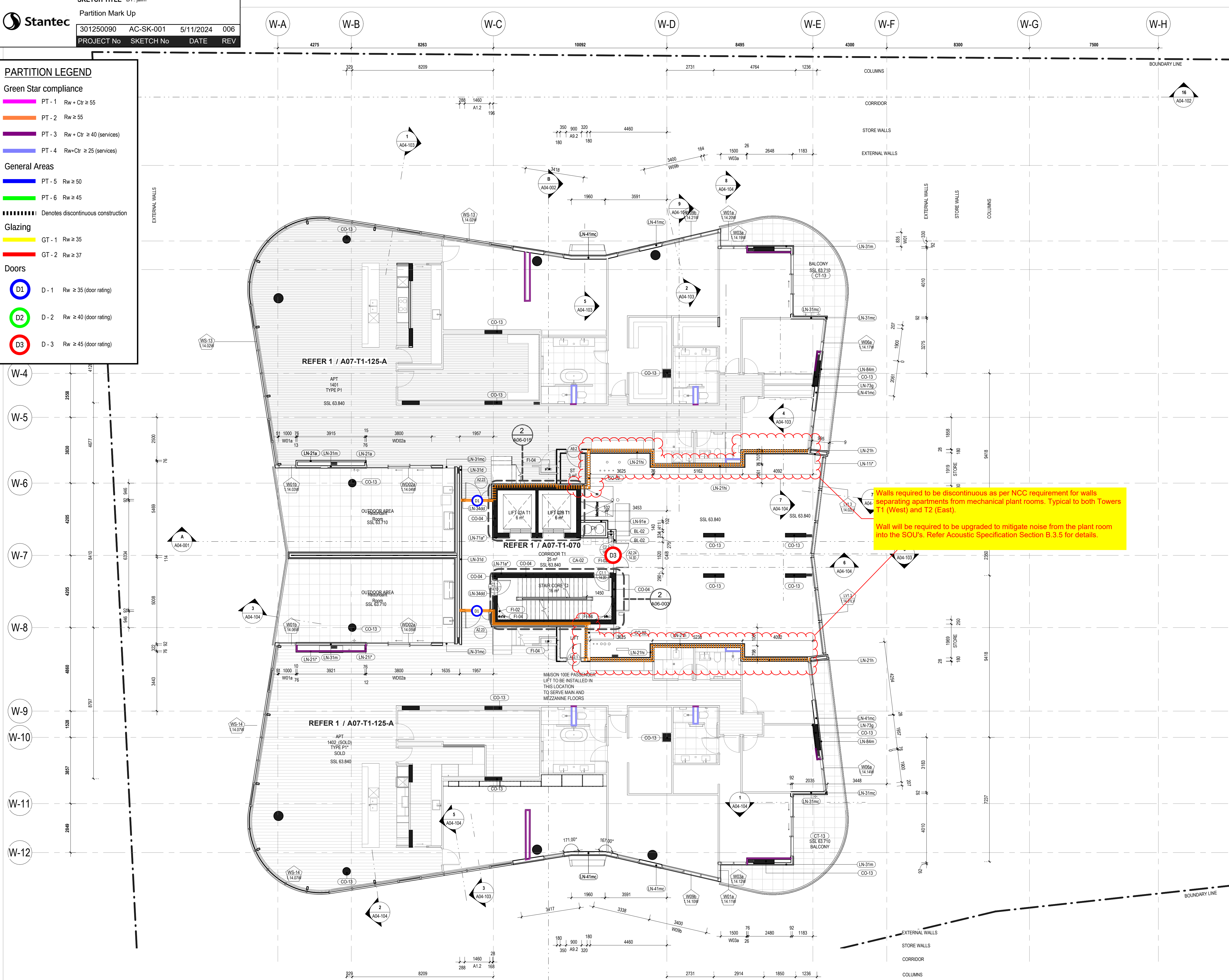
W-8

W-9

W-10

W-11

W-12



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-02	150mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE COLUMN
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21hi	2x9mm FIBRE CEMENT ON 2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21i	1x9mm FIBRE CEMENT ON ONE SIDE OF 76mm STEEL STUD
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm MR PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)

City of Stirling
17 Jan 2025
RECEIVED

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 14

SCALE

1 : 100 (A1)



PROJECT No	DRAWING No	REV
2005	A02-T1-118	4
DRAWN BY		RR

PARTITION LEGEND

Green Star compliance

PT-1

Rw + Ctr ≥ 55

PT-2

Rw ≥ 55

PT-3

Rw + Ctr ≥ 40 (services)

PT-4

Rw + Ctr ≥ 25 (services)

General Areas

PT-5

Rw ≥ 50

PT-6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT-1

Rw ≥ 35

GT-2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

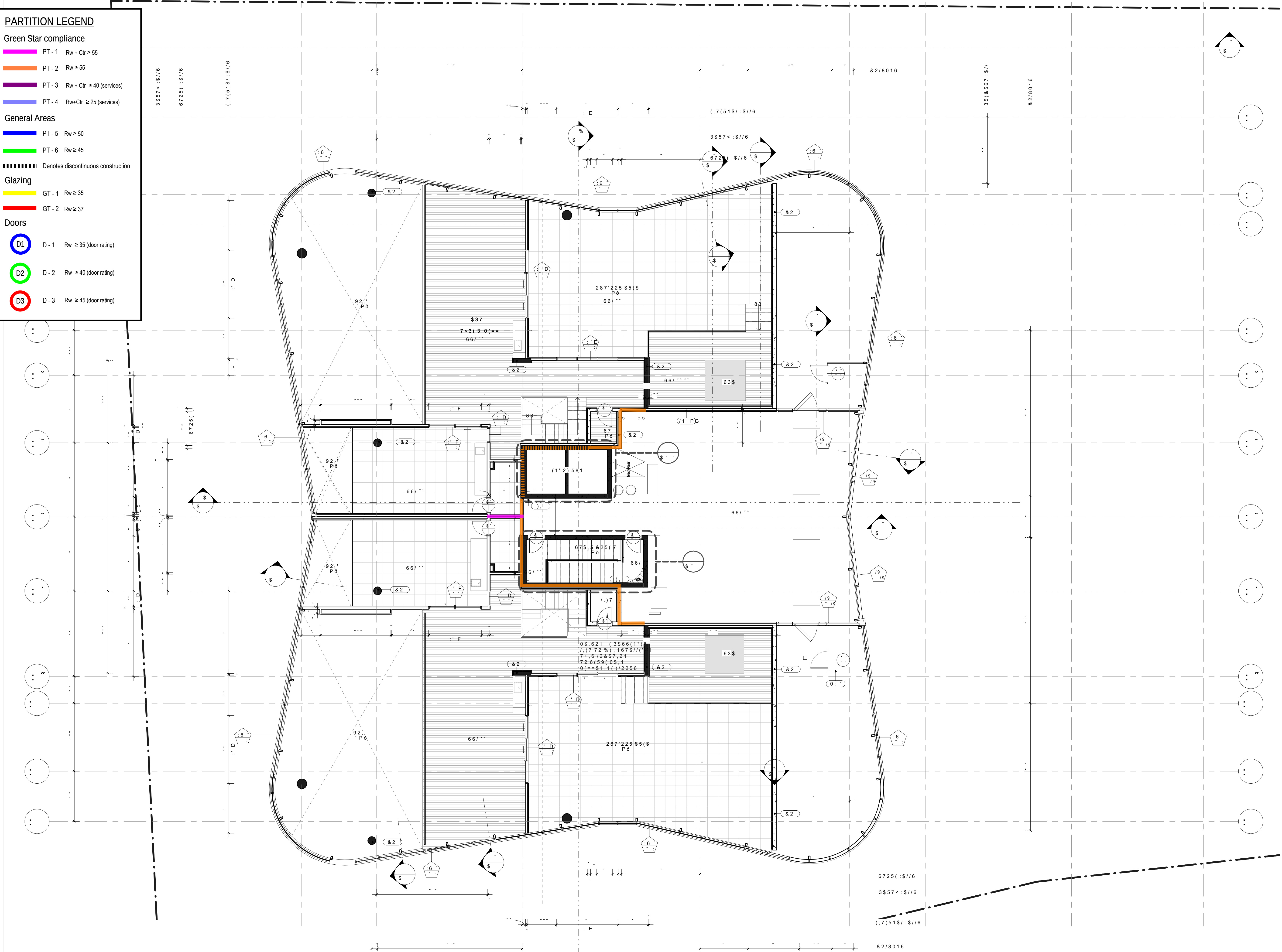
D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



7+(6'55'1'6&23<5'7& \$1'5(05.167+3
+/J/\$0 \$5&+.7(&7&6.70867 127 %(5(75.1(' &2
:7+2877+(\$87+25.7<2)+./J/\$0 \$5&+.7(&7&6
7+(&2175\$&72572 &+(& \$/1'0(16.216216.
%(1)25(&200(18.1'25.25352&((1'1'7+35(1
6+23'55'1'6 \$1<'6&5(351&.(66+\$//% (%5
\$77(17.212)7+(\$5&+.7(&7&25&/5&).&57.2
)'.85(1'0(16.21675.(35&('1&(29(56&5(1'
'21276&5(1)5205'8&('55'1'6
\$/1'25.0867%(1'1\$&25'\$1&((1'7+7+(157.2
&216758&7.21&2')\$86755/,\$ \$1'7+(\$33/
\$86755/.\$16751'\$5'6
7+(&2175\$&72572(1685(7+577+.6'55'1'
&21-61&7.21'7+\$/5(1(9517\$5&+.7(&7&5\$
+<'558/ & 0(&+\$1.&\$/ \$1'/(1&75.&5/2&80(1
&225'.157(%(7:(175\$'(635.2572&200(18(
:25. \$1<'6&5(351&.(66+\$//% (%528'+7727
2)7+(\$5&+.7(&7&25&/5&).&57.21
7+(&2175\$&7256+\$//055.683(56('21\$//
)25:+.&+\$5(9.6.21+\$6%((1.668('

63(&.).&\$7.216&+('8/(

&2'('

'(6&5.37.21

&2 PP.16.785(1)25&(' &21&5(7':\$//

&2 PP.16.785(1)25&(' &21&5(7':\$//

&2 1.6.785(1)25&(' &21&5(7':\$//

)).5((17.1'8.6+(55(1)572).5((1'663(&.).

)).5(+<'5517

/1 P0('PP').%5(&(0(1721'PP723+\$76-\$0(6
)\$&5'(6<67(021'PP+25.=2175/723+\$7
\$5%\$55.(5%255' PP86'%255/).5(672
:(7\$5(\$).5(672302.6785(5(6.675173/\$6
:(17\$5(\$62)2121(6.'(2)'PP67(1(678'
%55')25'6281'6&5((1 NJP ''28%/(/\$<(
3/\$67(5%255' PP
0: '\$/80.1.80 %\$/86755(')/22502817('1'7+

.VXXHIRU&ARRUGLQDWLRQ
.VXXHIRU&ARRUGLQDWLRQ
SHYLVHG7HQGHU.VVXH0.
SH.VVXH)RU7HQGHU1RWIRUFR
.VXXH)RU7HQGHU7+

'00<< 5(9 '(6&5.37.21 &+(&('

\$5&+.7(&7

'52<'1+286(6768%.\$&2:\$

(LQIR#KLOODPFR

A

HILLAM
ARCHITECTS

&/.(17

('*(9,6,21\$5</,9,

352-(&71\$0(

7+('81(67

127~5(6(59(675((7

6&\$5%2528*+

'5\$:-1'1\$0(

*\$3/\$1/(9(/

6&\$/(

\$

0

352-(&71R

'5\$:-1'1R

5(9

\$7

'5\$:-1%<

55

%of LQDP \$UFKLWHFW 3W1W6

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)

W A MINIMUM 3000 mm (W) FROM ROOF
E AS AN EXCLUSION ZONE FOR ACCESS
MAINTENANCE OF PV SOLAR PANELS AND
E ACCESS TO FACADE BELOW

W-4
2
SK-0125

W-5

W-6

W-7

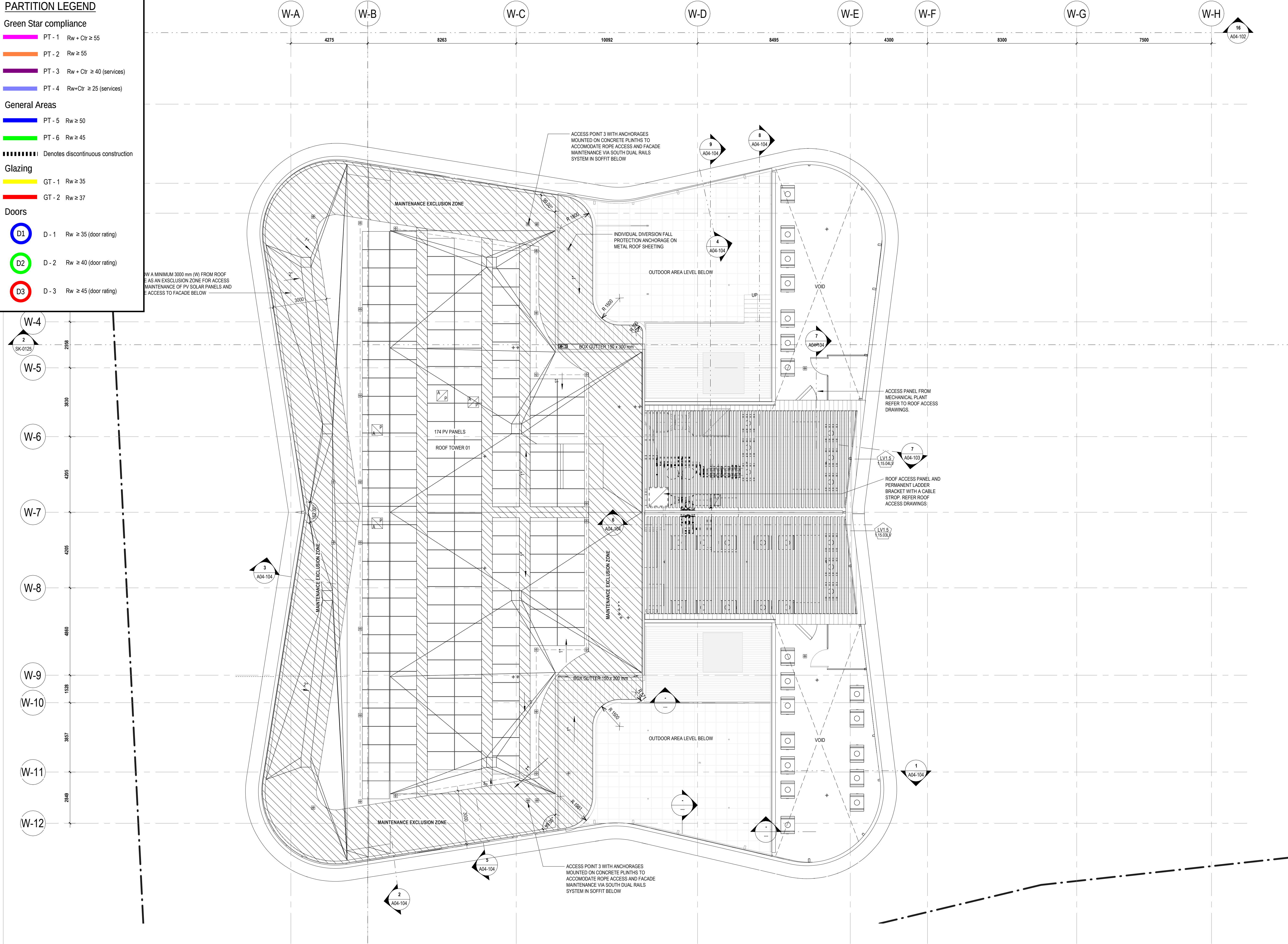
W-8

W-9

W-10

W-11

W-12



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
------	-------------

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

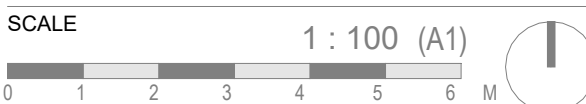
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA ROOF PLAN



PROJECT No	DRAWING No	REV
2005	A02-T1-121	4

DRAWN BY RR

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw + Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

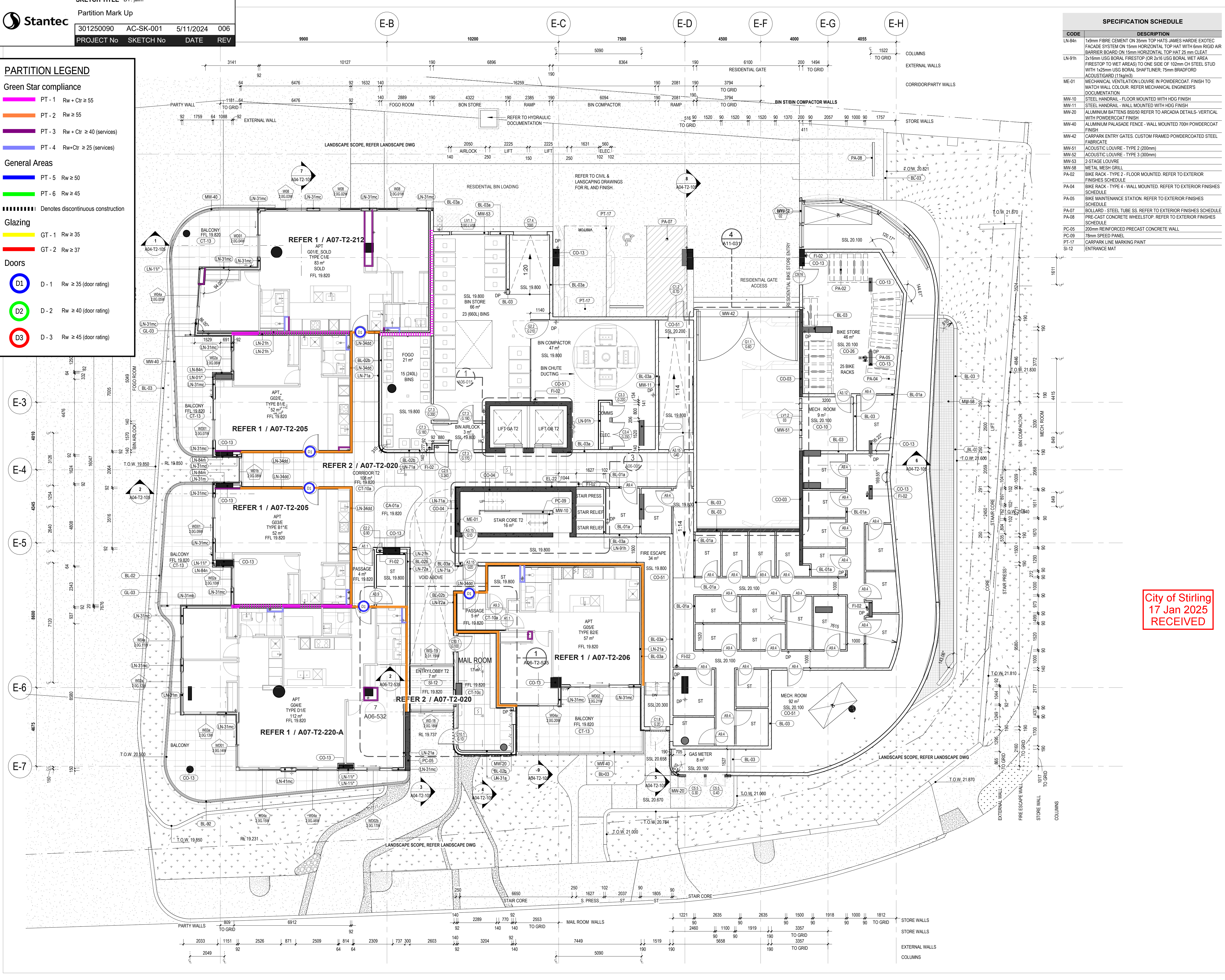
D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
LN-84n	1x3mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm GLEAT 2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-91h	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
ME-01	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-10	STEEL HANDRAIL - WALL MOUNTED WITH HDG FINISH
MW-11	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS - VERTICAL WITH POWDERCOAT FINISH
MW-20	ALUMINIUM PALASADE FENCE - WALL MOUNTED 700H POWDERCOAT FINISH
MW-42	CARPARK ENTRY GATES. CUSTOM FRAMED POWDERCOATED STEEL FABRICATE
MW-51	ACOUSTIC LOUVRE - TYPE 2 (200mm)
MW-52	ACOUSTIC LOUVRE - TYPE 3 (300mm)
MW-53	2-STAGE LOUVRE
MW-58	METAL MESH GRILL
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PA-04	BIKE RACK - TYPE 4 - WALL MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PA-05	BIKE MAINTENANCE STATION. REFER TO EXTERIOR FINISHES SCHEDULE
PA-07	ROLL-UP STEEL TUBE SS. REFER TO EXTERIOR FINISHES SCHEDULE
PA-08	PRE-CAST CONCRETE WHEEL STOP. REFER TO EXTERIOR FINISHES SCHEDULE
PC-05	200mm REINFORCED PRECAST CONCRETE WALL
PC-09	78mm SPEED PANEL
PT-17	CARPARK LINE MARKING PAINT
SI-12	ENTRANCE MAT

DATE	REV	DESCRIPTION	CHECKED
04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
22.05.23	1	Issue For Information	JG
13.03.23	0	Issue For Tender	TH

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN GROUND FLOOR

CONSTRUCTION DOCUMENTATION

SCALE 1:100 (A1)

PROJECT No 2005

DRAWING No A02-T2-201

REV 5

DRAWN BY RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw + Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

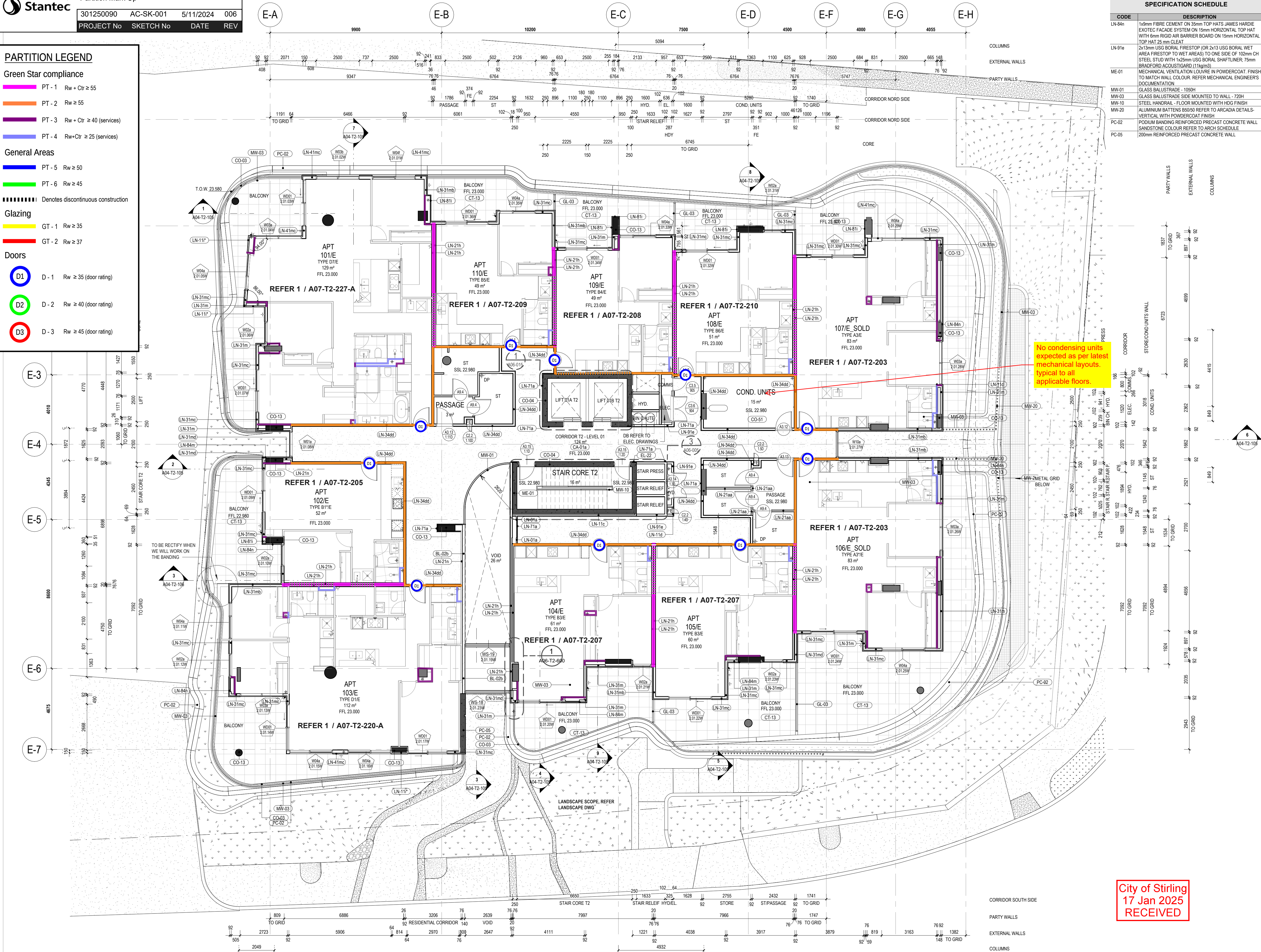
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
LN-84n	1x3mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD WITH 1x2mm USG BORAL FIRESTOP (OR 2x13mm USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD WITH 1x2mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (114kg/m3)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-03	GLASS BALUSTRADE SIDE MOUNTED TO WALL - 720H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS
PC-02	VERTICAL WITH POWDERCOAT FINISH
PC-05	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE
PC-05	200mm REINFORCED PRECAST CONCRETE WALL

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-02b	140 CONCRETE BLOCK WALL. REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-51	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
EL-22	
GL-03	BALCONY GLASS SCREEN GENERALLY
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm
LN-11c	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON BOTH SIDES OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (144kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (144kg/m3)
LN-21n	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13mm)
LN-31nd	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (144kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 23mm BRADFORD ACOUSTIGARD (144kg/m3)
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM. TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	SG
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO/MAY/Y	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 01

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-202	4

DRAWN BY RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

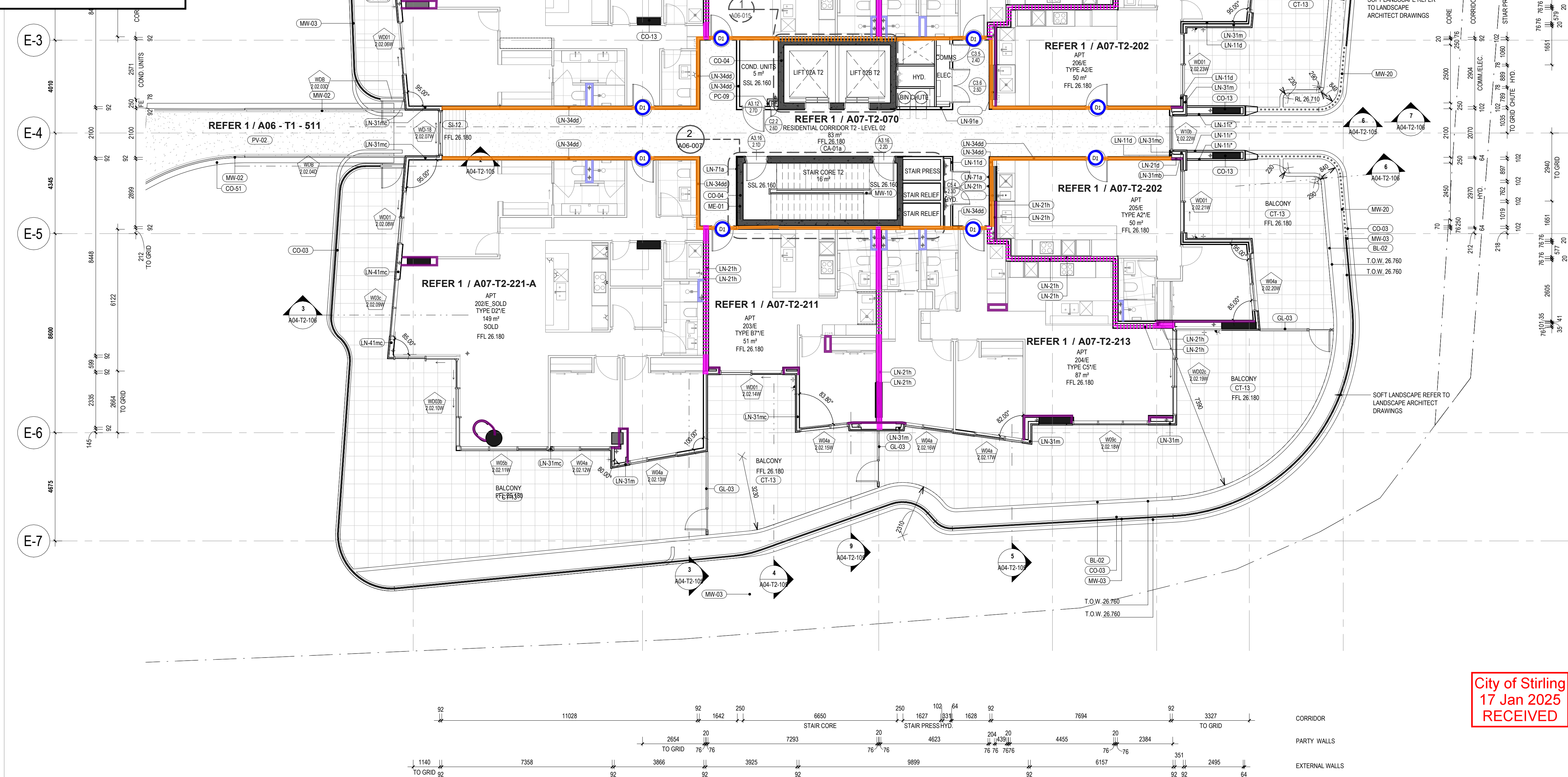
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
CA-01a	CARPET TILE REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-51	200mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
GL-03	BALCONY GLASS SCREEN GENERALLY
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (22kg/m3)
LN-21d	2x15mm USG BORAL FIRESTOP (OR 2x15 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-21h	2x15mm USG BORAL FIRESTOP (OR 2x15 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16mm USG BORAL FIRESTOP (OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m3)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-02	GLASS BALUSTRADE, 1200H
MW-03	GLASS BALUSTRADE SIDE MOUNTED TO WALL - 720H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-09	78mm SPEED PANEL
PV-02	EXPOSED AGGREGATE CONCRETE (OFF-WHITE)
SI-12	ENTRANCE MAT

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

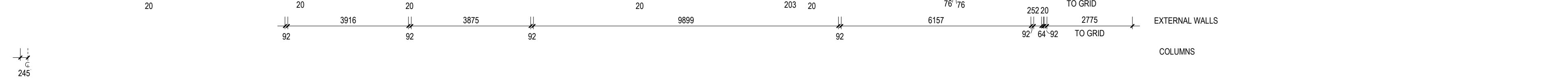
GA LEVEL 02

CONSTRUCTION
DOCUMENTATION



PROJECT No	DRAWING No	REV
2005	A02-T2-203	4

DRAWN BY RR



City of Stirling
17 Jan 2025
RECEIVED

© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

- PT - 1 R_w + C_{tr} ≥ 55
- PT - 2 R_w ≥ 55
- PT - 3 R_w + C_{tr} ≥ 40 (services)
- PT - 4 R_w + C_{tr} ≥ 25 (services)

General Areas

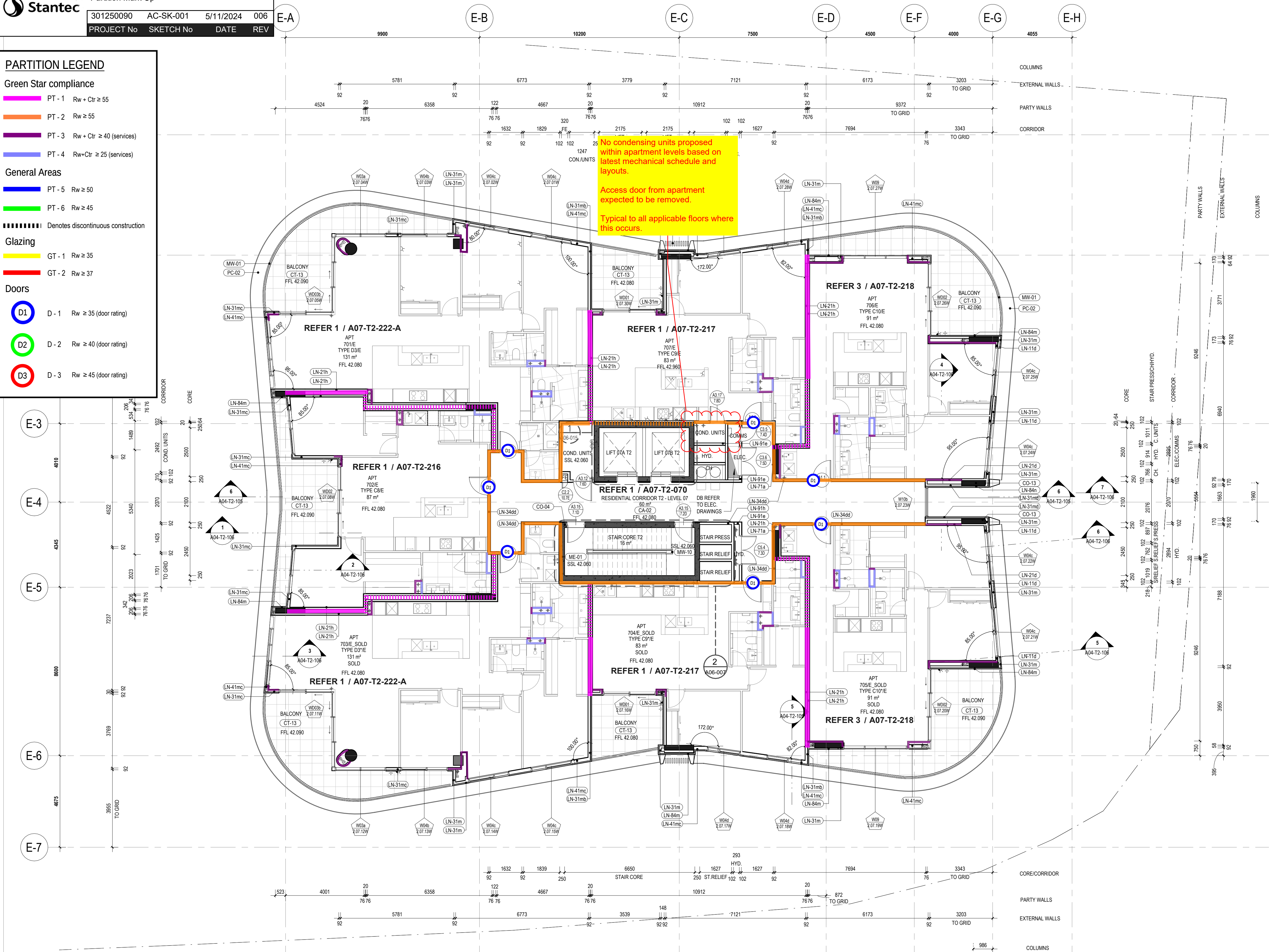
- PT - 5 R_w ≥ 50
- PT - 6 R_w ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1 R_w ≥ 35
- GT - 2 R_w ≥ 37

Doors

- D1 D - 1 R_w ≥ 35 (door rating)
- D2 D - 2 R_w ≥ 40 (door rating)
- D3 D - 3 R_w ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSREEN (40kg/m ³)
LN-31m b	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDSREEN (40kg/m ³)
LN-31mc	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSREEN (40kg/m ³); 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84h	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 125mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 125mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-21	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
PC-02	ALUMINUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

DATE	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 07

CONSTRUCTION DOCUMENTATION



PROJECT No	DRAWING No	REV
2005	A02-T2-208	4

DRAWN BY RR

PARTITION LEGEND

Green Star compliance

- PT - 1 R_w + C_{tr} ≥ 55
- PT - 2 R_w ≥ 55
- PT - 3 R_w + C_{tr} ≥ 40 (services)
- PT - 4 R_w+C_{tr} ≥ 25 (services)

General Areas

- PT - 5 R_w ≥ 50
- PT - 6 R_w ≥ 45

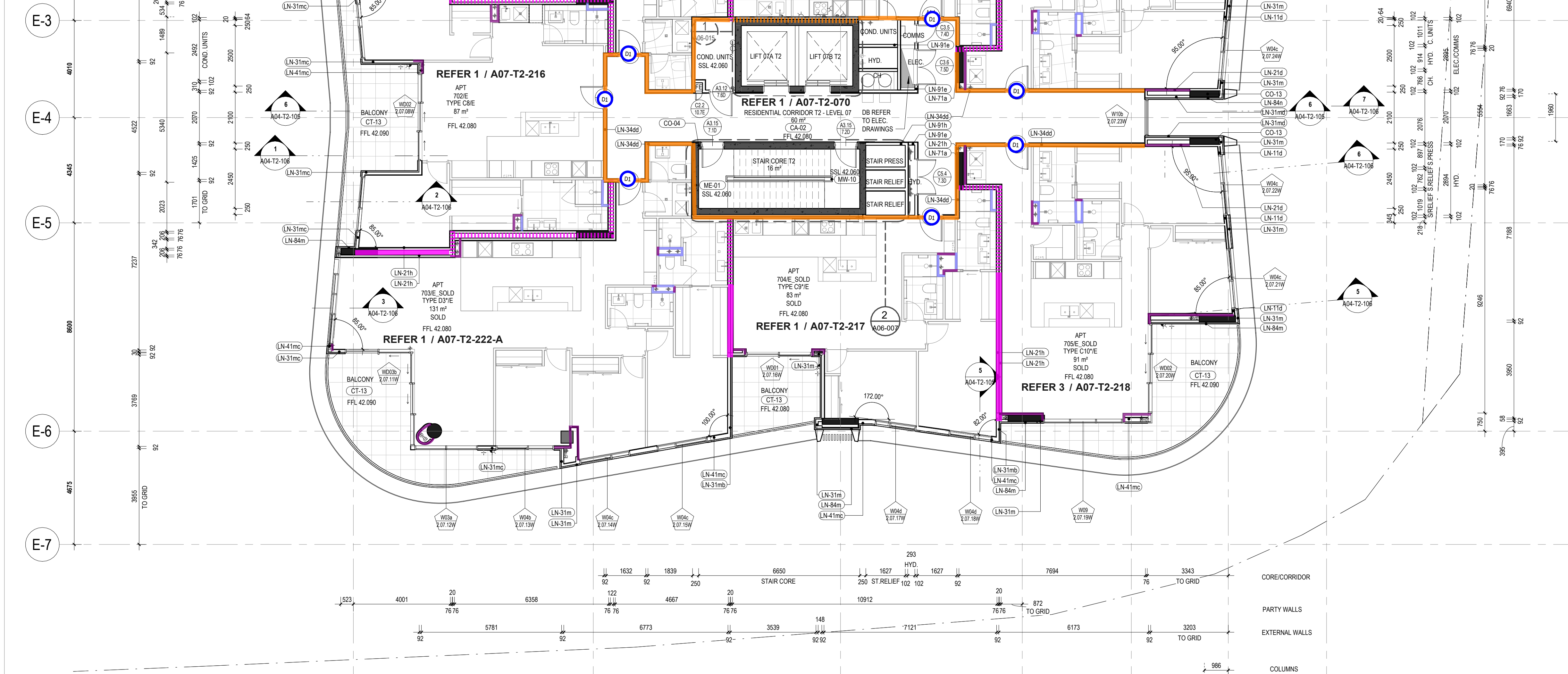
Denotes discontinuous construction

Glazing

- GT - 1 R_w ≥ 35
- GT - 2 R_w ≥ 37

Doors

- D1 D - 1 R_w ≥ 35 (door rating)
- D2 D - 2 R_w ≥ 40 (door rating)
- D3 D - 3 R_w ≥ 45 (door rating)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m b	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m c	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84h	15mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 125mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 125mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-21	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
PC-02	ALUMINUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

DATE	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

SCARBOROUGH

DRAWING NAME

GA LEVEL 08-10

CONSTRUCTION DOCUMENTATION

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-208	4

DRAWN BY RR

© Hillam Architects Pty Ltd

PARTITION LEGEND

Green Star compliance

- PT - 1 Rw + Ctr ≥ 55
- PT - 2 Rw ≥ 55
- PT - 3 Rw + Ctr ≥ 40 (services)
- PT - 4 Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5 Rw ≥ 50
- PT - 6 Rw ≥ 45

Denotes discontinuous construction

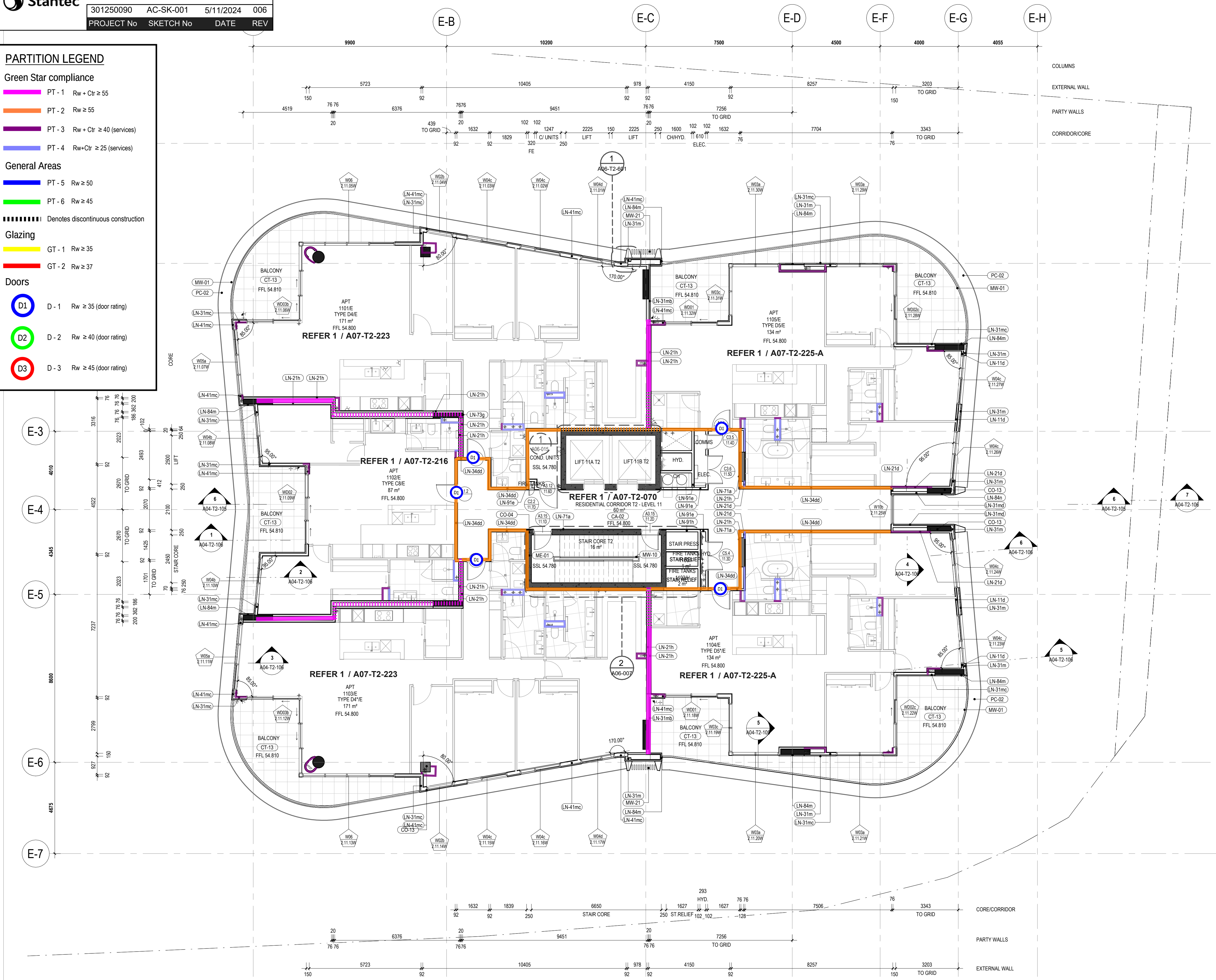
Glazing

- GT - 1 Rw ≥ 35
- GT - 2 Rw ≥ 37

Doors

- D1 D - 1 Rw ≥ 35 (door rating)
- D2 D - 2 Rw ≥ 40 (door rating)
- D3 D - 3 Rw ≥ 45 (door rating)

E-3
E-4
E-5
E-6
E-7



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³)
LN-31mb	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS); ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m³)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84n	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH
DRAWING NAME
GA LEVEL 11

CONSTRUCTION DOCUMENTATION

SCALE 1:100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-212	4

DRAWN BY RR

PARTITION LEGEND

Green Star compliance

- PT - 1 Rw + Ctr ≥ 55
- PT - 2 Rw ≥ 55
- PT - 3 Rw + Ctr ≥ 40 (services)
- PT - 4 Rw + Ctr ≥ 25 (services)

General Areas

- PT - 5 Rw ≥ 50
- PT - 6 Rw ≥ 45

Denotes discontinuous construction

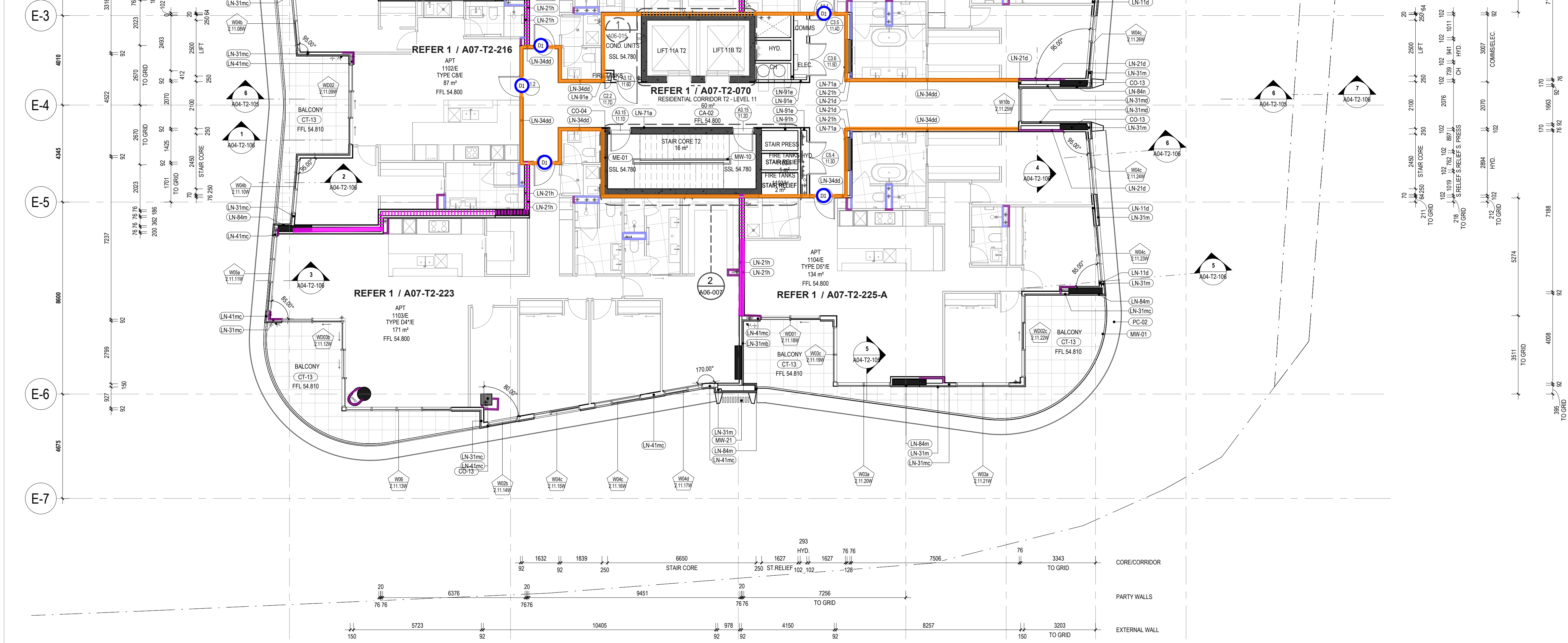
Glazing

- GT - 1 Rw ≥ 35
- GT - 2 Rw ≥ 37

Doors

- D1 D - 1 Rw ≥ 35 (door rating)
- D2 D - 2 Rw ≥ 40 (door rating)
- D3 D - 3 Rw ≥ 45 (door rating)

GA Plans level 12-14



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE	
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL	
CO-13	IN-SITU REINFORCED CONCRETE COLUMN	
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m ³)	
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (20kg/m ³)	
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31mb	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)	
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS. 25mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS. 25mm BRADFORD SOUNDSCREEN (14kg/m ³)	
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT	
LN-84n	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT	
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION	
MW-01	GLASS BALUSTRADE - 1050H	
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH	
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH	
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE	

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH (14kg/m³)

DRAWING NAME
GA LEVEL 12-14

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-212	4

DRAWN BY RR

City of Stirling
17 Jan 2025
RECEIVED

PARTITION LEGEND

Green Star compliance

- PT - 1 Rw + Ctr ≥ 55
- PT - 2 Rw ≥ 55
- PT - 3 Rw + Ctr ≥ 40 (services)
- PT - 4 Rw+Ctr ≥ 25 (services)

General Areas

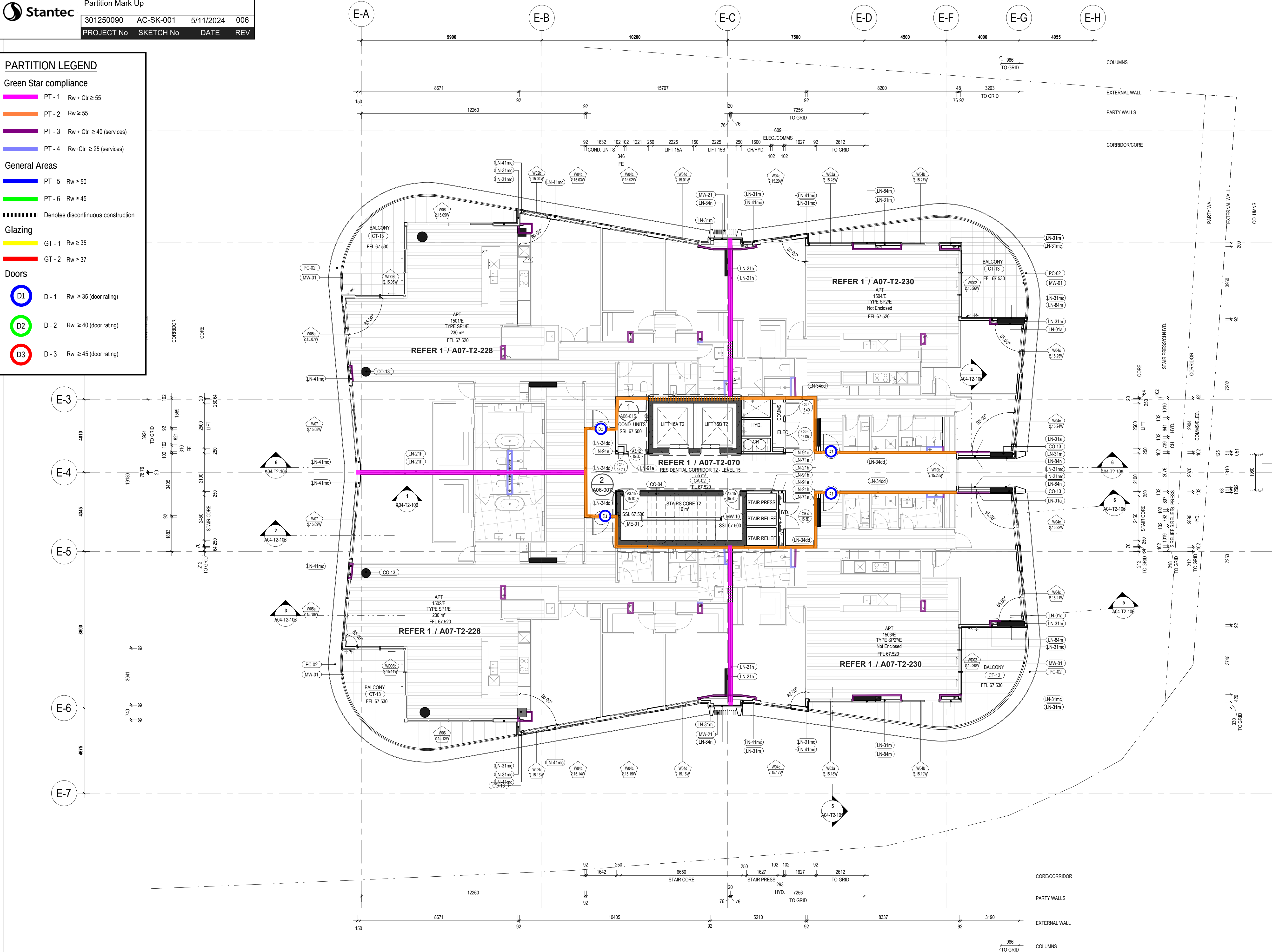
- PT - 5 Rw ≥ 50
- PT - 6 Rw ≥ 45
- Denotes discontinuous construction

Glazing

- GT - 1 Rw ≥ 35
- GT - 2 Rw ≥ 37

Doors

- D1 D - 1 Rw ≥ 35 (door rating)
- D2 D - 2 Rw ≥ 40 (door rating)
- D3 D - 3 Rw ≥ 45 (door rating)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO ALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm RIGID WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 20mm FURRING CHANNELS. 25mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-84n	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAPTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAPTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m3)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- DOCUMENTATION
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA LEVEL 15

CONSTRUCTION DOCUMENTATION		
SCALE 1 : 100 (A1)		
PROJECT No	DRAWING No	REV
2005	A02-T2-216	4
DRAWN BY		RR

City of Stirling
17 Jan 2025
RECEIVED

PARTITION LEGEND

Green Star compliance

- PT - 1 R_w + C_{tr} ≥ 55
- PT - 2 R_w ≥ 55
- PT - 3 R_w + C_{tr} ≥ 40 (services)
- PT - 4 R_w+C_{tr} ≥ 25 (services)

General Areas

- PT - 5 R_w ≥ 50
- PT - 6 R_w ≥ 45

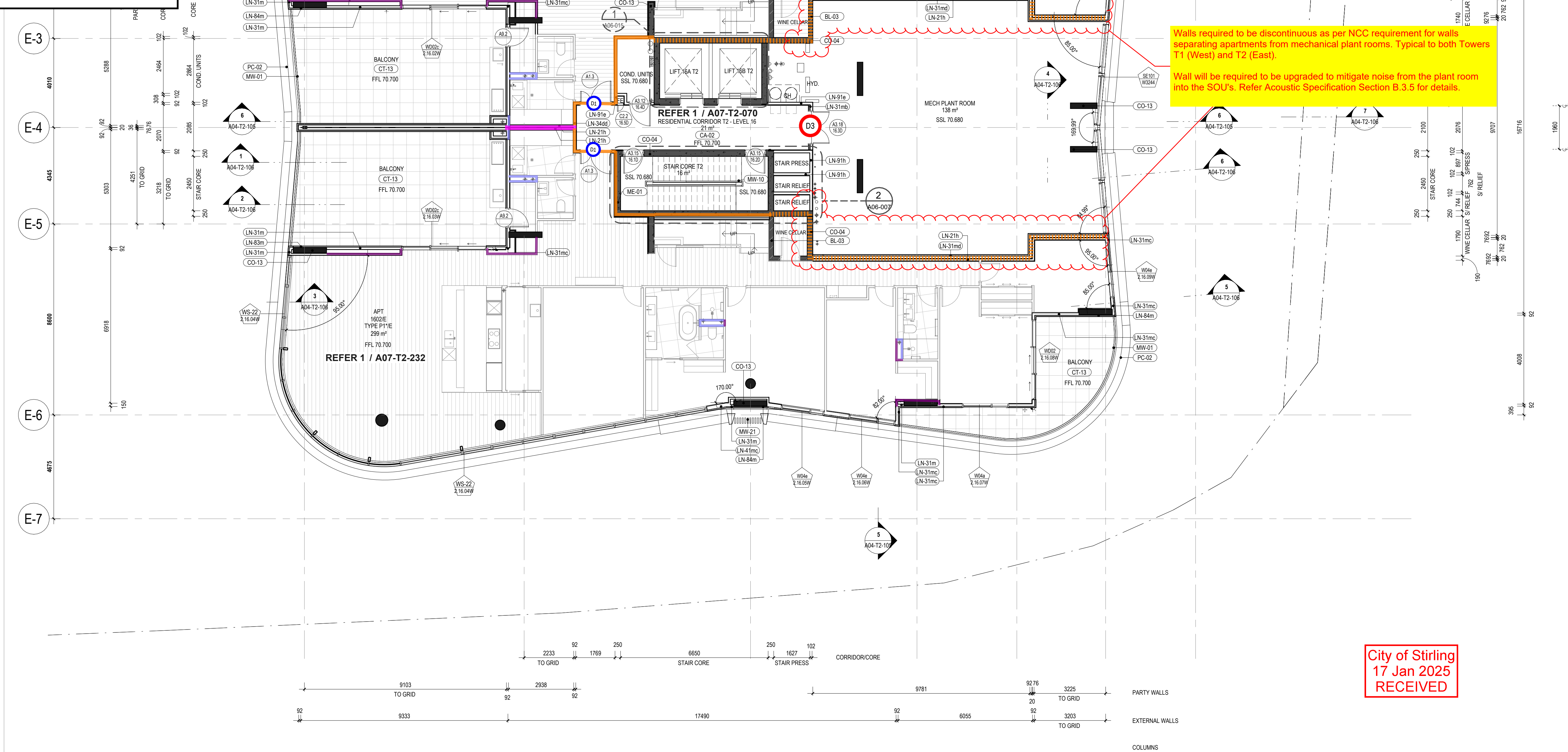
Denotes discontinuous construction

Glazing

- GT - 1 R_w ≥ 35
- GT - 2 R_w ≥ 37

Doors

- D1 D - 1 R_w ≥ 35 (door rating)
- D2 D - 2 R_w ≥ 40 (door rating)
- D3 D - 3 R_w ≥ 45 (door rating)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
BL-03	190 CONCRETE BLOCK WALL	
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE	
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL	
CO-13	IN-SITU REINFORCED CONCRETE COLUMN	
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
LN-21a	1x15mm PLASTERBOARD (OR 1x15mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 150mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³)	
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³)	
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³)	
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³)	
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³)	
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDCSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)	
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD	
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD	
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)	
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION	
MW-01	GLASS BALUSTRADE - 1050H	
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH	
MW-21	ALUMINIUM BATTENS 850/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH	
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE	
SE-06	RHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER	

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO/M/YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hllam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH
DRAWING NAME
GA LEVEL 16

CONSTRUCTION DOCUMENTATION		
SCALE 1 : 100 (A1)		
PROJECT No	DRAWING No	REV
2005	A02-T2-217	4
DRAWN BY		RR

PARTITION LEGEND

Green Star compliance

- PT - 1

Rw + Ctr ≥ 55
- PT - 2

Rw ≥ 55
- PT - 3

Rw + Ctr ≥ 40 (services)
- PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

- PT - 5

Rw ≥ 50
- PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

- GT - 1

Rw ≥ 35
- GT - 2

Rw ≥ 37

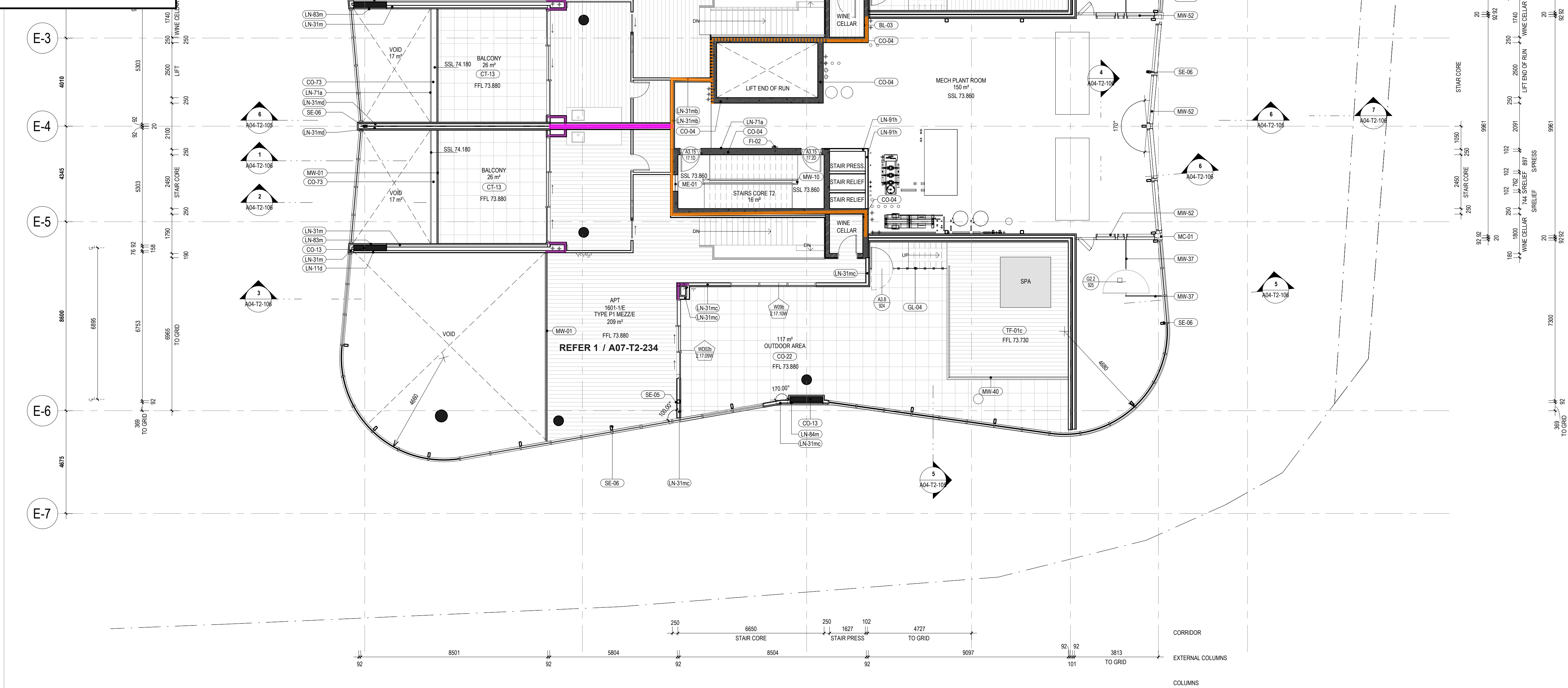
Doors

- D - 1

Rw ≥ 35 (door rating)
- D - 2

Rw ≥ 40 (door rating)
- D - 3

Rw ≥ 45 (door rating)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-22	150mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH
CO-73	750mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FL-02	FIRE EXTINGUISHER REFER TO FIRE ENGINE SPECIFICATIONS
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGUARD (32kg/m3)
LN-31m	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 82mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mb	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31mc	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGUARD (14kg/m3)
LN-83m	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGUARD (11kg/m3)
MC-01	MAXLINE COLORBOND METAL SHEET WALL CLADDING BY REVOLUTION ROOFING ON 35mm FURRING CHANNELS ON 92mm STEEL STUD FRAMING, TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE, 90mm BRADFORD ACOUSTIGUARD (20kg/m3)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 105PH
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-37	GALVANISED STEEL MESH SECURITY FENCING FIXED TO 40x40 EQUAL ANGLE
MW-40	ALUMINIUM PALASADE FENCE - WALL MOUNTED 700H POWDERCOAT FINISH
MW-52	ACOUSTIC LOUVER - TYPE 3 (300mm)
SE-05	SHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER
SE-06	RHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER
TF-01c	TIMBER FLOORBOARDS ON ACOUSTIC UNDERLAY, STRAIGHT PATTERN, DARK. REFER TO TIMBER SELECTION TABLE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MMYY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH
DRAWING NAME
GA LEVEL 17

CONSTRUCTION DOCUMENTATION		
SCALE	1 : 100 (A1)	
PROJECT No	DRAWING No	REV
2005	A02-T2-218	4
DRAWN BY		RR

City of Stirling
17 Jan 2025
RECEIVED

PARTITION LEGEND

Green Star compliance

PT - 1

Rw + Ctr ≥ 55

PT - 2

Rw ≥ 55

PT - 3

Rw + Ctr ≥ 40 (services)

PT - 4

Rw+Ctr ≥ 25 (services)

General Areas

PT - 5

Rw ≥ 50

PT - 6

Rw ≥ 45

Denotes discontinuous construction

Glazing

GT - 1

Rw ≥ 35

GT - 2

Rw ≥ 37

Doors

D1

D - 1

Rw ≥ 35 (door rating)

D2

D - 2

Rw ≥ 40 (door rating)

D3

D - 3

Rw ≥ 45 (door rating)

The drawing illustrates the GA Roof Level with a grid system (E-A to E-H horizontally and E-3 to E-7 vertically). Key features include:

- Maintenance Exclusion Zones:** Indicated by hatched areas along the perimeter and around the roof tower.
- Roof Tower 02:** A central structure housing 151 PV panels.
- Access Points:** Labeled with callouts like CO-50, PC-02, and A04-T2-106, often accompanied by notes about concrete plinths and roof access drawings.
- Structural Details:** Includes cutters (150 x 300), individual diversion fall protection anchorages, and outdoor area levels below.
- Annotations:** Various notes provide specific instructions, such as "INSTALLATION OF HORIZONTAL STATIC LINE ON CONCRETE PLINTH" and "ALLOW MINIMUM 3000 mm (W) FROM ROOF EDGE AS AN EXCLUSION ZONE".

GENERAL NOTES

1.

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2.

THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3.

FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4.

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5.

THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6.

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CO-50	100mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH.
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS. JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS OF ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m3). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm).
MC-01	MAXLINE COLORBOND METAL SHEET WALL CLADDING BY REVOLUTION ROOFING ON 35mm FURRING CHANNELS ON 92mm STEEL STUD FRAMING. TBA FIREFLY NON-COMBUSTIBLE BREATHABLE MEMBRANE. 90mm BRADFORD ACOUSTIGARD (20kg/m3).
MW-52	ACOUSTIC LOUVRE - TYPE 3 (300mm)
MW-54	LOUVRE BLADE
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO/MY/YY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM

ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA ROOF LEVEL

CONSTRUCTION DOCUMENTATION		
SCALE	1 : 100 (A1)	
PROJECT No	DRAWING No	REV
2005	A02-T2-219	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

City of Stirling

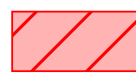
17 Jan 2025

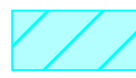
RECEIVED

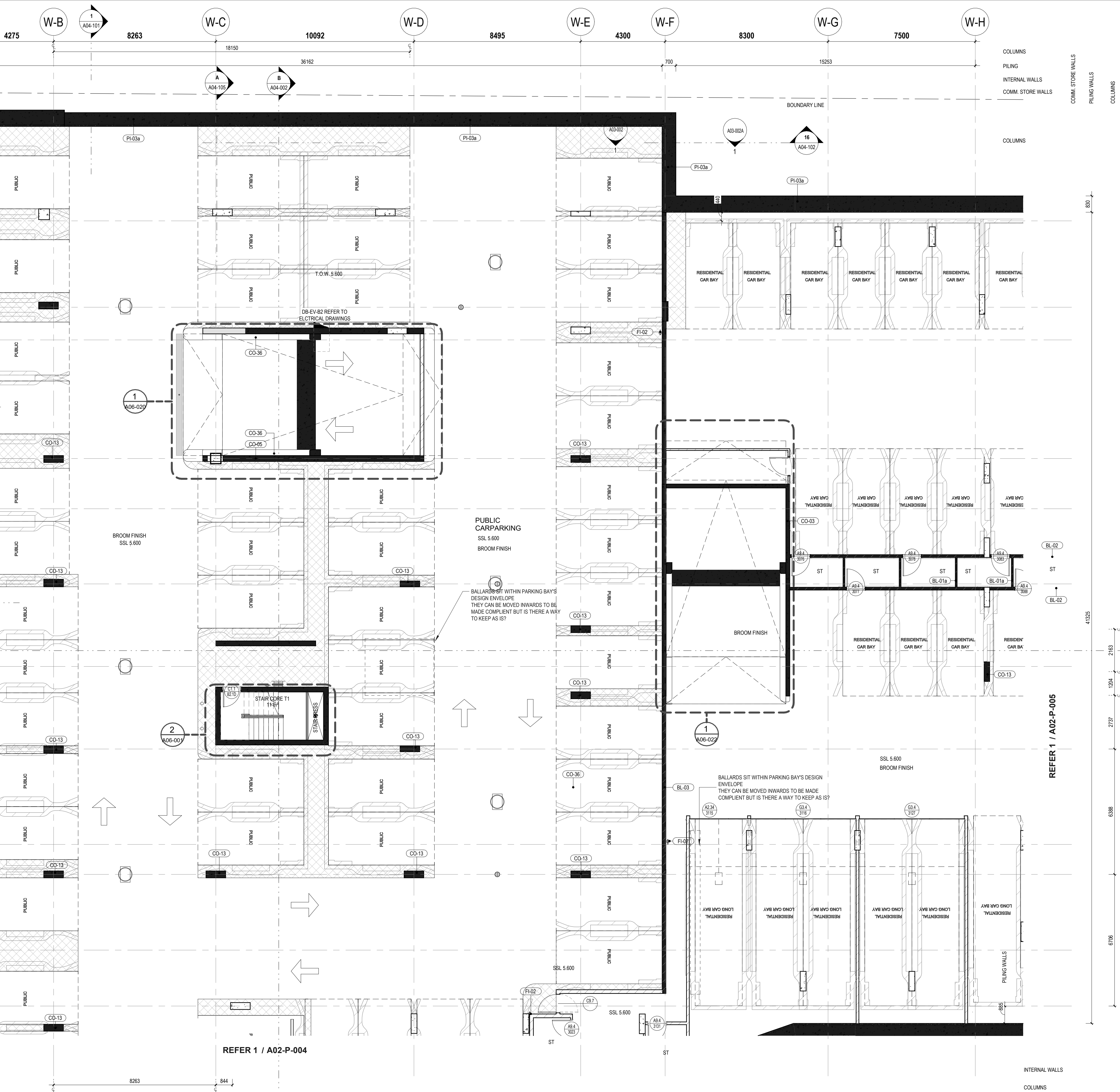
PART G. Floor Markups

City of Stirling
17 Jan 2025
RECEIVED

Legend / Notes

 $R_u + C_u$ (airborne) no less than 55 and an $L_{w,u} + C_u$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_u + C_u$ (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
29.05.23	1	Issue For Tender	JG
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

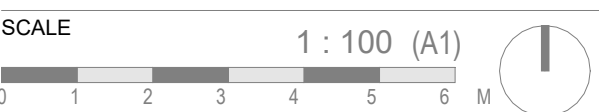
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 02 -
NORTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-003	5

DRAWN BY RR

SKETCH TITLE

BY: jalim

Stantec

Floor Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

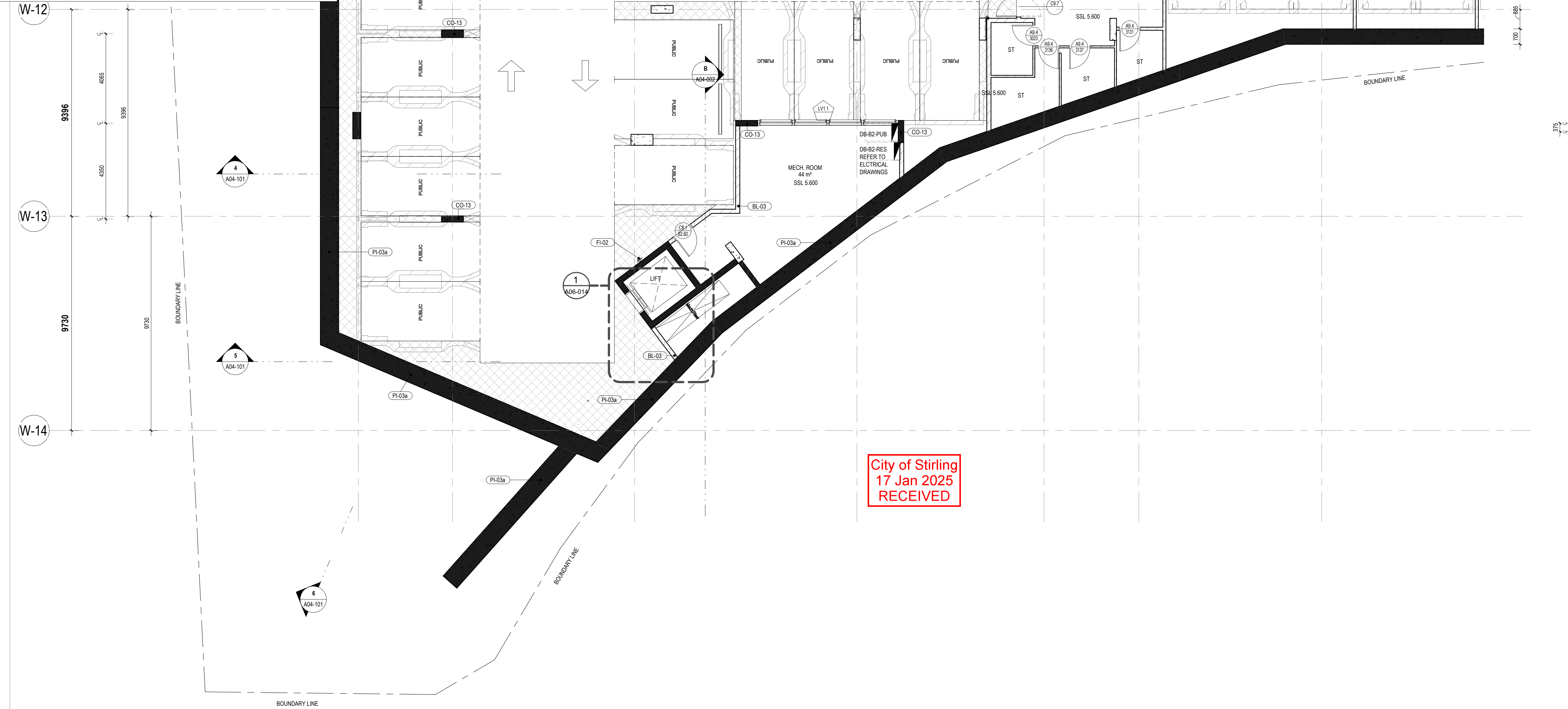
DATE

REV

Legend / Notes

$R_{w} + C_{w}$ (airborne) no less than 55 and an $L_{w,T,W} + C_{w}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

$R_{w} + C_{w}$ (airborne) no less than 50 between this level and the level below. (Recommended)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-Issue For Tender (Not for construction)	MK
29.05.23	1	Issue For Tender	JG
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

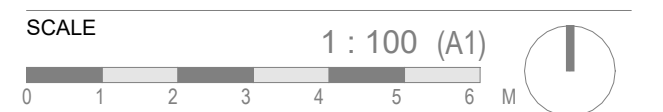
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 02 -
SOUTH WEST



PROJECT No	DRAWING No	REV
2005	A02-P-004	5
DRAWN BY		RR

GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 210mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-02b	140 CONCRETE BLOCK WALL REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PC-09	78mm SPEED PANEL
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEERS DOCUMENTATION

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT / 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

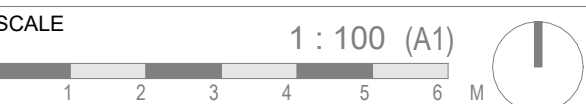
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 02 -
EAST



PROJECT No.	DRAWING No.	REV
2005	A02-P-005	4

DRAWN BY _____ RI _____

 $R_w + C_{tr}$ (airborne) no less than 50 between this level and the level below.
(Recommended)



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. ALL WORK MUST BE COMPLETED ON THE DATE OR ON OFF SITE TO COMPLY WITH THE TIME FRAME SPECIFIED ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, MECHANICAL, ELECTRICAL AND PLUMBING DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	180 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-16	135mm IN-SITU REINFORCED CONCRETE KERB.
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-03	FHR
PI-03a	600 B&B BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEERS DOCUMENTATION
PL-20	EXTERNAL HOSE COCK
SC-04n	300x300 NANO HYDROPHILIC CERAMIC REFER TO STONE SELECTION TABLE

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-Issue For Tender (Not for construction)	MK
22.08.23	1	Issue For Information	JG
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT / 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN BASEMENT 01 -
NORTH WEST

DRAWING NAME

GA PLAN BASEMENT 01 -
NORTH WEST

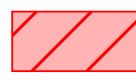
SCALE 1 : 100 (A1)

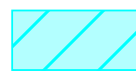


PROJECT No.	DRAWING No.	REV
2005	A02-P-006	5

DRAWN BY	RF
----------	----

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,0} + C_{s}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
BL-02b	140 CONCRETE BLOCK WALL, REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PC-09	78mm SPEED PANEL
PL-03a	600 dia BOUNDARY PILING, SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
PL-20	EXTERNAL HOSE COCK

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

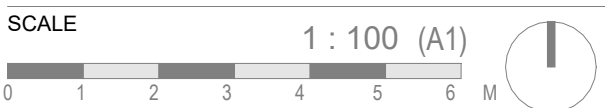
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

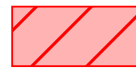
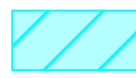
GA PLAN BASEMENT 01 -
EAST

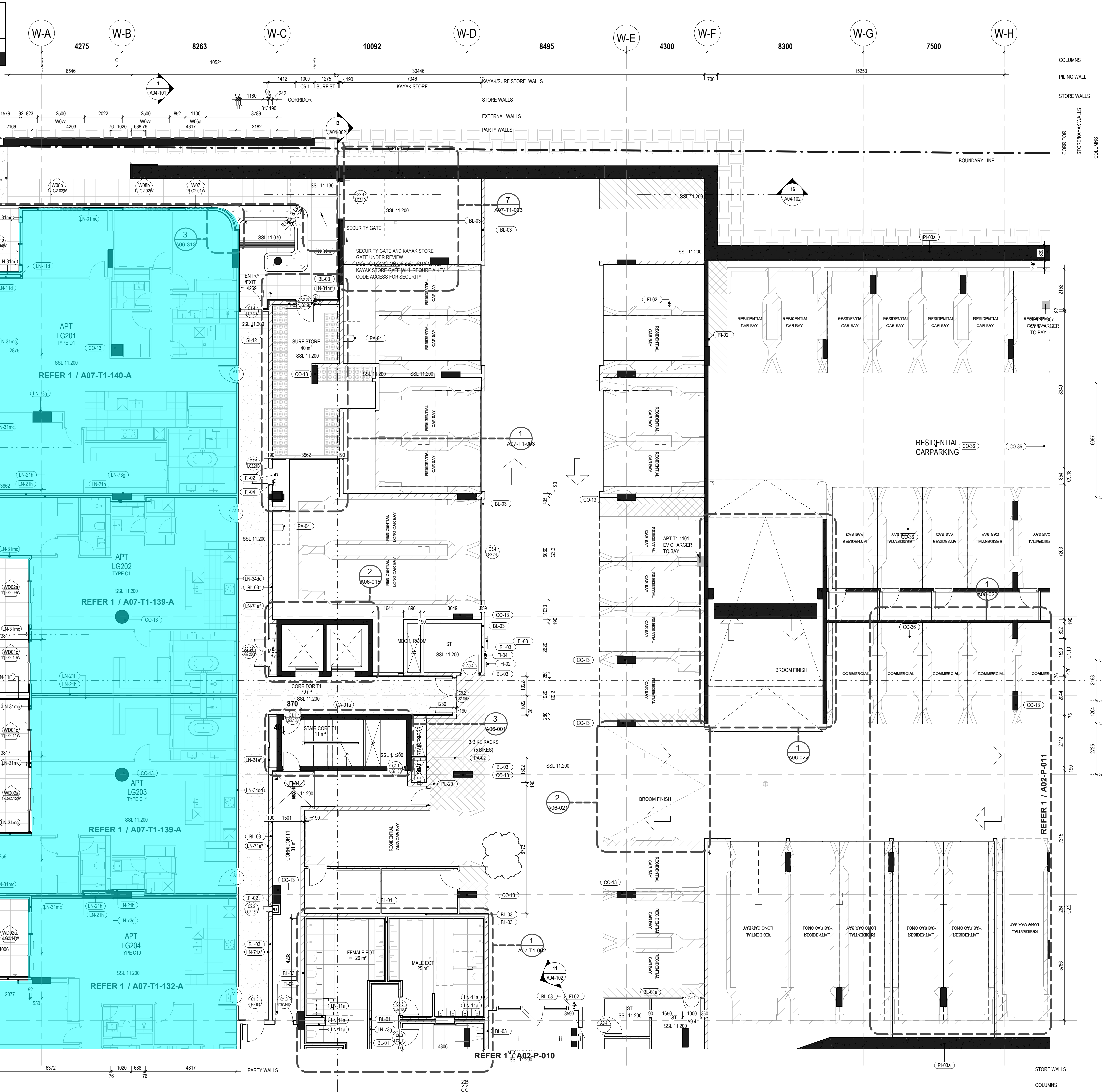


PROJECT No	DRAWING No	REV
2005	A02-P-008	4

DRAWN BY RR

Legend / Notes

-  $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,TOT} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
-  $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE			
CODE	DESCRIPTION		
BL-01	90 CONCRETE BLOCK WALL		
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP		
BL-03	190 CONCRETE BLOCK WALL		
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE		
CO-13	IN-SITU REINFORCED CONCRETE COLUMN		
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB		
CT-13	800x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE		
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS		
FI-03	FIRE HYDRANT		
FI-04	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)		
LN-11a	1x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)		
LN-11d	1x13mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD		
LN-21a*	1x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD		
LN-21b	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)		
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)		
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)		
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)		
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)		
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)		
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS		
LN-71b	1x9mm FIBRE CEMENT ON 28mm FURRING CHANNELS		
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m ³)		
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM, TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE		
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE		
PA-04	BIKE RACK - TYPE 4 - WALL MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE		
PI-03a	600 BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION		
PL-20	EXTERNAL HOSE COCK		
SI-12	ENTRANCE MAT		

City of Stirling
17 Jan 2025
RECEIVED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
GA PLAN LOWER GROUND FLOOR 02 - NORTH WEST

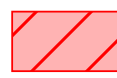
SCALE 1 : 100 (A1)

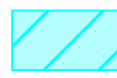
PROJECT No 2005 DRAWING No A02-P-009 REV 5

DRAWN BY RR

© Hillam Architects Pty Ltd

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,TM} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)

W-12

W-13

W-14

W-A

W-B

W-C

W-D

W-E

W-F

W-G

4275

8263

10092

8495

4300

8300

APT LG204
TYPE C10

CORRIDOR

REFER 1 / A02-P-009

CORRIDOR

STORE WALLS

PILING WALLS

COLUMNS

180

90

1720

6652

375

375

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01	90 CONCRETE BLOCK WALL
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 54mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	149mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m3)
PA-02	BIKE RACK - TYPE 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PI-03a	R60 dB BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-12	ENTRANCE MAT
SI-24	LOCKERS. REFER TO INTERIOR AMENITIES ACCESSORIES SCHEDULE

04.10.24	6	Issue for Coordination	SG
30.09.24	5	Issue for Coordination	MK
13.05.24	4	Issue for Coordination Only	HN
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-Issue For Tender (Not for construction)	MK
13.11.23	1	Issue For Information	SG

DD MM YY REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 02 - SOUTH WEST

SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-P-010	6

DRAWN BY RR

© Hillam Architects Pty Ltd

City of Stirling
17 Jan 2025
RECEIVED

2 GA PLAN LOWER GROUND FLOOR 02 - LANDSCAPE

1:100

REFER 2 / A02-P-010

LANDSCAPE SCOPE
REFER LANDSCAPE
ARCHITECTS DWGS

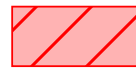
LANDSCAPE SCOPE
REFER LANDSCAPE
ARCHITECTS DWGS

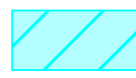


Floor Mark Up

301250090 AC-SK-001 5/11/2024 005
PROJECT No SKETCH No DATE REV

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
FI-04	FIRE HYDRANT
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 02 - EAST

SCALE 1 : 100 (A1)
0 1 2 3 4 5 6 M

PROJECT No 2005
DRAWING No A02-P-011
REV 4

DRAWN BY RR

© Hillam Architects Pty Ltd

Legend / Notes

-  $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C_{i}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
-  $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-36	135mm IN-SITU REINFORCED CONCRETE KERB
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FIRE
FI-04	FIRE HYDRANT
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m³)
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 75mm STEEL STUD
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 90mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m³)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-71f	1x9mm FIBRE CEMENT ON 28mm FURRING CHANNELS
LN-71g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m³)
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM; TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE
PC-11	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-29	BIN LIFT. REFER TO FINISHES SCHEDULE FOR DETAILS.

City of Stirling
17 Jan 2025
RECEIVED

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

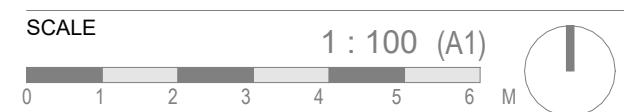
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

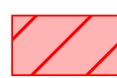
GA PLAN LOWER GROUND
FLOOR 01 - NORTH WEST

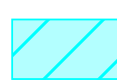


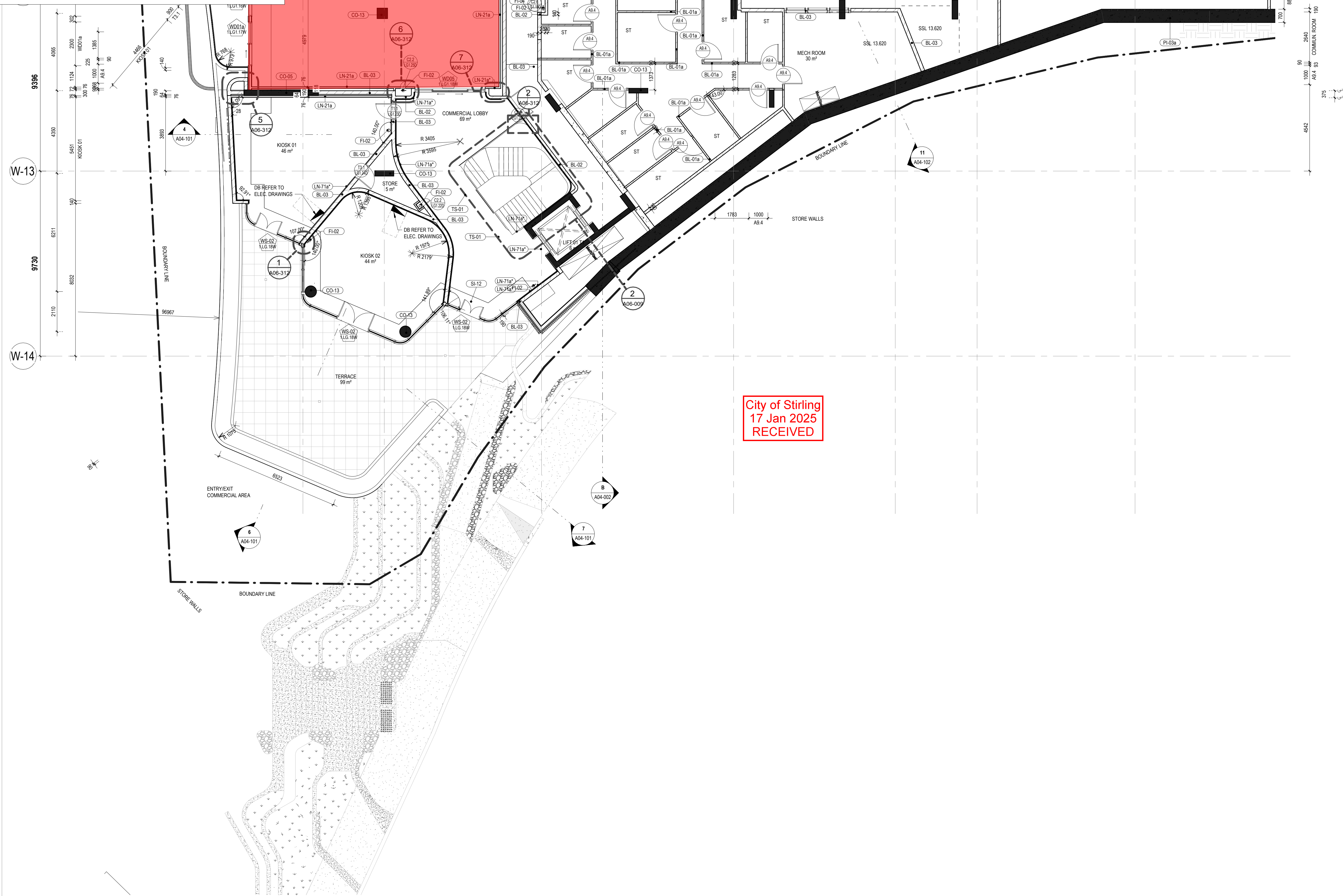
PROJECT No	DRAWING No	REV
2005	A02-P-012	4

DRAWN BY RR

Legend / Notes

 R_u + C_u (airborne) no less than 55 and an L_u+C_u(impact) not more than 55 between this level and the level below. (Green Star requirement)

 R_u + C_u (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m²)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION
SI-12	ENTRANCE MAT
TS-01	BLACK URETHANE WARNING TACTILE INDICATORS

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.auHILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

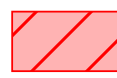
GA PLAN LOWER GROUND
FLOOR 01 - SOUTH WEST

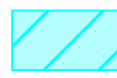
SCALE 1 : 100 (A1)

PROJECT No 2005
DRAWING No A02-P-013
REV 4

DRAWN BY RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 210mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02	140 CONCRETE BLOCK WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PI-03a	800 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LOWER GROUND
FLOOR 01 - EAST

SCALE



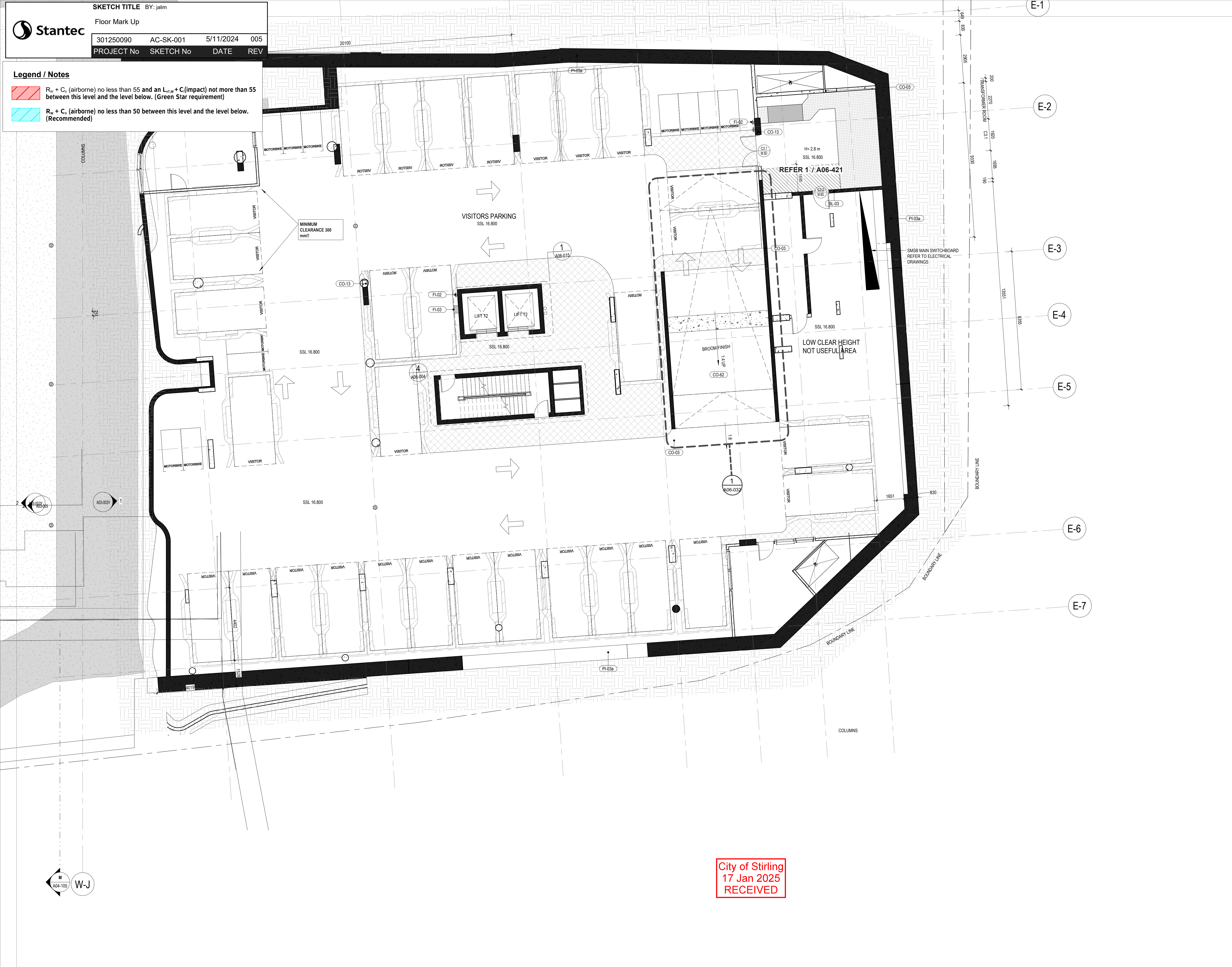
PROJECT No	DRAWING No	REV
2005	A02-P-014	4

DRAWN BY RR

Legend / Notes

$R_{w} + C_{w}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

$R_{w} + C_{w}$ (airborne) no less than 50 between this level and the level below. (Recommended)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	150 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-62	230mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS.
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-03	FHR
PI-03a	600 dia BOUNDARY PILING. SHOTCRETE FINISH. REFER STRUCTURAL ENGINEER'S DOCUMENTATION

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

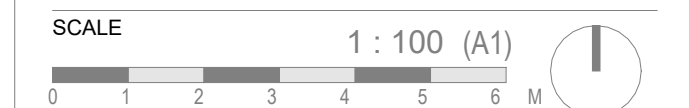
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

MEZZANINE LEVEL



PROJECT No	DRAWING No	REV
2005	A02-P-015	4

DRAWN BY Author

© Hillam Architects Pty Ltd

SKETCH TITLE

Floor Mark Up

BY: jalim

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

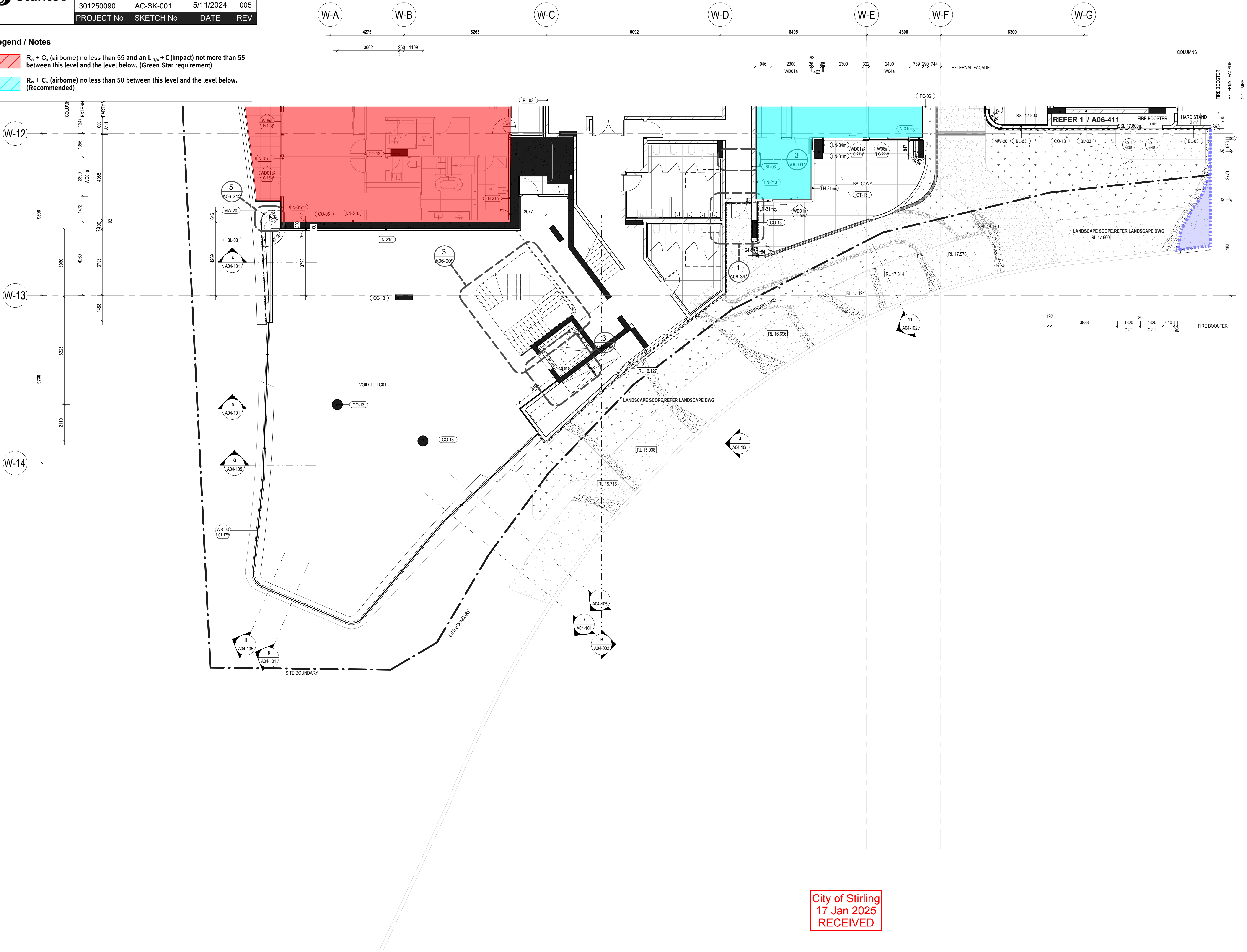
DATE

REV

Legend / Notes

$R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

$R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
MW-20	ALUMINUM BATTENS 60x50 REFER TO ARCADE DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-06	250mm REINFORCED PRECAST CONCRETE WALL

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

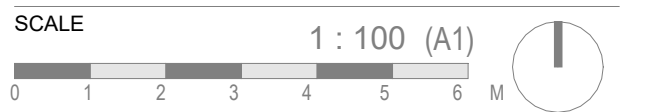
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN GROUND FLOOR -
SOUTH WEST

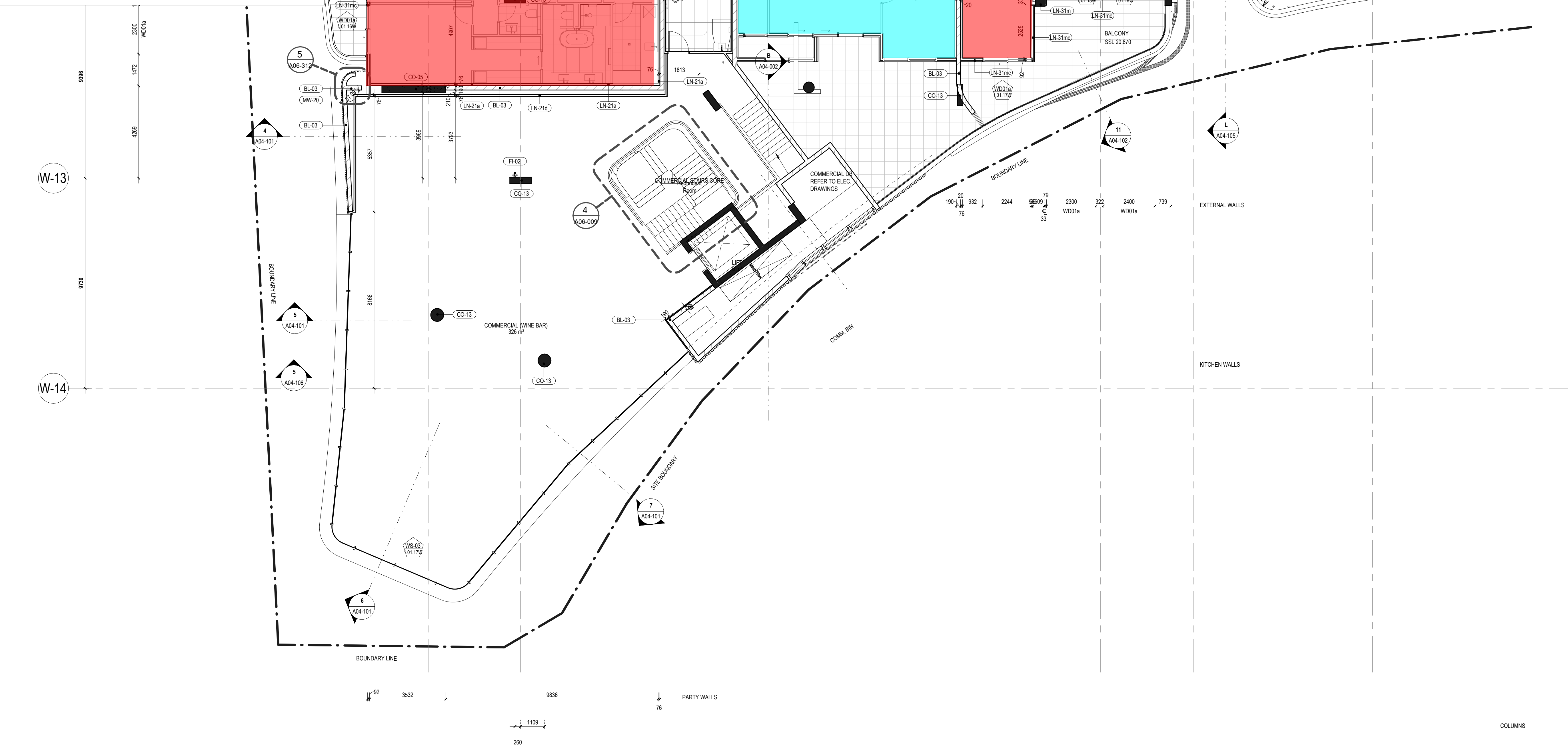


PROJECT No	DRAWING No	REV
2005	A02-T1-102	4
DRAWN BY		RR

Legend / Notes

$R_{w} + C_{w}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

$R_{w} + C_{w}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-05	300mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNSCREEN (40kg/m3)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

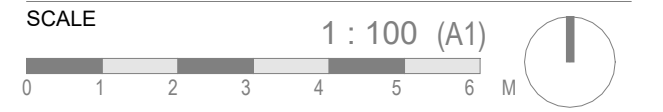
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

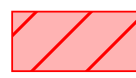
DRAWING NAME

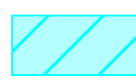
GA PLAN LEVEL 01 - SOUTH WEST

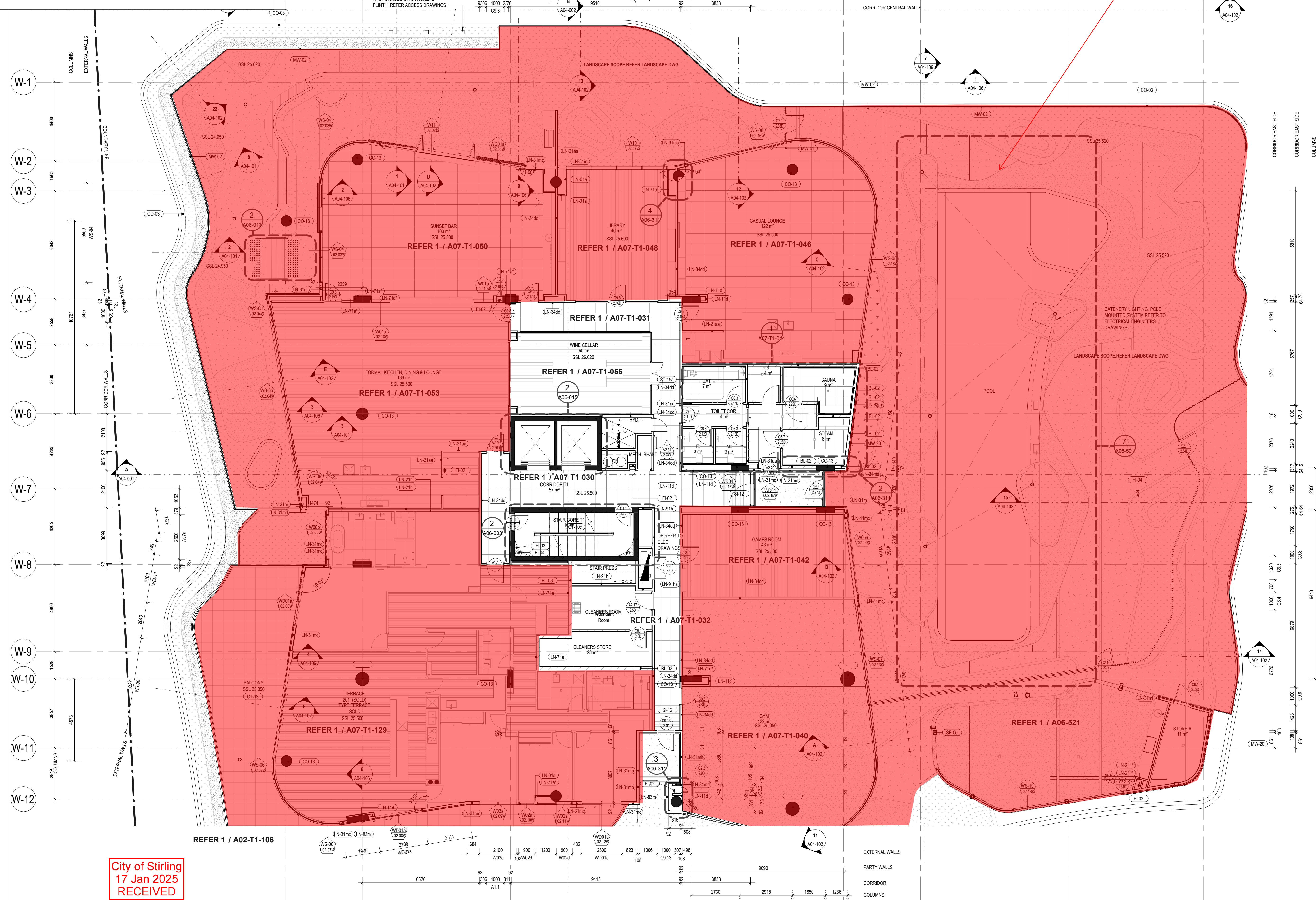


PROJECT No	DRAWING No	REV
2005	A02-T1-104	4
DRAWN BY		RR

Legend / Notes

 $R_{w} + C_{w}$ (airborne) no less than 55 and an $L_{w,eq} + C_{w}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{w}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
BL-03	190 CONCRETE BLOCK WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-10c	600x600 PORCELAIN FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WET APARTMENT AREA BELOW. SLIP RATING R9. REFER TILE SELECTION TABLE
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
CT-15a	1200x600 CERAMIC OR PORCELAIN WALL TILE ON PLASTERBOARD LINING ON METAL STUD. REFER TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON BOTH SIDES OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21i	1x13mm COMPRESSED FIBRE CEMENT ON BOTH SIDE OF 76mm STEEL STUD
LN-31aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m b	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m c	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m e	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41m c	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 20mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-83m	1x13mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x2mm USG BORAL FIRESTOP LINER; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-91h*	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x2mm USG BORAL FIRESTOP LINER; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
MW-02	ALUMINUM PALASADE FENCE - FLOOR MOUNTED 1200H
MW-41	ALUMINUM PALASADE FENCE - FLOOR MOUNTED 1200H
SE-05	SHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER
SM-05	SM-05 MAT 1/15 ROYDHOUSE ST SUBIACO WA P (08) 6380 1877 E info@hillam.com.au



CLIENT

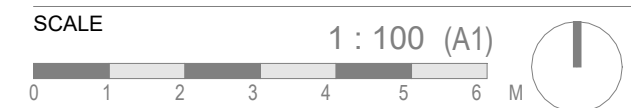
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 02 - NORTH WEST



PROJECT No 2005 DRAWING No A02-T1-105 REV 4

DRAWN BY RR

SKETCH TITLE

BY: jalim

Stantec

Floor Mark Up

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

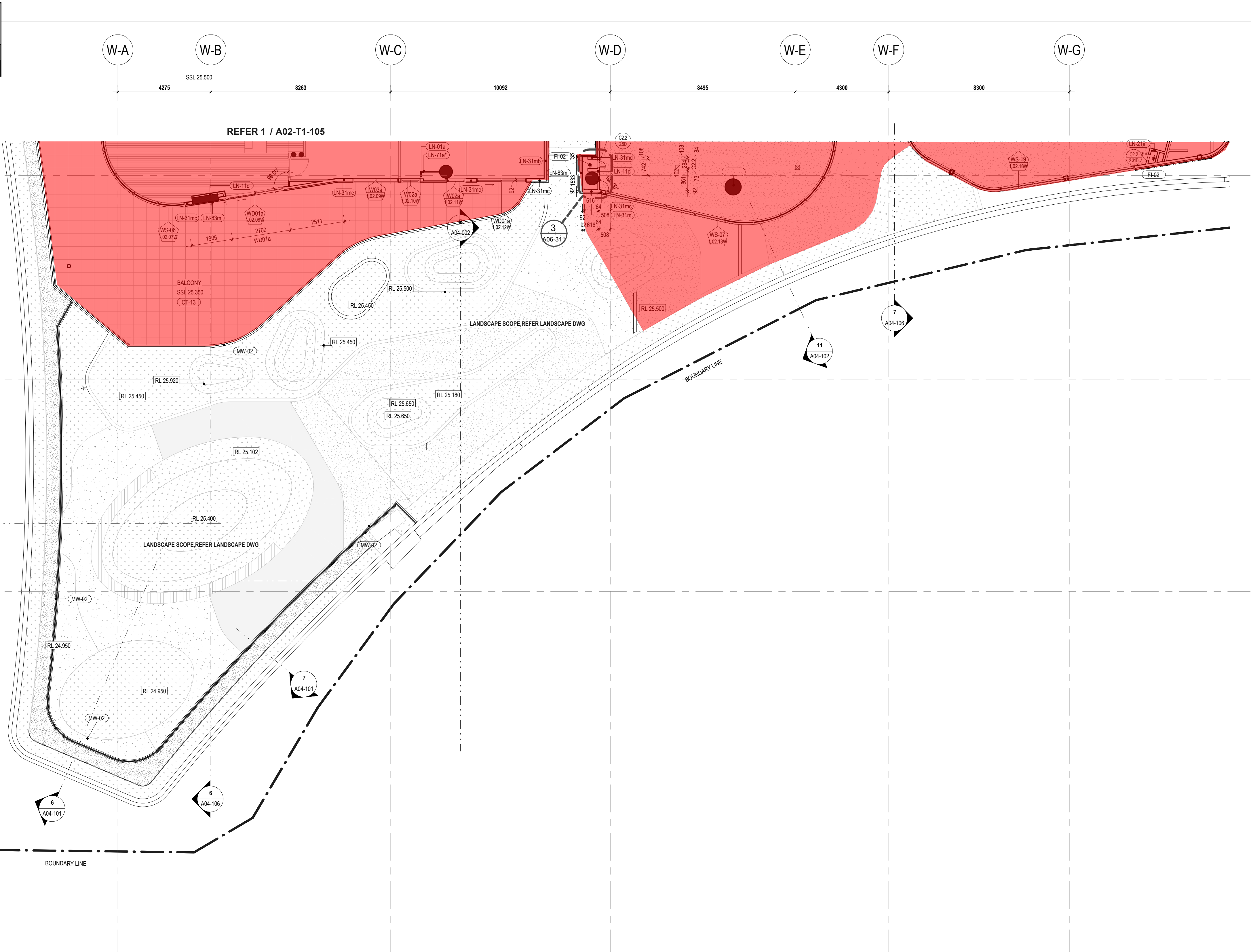
DATE

REV

Legend / Notes

R_u + C_u (airborne) no less than 55 and an L_u+C_u(impact) not more than 55 between this level and the level below. (Green Star requirement)

R_u + C_u (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a*	1x9mm COMPRESSED FIBRE CEMENT ON BOTH SIDE OF 76mm STEEL STUD
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLURRING CHANNELS
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
MW-02	GLASS BALUSTRADE - 1200H

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



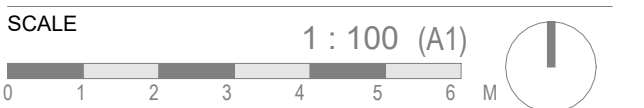
CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

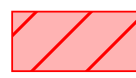
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

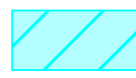
DRAWING NAME
GA PLAN LEVEL 02 - SOUTH
WEST



PROJECT No	DRAWING No	REV
2005	A02-T1-106	4
DRAWN BY		RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,ref} + C_{s}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 82mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm MR PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)
MW-01	GLASS BALUSTRADE - 1050H

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBICAO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 03

SCALE



PROJECT No	DRAWING No	REV
2005	A02-T1-107	4
DRAWN BY		RR

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. THE CONTRACTOR IS TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED SCALE DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE ARCHITECTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECTOR FOR CLARIFICATION
6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED



HILLAM
ARCHITECTS

EDGE VISIONARY LIVING

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 04

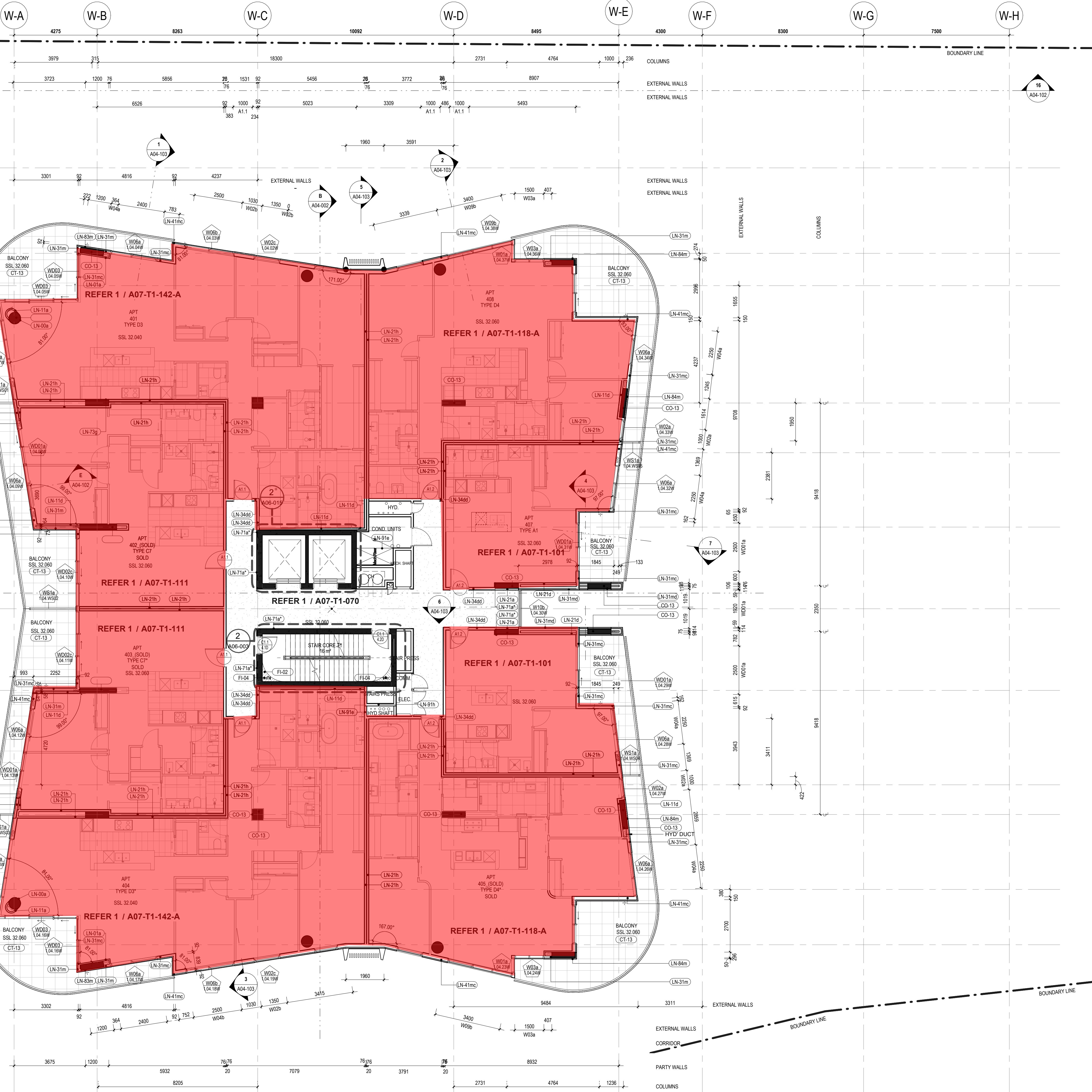
PROJECT No.	DRAWING No.	REV
2005	A02-T1-108	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

Legend / Notes

 $R_{w} + C_{w}$ (airborne) no less than 55 and an $L_{w,ref} + C_{w}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{w}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK AND PRECEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACoustIGARD (32kg/m3)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACoustIGARD (32kg/m3)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACoustIGARD (32kg/m3)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACoustIGARD (14kg/m3)
LN-21a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACoustIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACoustIGARD (14kg/m3)
LN-31m	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13mm)
LN-31md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACoustIGARD (14kg/m3)
LN-41mc	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm MR PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-83m	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACoustIGARD (11kg/m3)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACoustIGARD (11kg/m3)

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-Issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA



P (08) 6380 1877

E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

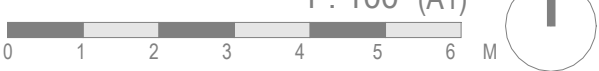
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 05-06

SCALE

1 : 100 (A1)



PROJECT No	DRAWING No	REV
2005	A02-T1-108	4
DRAWN BY		RR

Legend / Notes

- $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C_{i}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
- $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PRECEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD ACOUSTIGARD (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/OF ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLURRING CHANNELS
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFT LINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFT LINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT

1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

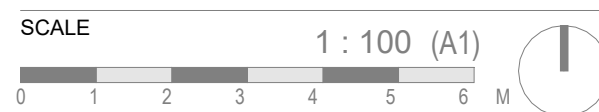
PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 07

SCALE



PROJECT No	DRAWING No	REV
2005	A02-T1-111	4
DRAWN BY		RR



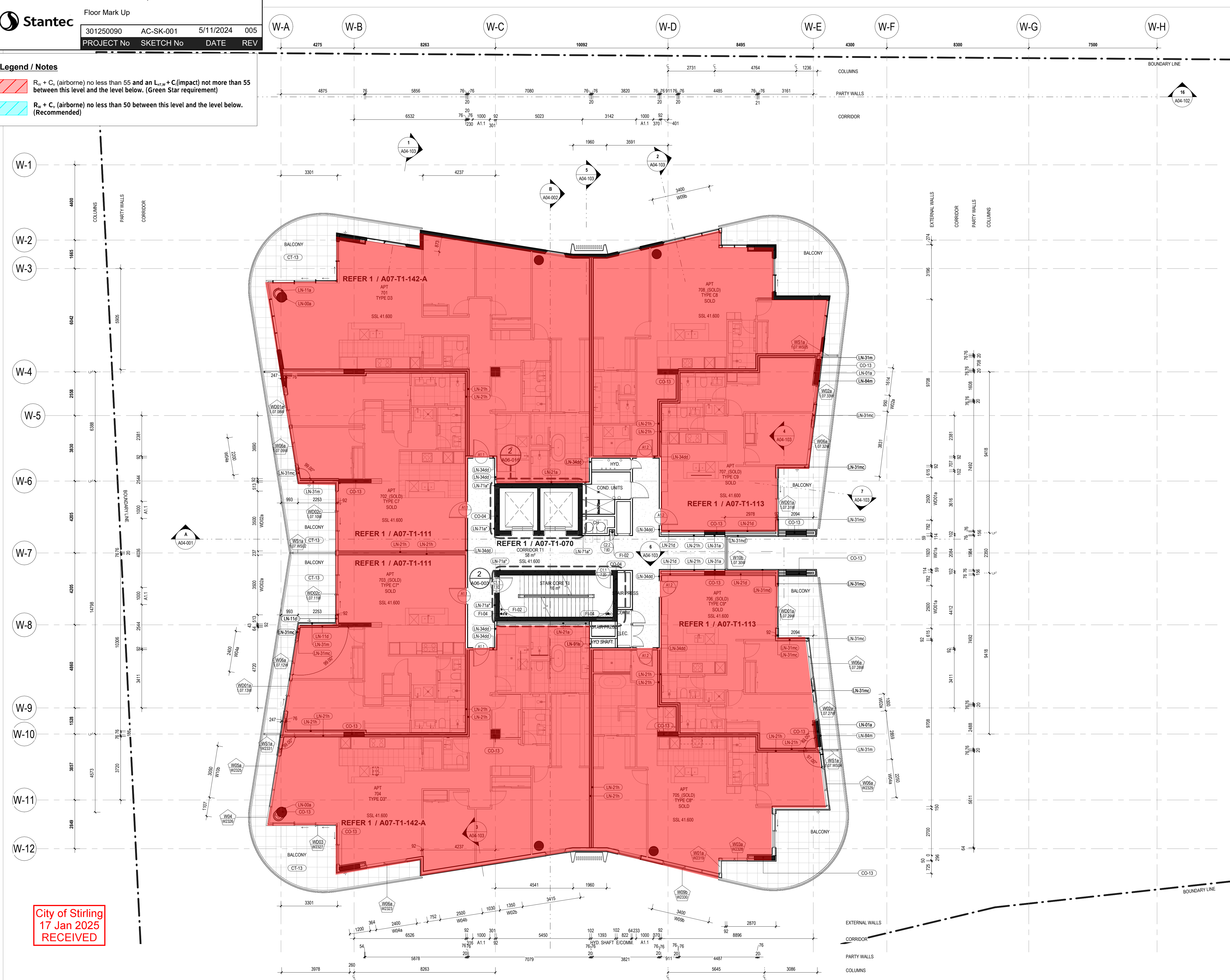
Floor Mark Up

301250090 AC-SK-001 5/11/2024 005
PROJECT No SKETCH No DATE REV

Legend / Notes

$R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C_{i}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

$R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PRECEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS/OF ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FLURRING CHANNELS
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFT LINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFT LINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

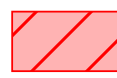
DRAWING NAME
GA PLAN LEVEL 08-10

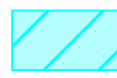
SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T1-111	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C_{i}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

EDGE VISIONARY LIVING

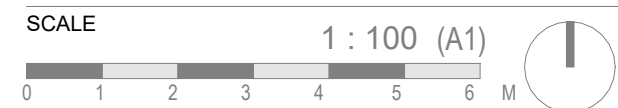
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

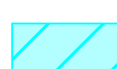
GA PLAN LEVEL 11



PROJECT No	DRAWING No	REV
2005	A02-T1-115	4

DRAWN BY RR

Legend / Notes

-  $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C_{i}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
-  $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-00a	1x13mm PLASTERBOARD LINING
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

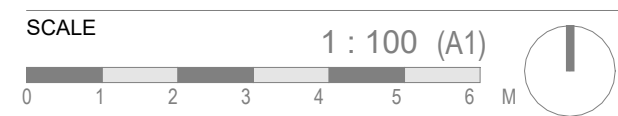
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

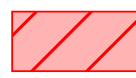
DRAWING NAME

GA PLAN LEVEL 12



PROJECT No	DRAWING No	REV
2005	A02-T1-115	4
DRAWN BY	RR	

Legend / Notes

 $R_w + C_w$ (airborne) no less than 55 and an $L_{w,eq} + C_w$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_w + C_w$ (airborne) no less than 50 between this level and the level below. (Recommended)

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-01a	1x15mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 84mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-31a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD ACOUSTIGARD (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a*	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS, 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-08	FULL HEIGHT MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION

DO	MM	YY	REV	DESCRIPTION	CHECKED
04.10.24	4			Issue for Coordination	SG
30.09.24	3			Issue for Coordination	MK
18.03.24	2			Revised Tender Issue	MK
22.02.24	1			Re-issue For Tender (Not for construction)	MK
13.03.23	0			Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



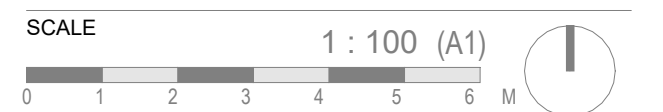
CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

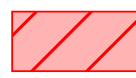
DRAWING NAME
GA PLAN LEVEL 13

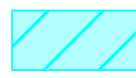


PROJECT No	DRAWING No	REV
2005	A02-T1-117	4
DRAWN BY		RR

City of Stirling
17 Jan 2025
RECEIVED

Legend / Notes

 $R_{w} + C_{w}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{w}$ (airborne) no less than 50 between this level and the level below. (Recommended)

W-1

W-2

W-3

W-4

W-5

W-6

W-7

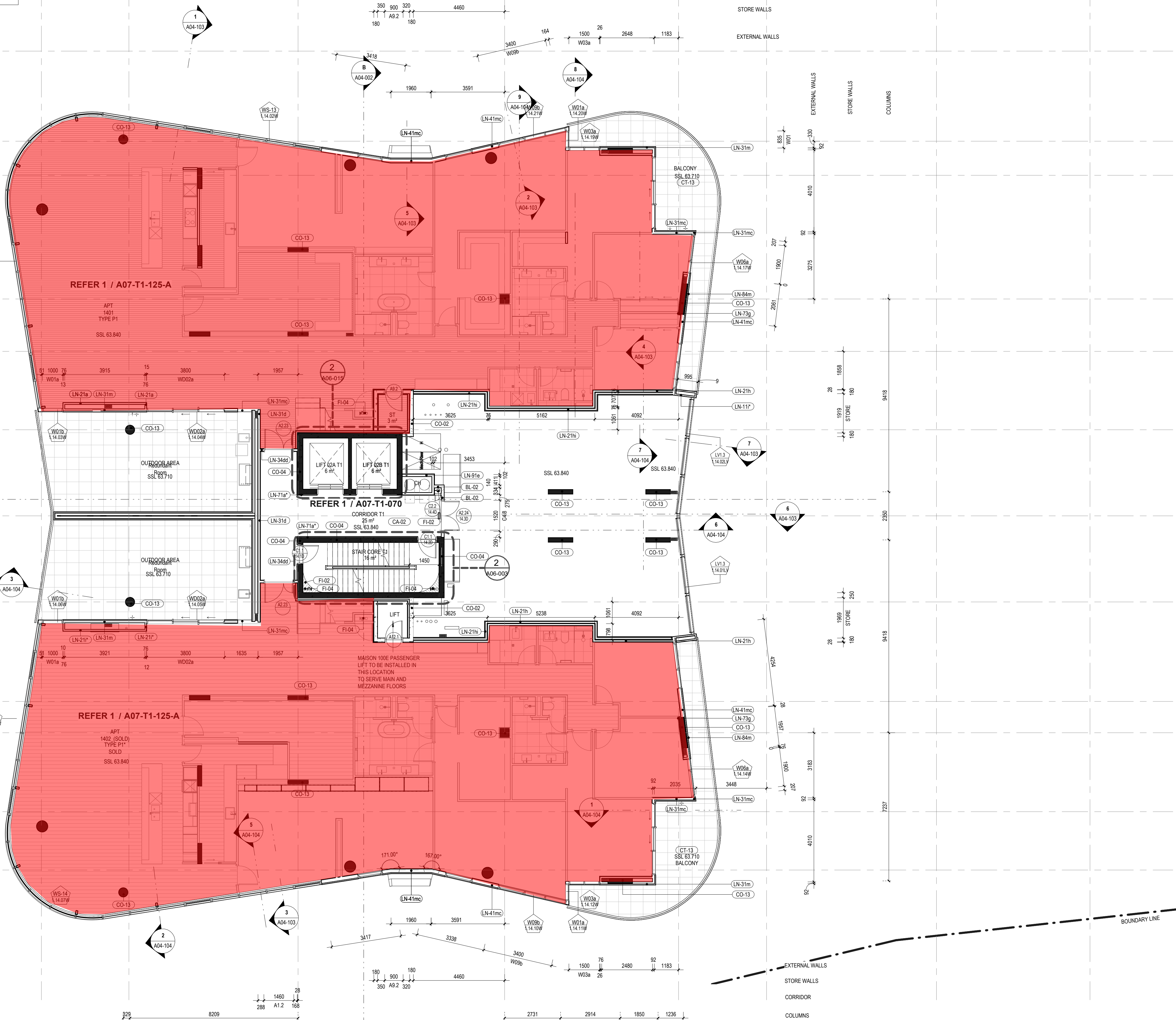
W-8

W-9

W-10

W-11

W-12



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-02	150mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21hi	2x9mm FIBRE CEMENT ON 2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-21i	1x9mm FIBRE CEMENT ON ONE SIDE OF 76mm STEEL STUD
LN-31d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m3)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m3); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm MR PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m3)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m3)

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO/MA/Y/Y	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 14

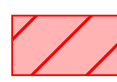
SCALE

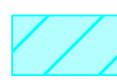
1 : 100 (A1)



PROJECT No	DRAWING No	REV
2005	A02-T1-118	4
DRAWN BY	RR	

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)

W-1

W-2

W-3

W-4

W-5

W-6

W-7

W-8

W-9

W-10

W-11

W-12

W-A

W-B

W-C

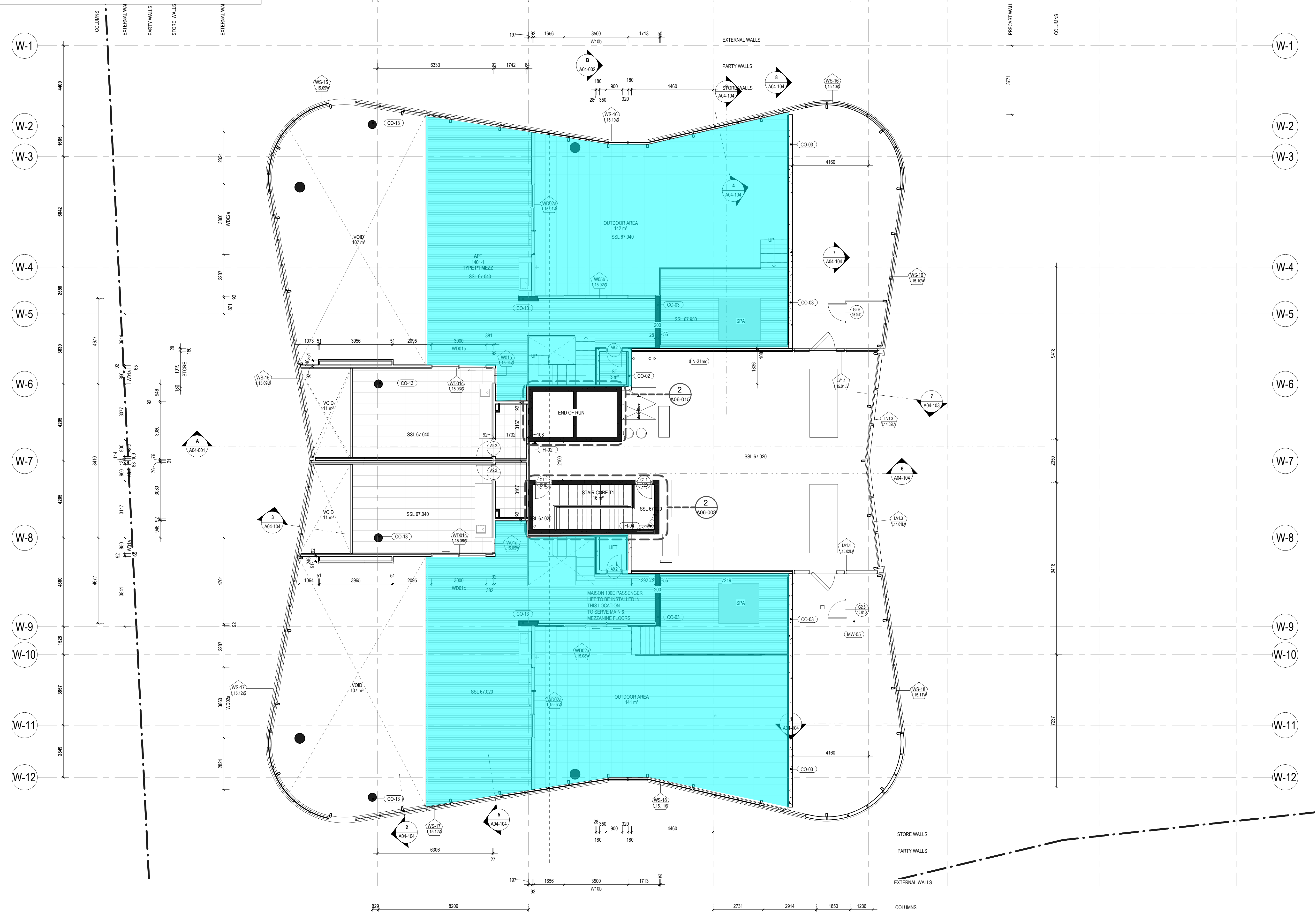
W-D

W-E

W-F

W-G

W-H



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CO-02	150mm IN-SITU REINFORCED CONCRETE WALL
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENGS SPECIFICATIONS
FI-04	FIRE HYDRANT
LN-31md	19mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS OF ON ONE SIDE OF 50mm STEEL STUD 90mm BRADFORD SOUNDSCREEN (40kg/m3), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
MW-05	ALUMINIUM BALUSTRADE - FLOOR MOUNTED WITH GALV. FINISH

City of Stirling
17 Jan 2025
RECEIVED

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA PLAN LEVEL 15

SCALE

1 : 100 (A1)



PROJECT No	DRAWING No	REV
2005	A02-T1-119	4

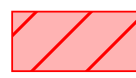
DRAWN BY RR

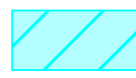


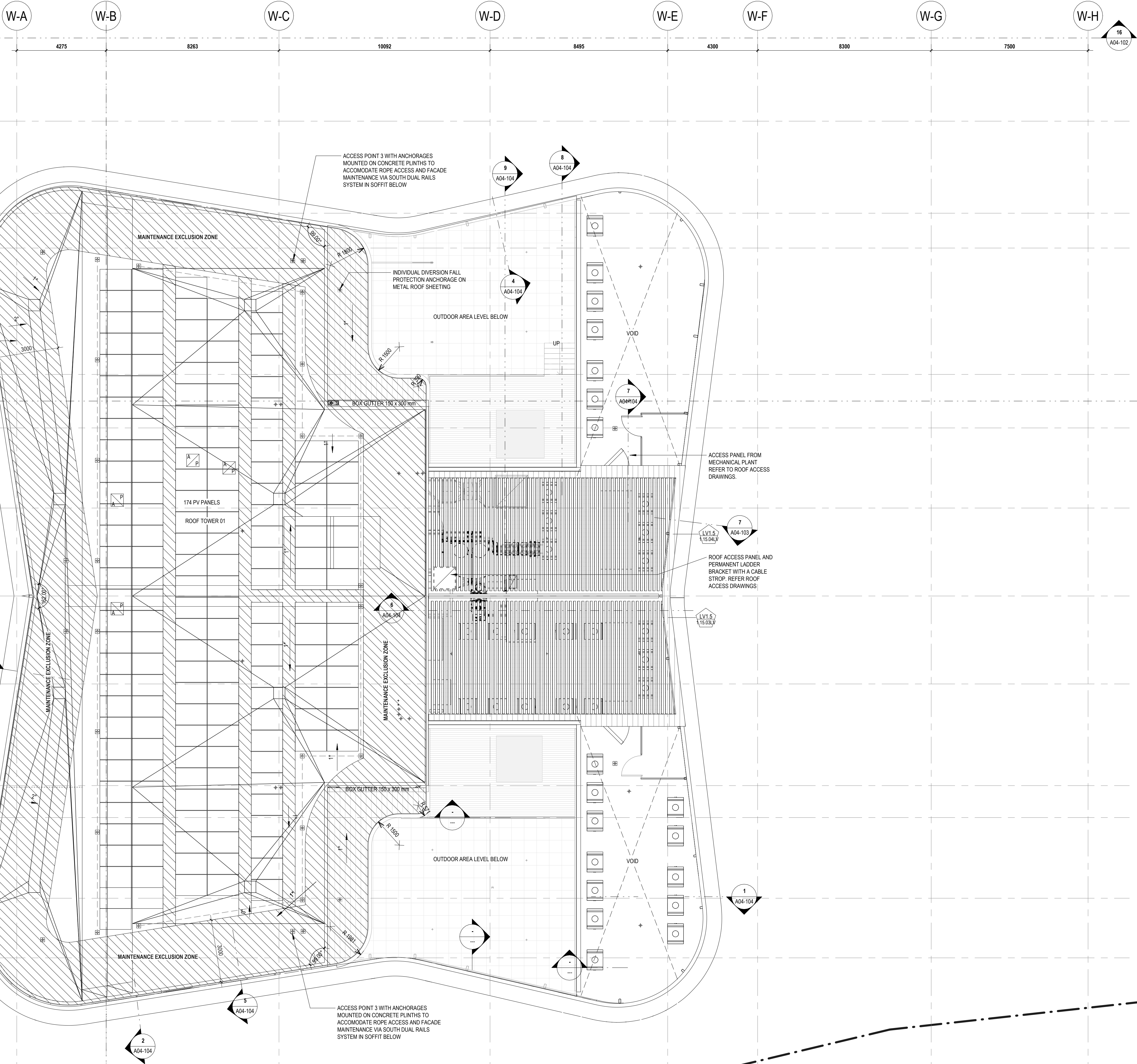
Floor Mark Up

301250090 AC-SK-001 5/11/2024 005
PROJECT No SKETCH No DATE REV

Legend / Notes

 $R_{w,} + C_{w,}$ (airborne) no less than 55 and an $L_{w,} + C_{w,}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w,} + C_{w,}$ (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
------	-------------

City of Stirling
17 Jan 2025
RECEIVED

DATE	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hllam.com.au



CLIENT

EDGE VISIONARY LIVING

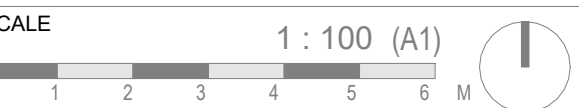
PROJECT NAME

THE DUNES-T1

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA ROOF PLAN



PROJECT No	DRAWING No	REV
2005	A02-T1-121	4

DRAWN BY RR

Treatments and floor construction advice to minimize noise from truck/vehicle movements provided in acoustic specification Section B.3.6.4.

 $R_w + C_v$ (airborne) no less than 55 and an $L_{nt,w} + C_i$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_w + C_v$ (airborne) no less than 50 between this level and the level below. (Recommended)

CODE	DESCRIPTION
LN-54H	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTIC FACETIME SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm GLEAT
LN-59H	2x16mm USG BURAL PRESTOR (OR) 2x16 USG BURAL WET AREA W/ 12mm GROUT TO WEAT AREA TO ONE SIDE OR 102mm CH STEEL STUD W/ 12x25mm USG BURAL SHATFLINER, 75mm BRADFOORD ACIOUSTGARD (11kg/m3)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WITH COLOR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-11	STEEL HANDRAIL - WALL MOUNTED WITH HDG FINISH
MW-20	ALUMINUM BATTENS 850/9 REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
MW-40	ALUMINUM PALASADE FENCE - WALL MOUNTED 730H POWDERCOAT FINISH
MW-42	CARPARK ENTRY GATES. CUSTOM FRAMED POWDERCOATED STEEL FABRICATE
MW-51	ACOUSTIC LOUVER - TYPE 2 (200mm)
MW-53	ACOUSTIC LOUVER - TYPE 3 (200mm)
MW-53	2-STAGE LOUVER
MW-58	METAL MESH GRILL
PA-02	BIKE RACK - 2 - FLOOR MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PA-04	BIKE RACK - 4 - WALL MOUNTED. REFER TO EXTERIOR FINISHES SCHEDULE
PA-05	BIKE MAINTENANCE STATION. REFER TO EXTERIOR FINISHES SCHEDULE
PA-07	BOLLARD - STEEL TUBE. SEE REFER TO EXTERIOR FINISHES SCHEDULE
PA-08	PRE-CAST CONCRETE WHEELSTOP. REFER TO EXTERIOR FINISHES SCHEDULE
PC-05	200mm REINFORCED PRECAST CONCRETE WALL
PC-09	18mm SPEED PANEL
PT-17	ENTRANCE LINK MARKING PANEL
SI-12	ENTRANCE MAT

THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS

THE CONTRACTOR SHALL CHECK DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

FIXED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS

ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS

THE CONTRACTOR SHALL ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK

ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION

THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

CODE	DESCRIPTION
BL-01a	90 CONCRETE BLOCK WALL TO 2100mm ABOVE FLOOR LEVEL WITH GALVANISED STEEL MESH ON TOP
BL-02a	40 CONCRETE BLOCK WALL
BL-02b	40 CONCRETE BLOCK WALL - REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
BL-03a	190 CONCRETE BLOCK WALL
BL-03b	190 CONCRETE BLOCK WALL
CO-01a	CARPET TILE - REFER TO CARPET SELECTION TABLE
CO-01b	250mm IN-SITU REINFORCED CONCRETE WALL
CO-02	250mm IN-SITU REINFORCED CONCRETE WALL
CO-10	IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH
CO-11	IN-SITU REINFORCED CONCRETE COLUMN
CO-21	450mm IN-SITU REINFORCED CONCRETE WALL
CO-26	240mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH TO FLOORS TO 2100mm ABOVE FLOOR LEVEL AND STORE ROOMS
CO-62	2300mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-10a	600x120 CERAMIC FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WHERE APPLICABLE
CT-10b	600x120 CERAMIC FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WHERE APPLICABLE
CT-10c	600x120 CERAMIC FLOOR TILE ON CONCRETE TO INTERNAL DRY AND WET AREAS. PROVIDE ACOUSTIC UNDERLAY TO WHERE APPLICABLE
CT-13	AREA BELOW, SLIP RATING RNR. REFER TILE SELECTION TABLE
CT-13b	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON AREA BELOW, SLIP RATING RNR. REFER TILE SELECTION TABLE
EL-22	REFER TO TILE SELECTION TABLE
FI-02	FIRE EXTINGUISHER REFER TO FIRE ENG'S SPECIFICATIONS
GL-03	BACALIT GLASS SCREENS TO EXTERIOR WALLS
FL-01	16mm FIBRE CEMENT ON ONE SIDE OF 51mm STEEL PLASTER
FL-02	16mm FIBRE CEMENT ON ONE SIDE OF 46mm STEEL PLASTER
FL-11a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL TIE, 35mm BRADFORD ACOUSTIGUARD (14kg/m ²)
FL-12b	1x13mm URETHANE BOREAL INSULATION (OR 2x16 URETHANE BOREAL AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL TIE, 35mm BRADFORD ACOUSTIGUARD (14kg/m ²)
FL-13a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 52mm STEEL TIE, 90mm BRADFORD SOUNDCREEN (40kg/m ²)
FL-13bm	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13mb	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13mc	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 16 mm URETHANE BOREAL INSULATION (OR 2x 90mm BRADFORD SOUNDCREEN (40kg/m ²))
FL-13md	16mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID ALU BARRIER BOARD 1

04.10.24	5	Issue for Coordination	SG
30.09.24	4	Issue for Coordination	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-Issue For Tender (Not for construction)	MK
22.05.23	1	Issue For Information	JG
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

EDGE VISIONARY LIVING

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

GA PLAN GROUND FLOOR

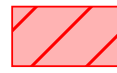
CONSTRUCTION DOCUMENTATION

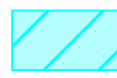
SCALE 1 : 100 (A1)

PROJECT No.	DRAWING No.	REV
2005	A02-T2-201	5

DRAWN BY	RE
----------	----

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,TW} + C_{s}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
LN-84n	1x3mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 12mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-03	GLASS BALUSTRADE SIDE MOUNTED TO WALL - 720H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS. VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE
PC-05	200mm REINFORCED PRECAST CONCRETE WALL

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02b	140 CONCRETE BLOCK WALL REDUCED CORE 120 MINUTE FIRE RESISTANT CONCRETE BLOCK
CA-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-51	200mm IN-SITU REINFORCED CONCRETE SLAB MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
EL-22	
GL-03	BALCONY GLASS SCREEN GENERALLY
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (10kg/m ³)
LN-11c	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21aa	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON BOTH SIDES OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21n	
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16mm USG BORAL FIRESTOP OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP OR 16mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-81i	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM, TBA FIREFLY NON-COMBUSTIBLE BREATHABLE MEMBRANE
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT

City of Stirling
17 Jan 2025
RECEIVED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 01

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

PROJECT No 2005 DRAWING No A02-T2-202 REV 4

DRAWN BY RR

© Hillam Architects Pty Ltd

SKETCH TITLE

Floor Mark Up

BY: jalim

301250090

AC-SK-001

5/11/2024

005

PROJECT No

SKETCH No

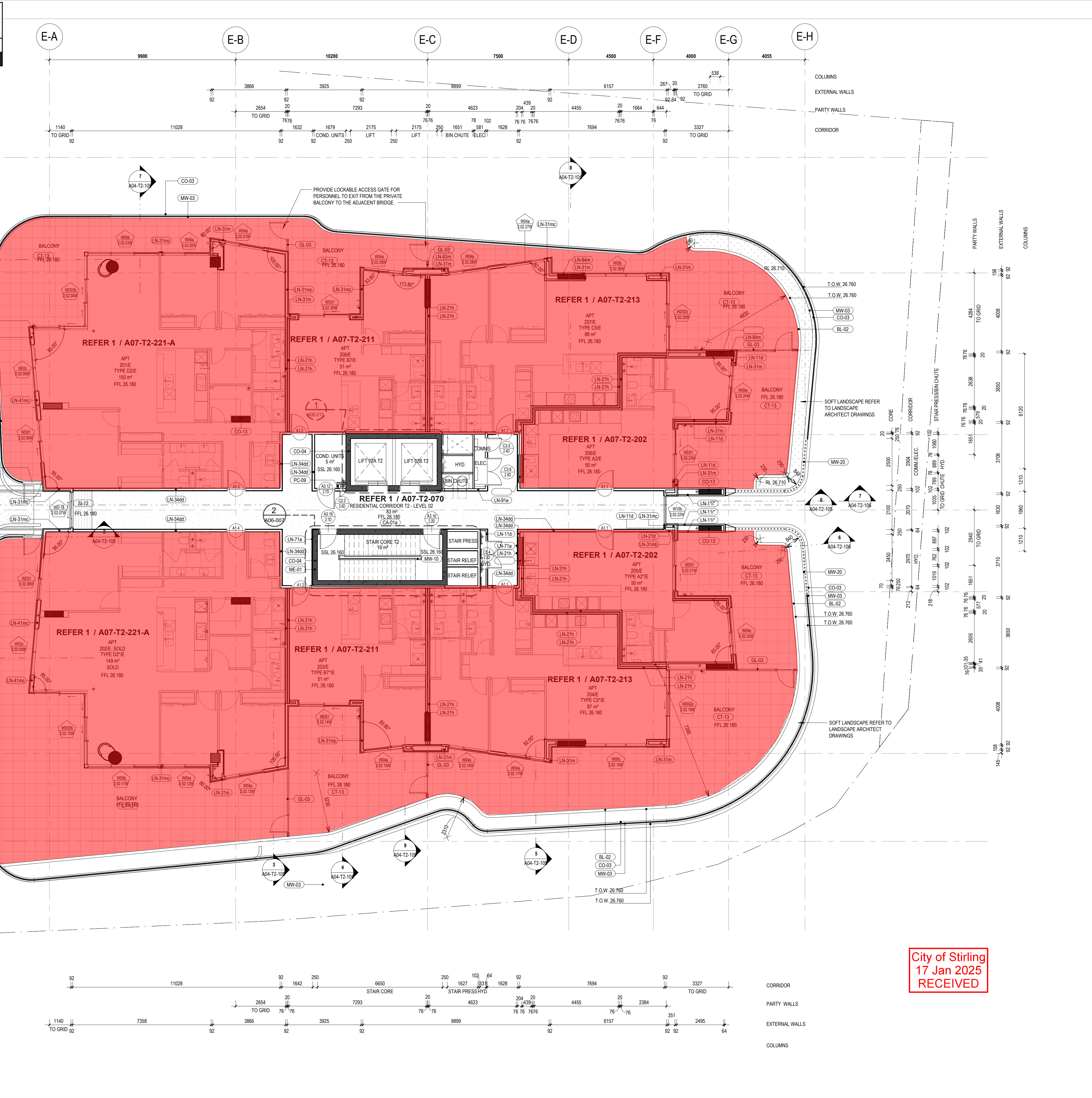
DATE

REV

Legend / Notes

$R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

$R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-02	140 CONCRETE BLOCK WALL
CA-01a	CARPET TILE REFER TO CARPET SELECTION TABLE
CO-03	200mm IN-SITU REINFORCED CONCRETE WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-51	200mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
GL-03	BALCONY GLASS SCREEN GENERALLY
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (22kg/m ³)
LN-11f	1x9mm FIBRE CEMENT ON ONE SIDE OF 64mm STEEL STUD
LN-21d	2x15mm USG BORAL FIRESTOP (OR 2x15 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-34d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-71a	1x13mm PLASTERBOARD OR 1x13mm MR PLASTERBOARD TO WET AREAS
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS, JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-02	GLASS BALUSTRADE - 1200H
MW-03	GLASS BALUSTRADE SIDE MOUNTED TO WALL - 720H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-20	ALUMINIUM BATTENS B5050 REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-09	78mm SPEED PANEL
PV-02	EXPOSED AGGREGATE CONCRETE (OFF-WHITE)
SI-12	ENTRANCE MAT

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO-MW-YY REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 02

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

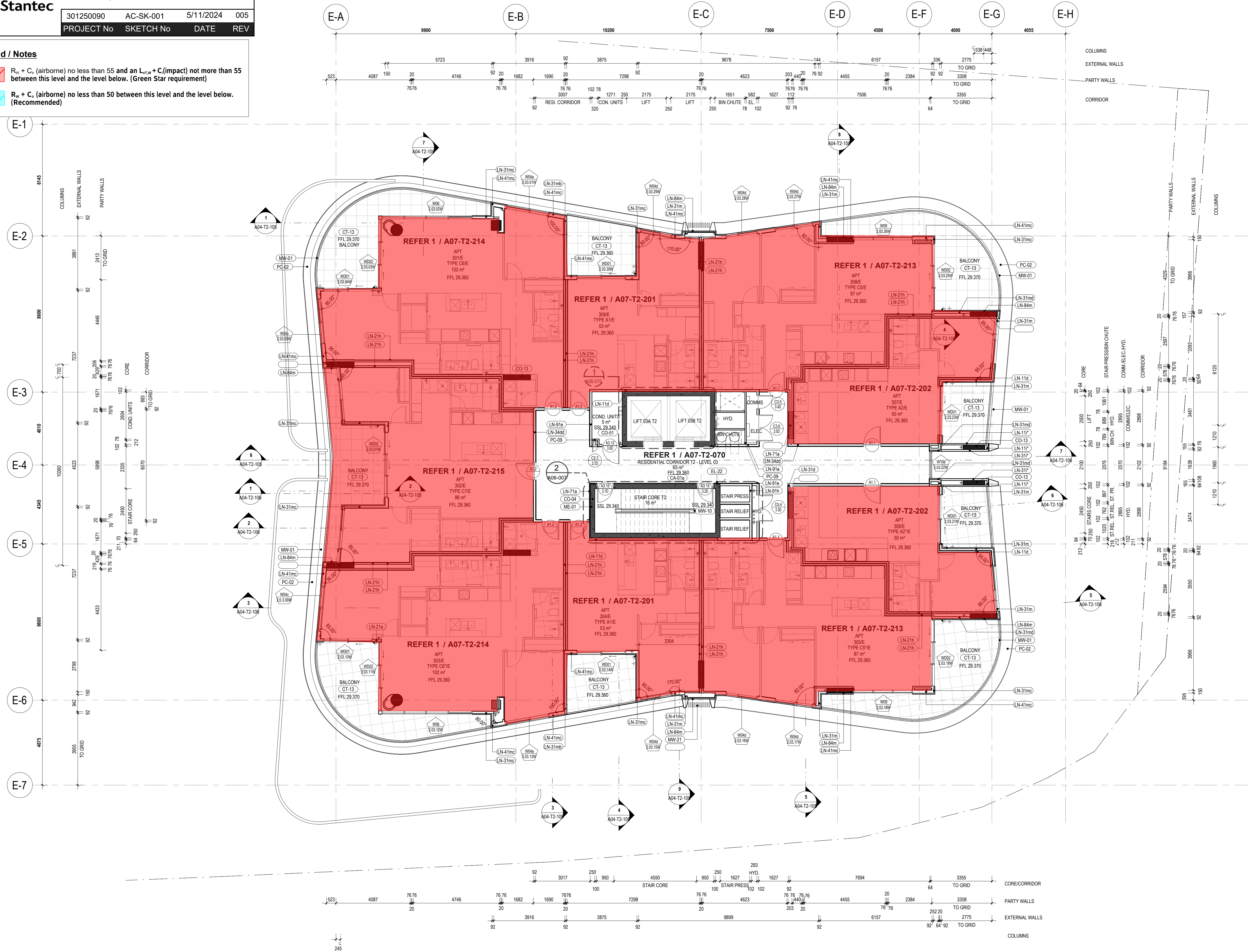
PROJECT No	DRAWING No	REV
2005	A02-T2-203	4

DRAWN BY RR

© Hillam Architects Pty Ltd

Legend / Notes

	$R_{WV} + C_v$ (airborne) no less than 55 and an $L_{ST,WV} + C_L$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
	$R_{WV} + C_v$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS.
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS.
- ALL MATERIALS MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE (AUSTRALIA) AND THE APPLICABLE AUSTRALIAN STANDARDS.
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED.

FOR FUTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
C-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE	
C-02	250mm IN-SITU REINFORCED CONCRETE WALL	
C-03	150mm IN-SITU REINFORCED CONCRETE COLUMN	
C-051	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS	
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON W/P ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
L-22		
N-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BROADFOAM ACoustIGUARD (32x63/3)	
N-11a	1x16mm FIRE CEMENT ON ONE SIDE OF 64mm STEEL STUD	
N-21e	1x13mm PLASTERBOARD (OR 1x13mm MRK PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 75mm BROADFOAM ACoustIGUARD (14x63/3)	
N-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BROADFOAM ACoustIGUARD (14x63/3)	
N-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31f	1x16mm FIRE CEMENT ON ONE SIDE OF 92mm STEEL STUD	
N-31m	EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31b	1x6mm FIRE CEMENT ON ONE SIDE OF 92mm STEEL STUD	
N-31c	EXOTEC FACED SYSTEM ON 6mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31m	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMIES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31m	DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
N-31d	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMIES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BROADFOAM ACoustIGUARD (14x63/3)	
N-41mc	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMIES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-71a	2x13mm PLASTERBOARD (OR 2x13mm MRK PLASTERBOARD TO WET AREAS)	
N-84m	1x13mm PLASTERBOARD (OR 1x13mm MRK PLASTERBOARD TO WET AREAS) ON 22mm RIGID AIR BARRIER CHANNELS, 25mm BROADFOAM ACoustIGUARD (14x63/3)	
N-84m	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMIES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT	
N-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH W/STUD WITH 1x6mm RIGID AIR BARRIER CHANNELS, 75mm BROADFOAM ACoustIGUARD (11x63/3)	
N-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH W/STUD WITH 1x6mm RIGID AIR BARRIER CHANNELS, 75mm BROADFOAM ACoustIGUARD (11x63/3)	
NE-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFERENCE MECHANICAL ENGINEERS DRAWING	
W-01	GLASS SLAB LIFTING - 1050H	
W-01	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH	
W-021	ALUMINIUM BANDING B50200 CLIP. REFER TO ARCADIA DETAILS - VERTICAL WITH POWDERCOAT FINISH	
W-21	POWDER COAT BANDING REINFORCED PRECAST CONCRETE WALL	
CP-08	78mm Specimen for Reinforcement	MK
CP-08	2 Revised Tender Item	MK
22.02.24	1 Re-Use For Tender (Not for construction)	MK
13.03.23	1 Use For Tender	TH
08-04-04	REV	DESCRIPTION
		CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO W.
P (08) 6380 187
E info@hillam.com.au



HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

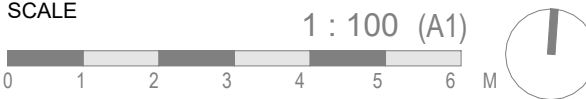
PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 03

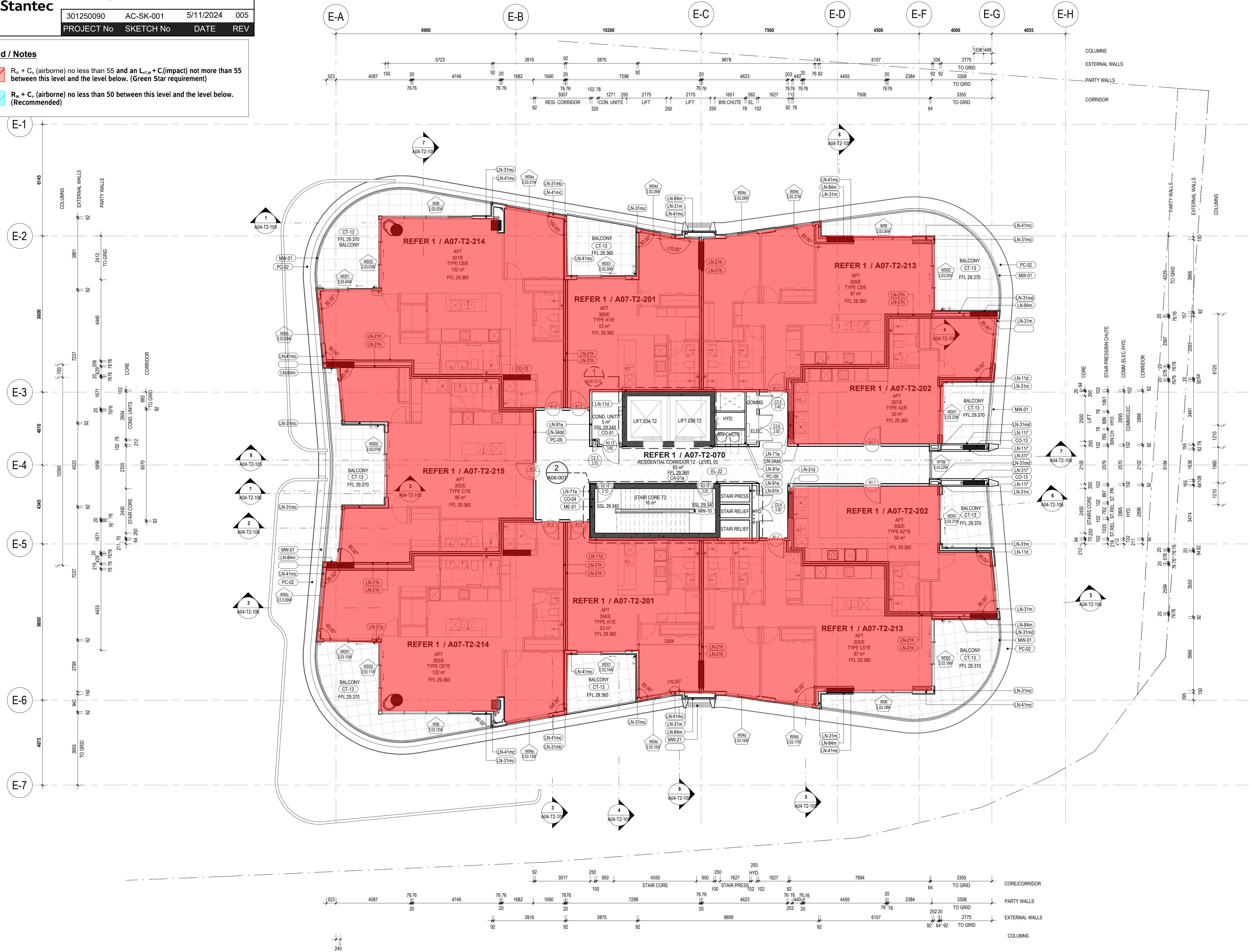
CONSTRUCTION
DOCUMENTATION

PROJECT No.	DRAWING No.	REV
2005	A02-T2-204	4

DRAWN BY	RR
----------	----

Legend / Notes

	$R_{WV} + C_v$ (airborne) no less than 55 and an $L_{ST,WV} + C_L$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
	$R_{WV} + C_v$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS.
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS.
- ALL MATERIALS MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE (AUSTRALIA) AND THE APPLICABLE AUSTRALIAN STANDARDS.
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.
- THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED.

FOR FUTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE		
CODE	DESCRIPTION	
C-01a	CARPET TILE. REFER TO CARPET SELECTION TABLE	
C-02	250mm IN-SITU REINFORCED CONCRETE WALL	
C-03	150mm IN-SITU REINFORCED CONCRETE COLUMN	
C-051	200mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH TO FLOORS TYPICALLY. BROOM FINISH TO RAMPS AND STORE ROOMS	
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON W/P ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE	
L-22		
N-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BROADFOAM ACoustIGUARD (32x63/3)	
N-11a	1x16mm FIRE CEMENT ON ONE SIDE OF 64mm STEEL STUD	
N-21e	1x13mm PLASTERBOARD (OR 1x13mm MK PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 75mm BROADFOAM ACoustIGUARD (14x63/3)	
N-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BROADFOAM ACoustIGUARD (14x63/3)	
N-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31f	1x16mm FIRE CEMENT ON ONE SIDE OF 92mm STEEL STUD	
N-31m	EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31mb	1x6mm FIRE CEMENT ON ONE SIDE OF 92mm STEEL STUD	
N-31c	EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31mc	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31md	DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)	
N-31md	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-31d	1x13mm PLASTERBOARD (OR 1x13mm MK PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 75mm BROADFOAM ACoustIGUARD (14x63/3)	
N-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BROADFOAM ACoustIGUARD (14x63/3)	
N-41mc	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BROADFOAM SOUNDSCREEN (40x63/3)	
N-71a	2x13mm PLASTERBOARD (OR 2x13mm MK PLASTERBOARD TO WET AREAS)	
N-84m	1x13mm PLASTERBOARD (OR 1x13mm MK PLASTERBOARD TO WET AREAS) ON 22mm RIGID AIR BARRIER CHANNELS, 25mm BROADFOAM ACoustIGUARD (14x63/3)	
N-84m	1x16mm FIRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACED SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT	
N-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH W/STUD WITH 1x6mm RIGID AIR BARRIER CHANNELS, 75mm BROADFOAM ACoustIGUARD (11x63/3)	
N-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH W/STUD WITH 1x6mm RIGID AIR BARRIER CHANNELS, 75mm BROADFOAM ACoustIGUARD (11x63/3)	
NE-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFERENCE MECHANICAL ENGINEER'S DRAWING	
W-01	GLASS SLAB REPAIR - 1050H	
W-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH	
W-201	ALUMINIUM BANDS B5020 CUP. CLIP TO ARCADIA DETAILS - VERTICAL WITH POWDERCOAT FINISH	
W-21	POWDER COAT FINISH TO PRECAST CONCRETE WALL	
CP-08	78mm Spec Reinforcement	MK
CP-08	2 Revised Tender Item	MK
22.02.24	1 Re-Use For Tender (Not for construction)	MK
13.03.23	1 Use For Tender	TH
08-04-16	REV	DESCRIPTION
		CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

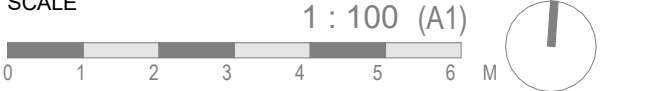
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

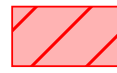
DRAWING NAME
GA LEVEL 04-06

CONSTRUCTION
DOCUMENTATION

PROJECT No.	DRAWING No.	REV
2005	A02-T2-204	4

DRAWN BY RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,w} + C_{i}$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)

E-1

E-2

E-3

E-4

E-5

E-6

E-7

E-B

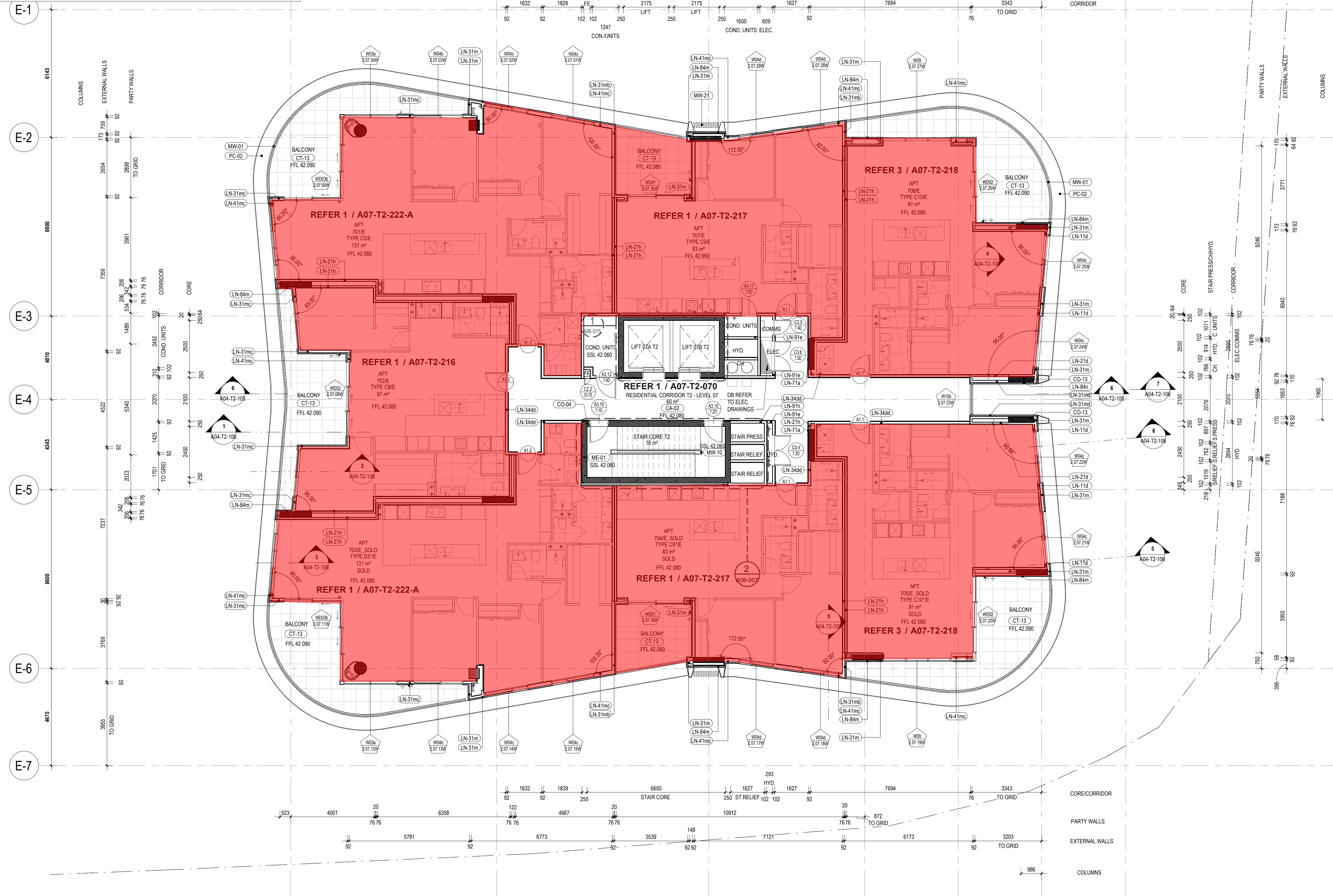
E-C

E-D

E-F

E-G

E-H



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	800x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m ³)
LN-31m b	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS); 90mm BRADFORD SOUNDCREEN (40kg/m ³)
LN-31m c	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD; 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84h	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-21	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
PC-02	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

DO	MM	YY	REV	DESCRIPTION	CHECKED
10.10.24	4	3	Issue for Coordination	SG	
30.09.24	3	3	Issue for Coordination	MK	
18.03.24	2	2	Revised Tender Issue	MK	
22.02.24	1	1	Re-Issue For Tender (Not for construction)	MK	
13.03.23	0	0	Issue For Tender	TH	

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 07

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

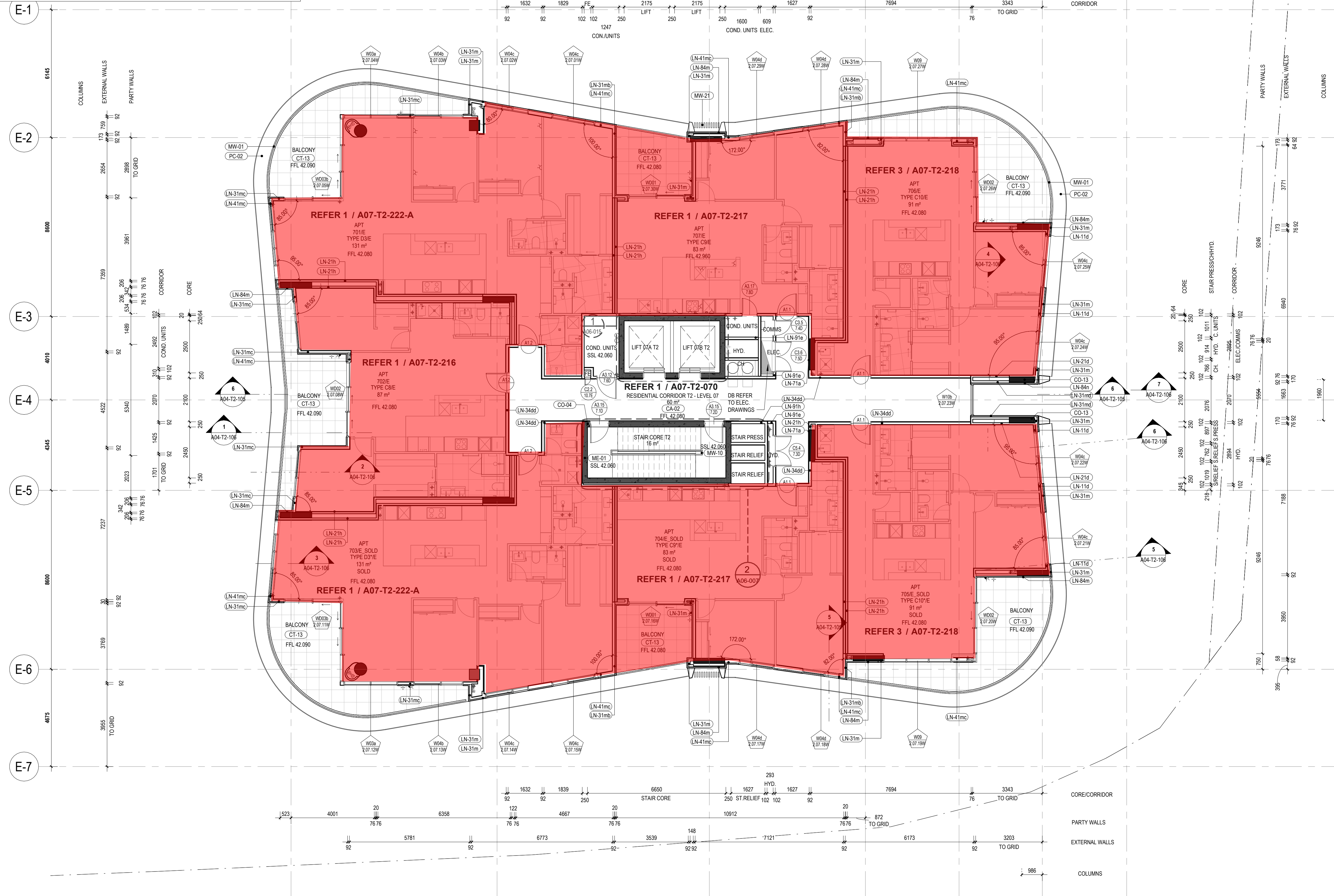
PROJECT No	DRAWING No	REV
2005	A02-T2-208	4

DRAWN BY RR

Legend / Notes

R_u + C_u (airborne) no less than 55 and an L_u + C_u (impact) not more than 55 between this level and the level below. (Green Star requirement)

R_u + C_u (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	800x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD, 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m b	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS), 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31m c	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31m d	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD, 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84h	150mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91a	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) TO ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-21	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
PC-02	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS - VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

DATE	REV	DESCRIPTION	CHECKED
04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 08-10

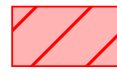
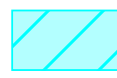
CONSTRUCTION
DOCUMENTATION

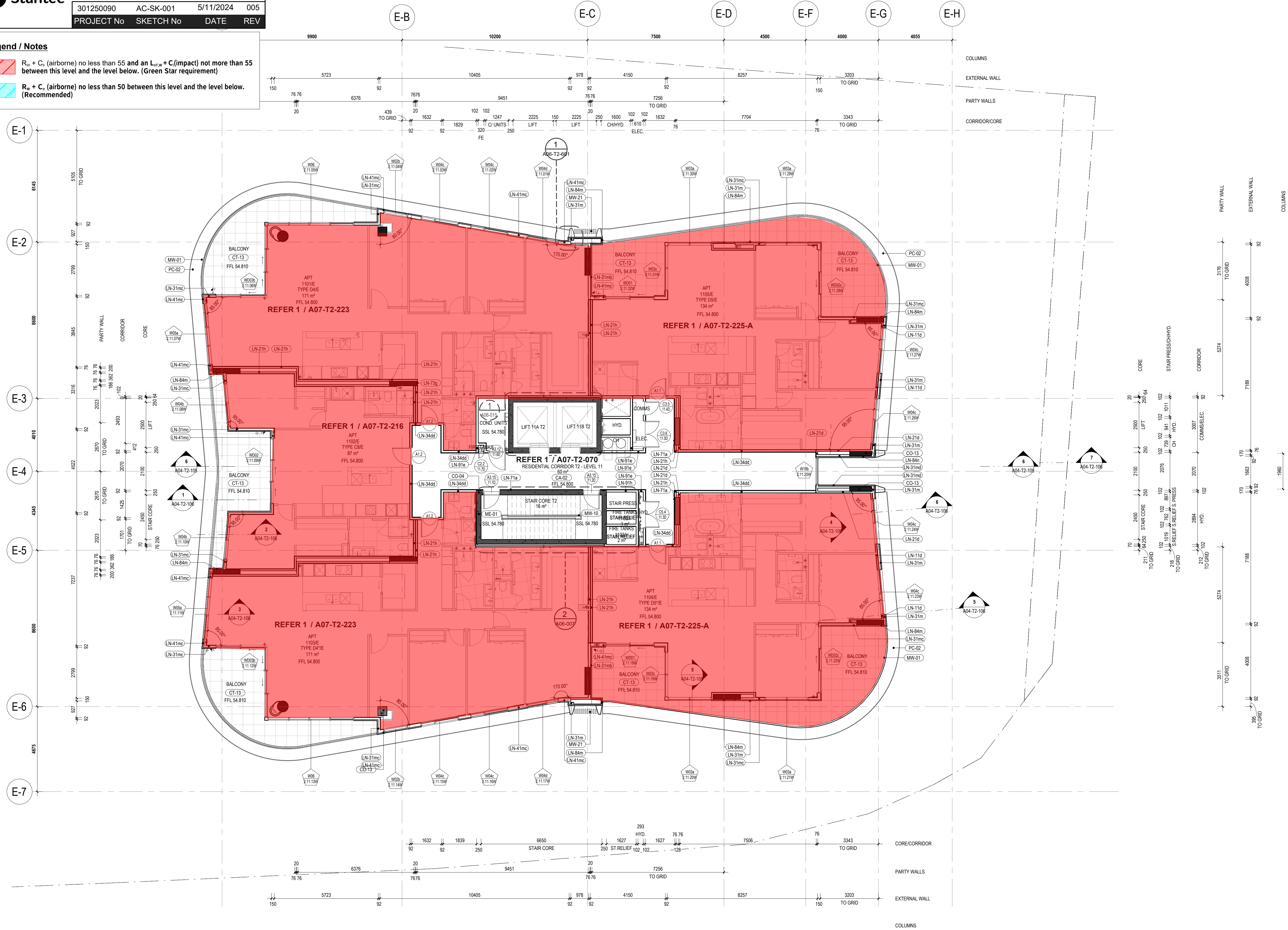
SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-208	4

DRAWN BY RR

Legend / Notes

-  $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
-  $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84n	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 11

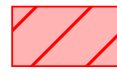
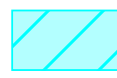
CONSTRUCTION
DOCUMENTATION

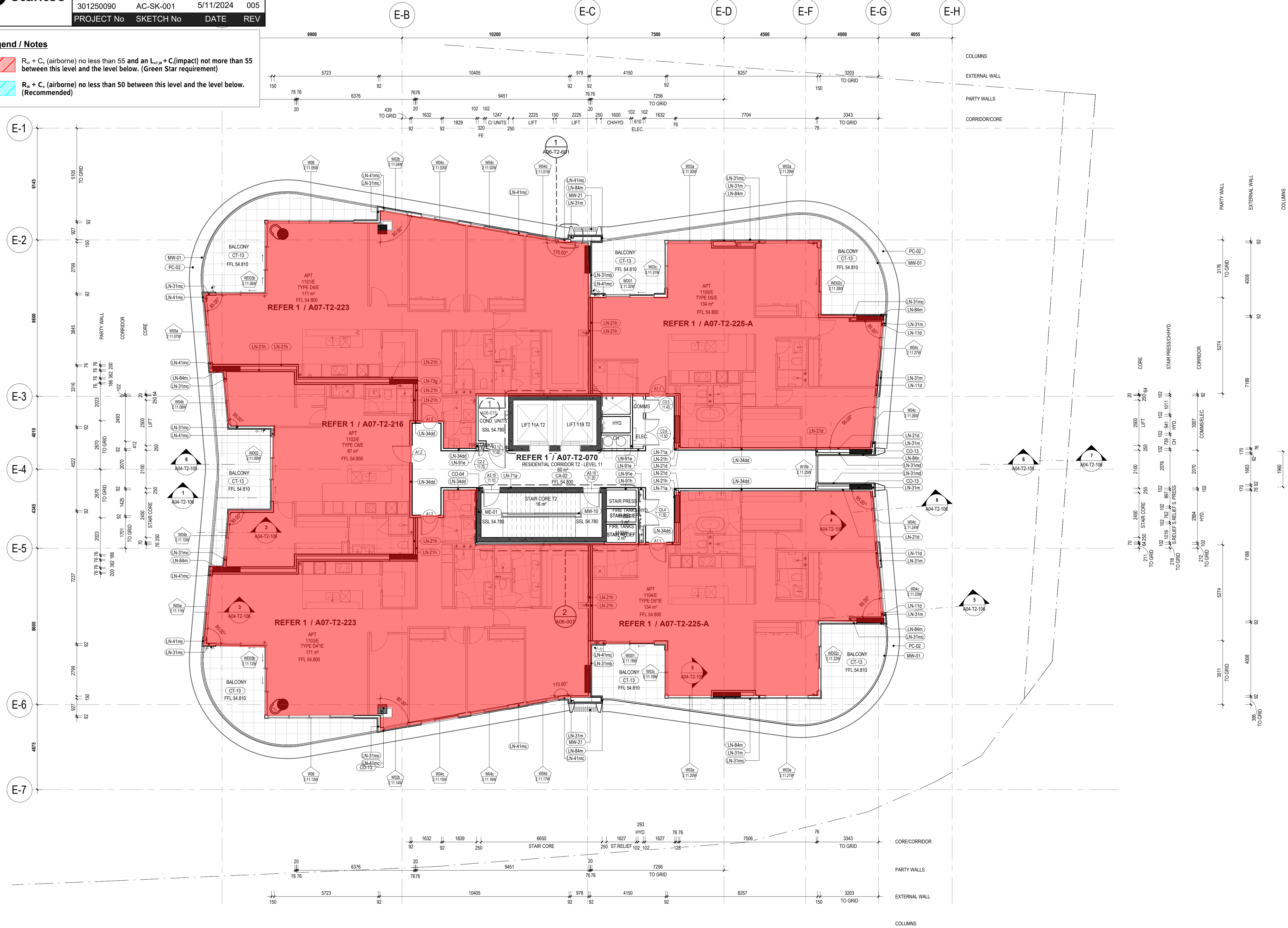
SCALE 1 : 100 (A1)

PROJECT No	DRAWING No	REV
2005	A02-T2-212	4

DRAWN BY RR

Legend / Notes

-  $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)
-  $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD; 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (20kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS; 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-73g	1x16mm USG BORAL FIRESTOP (OR 1x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 28mm FURRING CHANNELS; 25mm BRADFORD SOUNDSCREEN (14kg/m ³)
LN-84m	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT
LN-84n	1x6mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON 15mm HORIZONTAL TOP HAT 25 mm CLEAT
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 15mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO	MM	YY	REV	DESCRIPTION	CHECKED
----	----	----	-----	-------------	---------

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 12-14

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

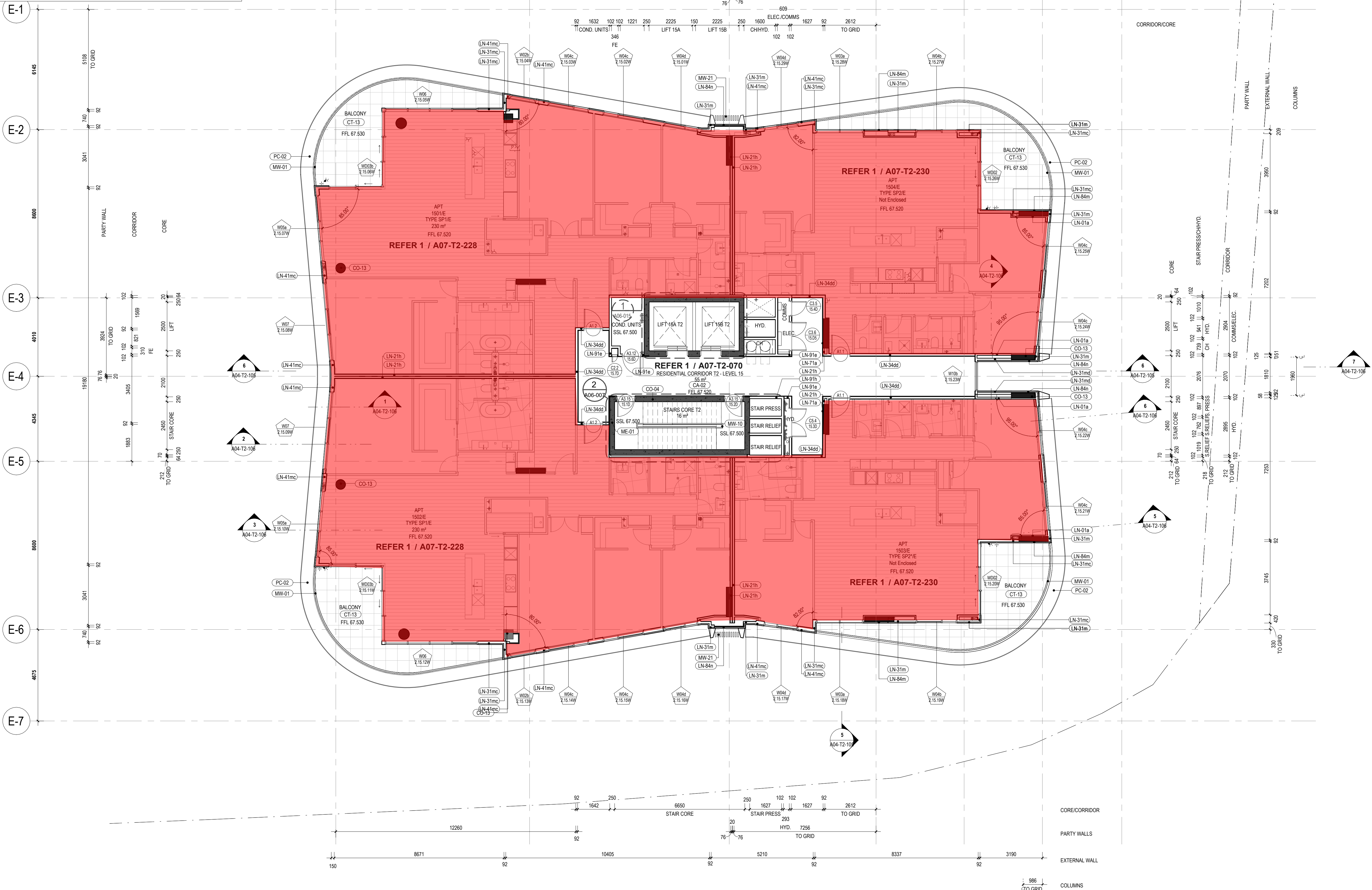
PROJECT No	DRAWING No	REV
2005	A02-T2-212	4

DRAWN BY RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO ALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-01a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 51mm STEEL STUD. 50mm BRADFORD ACOUSTIGARD (32kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD. 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³) DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD. 16 mm USG BORAL FIRESTOP OR 16 mm RIGID WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS ON ONE SIDE OF 92mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³) DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STAGGED STUD. 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³). 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 20mm FURRING CHANNELS. 25mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-84n	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD. 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAPTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAPTLINER. 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEERS DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS B50/200 CLIP. REFER TO ARCADIA DETAILS-
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE

DO	MM	YY	REV	DESCRIPTION	CHECKED
04	10	24	4	Issue for Coordination	SG
30	09	24	3	Issue for Coordination	MK
18	03	24	2	Revised Tender Issue	MK
22	02	24	1	Re-Issue For Tender (Not for construction)	MK
13	03	23	0	Issue For Tender	TH

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 15

CONSTRUCTION DOCUMENTATION

SCALE 1 : 100 (A1)

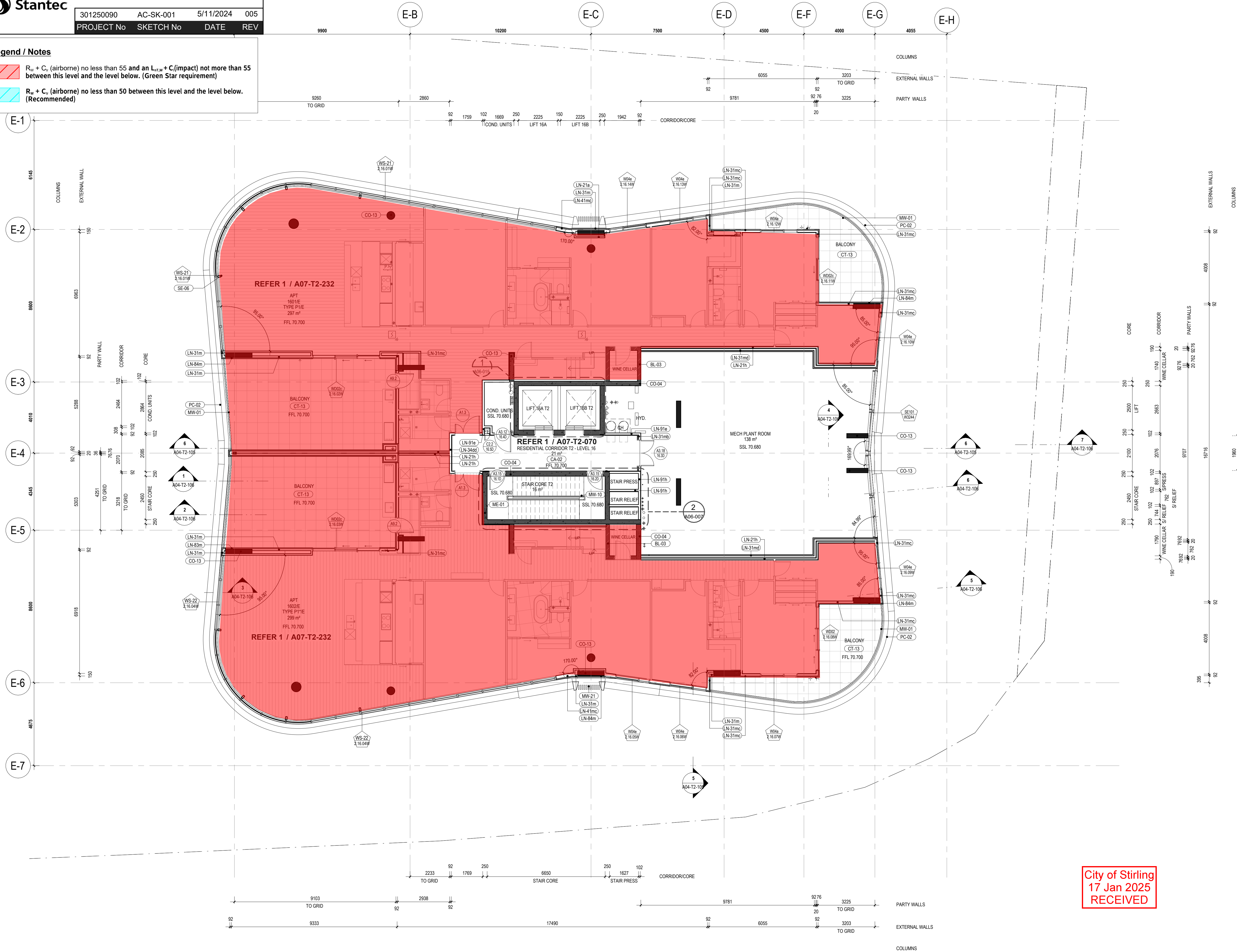
PROJECT No	DRAWING No	REV
2005	A02-T2-216	4

DRAWN BY RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-003

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CA-02	BROADLOOM CARPET ON ACOUSTIC UNDERLAY. DEFAULT. REFER TO CARPET SELECTION TABLE
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
LN-21a	11.1mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 76mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-21h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 15mm STEEL STUD; 75mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-31m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 92mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-34dd	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON BOTH SIDES OF 92mm STEEL STUD; 100mm BRADFORD ACOUSTIGARD (14kg/m ³)
LN-41mc	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 150mm STEEL STUD; 90mm BRADFORD SOUNDSCREEN (40kg/m ³); 2x13mm PLASTERBOARD (OR 2x13mm MR PLASTERBOARD TO WET AREAS)
LN-83m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x9mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91e	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER; 75mm BRADFORD ACOUSTIGARD (11kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVRE IN POWDERCOAT. FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 1050H
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-21	ALUMINIUM BATTENS 850/200 CLIP. REFER TO ARCADIA DETAILS- VERTICAL WITH POWDERCOAT FINISH
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL SANDSTONE COLOUR REFER TO ARCH SCHEDULE
SE-06	RHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MMYY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

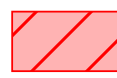


CLIENT
EDGE VISIONARY LIVING

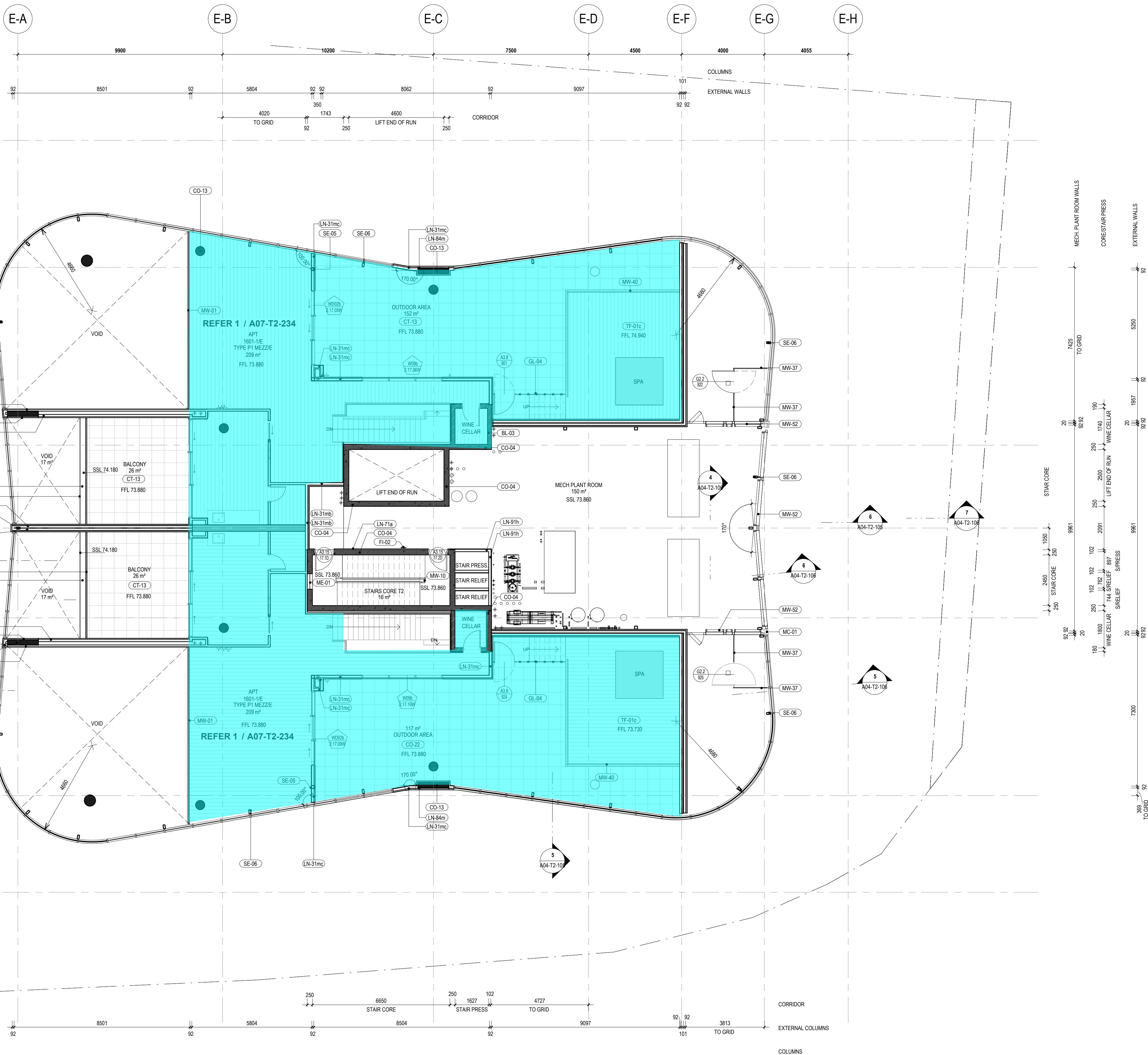
PROJECT NAME
THE DUNES - T2
LOT 500 RESERVE STREET
SCARBOROUGH
DRAWING NAME
GA LEVEL 16

CONSTRUCTION DOCUMENTATION		
SCALE 1 : 100 (A1)		
PROJECT No	DRAWING No	REV
2005	A02-T2-217	4
DRAWN BY		RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,T,W} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



GENERAL NOTES

- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
- THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
- ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
- THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
- THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

FOR FURTHER NOTES AND LEGENDS REFER TO DRAWING A01-A03

SPECIFICATION SCHEDULE

CODE	DESCRIPTION
BL-03	190 CONCRETE BLOCK WALL
CO-04	250mm IN-SITU REINFORCED CONCRETE WALL
CO-13	IN-SITU REINFORCED CONCRETE COLUMN
CO-22	150mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH
CO-73	750mm IN-SITU REINFORCED CONCRETE SLAB, MONO FINISH
CT-13	600x600 PORCELAIN FLOOR TILE ON ADJUSTABLE PEDESTALS ON WP ON CONCRETE TO FALL TO EXTERNAL AREAS. SLIP RATING R11. REFER TO TILE SELECTION TABLE
FL-02	FIRE EXTINGUISHER REFER TO FIRE ENGINE SPECIFICATIONS
LN-11d	2x13mm USG BORAL FIRESTOP (OR 2x13 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 64mm STEEL STUD, 50mm BRADFORD ACOUSTIGUARD (32kg/m ³)
LN-31m	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 82mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³)
LN-31mb	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGUARD (14kg/m ³)
LN-31mc	AREAS: 90mm BRADFORD SOUNDSCREEN (40kg/m ³), 1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 82mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m ³), DOUBLE LAYERS OF PLASTERBOARD (2x13 mm)
LN-31md	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON ONE SIDE OF 92mm STEEL STUD, 1x16 mm USG BORAL FIRESTOP (OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGUARD (14kg/m ³)
LN-71a	1x13mm PLASTERBOARD (OR 1x13mm MR PLASTERBOARD TO WET AREAS) ON 28mm FURRING CHANNELS, 25mm BRADFORD ACOUSTIGUARD (14kg/m ³)
LN-83m	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD
LN-84m	1x2mm FIBRE CEMENT ON 35mm TOP HATS JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD ON ONE SIDE OF 82mm STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGUARD (11kg/m ³)
LN-91h	2x16mm USG BORAL FIRESTOP (OR 2x16 USG BORAL WET AREA FIRESTOP TO WET AREAS) ON ONE SIDE OF 102mm CH STEEL STUD WITH 1x25mm USG BORAL SHAFTLINER, 75mm BRADFORD ACOUSTIGUARD (11kg/m ³)
MC-01	MAXLINE COLORBOND METAL SHEET WALL CLADDING BY REVOLUTION ROOFING ON 35mm FURRING CHANNELS ON 92mm STEEL STUD FRAMING, TBA FIRELY NON-COMBUSTIBLE BREATHABLE MEMBRANE, 90mm BRADFORD ACOUSTIGUARD (20kg/m ³)
ME-01	MECHANICAL VENTILATION LOUVER IN POWDERCOAT FINISH TO MATCH WALL COLOUR. REFER MECHANICAL ENGINEER'S DOCUMENTATION
MW-01	GLASS BALUSTRADE - 105PH
MW-10	STEEL HANDRAIL - FLOOR MOUNTED WITH HDG FINISH
MW-37	GALVANISED STEEL MESH SECURITY FENCING FIXED TO 40x40 EQUAL ANGLE
MW-40	ALUMINIUM PALASADE FENCE - WALL MOUNTED 700H POWDERCOAT FINISH
MW-52	ACOUSTIC LOUVER - TYPE 3 (300mm)
SE-05	SHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER
SE-06	RHS STEEL COLUMN REFER TO STRUCTURAL ENGINEER
TF-01c	TIMBER FLOORBOARDS ON ACOUSTIC UNDERLAY, STRAIGHT PATTERN. DARK. REFER TO TIMBER SELECTION TABLE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH

DO MMYY REV DESCRIPTION CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.auHILLAM
ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA LEVEL 17

CONSTRUCTION
DOCUMENTATION

SCALE 1 : 100 (A1)

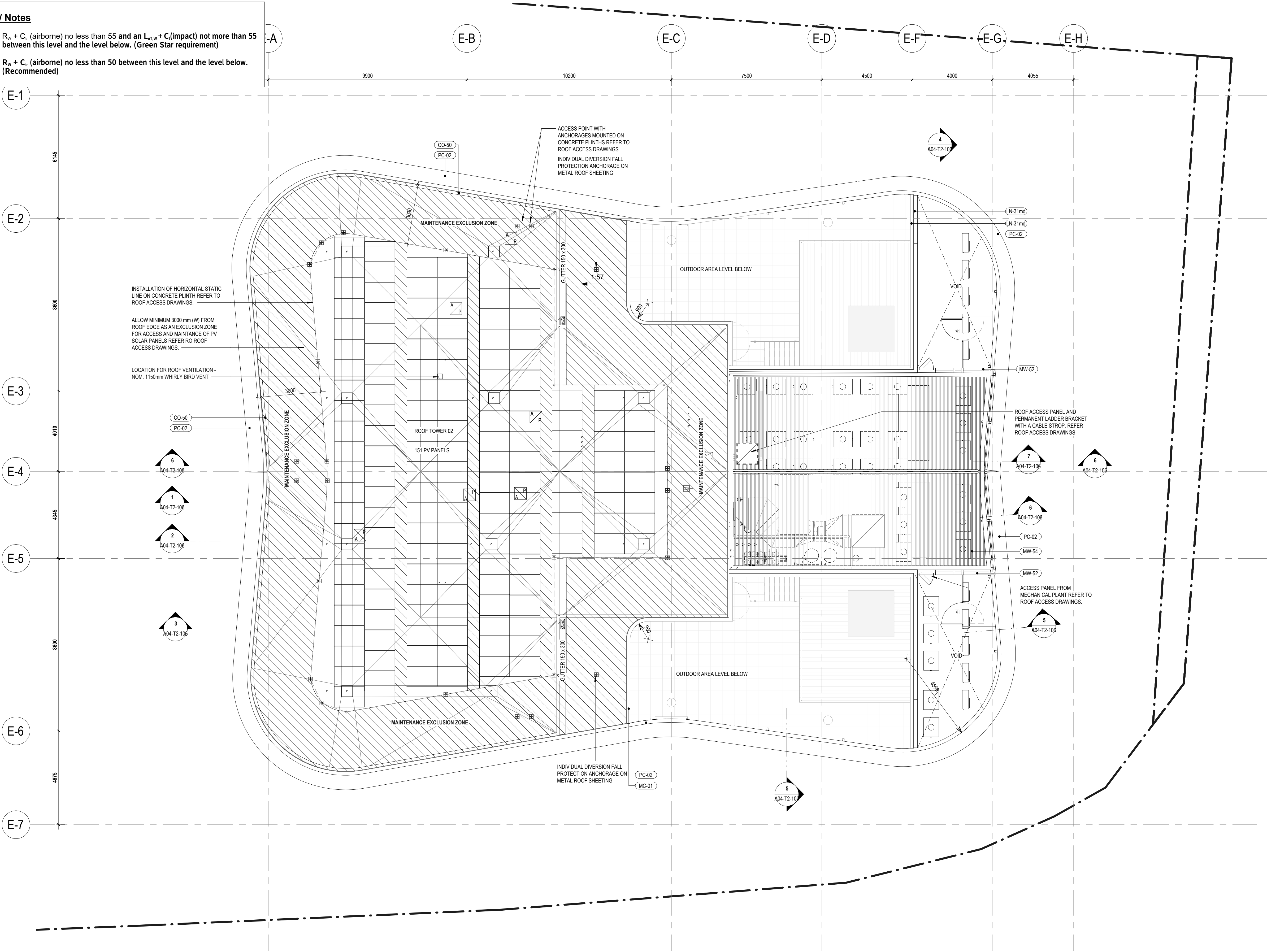
PROJECT No	DRAWING No	REV
2005	A02-T2-218	4

DRAWN BY RR

Legend / Notes

 $R_{w} + C_{s}$ (airborne) no less than 55 and an $L_{w,eq} + C$ (impact) not more than 55 between this level and the level below. (Green Star requirement)

 $R_{w} + C_{s}$ (airborne) no less than 50 between this level and the level below. (Recommended)



City of Stirling
17 Jan 2025
RECEIVED

- GENERAL NOTES**
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK 'SUPERSEDED' ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

SPECIFICATION SCHEDULE	
CODE	DESCRIPTION
CO-50	100mm IN-SITU REINFORCED CONCRETE SLAB. MONO FINISH.
LN-31md	1x6mm FIBRE CEMENT ON 35mm TOP HATS. JAMES HARDIE EXOTEC FACADE SYSTEM ON 15mm HORIZONTAL TOP HAT WITH 6mm RIGID AIR BARRIER BOARD, 16 mm USG BORAL FIRESTOP OR 16 mm USG WET AREA FIRESTOP MOISTURE RESISTANT PLASTERBOARD TO WET AREAS OF ON ONE SIDE OF 92mm STEEL STUD, 90mm BRADFORD SOUNDSCREEN (40kg/m3). DOUBLE LAYERS OF PLASTERBOARD (2x13 mm).
MC-01	MAXLINE COLORBOND METAL SHEET WALL CLADDING BY REVOLUTION ROOFING ON 35mm FURRING CHANNELS ON 92mm STEEL STUD FRAMING. TBA FIREFLY NON-COMBUSTIBLE BREATHABLE MEMBRANE. 90mm BRADFORD ACOUSTIGARD (20kg/m3).
MW-52	ACOUSTIC LOUVRE - TYPE 3 (300mm)
MW-54	LOUVRE BLADE
PC-02	PODIUM BANDING REINFORCED PRECAST CONCRETE WALL. SANDSTONE COLOUR REFER TO ARCH SCHEDULE

04.10.24	4	Issue for Coordination	SG
30.09.24	3	Issue for Coordination	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DO MM YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES - T2

LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

GA ROOF LEVEL

CONSTRUCTION DOCUMENTATION		
SCALE	1 : 100 (A1)	
PROJECT No	DRAWING No	REV
2005	A02-T2-219	4
DRAWN BY		RR

© Hillam Architects Pty Ltd

2005-Dunes

Phase: CD

Date: 13.01.2025

Dunes RL/Level Change Comparison

Tower 1 (West)					
Level	DA Approved 16.02.2023	Floor to Floor	Proposed	Floor to Floor	Proposed Height Difference
Basement 03	2.60	2.80	n/a	n/a	n/a
Basement 02	5.40	2.80	5.60	2.80	0.00
Basement 01	8.20	3.60	8.40	2.80	-0.80
Lower Ground 02	11.80	3.20	11.20	3.20	0.00
Lower Ground 01	15.00	3.20	14.40	3.40	0.20
Mezzanine Level	n/a	n/a	n/a	n/a	n/a
Ground Floor	18.20	3.20	17.80	3.20	0.00
Level 1	21.40	4.38	21.00	4.50	0.12
Level 2	25.78	3.36	25.50	3.36	0.00
Level 3	29.14	3.18	28.86	3.18	0.00
Level 4	32.32	3.18	32.04	3.18	0.00
Level 5	35.50	3.18	35.22	3.18	0.00
Level 6	38.68	3.18	38.40	3.18	0.00
Level 7	41.86	3.18	41.58	3.18	0.00
Level 8	45.04	3.18	44.76	3.18	0.00
Level 9	48.22	3.18	47.94	3.18	0.00
Level 10	51.40	3.18	51.12	3.18	0.00
Level 11	54.58	3.18	54.30	3.18	0.00
Level 12	57.76	3.18	57.48	3.18	0.00
Level 13	60.94	3.18	60.66	3.18	0.00
Level 14	64.12	3.18	63.84	3.18	0.00
Level 15	67.30	3.25	67.02	4.13	0.88
Roof	70.55		71.15		0.60

Tower 2 (East)					
Level	DA Approved 16.02.2023	Floor to Floor	Proposed	Floor to Floor	Proposed Height Difference
Basement 03	n/a	n/a	n/a	n/a	n/a
Basement 02	6.00	2.80	5.60	2.80	0.00
Basement 01	8.80	2.80	8.40	2.80	0.00
Lower Ground 02	11.60	2.80	11.20	2.80	0.00
Lower Ground 01	14.40	2.70	14.00	2.80	0.10
Mezzanine Level	17.10	2.70	16.80	3.00	0.30
Ground Floor	19.80	3.10	19.80	3.18	0.08
Level 1	22.90	3.10	22.98	3.18	0.08
Level 2	26.00	3.18	26.16	3.18	0.00
Level 3	29.18	3.18	29.34	3.18	0.00
Level 4	32.36	3.18	32.52	3.18	0.00
Level 5	35.54	3.18	35.70	3.18	0.00
Level 6	38.72	3.18	38.88	3.18	0.00
Level 7	41.90	3.18	42.06	3.18	0.00
Level 8	45.08	3.18	45.24	3.18	0.00
Level 9	48.26	3.18	48.42	3.18	0.00
Level 10	51.44	3.18	51.60	3.18	0.00
Level 11	54.62	3.18	54.78	3.18	0.00
Level 12	57.80	3.18	57.96	3.18	0.00
Level 13	60.98	3.18	61.14	3.18	0.00
Level 14	64.16	3.18	64.32	3.18	0.00
Level 15	67.34	3.18	67.50	3.18	0.00
Level 16	70.52	3.18	70.68	3.18	0.00
Level 17	73.70	3.25	73.86	4.13	0.88
Roof	76.95		77.99		1.04





The Dunes, Lot 500 Reserve Street,
Scarborough

Community Needs Analysis

February 2021

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

Document ID: Projects 2020/ Documents/ 20-343 – Scarborough, Lot 500 Reserve Street Place and Planning Services/ Project Work/ Needs Analysis

Issue	Date	Status	Prepared by		Approved by	
			Name	Initials	Name	Initials
1	20.11.20	DRAFT	Hayley Campbell	HC	Ben Kent Cath Blake-Powell	BK CBP
2	26.02.21	FINAL	Hayley Campbell	HC	Ben Kent	BK

This report has been prepared for the exclusive use of the Client, in accordance with the agreement between the Client and Element Advisory Pty Ltd (**element**) ('Agreement').

element accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report by any person who is not a party to the Agreement or an intended recipient.

In particular, it should be noted that this report is a qualitative assessment only, based on the scope and timing of services defined by the Client and is based on information supplied by the Client and its agents.

element cannot be held accountable for information supplied by others and relied upon by **element**.

Copyright and any other Intellectual Property arising from the report and the provision of the services in accordance with the Agreement belongs exclusively to **element** unless otherwise agreed and may not be reproduced or disclosed to any person other than the Client without the express written authority of **element**.

Contents

1. Executive summary 1

1.1 Overview of a community needs analysis 1

2. Introduction 2

2.1 Purpose..... 2

2.2 Project background and scope..... 2

3. Trends..... 3

3.1 Literature review 3

3.2 Scarborough's demographic profile..... 6

3.3 Asset audit and map 1

3.4 Community and cultural events 1

3.5 Comparative analysis..... 2

3.6 Gap analysis 4

4. Community engagement 6

4.1 Intercept surveying 6

4.2 Community Open House..... 7

5. Discussion 8

5.1 Key findings 8

5.2 Next steps 9

City of Stirling
17 Jan 2025
RECEIVED

This page has been left blank intentionally.

City of Stirling
17 Jan 2025
RECEIVED

1. Executive summary

1.1 Overview of a community needs analysis

A community needs analysis is a social research document that aims to provide a snapshot of a local community in its current and future forms. In doing so, it aims to identify the needs of the community both now and over time. A community needs analysis is often supported by community and stakeholder engagement.

Scarborough is Perth's beachside playground, home to a multitude of shops, entertainment and places to eat, drink and soak up the sun. It is currently characterised by a relatively young, childfree and financially comfortable local population who adore the vibrancy, sand dunes and fresh salty air that the coastal suburb provides.

Recent investment by the State Government has encouraged a range of development along the Scarborough foreshore. This is to encourage Scarborough as a vibrant beachside location that is attractive to a range of visitors, workers and a bustling population. One of such recent development proposals is the project at Lot 500 Reserve Street, Scarborough (referred to in this report herein as The dunes, or the Site).

The Dunes currently sits at the northern portion of the Scarborough foreshore, representing the 'gateway' to Scarborough and all it has to offer.

The development plans to unlock additional building height by providing multiple benefits to the surrounding local community and visitors, as determined by this Community Needs Analysis. Through rigorous social research, Scarborough's community needs are summarised by the following statements:

- Diverse housing opportunities and support for active, healthy, active ageing to promote social inclusion and urban efficiency.
- To enhance sense of place in Scarborough, the northern gateway and Aboriginal Mooro story should be explored.
- Connectivity should be encouraged by providing quality end of trip facilities that promote multiple modes of transport.
- Bringing activities and services further north will support economic wellbeing in Scarborough and bring vibrancy to multiple locations within the suburb.
- The coastal location is adored by the community and should be celebrated in the built environment.

City of Stirling
17 Jan 2025
RECEIVED

2. Introduction

2.1 Purpose

The purpose of this report is to identify how The Dunes will deliver community benefit. In doing so we will assess relevant literature, a comparative case study and the gaps in provision of community needs within context of the site at Lot 500 Reserve Street, Scarborough.

This key themes within this report provides guidance to the project's place, design and planning team based on social research, comparative assessment, audits and engagement with community and stakeholders. In doing so, the Community Needs Analysis provides a solid evidence base to support unlocking additional height through demonstrating tangible and sought-after community benefits.

2.2 Project background and scope

Scarborough has recently been identified by the State Government as a redevelopment area priority under the Central sub-regional Planning Framework of Perth and Peel @ 3.5 million (2018) and has already undergone works of significant redevelopment to create a more vibrant and activated destination.

The Site is identified by Development WA (previously Metropolitan Redevelopment Authority) as part of the 'Gateway Precinct' of the Scarborough Redevelopment Scheme and sits less than 200m from the Scarborough Beach front.

The site features a significant 12m east-west slope and is currently occupied by a public car park containing roughly 100 bays.

A maximum 'base' building height of 8 storeys is applicable with potential for a total of 12 storeys, subject to the development meeting design excellence and the additional height criteria of the Guidelines.

The development proposal includes a mixed use development, containing two towers sitting atop two podiums connected with a skybridge. Almost 200 residential apartments are planned for and the development is envisaged to include a landscaped terrace park, commercial tenancies, indoor and outdoor community spaces, affordable housing and 100 undercover public car bays.

City of Stirling
17 Jan 2025
RECEIVED

3. Trends

3.1 Literature review

Central Sub-regional Planning Framework (Western Australian Planning Commission, 2018)

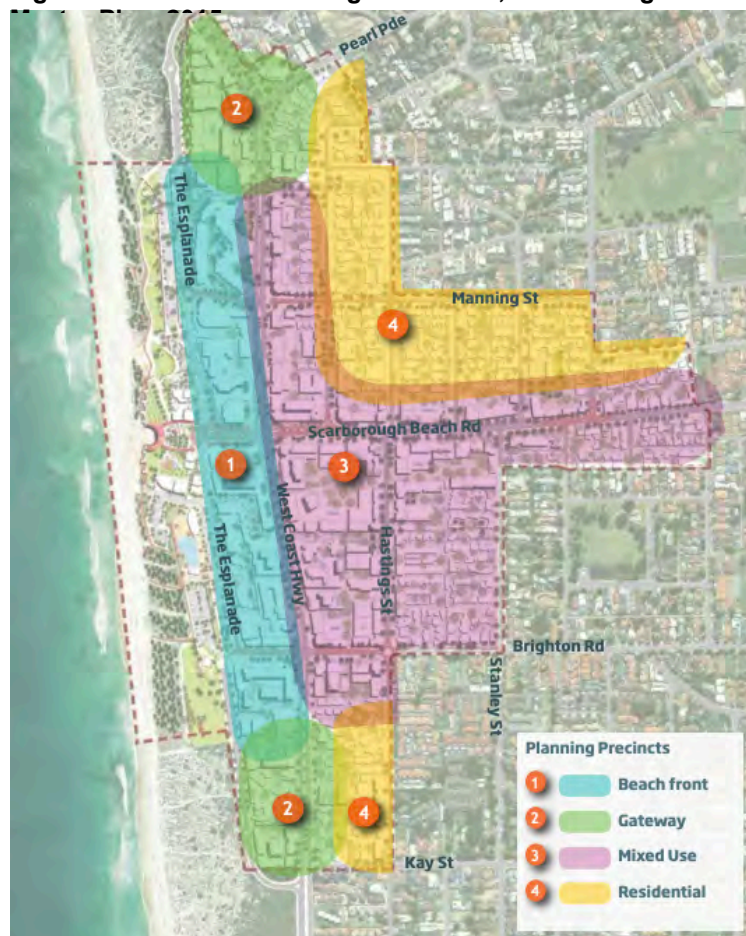
This planning framework is part of the Perth and Peel @ 3.5 million (WAPC, 2018) strategic planning policy. It identifies Scarborough as one of the three areas in the central sub-regional area that is underutilised and will be part of the Metropolitan Redevelopment Authority's (now, DevelopmentWA) redevelopment scheme.

Consideration: State government has identified the capacity of this area to accommodate future population growth through a significant number of dwellings.

The 'Gateway Precinct', Scarborough Master Plan, DevelopmentWA, 2015

The development site is located within the Gateway Precinct of the Scarborough Master Plan (DevelopmentWA, 2015), which is defined as a precinct that 'creates the northern and southern gateways into the Scarborough Beach area. Their physical form will create a sense of arrival and a transition into the intensity of the beachfront core from the surrounding residential areas. The precincts will cater for high density residential development and tourism accommodation.'

Figure 1 Character and Design Precincts, Scarborough



City of Stirling
17 Jan 2025
RECEIVED

The Master Plan articulates that additional height may be achieved if the development provides significant community development such as:

- Exceeding the baseline development policies;
- Provision of short stay accommodation;
- Exceeding the minimum sustainability requirements;
- Providing outstanding architectural design as agreed with MRA (now DevelopmentWA);
- Improving public connectivity through east-west links;
- Other significant community benefits as agreed with the MRA (now DevelopmentWA).

Consideration: State Government has identified the northern portion of Scarborough's beachfront as an ideal location for 'entryway' development.

Community values

The Scarborough Master Plan (DevelopmentWA, 2015) undertook an initial set of community and stakeholder engagement to cultivate the direction for the master plan. From the engagement, the community and stakeholders said their aspirations for Scarborough is to become 'unique, vibrant, safe, fun, iconic, memorable and family-friendly'.

Further, the City of Stirling's Strategic Community Plan 2018-2028 outlines community and stakeholder values as 'community connectedness, place, access and sustainability'.

Consideration: Previous community values can shape the nature of the development to speak to values and characteristics identified.

Scarborough Redevelopment Strategy, DevelopmentWA, 2015

The Scarborough Redevelopment Strategy issued by DevelopmentWA is founded on six Redevelopment Area Objectives namely: economic wellbeing, urban efficiency, connectivity, environmental integrity, social inclusion and building a sense of place. The project seeks to address each redevelopment objective, which is interrogated in this Community Needs Analysis.

The redevelopment objectives are defined as:

Sense of place – ensuring a vibrant, safe and welcoming Scarborough which recognises and celebrates its unique identity and beach culture through a range of attractors and high-quality urban form.

Social inclusion – ensuring that the needs of all Scarborough residents and visitors are considered and catered for by providing a diversity of activities and infrastructure appropriate for a range of ages, genders, cultures and price points.

Connectivity – balancing the movement needs of all users in arriving in, departing from or moving around the Scarborough Redevelopment Area.

Economic wellbeing – stimulating investment and spending in the Scarborough Redevelopment Area by businesses, residents and visitors.

Environmental integrity – recognising, protecting, and enhancing Scarborough's coastal location and ensuring efficient resource use.

Urban efficiency – ensuring a critical mass of population through higher densities and integrated outcomes which leverage existing and planned infrastructure.

Consideration: The development application will seek to respond to each objective in the design and planning of the project.

City of Stirling
17 Jan 2025
RECEIVED

Mooro Noongar Katitjin Bidi (Mooro Peoples Knowledge Trail), City of Stirling

Noongar people have occupied the south-west region for at least 40,000 years. Mooro is the name of the people who traditionally lived in the north of Whadjuk Noongar country (north of the Derbal Yerrigan/Swan River). The Mooro people traditionally lived in extended family groups, caring for country through cultural ceremonies such as song, dance and use of fire. Access to certain areas such as the sea was regulated according to seasons, the status of a family group member, totem and the presence of sacred sites¹.

Consideration: The City of Stirling acknowledges the significance of its past and present Aboriginal culture. There is a unique opportunity to celebrate this part of the City's community within the development.

Healthy Active Ageing, National Heart Foundation of Australia, 2019

The Heart Foundation (National Heart Foundation of Australia, 2019) has created a checklist for healthy active ageing within outdoor spaces and buildings. They note that 'well designed open spaces and buildings increase the mobility, independence and quality of life for [all] people.'

Given the general population of Perth is expected to age substantially over the years to come, ensuring the built environment and open spaces respond to this shift will be key to creating healthy and inclusive urban spaces.

The checklist for healthy active ageing assists to identify opportunities to support older people to stay active and be engaged, enhance their sense of security and provide opportunities to socialise. In doing so, the checklist points to the provision of:

- Sufficient and frequent shaded benches
- Universally accessible toilets
- Universally accessible water fountains
- Bicycle stand, storage and end of trip facilities
- Destinations to support the growth of e-bikes
- Lighting, and
- Safety.

City of Stirling
17 Jan 2025
RECEIVED

Consideration: Given the ageing nature of Scarborough and Greater Perth's population, it is important to provide a built environment that supports healthy, active ageing and therefore supporting the population at large.

Perth ALIVE, Multi-Age Precinct Assessment Framework, 2019

Perth ALIVE's Multi-Age Precincts Assessment Framework outlines a number of standards essential to intergenerational living which in turn supports healthy ageing-in-place. These standards include walkable access to transport amenities; multi-unit, mixed use development; intergenerational building design; community facilities and; on-site services. Notably, the Framework includes the following provisions under the community facilities standard:

- Communal furniture, storage and kitchens
- Sound proofing, ventilation, lighting, power and storage
- Town hall or utility rooms where residents and neighbours of all ages can come together for more structured activities (e.g. meetings, classes, clubs, creches, clinics, guest speakers and special functions).

¹ City of Stirling, Mooro Nyungar Katitjin Bidi (Mooro Peoples Knowledge Trail), <https://www.stirling.wa.gov.au/your-city/documents-and-publications/your-city/about-stirling/mooro-people-s-knowledge-trail>

Consideration: Facilities which support healthy, active ageing are those that include the above amenities. These should be considered where the offer of a community facility is determined to be suitable community benefit.

Big Bold Vision, City of Stirling, 2020

In 2020 the City of Stirling released plans to drive jobs, strengthen the economy and get people home safer and sooner with its 'Big Bold Vision' for the trackless tram from Perth's CBD via Glendalough station to Scarborough. The trackless tram from the CBD to Scarborough will be a significant piece of transport infrastructure supporting Scarborough as a high-density suburb and iconic tourist destination in Perth.

Consideration: Given the City's plan for connecting Scarborough, Glendalough and the CBD through rapid public transport, the development would be supported by a greater capacity in Greater Perth's public transport network.

3.2 Scarborough's demographic profile

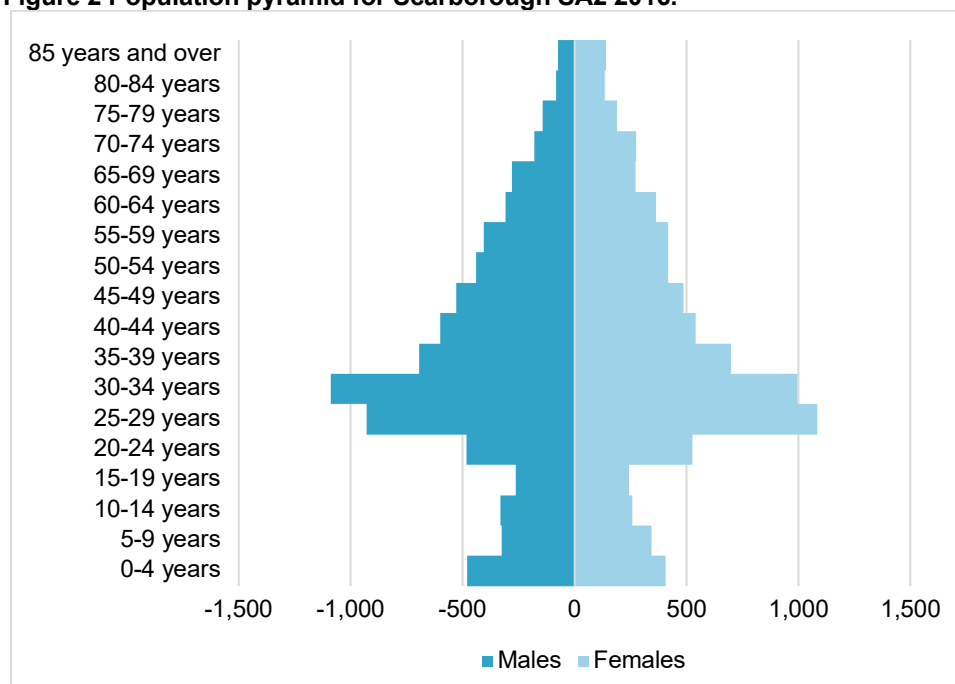
Research has been conducted into the people currently living in Scarborough and who give it its unique social and economic characteristics. Insights demonstrate Scarborough's current population is relatively young, affluent and predisposed to rentals and medium density housing typologies.

Population trends and demographic projection

Scarborough is one of Greater Perth's most densely populated locations with a population density of 3,425 people per km² (the average population density for Greater Perth is 317 people per km²). Currently, the two largest age groups are between 24 and 34 years making it a relatively youthful suburb compared to Greater Perth.

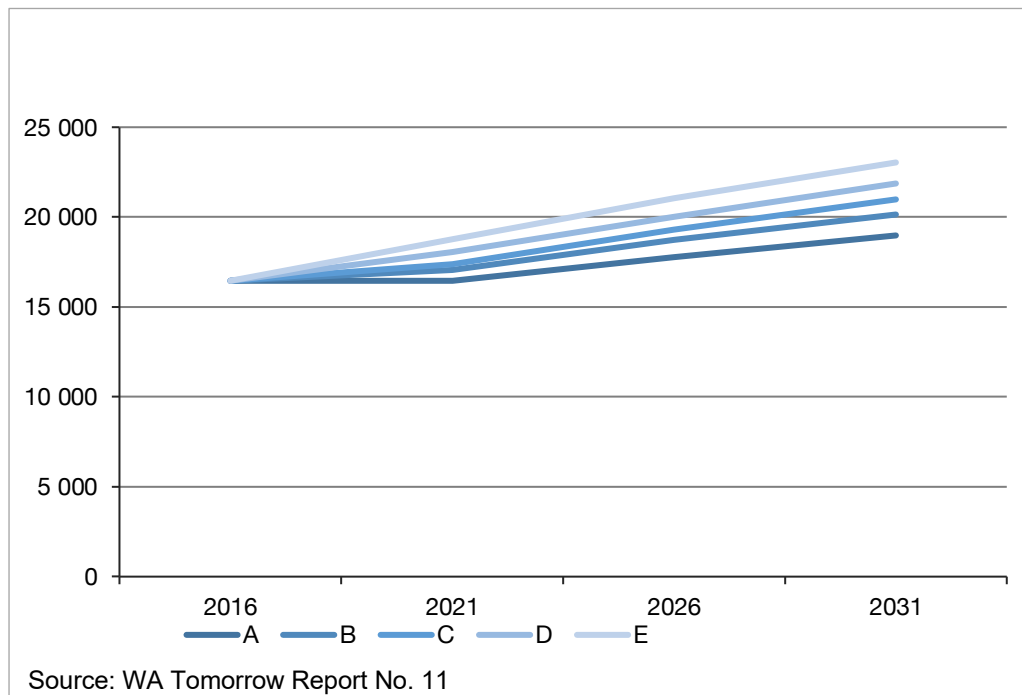
Over time, Scarborough's population demographics are projected to age and attract more people who are 'downsizing' or 'rightsizing' and already live within the local area. The Department of Planning, Lands and Heritage (2018) observes that Western Australia's growth rate has, up until next year, exceeded Scarborough's growth rate. DPLH's WA Tomorrow report (No.11) projects that Scarborough's growth will exceed the growth rate of the state between 2016-2026. Additionally, their population growth is expected to match and slightly exceed the growth rate of Greater Perth by 2031.

Figure 2 Population pyramid for Scarborough SA2 2016.



City of Stirling
17 Jan 2025
RECEIVED

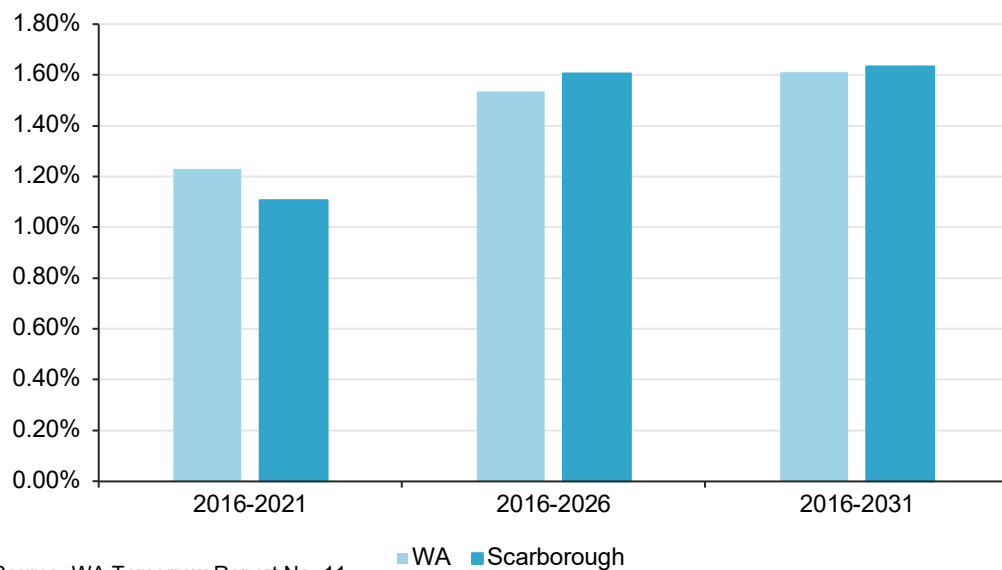
Figure 3 Medium term population forecasts for Scarborough 2016-2031 (DPLH, 2018).



The WA Tomorrow forecast comprises five bands of occurrence; Band A - low, Band B - medium-low, Band C - medium, Band D - medium-high and Band E - high.

City of Stirling
17 Jan 2025
RECEIVED

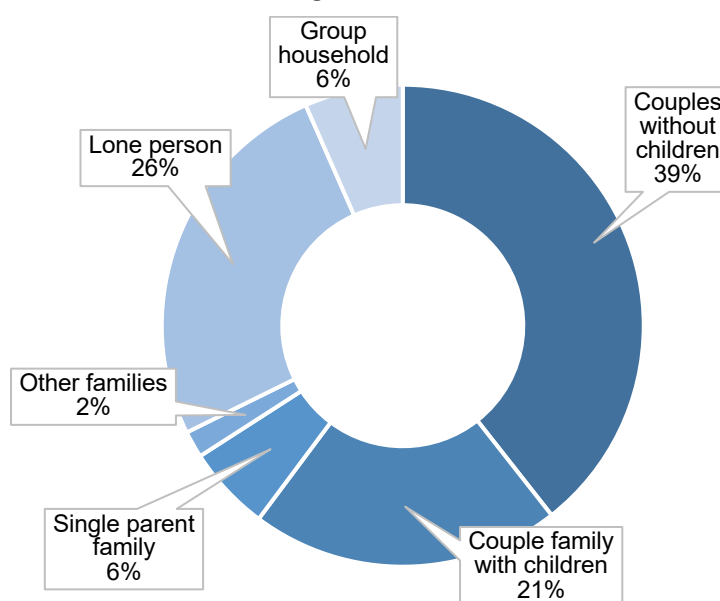
Figure 4 Average annual population growth rate Band C comparison with WA (DPLH, 2018)



Housing diversity

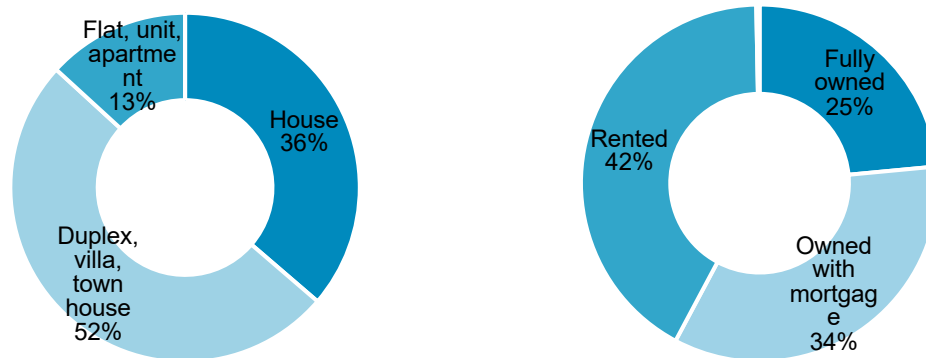
In Scarborough, the most common household structures are couples without children (39.4%) and lone person households (25.7%). A large proportion of Scarborough dwellers are renting (42%) compared to Greater Perth (26.7%). Reflecting the high-density nature of Scarborough, just over half (51%) of their housing typology is constructed with 'medium' density typologies including duplexes, villas and townhouses. Standard houses make up 36% of the housing typology and flats, units and apartments make up just 13%. Scarborough is also a considerable destination for short stay and vacation accommodation offering various opportunities for hotel accommodation or short stay including the Rendezvous Hotel, Seashells Scarborough, Ramada Scarborough Beach, Indian Ocean Hotel and the View Apartments, with a variety of shared accommodation offerings (e.g. Airbnb, Stayz) provided (see the asset audit map for more accommodation details).

Figure 5 Household structures, Scarborough



City of Stirling
17 Jan 2025
RECEIVED

Figure 6 Housing typology (left) and home ownership (right), Scarborough



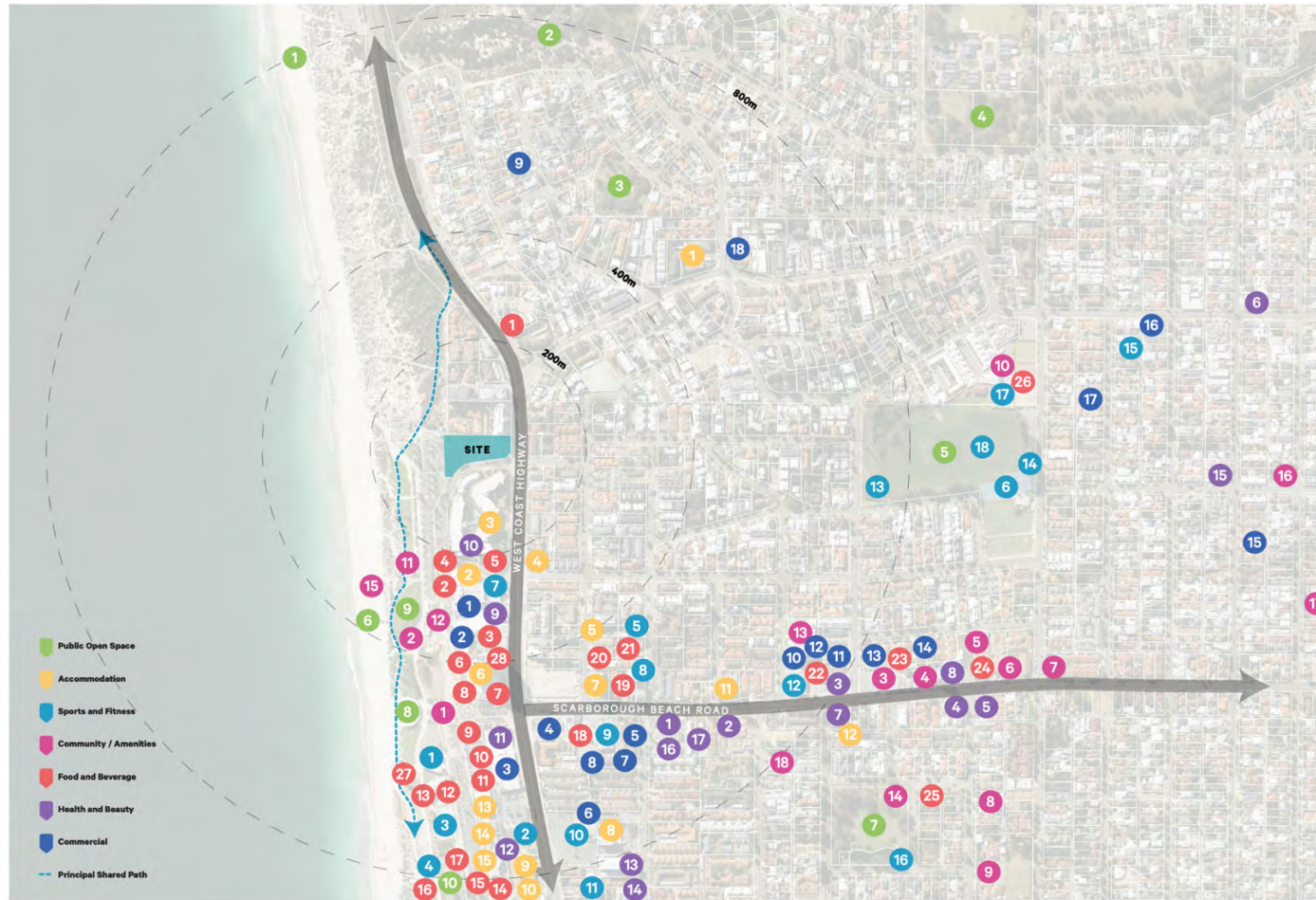
Income

The Scarborough population is relatively affluent compared to the population of the rest of Greater Perth, earning roughly \$200 more a week. This is significant given a majority of their population are either couples without children, or lone person households indicating that they are likely to have more disposable income. This disposable income stimulates economic activity, namely in the surrounding retail, and food and beverage businesses in the local area.

City of Stirling
17 Jan 2025
RECEIVED

3.3 Asset audit and map

To understand the current offer of services and activities within Scarborough and near the Site, the range of assets within the nearby area has been mapped and their proximity to the site interrogated based on a walkable catchment of 400m and 800m. The asset audit reveals a lack of activities and services in the northern portion of Scarborough surrounding the site.



City of Stirling
17 Jan 2025
RECEIVED

Public Open Space

- 1 South Trigg Beach
- 2 Kevan Langdon Reserve
- 3 Peet Fyfe Reserve
- 4 Deanmore Duke Reserve
- 5 Abbett Park Reserve
- 6 Scarborough Beach
- 7 Deanmore Square
- 8 Scarborough Amphitheatre
- 9 Scarborough Reserve
- 10 Brighton Reserve

Food and Beverage

- 1 Basil's Coffee
- 2 Bay Bays on Scarborough
- 3 Peter by the Sea
- 4 Scarborough Beach Bar
- 5 Oceans 6019
- 6 The Lookout Bar
- 7 Nando's Scarborough
- 8 The Local Shack
- 9 The Sandbar
- 10 Buteko Bar
- 11 Hamburger Hill
- 12 La Capannina
- 13 Cocolat
- 14 Grill'd Scarborough
- 15 The Wild Fig
- 16 C-Breez Kiosk
- 17 Arai Coffee
- 18 Uncle Gino's Pizzeria
- 19 Domino's Pizza
- 20 Health Freak Cafe
- 21 Lady Latte
- 22 Fortuna Chinese Restaurant
- 23 La Vela Restaurant
- 24 One for the Road
- 25 Warong Timah Merah
- 26 Scarborough Bowling Club Bar
- 27 Cocolat

Accommodation

- 1 Relax Bright & Airy Garden Villa
- 2 Scarborough & Absolutely Beachfront
- 3 Observation Rise Realty
- 4 Scarborough Apartments
- 5 The View Apartments
- 6 Rendezvous Hotel Perth
- 7 Ramada
- 8 Indian Ocean Hotel
- 9 West Beach Lagoon
- 10 Quest Scarborough
- 11 Scarborough Accommodation Bureau
- 12 Western Beach Lodge
- 13 Amazing Beachfronts
- 14 Seashells Scarborough
- 15 Adriatic Blue
- 16 Sandcastles Scarborough

Health and Beauty

- 1 Clinipath Pathology
- 2 Scarborough Traditional Acupuncture
- 3 Jaydoe Eco Hair
- 4 Optimal Pharmacy +
- 5 The Woods Medical Centre
- 6 A Touch of Blush
- 7 Bellus on Scarborough
- 8 Serene Day Spa & Beauty
- 9 Ra'Ra Studio
- 10 Vanilla Face & Body Spa
- 11 The Perfect Look
- 12 Dermedica Cosmetic Clinic
- 13 Belle Cherie
- 14 Arai Lounge Hair and Beauty
- 15 Beauty Hit
- 16 Scarborough Beach Medical Centre
- 17 Hastings Dental Centre

Sports and Fitness

- 1 Scarborough Beach Surf School
- 2 Boom Fitness
- 3 Scarborough Beach Pool
- 4 Perth Go Surf
- 5 Verve Training
- 6 Scarborough Tennis Club
- 7 Life Ready Physio and Pilates
- 8 F45
- 9 12RND Fitness
- 10 Revo Fitness
- 11 Proactive Fitness
- 12 The Yoga Room
- 13 Insta Fit Group Training
- 14 Fitbody Scarborough
- 15 Iron Fit Perth
- 16 Onelife Taekwondo
- 17 Scarborough Bowling Club
- 18 Scarborough Cricket Club

Commercial

- 1 Coles Express Scarborough
- 2 Cordingley's Surf Shop
- 3 Coles Scarborough
- 4 BP
- 5 The Surf Boardroom
- 6 Thirsty Camel
- 7 A1 Scarborough Dry Cleaners
- 8 Australia Post Office
- 9 Thox Socks
- 10 O' Rouke Real Estate
- 11 Peard Real Estate
- 12 Scarboro Super Deli
- 13 Caltex Scarborough
- 14 LJ Hooker Scarborough
- 15 Allia
- 16 Vine & Bloom Florist
- 17 Lucie June
- 18 Wrap Works

Community / Amenities

- 1 Scarborough Beach Clock Tower
- 2 Scarborough Beach Skate Park
- 3 The Art Space Collective
- 4 Scarborough Police Station
- 5 St John's Primary School
- 6 Immaculate Heart of Mary Parish
- 7 Wanslea Family Services
- 8 Deanmore Primary School
- 9 Scarborough Primary School
- 10 Scarborough Community Club
- 11 Whale Playground
- 12 Scarborough Rock Climbing Wall
- 13 Regents Garden Aged Care
- 14 Scarborough Beach Scouts
- 15 Scarborough Surf Life Saving
- 16 Scarborough Uniting Club
- 17 Anglican Church of Australia
- 18 Scarborough Telephone Exchange

City of Stirling
17 Jan 2025
RECEIVED

As a site within the 'Gateway Precinct' of the Scarborough Redevelopment Area, there is an opportunity to meet many of the needs of residents within the northern section of Scarborough, saving a journey south to the main beachfront precinct.

Current activities and services on offer include a range of cafes, chain restaurants, pubs, nightclubs and a small retail offer. The bulk of these are centralised in the Beachfront Precinct and are roughly 200m from the Site.

Near the Site is a principal shared pathway (PSP) that travels from the main Beachfront Precinct of Scarborough past the Reserve Street site north to Trigg and beyond. Observations from site visits reveal that the PSP is used by a range of people, mostly walkers, joggers, cyclists and surfers making their way to and from Scarborough and Trigg.

The main provision of public open space is provided by the most northern stretch of the Scarborough Reserve due west of the Site. Apart from this, there are little limited neighbourhood parks and open spaces for casual use in a comfortable walkable distance from the Site.

Scarborough is a popular destination for functions and events. Considering Scarborough has a population of over 15,000 and is a popular destination for visitors, a lack of variety exists in terms of versatile spaces for functions and events. Functions and events are typically held in the various bars or restaurants in Scarborough, or in one of three dedicated function spaces:

- The Rendezvous Hotel function and events spaces
- Sunset Terrace Scarboro Function Centre
- Stirling Community Centres – Scarborough Beach.

3.4 Community and cultural events

Scarborough holds a variety of events, particularly in the summer months due to favourable weather conditions. These events vary from small to large scale and attract thousands of people to visit Scarborough. The following list of major community and cultural events provides a snapshot of events held in Scarborough:

- The Aussies Surf Lifesaving Championships – over 6,000 competitors plus 5,000 spectators.
- Scarborough Sunset Markets (summer) – over 10,000-15,000 visitors each week.
- Scarborough Sunset Markets (winter edition) – 3,000-5,000 visitors each week.
- Sunset applause – runs in tandem with the sunset markets.
- (Former) Scarborough Veranda – a FringeWorld Festival venue, 16,500 visitors over 1 month.
- Brazilian Beach Carnival – 8,000 people.
- Groundswell Festival – 10,000 visitors over 2 days.
- Various live music performances held in the amphitheatre or at live music venues and bars.
- Various sporting competitions and events including beach volleyball, yoga and swimming.

City of Stirling
17 Jan 2025
RECEIVED

3.5 Comparative analysis

When undertaking this Community Needs Analysis, a destination of a similar composition is often investigated to compare and contrast the characteristics of the different places. These comparisons help us understand what makes a certain urban realm a success and thus, what would work well on the project site to deliver community benefit.

For this project, Scarborough has been compared with the beachside urban location of Glenelg, South Australia for its vibrant character, urban form and similarities in demographics and spatial size.

Glenelg

Glenelg is an example of a coastal urban hub which provides a range of activities and services through mixed residential high-density urban form that delivers to both a local and external group of users. Quite alike to Scarborough, there are pockets of medium to high density developments taking advantage of a vibrant seaside location.

The bustling coastal and urban suburb of Glenelg incorporates a range of activities such as shopping, nightlife, tours, entertainment, walks, trails and museums surrounding a grassed public open space and the wide stretch of beach. It has been described as “Adelaide at its most ‘LA’” indicating the vibrant and playful nature of the suburb (Lonely Planet).

Population demographics

Glenelg's population is older than Scarborough's, providing a snapshot of the density that Scarborough may develop in the years to come, as population projections suggest.

Similar to Scarborough, the Glenelg SA2 (as defined by Australian Bureau of Statistics, 2019) is an urban hub and in 2019 had an estimated resident population of 21,050 with a relatively high population density at 2,914 people per km². In comparison, Greater Adelaide's average population density is just 400 people per km².

In a similar nature to Scarborough's affluent population, activity in Glenelg is partly sustained by a comfortable population with a median weekly household income of \$1,349, \$100 higher than the South Australian state average.

Transport and urban form

What sets Glenelg apart from Scarborough is the tram line that glides in from the CBD, providing an easy 30-minute journey for residents and tourists alike. Most of the activity has formed along the tram line running north east along Jetty Road from Glenelg to the city centre. Clusters of activity are forming along the north west of Glenelg, pulled by the marina which hosts a handful of activities and services, mainly restaurants and bars.

If Scarborough grows the way that the City of Stirling desires through its Big Bold Vision, it will have public transport in a similar way to Glenelg.

Built environment

Upon arrival in Glenelg at the end of the tram line, passengers are dropped off into Mosely Square – an urban square of green lawn, which hosts a range of programmed activities during certain times of the year including live music, summer night markets, 'City Bay Rolling' and mini festivals and concerts. This is not dissimilar to Scarborough's arrival sequence, with Scarborough Beach Road terminating at the clock tower and the activated Beachfront Precinct.

Mosely Square is edged by medium height mixed-use buildings that lead to a grassed public open space area and beach front known as the Glenelg Foreshore playground. The urban environment is complemented with green open reserves, including Colley Reserve and Wigley Reserve to the North. While Scarborough has a similar urban environment, it is lacking the same provision of green open space between buildings.

The dispersal of activities throughout Glenelg is what works in terms of the suburb's vibrancy and life. While there is a clear cluster of activity in the central Mosely Square area and along Jetty Road

following the tram line, activity is distributed throughout Glenelg, about 500m north and 1km along Jetty Road from the 'centre'. This gives it a variety of interest at multiple locations in the suburb. This is something that Scarborough could look to do to increase its sense of vibrancy.

Glenelg has a variety of community events and function spaces. Matching Scarborough, these range from events spaces within bars and restaurants. Glenelg is home to four spaces that specifically host functions and community events, including the Glenelg Community Centre, The Function Glenelg, The Stamford Grand Adelaide Hotel and the Oaks Glenelg Plaza Pier.



City of Stirling
17 Jan 2025
RECEIVED

3.6 Gap analysis

After we have an understanding of what is on offer in Scarborough, we are able to identify what's missing in terms of the activities, services, built and natural environment that provide community benefit.

Through review of literature, asset mapping and observations of the site the following gaps in the Scarborough have been identified. The following gaps have been identified and present current opportunities for development in Scarborough.

Offer of activities and services in Scarborough's north

The asset audit presented a gap in the activities and services on offer in Scarborough. It showed that they are highly concentrated in the Beachfront Precinct and along Scarborough Beach Road. Due to the site's advantageous location next to the principle shared pathway (PSP) to Trigg, there is ample opportunity for an expansion of activities and services in the northern Gateway Precinct, which would help to attract more people north of Scarborough and Trigg into the main Scarborough area.

There is also a lack of public art and cultural activities in the northern section of the Scarborough Beachfront Precinct.

Community function room and events space

There is a lack of multi-use community function rooms within the northern Scarborough area that are versatile, elegant, indoors and protected from the elements. Glenelg has a variety of venues dedicated to this type of function serving a similar population size well. Given Scarborough has so many community and cultural events, it would be fitting to incorporate an architecturally designed multi-purpose space for community hire in the northern portion of Scarborough. These spaces could cater for current demographics, however as the area matures, they could offer multi-use opportunities for a wide range of age groups.

Mooro story

The story of the traditional custodians of the land we now know as Scarborough is currently not strongly celebrated in the built environment and public realm. In order to connect to all of the stories of Scarborough, there is an opportunity to explore and tell the Mooro story. This will in turn enrich both the local and visitor experience.

End of trip facilities

In Scarborough there is a limited range of end of trip facilities in both their offer and functionality. As the site is in close proximity to a PSP, it would be beneficial to include a range of end of trip facilities that make commuting in and out of Scarborough through active transport more accessible.

Inclusive design

Scarborough's ageing population calls for attention to inclusive design in the built environment and open spaces, such as those mentioned by the Heart Foundation's (2019) Healthy Active Ageing checklist. Combining affordable housing opportunities with ageing-in-place amenity such as accessible open spaces, secure and social building design and community facilities that support all ages of the population will help to fill this gap in Scarborough's built environment.

Affordable and diverse housing

To meet the demands of future (and current) downsizers and younger people who seek out a home in Scarborough, affordable and diverse housing should be achieved within new developments. There is currently a high proportion of people renting in Scarborough, showing there is already a suitable rental market and demand for alternative housing.

City of Stirling
17 Jan 2025
RECEIVED

While there is a high amount of duplex, villa and town house housing typologies in Scarborough, the number of flats, units and apartments could be higher (currently at 13%). This could improve the diversity of housing and allow for more affordable housing stock.

Public transport

While Scarborough is connected through bus services including the popular 990 bus service that runs along Scarborough Beach Road from Perth City, there is limited direct public transport to the area. The comparative analysis found Scarborough would develop similar to Glenelg if it was supported by frequent rapid public transport service, as outlined in the City of Stirling's 'Big Bold Vision'.

City of Stirling
17 Jan 2025
RECEIVED

4. Community engagement

To explore the gaps found in the trend analysis research, the community was engaged to investigate how some of these gaps are perceived. To do this, feedback was collected using intercept surveying, kitchen table conversations and a Community Open House session. An online survey was offered to reach those who were unable or unwilling to participate in face-to-face engagement.

In summary, a total of 118 people (50 survey respondents and 68 Open House session attendees) were reached through consultation-style engagement and over 700 people through informative engagement through two rounds of flyer leafletting.

Overall, there is general support for The Dunes development, receiving an average of 75% support.

4.1 Intercept surveying

Social surveying in the form of public intercept surveying has assisted in the data collection to understand the current and future community desires for the site. Public intercept surveying involves engaging with people who are visiting Scarborough near the project site to collect data based on the survey questions.

The intercept surveying was conducted in close proximity to the site on Thursday 15 October 2020 and reached a total of 25 people 'on-the-ground'. Key themes from the intercept survey results are as follows:

There was overall high support for the development at Lot 500 Reserve Street, Scarborough.

81% of the intercept survey respondents were supportive of the redevelopment of Lot 500 Reserve Street. Some respondents welcomed more development in Scarborough while others provided conditional support, where they were supportive granted the development isn't too high and didn't completely block ocean views for surrounding residents.

There is a desire for 'smart casual' commercial opportunities.

While restaurant/fine dining (64% selection), café/casual eatery (56% selection) and a wine bar (52% selection) were the top reasons that would encourage visitation to the site, respondents also desired a mix between a casual venue and a more upmarket venue compared to what is already on offer in Scarborough. Examples of desired venues included the Shadow Wine Bar in Northbridge.

The community are supportive of a community function room.

Top responses for the community function room included ocean views, Wi-Fi, dance floor, casual liquor license, flexible furniture, and audio-visual equipment.

The community are supportive of a terraced pocket park with the following inclusions.

A sunset viewing area, dog-friendly allowance, terraced public seating and a native edible garden were the most desired attributes of the terraced pocket park. Other comments included having a grassed or lawned area.

Quality public toilets and amenities are desired by the community.

In addition to the offerings suggested in the survey, the community would also like to see quality and clean public toilets on offer, with 80% of the survey respondents indicating so. Following public toilets were drinking fountains and day-use lockers (at 68% and 64% respectively).

City of Stirling
17 Jan 2025
RECEIVED

4.2 Community Open House

A Community Open House 'drop in' session was held on Thursday 12 November from 3-7pm, open to all members of the community. A total of 68 people attended the Open House session, an overwhelming majority of which were Scarborough residents.

A total of 15 attendees completed the online survey as a result of its promotion at the Community Open House and hard copy feedback was recorded on post-it notes. A summary of the findings are as follows:

There is moderate support for the redevelopment of Lot 500 Scarborough.

A number of responses indicated 0% support, with commentary indicating concerns for traffic and 'overdevelopment'/height within Scarborough. Positive support responses were keen to see fresh development in Scarborough.

"I went to the public showing yesterday and I was impressed by the project. My major concern was to find out if the tower would block [our] ocean views from R212 in Observation Rise. It seems that we are only going to lose a partial view but we will gain by getting a much improved development in the area."

Any commercial offering should be different to what is already on offer in Scarborough.

There was enthusiasm for upmarket food and beverage offer, similar to the responses of the intercept survey. There was also a preference for locally made produce to be on offer (40% selection rate).

Unsure of community room.

Flexible seating, WiFi, ocean view and connection to outdoor area were most desired features of the community room (over 30% selection). Additionally, 30% of the selections went to 'none of the above' indicating that some had no interest in a community function room in the redevelopment. The community room was the least attractive reason that would draw people to use the site.

A terraced pocket park is positively anticipated.

Like the intercept survey respondents, a sunset viewing area was highly desired by the respondents at 76% selection rate. This was followed by terraced public seating and sculptural public art at 64% each.

Drinking water fountains would be a good addition to the community benefit offer.

Other than the community benefit options mentioned in the survey, the respondents would like to see drinking water fountains included in the redevelopment.

City of Stirling
17 Jan 2025
RECEIVED

5. Discussion

5.1 Key findings

The following key findings have arisen from the Community Needs Analysis. These have been organised to address the Scarborough Redevelopment Scheme Objectives.

Social inclusion

- **Diverse housing opportunity** – meeting the needs of Perth's growing and diversifying population will be important to make sure the development offers housing for the changing demographics of Scarborough. Scarborough already has a high rate of medium-high density housing typologies in comparison to Greater Perth.
- **Supporting healthy active ageing** – ensuring that the public space and the built environment support healthy active ageing will be important for Scarborough as the population is projected to age. Inclusive design isn't only beneficial for the elderly population but is beneficial for all groups of the population.

Sense of place

- **Gateway to the north** – according to the Scarborough Redevelopment Scheme, Reserve Street sits in the Gateway Precinct and will be the 'first contact' visitors have when they arrive in Scarborough from the north. Considering this, it is important to capture the feel of Scarborough including the exciting, vibrant destination it sets out to be while honouring the history and stories of the suburb.
- **Mooro story** – there is an opportunity to tell stories of the traditional owners of the land through the built environment and public art at the site, as this has not been thoroughly touched on in Scarborough.
- **Beachy, vibrant and relaxed** – The community described Scarborough's vibe as beachy, vibrant and relaxed. The community benefit of the redevelopment should draw upon and respond to these community values.

Connectivity

- **End of trip facilities** – encouraging multiple modes of transport is imperative to keeping Scarborough vibrant. To encourage this, providing good-quality end of trip facilities should be considered.

Economic wellbeing

- **Servicing the north of Scarborough** – providing a range of activities and services in the north of Scarborough will encourage more casual visitation from neighbouring suburbs. Services to be provided should have a point of difference to what is already on offer in Scarborough, as well as providing convenience to the surrounding local community.
- **Smart casual dining** – The community were open to both a casual café or eatery as well as a wine bar venue offering a more sophisticated food and beverage menu to what is already on offer along Scarborough's beachfront foreshore.

City of Stirling
17 Jan 2025
RECEIVED

Environmental integrity

- **Ecological integrity of the foreshore location** - the site at 500 Reserve Street is at an integral location that marks the edge the urban hub and the natural coastal dune environment that is enthusiastically protected. The project should link back to the coastal location, dune setting and native coastal planting palette.

Urban efficiency

- **Diverse housing** - to meet the needs of Scarborough's growing population, high-density development is needed to facilitate this, especially since Scarborough already has a healthy amount of medium density development in the form of villas, townhouses and duplexes.

5.2 Next steps

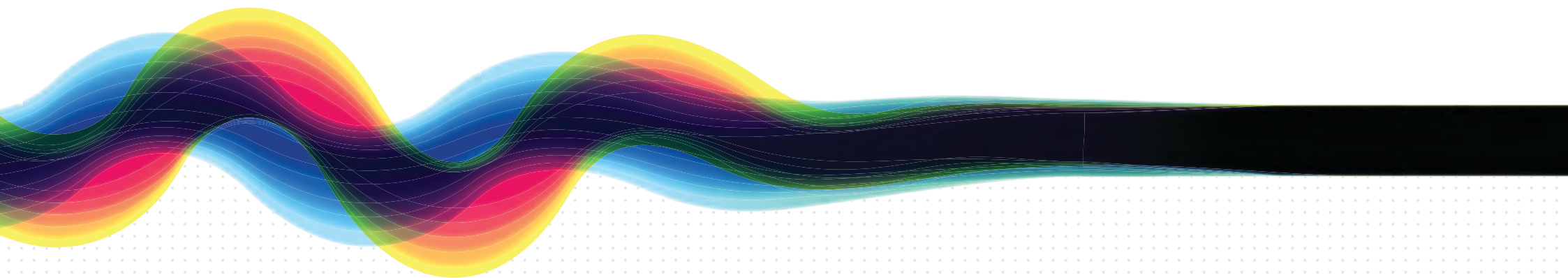
The key findings of this report will be considered and unpacked in the Place Strategy supporting The Dune's Development Application. A copy of the full engagement outcomes report can be found in the appendices of the Development Application or on request.

City of Stirling
17 Jan 2025
RECEIVED

The Dunes, Reserve Street Place Strategy

City of Stirling
17 Jan 2025
RECEIVED

March 2021 | 20-343



element.
the art and science of place

We acknowledge the custodians of this land, the Whadjuk Noongar and their Elders past, present and emerging. We wish to acknowledge and respect their continuing culture and the contribution they make to the life of this City and the State of

City of Stirling
17 Jan 2025
RECEIVED

Document ID: /Volumes/Graphics/2020/20-343 Scarborough, Lot 500 Reserve Street Place and Planning Services/00 Place Plan/20-343 Lot 500 Reserve st Placeplan Folder/20-343 The Dunes Place Strat Final.indd

Issue	Date	Status	Prepared by	Approved by
1	26.11.20	Draft	Suzie Zuber	Ben Kent
2	01.12.20	Draft	Suzie Zuber	Ben Kent
3	26.02.21	Final	Suzie Zuber	Ben Kent
4	12.03.21	Final	Suzie Zuber	Ben Kent

This report has been prepared for the exclusive use of the Client, in accordance with the agreement between the Client and Element Advisory Pty Ltd (**element**) ('Agreement').

element accepts no liability or responsibility whatsoever in respect of any use of or reliance upon this report by any person who is not a party to the Agreement or an intended recipient.

In particular, it should be noted that this report is a qualitative assessment only, based on the scope and timing of services defined by the Client and is based on information supplied by the Client and its agents.

element cannot be held accountable for information supplied by others and relied upon by **element**.

Copyright and any other Intellectual Property arising from the report and the provision of the services in accordance with the Agreement belongs exclusively to **element** unless otherwise agreed and may not be reproduced or disclosed to any person other than the Client without the express written authority of **element**.

Contents

1. Introduction	1	6. Embedding the Place Vision	19
1.1 Executive Summary	1	6.1 Place Plan	19
2. Context	3	6.2 Place zones	20
2.1 Historical context	3	7. Management and Governance	27
2.2 Physical context	5	8. Public Art	29
2.3 Strategic policy context	6	8.1 Public art	29
2.4 The people	8	9. Appendix: Strategic Documents	31
3. Needs Assessment	9		
3.1 Place scan	9		
3.2 Trends and drivers behind creating great places	12		
3.3 Community needs analysis	14		
4. Key place opportunities	17		
5. Place Vision	18		
The Dunes celebrates the essence of the Sunset Coast.	18		



City of Stirling
17 Jan 2025
RECEIVED

CAFE

1. Introduction

City of Stirling
17 Jan 2025
RECEIVED

1.1 Executive Summary

Located in the northern reach of the Scarborough Foreshore, The Dunes promises to create a landmark precinct for Scarborough Beach. Designed by Hillam Architects and Realm landscape studios, the development proposes a sinuous built form that reflects on its indigenous heritage in the soft landscaping strategy and embeds itself in its environs with its rippling curves and publicly accessible pocket park and community spaces.

This Place Strategy responds to the findings of the Community Needs Analysis, architectural design and desktop research to create a Place Vision that will embed meaningful community benefits into the new development.

The Dunes Development Snapshot

- Two architecturally designed buildings – podium-tower configuration
- Generous vehicle and pedestrian accessway between buildings
- A mix of studio, 1, 2 and 3+ bedroom apartments including affordable units
- Terraced pocket park, including bush tucker garden
- Beachside public viewing platform
- Community room for hire by residents, community groups and small business
- 100+ public undercover car bays
- Public amenities – toilets, storage lockers, drinking fountain, bicycle parking
- Lower ground cafe
- Two retail kiosks
- Sunset wine and tapas bar





City of Stirling
17 Jan 2025
RECEIVED

2. Context

Sitting at the northern end of The Esplanade car park, The Dunes Reserve Street (The Dunes, or the Site) boasts an exceptional location with uninterrupted views to Scarborough's renowned beachfront to the west and convenient access to West Coast Highway to the east.

2.1 Historical context

Until the 1960s, The Dunes was within the coastal dunes that extended north from Scarborough Beach to the suburb of Trigg.

For thousands of years this coastal area drew the Whadjuk Noongar people for their seasonal harvest of fish and crustaceans, and ceremonial occasions. The inland area now known as the City of Stirling, were wetlands, abundant with natural resources and used by the Mooro Noongar people during the warmer months for camping, fishing, hunting, leisure and ceremony. Foot trails connected the wetlands, rivers and lakes with the campsites and areas of importance.

City of Stirling
17 Jan 2025
RECEIVED

Elder Oriel Green remembers her grandfather telling her.....“the old people used to go through the bush to the water, to the sea. And he said they'd put their fish traps down there and when we lived in North Beach he said to me.....old people used to live there a long time ago and they used to catch fish down there not far from you. And he used to talk about old people meeting up in the bush”.

From the City of Stirling's Mooro Noongar Katitjin Bidi

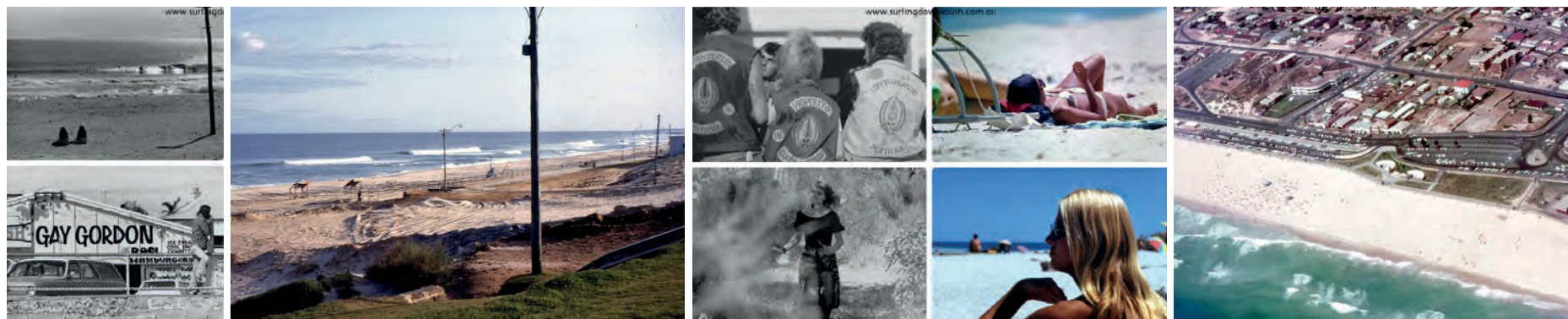
Wardan Boodjar – Sea Country

“The Aborigin[al]s along the whole line of Western coast believe that when the body dies, the spirit goes away westward through the sea to some country far away, and that there the spirit lives in much the same manner as it has lived when in the flesh.

“The heaven lay west of the great mama waddurn (father sea), under which their kaanya (spirit of the newly dead) must journey to reach koorannup-nyirganup (their heavenly home). The group ... whose kaanya left their bodies to go under the sea, were stopped in the middle of the sea by a janggi karak (black 'spirit' cockatoo with red-banded tail) ... when they had got through to the other side of the nest they travelled on and on until they come to the shallow waters of the heavenly shore.”

– Daisy Bates, The Native Tribes of Western Australia

City of Stirling
17 Jan 2025
RECEIVED



In the 19th Century this 2.5km stretch of white sandy beach attracted European settlers, who chose to name it after the English beach resort of Scarborough in Yorkshire. The sandy dunes had little agricultural value and presented a challenge for residential development until the turn of the twentieth century and the construction of the 1912 plank road that bridged the gap between the remote sandy coastal environment and the settled horticultural-friendly areas of Osborne Park and Nookenburra (Innaloo)¹.

The construction of the Promenade, now The Esplanade, in 1932, evoked the promenade walks of Mediterranean seaside towns and signalled Scarborough's popularity as a coastal leisure destination to escape the heat and labour of the inner suburbs.

Culturally, Scarborough has always had a reputation for being 'edgy'; a place physically on the edge of the continent, culturally on the edge of new trends, socially on the edge of acceptable.

Attracting a young demographic drawn to the free entertainment of the long stretch of beach, Scarborough has seen the rise of many cultural trends – 1950s teenagers came for the rock and roll scene at the Kool Korner American Diner and to dance in the outdoor 'snake-pit'; 1960s and 70s youth came with their pushbikes, motorbikes and cars for drag races along the long straight esplanade, and of course the challenging swell has attracted surfers since the 1960s.

With the increased popularity of Scarborough as a leisure destination came an increased demand for car parking. Photographs from 1965 show The Dunes allocated for parking as part of The Esplanade car park.

In 1977 the residential development on 1 Reserve Street was constructed, accessed from the The Dunes car park. This development was in keeping with the surrounding residential neighbourhood to the north and inland of Scarborough Beach.

The Observation Rise beachfront development to the south of The Dunes wasn't constructed until the early 1990s, part of the rippling higher-density development emanating from the centre of Scarborough Beach, the 19-storey Observation City (now Rendezvous Hotel), a coastal investment inspired by the America's Cup Challenge.

The 90s recession hit Scarborough like everywhere else, and though Scarborough Beach lost its vibrancy and with it its status and attraction, it never lost its core 'sandy-foot' patrons drawn to the call of the surf.

The revised planning framework and foreshore improvements of the early 2000s marked the renaissance for Scarborough. The first wave of investment, the Scarborough Beach Pool, Whale Playground, Snake Pit skate park, Sunset Hill and other features cemented the precinct firmly back on to the local and visitor tourist map, and set a high standard for the quality of all new development in the area.

As one of the few points of commercial access to the western beachfront, Scarborough is seen as Perth's best opportunity to create a truly urban precinct on the Sunset Coast. The Dunes is a rare opportunity to mark the northern gateway to the coastal-urban precinct, connecting the busy West Coast Highway to the natural beauty of the foreshore, and an opportunity to survey the wonder of the sunset coast from a new aspect.

¹ <https://library.vincent.wa.gov.au/local-history-centre/stories-from-our-past/the-gornall-family-tragedy-of-1916.aspx>

2.2 Physical context

Since the 1970s, The Dunes has been a City of Stirling managed car park, providing around 100 free bays for public use. A number of land-locked developments sit to the north with only one point of access with Rights of Access granted across The Dunes.

The Site slopes from West Coast Highway to The Esplanade car park (10m over 160m), a gradient currently addressed by a steep, natural embankment to the west with the car park laid at grade. The slope creates views of the ocean from the top of Reserve street down to The Esplanade car park.

The vegetation on this northern side of Reserve Street is dunal, with windswept and sparse native bushes and trees, compared to the more lush landscaping that screens the residential development on the southern side of the road. The Map of Bush Fire Prone Areas marks the western two-thirds of the site as within the southern extent of the coastal bush fire prone area.

Physical connection to the beach is a 2 minute walk (150m) across the car park and through the dunes.

2.2.1 Transport Connections

- Reserve Street serves as an access road to the northern section of The Esplanade car park and to a number of residential developments.
- Rights of access exist across the site to residential development lots to the north.
- Access into and out of Reserve Street is left turn only from and onto West Coast Highway.
- Bus routes along West Coast Highway connect to Stirling Station and Karrinyup Bus Station. Buses from Scarborough Beach bus station – a 5 minute walk away – connect into Perth City and Glendalough Station.
- A future light rail is proposed to terminate at Scarborough Beach Road and connect the precinct to Glendalough Station and beyond.

The Site is within easy walking distance of the convenient amenities of Scarborough Beach, including the Coles supermarket, cafés, shops, post office, swimming pool, playground and beach.



2.3 Strategic policy context

Under the provisions of the Metropolitan Redevelopment Authority Act 2011 (MRA Act) DevelopmentWA is responsible for planning and development control within redevelopment areas in the Perth Metropolitan Region.

The subject site is located within the Scarborough Redevelopment Area (SRA) and is subject to the Scarborough Redevelopment Scheme (the Scheme). The Scheme identifies the subject site as being located within the Gateway Precinct – an opportunity to create a sense of arrival and to mark the transition into the beachfront core from the surrounding residential areas, and to strengthen the natural setting of the adjacent foreshore.

The Site is also subject to DevelopmentWA's 2015 Master Plan, Redevelopment Strategy and Design Guidelines adopted in 2016.

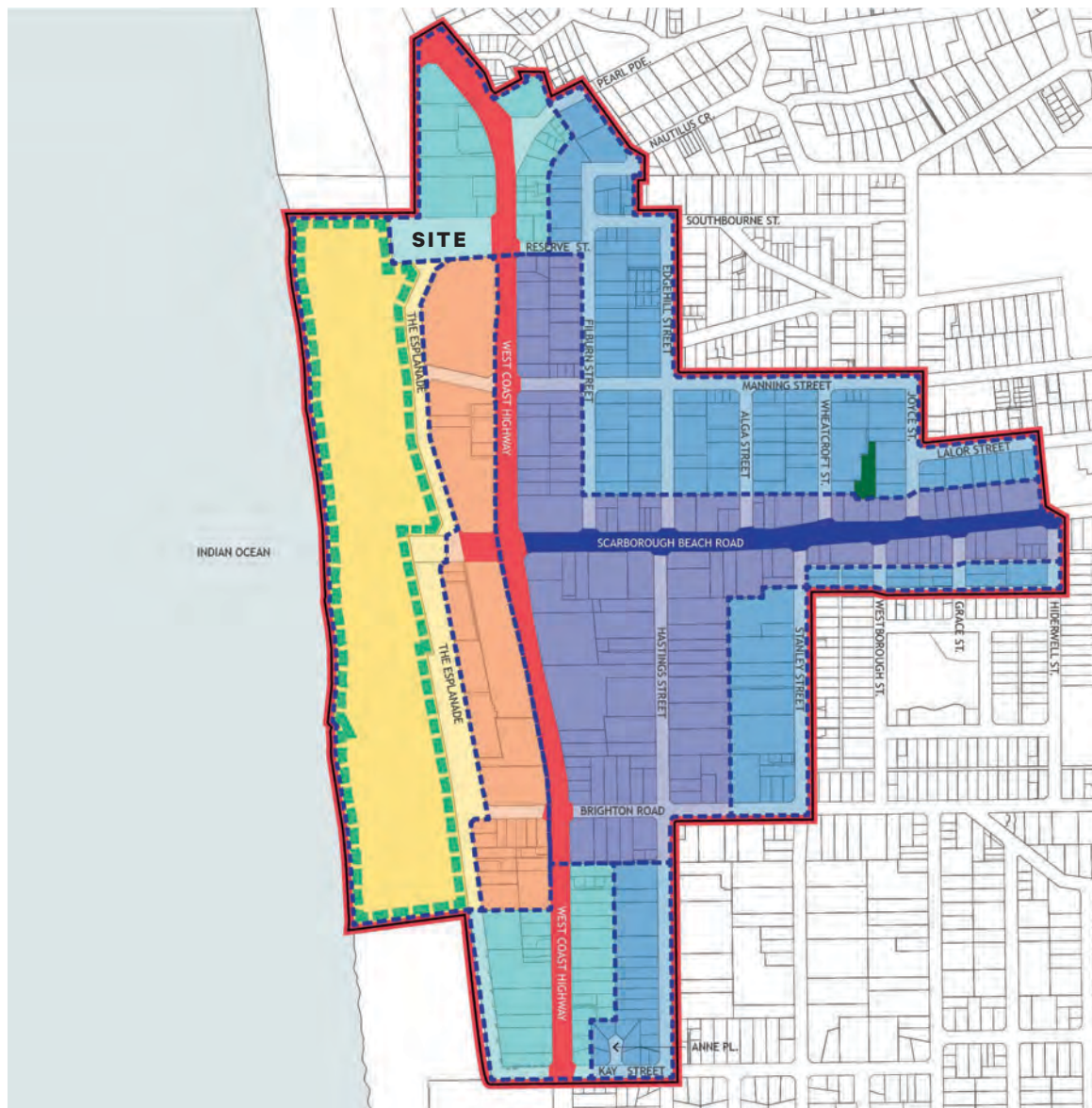
Key influencing values and objectives from these strategic documents that inform the context of the Place Vision for The Dunes are summarised in the following. Appendix 1 Strategic Documents includes more detailed analysis.

Scarborough Master Plan, 2015	• Expectation that the site will contribute to the local Scarborough place vision and values: • Being remarkable and iconic: not afraid to make a statement whilst building on the existing character. • Offer experiences for the local community that will enrich the soul. • Create a hub of activity that connects to the beachfront. • A destination where residential, commercial, entertainment and recreation all combine.
Scarborough Design Guidelines, 2016 – The Dunes sits in the Gateway Precinct.	• The physical form is to create a sense of arrival and provide a transition from the high-density urban core of the Redevelopment Area to the low-density residential development to the northeast and foreshore reserve. • The position is an opportunity to strengthen Scarborough's urban-coastal location and the natural setting of the adjacent foreshore reserve. • The design is to reflect the local Scarborough Character: – A proudly non-conformist recreational culture – Sense of 'edginess' through youth culture, a sense of intrigue and discovery, casual atmosphere, unique architecture and creativity.
Scarborough Redevelopment Strategy and Scheme, 2016	• Build a sense of place that supports public art and cultural activities that respond to Perth's environment, climate and lifestyle. • Promote social inclusion by supporting community infrastructure and activities for visitors and residents to socialise. • Provide community infrastructure that encourages informal uses. • Appreciate the elements that are uniquely Scarborough: beach life, surf culture, edgy vibe and appeal to day trippers.
Scarborough Edge, Creative Template for the Scarborough Redevelopment Area	• Reflect the 'creative DNA' of the place. • Embody the themes of 'edginess' and the cyclical nature of Scarborough.

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

-  Scheme Area Boundary
-  Beachside Precinct
-  Esplanade Precinct
-  Gateway Precinct
-  Beach Road Precinct
-  Groves Precinct
-  Primary Regional Road
-  Other Regional Road
-  Public Purpose Reserve
-  Public Open Space Reserve



2.4 The people

Scarborough's coastal location and extensive recreational offer supports an analysis of the local population which uncovers a community of young, educated and upwardly mobile adults.

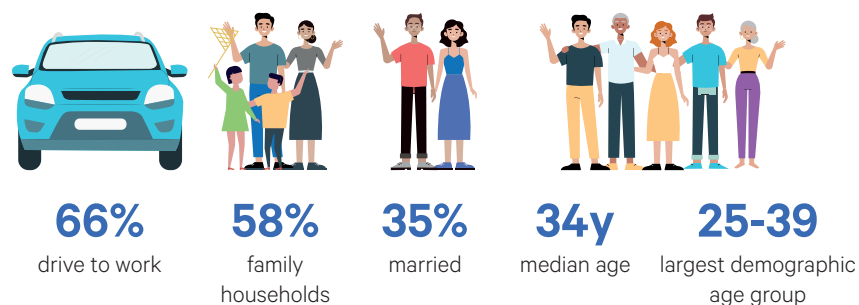
The median household income in Scarborough is a little higher than that of Greater Perth but is lower than the surrounding suburbs – the average income in neighbouring Trigg, Doubleview, City Beach and Doubleview ranging from 8-50% more than that of Scarborough.

Key to Scarborough's popularity is that it is still affordable for the young surfer and young professional. It is a popular destination for national and international tourists, mainly young visitors drawn to the appeal of the surf scene and affordable nightlife.

Whilst part of Scarborough's appeal is its 'earthy edginess,' the fear of being victim to anti-social behaviour or petty crime deters some visitors and tourists. Local crime statistics (online data² and anecdotal from the local police station) point to day and night antisocial behaviour along the beachfront associated with the bars/clubs as the main concern, with the highest crime figures associated with stealing, assault and drug offences.

The future prediction for Scarborough is a shift in the demographic trend. New developments will diversify the residential offer in the region, offering more apartments and higher-rise living opportunities for young first-time buyers and older 'right-sizing' empty-nesters looking to live close to the convenience shopping and wide range of entertainment and surf culture that Scarborough has to offer.

2.4.1 2016 Census- highlight



² WA Police Force Crime Statistics for Scarborough, <https://www.police.wa.gov.au/Crime/CrimeStatistics#/>

2.4.2 Demographic comparison to Greater Perth

Age: There is a significantly higher proportion of Scarborough residents aged between 20 and 39 when compared to Greater Perth, representing a distinctly younger adult community. Conversely there are fewer children and teens (5-19) and older adults (50+) living in Scarborough compared to Greater Perth.

Household composition: Supporting the above analysis, there are significantly more couples with no children living in Scarborough than Greater Perth. There are also proportionately more non-family households (e.g. share houses) than one-family households.

Dwellings: 50% of the dwellings in Scarborough are semi-detached or terraced properties, and 65% of the properties have three or more bedrooms.

Marital status: There are more locals who are either not married or in de facto relationships than those who are married. This is much more pronounced than Greater Perth.

Education: The Scarborough community is highly educated with more people gaining undergraduate or postgraduate tertiary qualifications than Greater Perth.

Employment: Almost 90% of the population of Scarborough is in full or part-time employment, 30% in professional occupations.

Income: The median household income in Scarborough almost 15% higher than that for Greater Perth

City of Stirling
17 Jan 2025
RECEIVED

3. Needs Assessment

City of Stirling
17 Jan 2025
RECEIVED

3.1 Place scan

The Dunes sits at the northern reach of the Scarborough Beach Esplanade at the cusp of the quiet sandy dunes to the west and the beginning of the residential precinct to the north and east, a contrast to the vibrant, 'always on' activity associated with the Scarborough Beach Foreshore to the south.

A place scan (see pages 10-11) shows the contrast between these adjacent neighbourhoods, few amenities are found to the residential north, east or west of the site, whereas a five-minute walk south offers a wide range of bars, cafés, restaurants and recreational activities.

3.1.1 Public open space

The Dunes is well-served by public open space associated with the foreshore to the west: 2.5km of sandy beach, a long expanse of foreshore lawn, outdoor gym and changing rooms, and the children's Whale Playground are less than a four-minute walk away. The Scarborough Beach Pool is just an eight-minute walk to the south and offers two pools, aqua fitness classes and outdoor group fitness classes including yoga, metafit and boxfit.

One drawback of such a stunning coastal location is the diurnal weather pattern of morning and afternoon sea breezes. What makes for great windsurfing conditions creates an unpleasant environment for picnicking day-trippers who leave the beach in search of sheltered seating areas. Away from the foreshore the landscape transitions into the suburban precinct with little public open space to find shelter in.

3.1.2 Event spaces

Scarborough is a popular destination for functions and events and regularly hosts a number of large-scale events that attract thousands of people – local residents and tourists.

Within the public open space are a number of open-air venues that can be hired for private events: Scarborough Beach, Djinda Mia square, the Watch Tower Green and Scarborough Amphitheatre. In contrast options for indoor events are limited, typically held in the various bars or restaurants in Scarborough, or in one of three dedicated function spaces:

- The Rendezvous Hotel function and events spaces
- Sunset Terrace Scarboro Function Centre
- Stirling Community Centre – Scarborough Beach (City owned).

The following list of major community and cultural events provides a snapshot of events held in Scarborough:

- The Aussies Surf Lifesaving Championships – over 6,000 competitors plus 5,000 spectators.
- Scarborough Sunset Markets (summer) – over 10,000-15,000 visitors each week.
- Scarborough Sunset Markets (winter edition) – 3,000-5,000 visitors each week.
- Sunset Applause – runs in tandem with the Sunset Markets.
- Brazilian Beach Carnival – 8,000 people.
- Groundswell Festival – 10,000 visitors over 2 days.
- Various live music performances held in the amphitheatre or at live music venues.
- Various sporting competitions and events including beach volleyball, yoga and swimming.

Of note is that the City of Stirling has made the decision not to hold the Sunset Veranda in 2021, but instead to distribute the financial outlay across more smaller venues across the City and spread the benefit to more local neighbourhoods.

As identified in the Scarborough Precinct Master Plan, The Dunes is a point of transition from the vibrant Scarborough Beach resort destination and the sleepy residential surrounds. It represents a unique opportunity to bring some of Scarborough's commercial and recreational vibrancy closer to the local community.

It is also an opportunity to provide a connection to the coast with a transitional landscape that embraces its native dunal bushland location and provides useful amenity for the local residents and visitors.

Public Open Space

- 1 South Trigg Beach
- 2 Kevan Langdon Reserve
- 3 Peet Fyfe Reserve
- 4 Deanmore Duke Reserve
- 5 Abbett Park Reserve
- 6 Scarborough Beach
- 7 Deanmore Square
- 8 Scarborough Amphitheatre
- 9 Scarborough Reserve
- 10 Brighton Reserve

Food and Beverage

- 1 Basil's Coffee
- 2 Bay Bays on Scarborough
- 3 Peter by the Sea
- 4 Scarborough Beach Bar
- 5 Oceans 6019
- 6 The Lookout Bar
- 7 Nando's Scarborough
- 8 The Local Shack
- 9 The Sandbar
- 10 Buteko Bar
- 11 Hamburger Hill
- 12 La Capannina
- 13 Cocolat
- 14 Grill'd Scarborough
- 15 The Wild Fig
- 16 C-Breez Kiosk
- 17 Arai Coffee
- 18 Uncle Gino's Pizzeria
- 19 Domino's Pizza
- 20 Health Freak Cafe
- 21 Lady Latte
- 22 Fortuna Chinese Restaurant
- 23 La Vela Restaurant
- 24 One for the Road
- 25 Warong Timah Merah
- 26 Scarborough Bowling Club Bar
- 27 Cocolat

Accommodation

- 1 Relax Bright & Airy Garden Villa
- 2 Scarborough & Absolutely Beachfront
- 3 Observation Rise Realty
- 4 Scarborough Apartments
- 5 The View Apartments
- 6 Rendezvous Hotel Perth
- 7 Ramada
- 8 Indian Ocean Hotel
- 9 West Beach Lagoon
- 10 Quest Scarborough
- 11 Scarborough Accommodation Bureau
- 12 Western Beach Lodge
- 13 Amazing Beachfronts
- 14 Seashells Scarborough
- 15 Adriatic Blue
- 16 Sandcastles Scarborough

Health and Beauty

- 1 Clinipath Pathology
- 2 Scarborough Traditional Acupuncture
- 3 Jaydoe Eco Hair
- 4 Optimal Pharmacy +
- 5 The Woods Medical Centre
- 6 A Touch of Blush
- 7 Bellus on Scarborough
- 8 Serene Day Spa & Beauty
- 9 Ra'Ra Studio
- 10 Vanilla Face & Body Spa
- 11 The Perfect Look
- 12 Dermedica Cosmetic Clinic
- 13 Belle Cherie
- 14 Arai Lounge Hair and Beauty
- 15 Beauty Hit
- 16 Scarborough Beach Medical Centre
- 17 Hastings Dental Centre

Sports and Fitness

- 1 Scarborough Beach Surf School
- 2 Boom Fitness
- 3 Scarborough Beach Pool
- 4 Perth Go Surf
- 5 Verve Training
- 6 Scarborough Tennis Club
- 7 Life Ready Physio and Pilates
- 8 F45
- 9 12RND Fitness
- 10 Revo Fitness
- 11 Proactive Fitness
- 12 The Yoga Room
- 13 Insta Fit Group Training
- 14 Fitbody Scarborough
- 15 Iron Fit Perth
- 16 Onelife Taekwondo
- 17 Scarborough Bowling Club
- 18 Scarborough Cricket Club

Commercial

- 1 Coles Express Scarborough
- 2 Cordingley's Surf Shop
- 3 Coles Scarborough
- 4 BP
- 5 The Surf Boardroom
- 6 Thirsty Camel
- 7 A1 Scarborough Dry Cleaners
- 8 Australia Post Office
- 9 Thox Socks
- 10 O' Rouke Real Estate
- 11 Peard Real Estate
- 12 Scarboro Super Deli
- 13 Caltex Scarborough
- 14 LJ Hooker Scarborough
- 15 Allia
- 16 Vine & Bloom Florist
- 17 Lucie June
- 18 Wrap Works

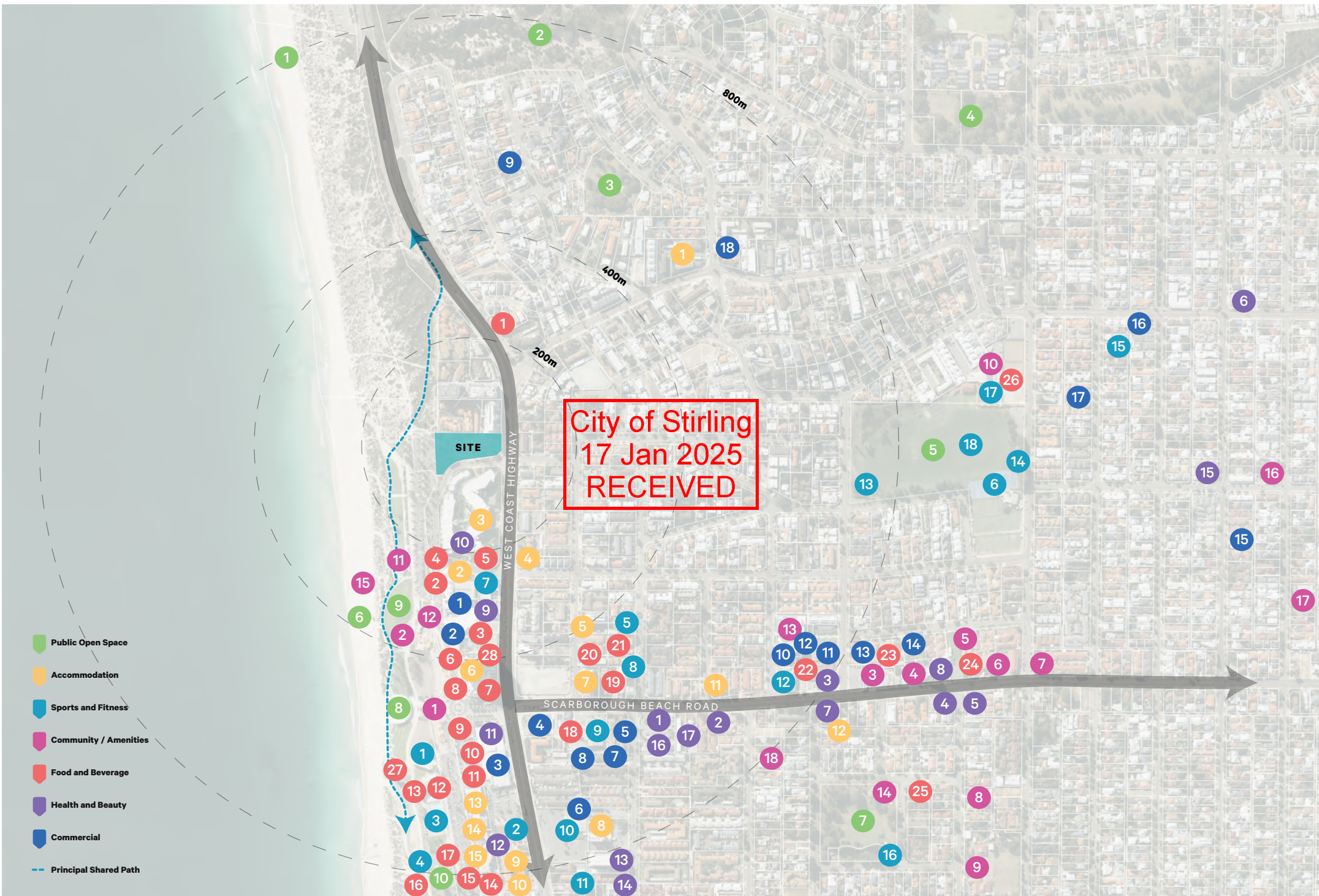
Community / Amenities

- 1 Scarborough Beach Clock Tower
- 2 Scarborough Beach Skate Park
- 3 The Art Space Collective
- 4 Scarborough Police Station
- 5 St John's Primary School
- 6 Immaculate Heart of Mary Parish
- 7 Wanslea Family Services
- 8 Deanmore Primary School
- 9 Scarborough Primary School
- 10 Scarborough Community Club
- 11 Whale Playground
- 12 Scarborough Rock Climbing Wall
- 13 Regents Garden Aged Care
- 14 Scarborough Beach Scouts
- 15 Scarborough Surf Life Saving
- 16 Scarborough Uniting Club
- 17 Anglican Church of Australia
- 18 Scarborough Telephone Exchange

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

- Public Open Space
- Accommodation
- Sports and Fitness
- Community / Amenities
- Food and Beverage
- Health and Beauty
- Commercial
- Principal Shared Path



City of Stirling
17 Jan 2025
RECEIVED

3.2 Trends and drivers behind creating great places

3.2.1 Always was, always will be

Always Was, Always Will Be. acknowledges this nation's story began at the dawn of time and not with documented European contact.³

Indigenous inhabitation of the Perth region extends back 40-60,000 years. Whilst only 0.8% of the modern population of Scarborough is indigenous, the recent redevelopment of the Scarborough Beach Foreshore has created the opportunity to bring the stories of the Whadjuk Noongar people to life for generations to come through public art. The Tjunta Trail is a collaboration between Noongar elders Neville Collard and Richard Walley and is one of several public artworks at Scarborough that depict indigenous cultural stories and serve to remind visitors of the roots of the modern culture in its indigenous past.

Australia has the world's oldest oral stories, and the earliest paintings and ceremonies.

3.2.2 Biophilic design

Biophilia is the idea that humans have an inherent need to affiliate with nature: exposure to nature and natural elements lifts moods and calms the spirit.

The biophilic building design trend incorporates nature, natural light and ventilation and other experiences of the natural world into the built environment to create healthy and productive habitats. The benefits of this design approach have been seen to improve health, reduce stress levels, increase mood and feeling of well-being and reduce fatigue.

Biophilic design features include:

- environmental features such as plants, water, air, sunlight, natural materials, colour
- natural shapes and forms – resisting straight lines and angles
- natural patterns and processes – incorporating rhythm, ratios and scale
- light and space – using contrasts to evoke emotional response
- place-based relationships – connecting the place to its cultural, spiritual or historical meaning

3.2.3 Experience economy

Shifts in consumer preferences and a growing awareness of our collective impact on resources and the environment is shifting demand from tangible goods to experiences and services – the so-called trend towards 'NOwnership'.

Coupled with this, more and more people are not having children or having children in later life and enjoying higher levels of disposable income for longer. This will be especially true for Scarborough with a concentration of professional SINKs and DINKs ready to spend on health and wellness services, cafés, restaurants and bars.

3.2.4 The 15-minute city

Proximity over mobility has gained traction during the global pandemic, seeing local authorities rethink their planning as demand increases for local neighbourhood amenities.

The '15-minute-city' concept is regaining popularity, spearheaded by Carlos Moreno, a specialist in the study of complex systems and in the development of innovation processes in pursuit of *amour des lieux* (attachment to place) in Paris.

In 15-minute cities:

- Everyone is able to meet most, if not all, of their needs within a short walk or bike ride from their home through lived-in, people-friendly, 'complete' and connected neighbourhoods.
- People are reconnected with their local areas and city life and services are decentralised.⁴
- Workplaces, shops, recreation and homes are brought closer together, freeing up streets for other purposes like gardens, bike lanes, sports and leisure facilities –
- Carbon emissions and pollution is reduced

Rooted in the principles of New Urbanism and the idea of a neighbourhood unit, 20/30 minute cities/neighbourhoods are emerging in Australia.

³ www.naidoc.org.au

⁴ C40 Cities Climate Leadership Group

3.2.5 Mosaic precincts

Australian cities are in the midst of a significant demographic shift and by 2034 there will be more Australians aged over 60 than under 20 for the first time in history, with the most common household type being couples with no children.

Accounting for 20% of the Western Australian population, baby boomers and seniors are driving demand for innovative, flexible and adaptable amenity which serves an ageing population. Scarborough is no different. The expanding apartment market will attract higher numbers of the right-sizing older population to Scarborough Beach, looking to benefit from its high convenience factor and open spaces. This requires a step change away from traditional design to one of choice, convenience and an integrated service offer, underpinned by a lifestyle that caters to overall wellbeing.

Alongside these 'right-sizers' is a market of young couples and key workers also keen to live in this edgy destination on top of the conveniences of modern life. The need is for a diverse mixed-tenure housing provision to cater for the varying needs of the existing and future Scarborough community. All the evidence suggests the most important guiding principle in mixing tenures is "tenure blindness". That is, it shouldn't be possible to distinguish one tenure from another simply by physical appearance.

3.2.6 Mental health and wellbeing

Almost half of all Australians aged 16-85 years will experience mental illness at some point in their life, and one quarter will experience an anxiety condition.

The global pandemic has changed the way we live – social distancing, financial uncertainty, periods of isolation and the fear of infection have caused more people to experience severe mental health issues and the Australian Government to set up a *Better Access Pandemic Support* in response.

Physical exercise is known to boost mood through the release of endorphins, as well as improve sleep and help people deal with anxiety, depression and stress. Studies show that exercise relieves tension and stress and lifts physical and mental energy levels. Yoga and meditation aide mental health through breathing techniques, deep relaxation and self-awareness.

Embedding ways for people to remain physically and mentally active in urban environments is a key challenge and opportunity for planners and developers alike.





3.3 Community needs analysis

element's Engagement Team undertook an in-depth Community Needs Analysis to paint a picture of Scarborough's current offer of social infrastructure and services and what the current and future community will need as Scarborough continues to grow.

Through social research and a series of community and stakeholder engagement activities, the study uncovered a range of findings to inform The Dunes's offer of publicly accessible services, spaces and amenities, and complementary commercial offering in order to deliver appropriate and sought-after community benefits.

A literature review, asset audit, demographic analysis, comparative analysis to Glenelg in South Australia and a suite of community and stakeholder engagement activities informed the study's findings.

The findings were analysed to understand the gaps in Scarborough's current offer of community benefit, forming a suite of recommendations for The Dunes's design and development application.

Key identified gaps and opportunities:

- Unique opportunities acknowledge and celebrate Scarborough's traditional custodians, the Mooro Noongar.
- A lack of public amenities in the northern end of Scarborough – safe / clean toilets and parent room, drinking fountains.
- The need for refined dining options to bring balance to the abundance of casual, family-friendly venues.
- Demand for more modern and flexible indoor community function spaces.
- Opportunities to provide a range of housing options servicing Scarborough's diverse population and future buyer profile.
- Restricted local access to parks – especially those with ocean views

City of Stirling
17 Jan 2025
RECEIVED

3.3.1 Key findings

The following key findings have arisen from the community needs analysis. These have been organised to address the Scarborough Redevelopment Scheme Objectives.

Social inclusion

- **Diverse housing opportunity** – meeting the needs of Perth's growing and diversifying population will be important to make sure the development offers housing for the changing demographics of Scarborough. Scarborough already has a high rate of medium-high density housing typologies in comparison to Greater Perth.
- **Supporting healthy active ageing** – ensuring that the public space and the built environment support healthy active ageing will be important for Scarborough as the population is projected to age. Inclusive design isn't only beneficial for the elderly population but is beneficial for all groups of the population.



Sense of place

- **Gateway to the north** – according to the Scarborough Redevelopment Scheme, Reserve Street sits in the Gateway Precinct and will be the 'first contact' visitors have when they arrive in Scarborough from the north. Considering this, it is important to capture the feel of Scarborough including the exciting, vibrant destination it sets out to be while honouring the history and stories of the suburb.
- **Mooro story** – there is an opportunity to tell stories of the traditional owners of the land through the built environment and public art at the site, as this has not been thoroughly touched on in Scarborough.



Connectivity

- **End of trip facilities** – encouraging multiple modes of transport is imperative to keeping Scarborough vibrant. To encourage this, providing good-quality end of trip facilities should be considered.

Economic wellbeing

- **Servicing the north of Scarborough** – providing a range of activities and services in the north of Scarborough will encourage more casual visitation from neighbouring suburbs. Services to be provided should have a point of difference to what is already on offer in Scarborough, as well as providing convenience to the surrounding local community.



Environmental integrity

- **Ecological integrity of the foreshore location** - the site at 500 Reserve Street is at an integral location that marks the edge the urban hub and the natural coastal dune environment that is enthusiastically protected. The project should link back to the coastal location, dune setting and native coastal planting palette.

Urban efficiency

- **Diverse housing** - to meet the needs of Scarborough's growing population, high-density development is needed to facilitate this, especially since Scarborough already has a decent amount of medium density development in the form of villas, townhouses and duplexes.





City of Stirling
17 Jan 2025
RECEIVED

4. Key place opportunities

Following close consideration of local community need and gaps in the provision of infrastructure, spaces and services to support Scarborough's social vitality, the following place opportunities and considerations have been identified as most relevant to The Dunes.

- **Corner position:** the junction of Reserve Street and the Esplanade forms a nodal point with prime frontage addressing The Esplanade car park and extending up Reserve Street.
- **Retail opportunity:** foot traffic generated by surfers and beachgoers walking past the site on their way up Reserve Street to the residential neighbourhood beyond.
- **Sunset views:** the corner point at the bottom of Reserve Street is the perfect place for a viewing platform; a place to pause and reflect looking out over the ocean.
- **Community space:** a facility to hire for events, workshops, classes and celebrations. With views of the sea and the stunning coastal sunsets.
- **Refined dining:** The Dunes's higher level position forms the perfect place for a sophisticated wine and tapas bar with sunset views over the ocean.
- **Public art:** integrated in the landscaping and the building, artworks can interpret stories from the Mooro Noongar people and more recent Scarborough cultural communities and moments in time.
- **Lighting strategy:** opportunity to create a unique night-time landmark.
- **Health and wellbeing:** the kiosks with their calming views out to the ocean support day spa, health and beauty or movement class operators

City of Stirling
17 Jan 2025
RECEIVED

5. Place Vision

The Dunes celebrates the essence of the Sunset Coast.

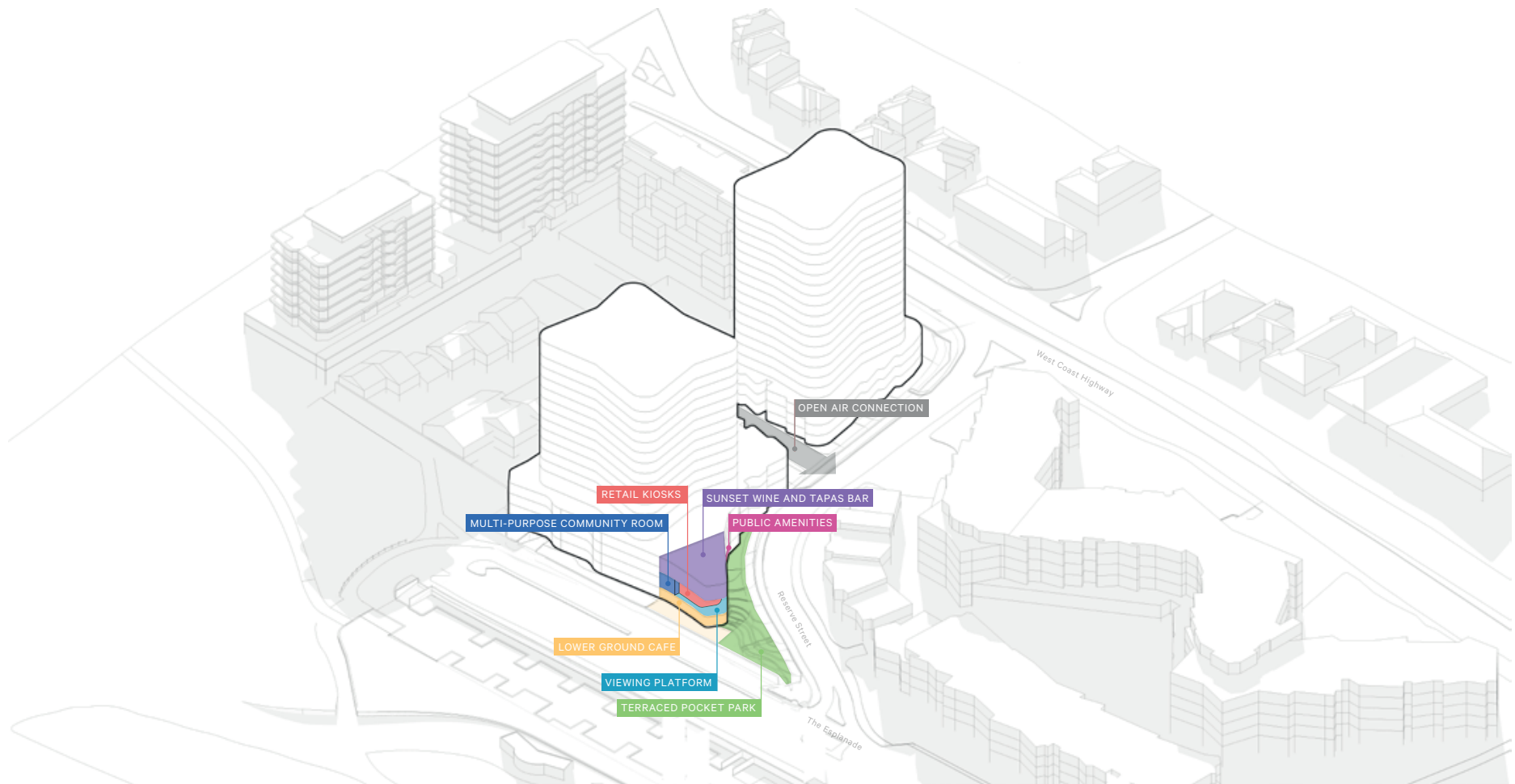
Organic design elements ripple across the buildings, cascading into abundant, native and edible landscapes.

A mix of casual places offer the community a moment to pause, socialise and rejuvenate during the day. At dusk, The Dunes imbues a cultured personality with its stunning viewing deck, elevated wine bar and façades reflecting Scarborough's famous sunset hues.

City of Stirling
17 Jan 2025
RECEIVED

6. Embedding the Place Vision

6.1 Place Plan



City of Stirling
17 Jan 2025
RECEIVED

6.2 Place zones

6.2.1 Lower ground café

Overview	- Located at the lower ground level by The Esplanade car park with a small west-facing alfresco dining area nestled next to a landscaped pocket park - Positioned for optimum passing footfall between the beach, public car parks (within The Dunes and along The Esplanade) and footpaths up to West Coast Highway - Café catering to day-trippers offering coffee, breakfast and lunch menu, picnic hampers, ice-creams, water and soft drinks. - Café connected to bush-tucker garden with produce harvested for use in seasonal menus
Features	- Alfresco seating area looking west - Stair/lift to community room and viewing deck above - Convenient access to public toilets for patrons
User groups and offer	- Local community - Visitors to the beach - Tourists
Community benefits	- Closer daytime food and beverage offer for Scarborough's northern residential population - Safe and convenient public amenities – popular with families
Identified partnership opportunities	Yelo Café, Trigg – experience in operating beachside café



6.2.2 Public amenities

Overview	- Located at lower ground level at the entry/exit to the public car park - A range of amenities for cyclists, surfers and beachgoers arriving by car - Clean and comfortable public toilets - Rentable day storage lockers for safe storage of valuables whilst visiting the beach - Space for vending machines selling a range of beach supplies, eg: sunsmart products: sunscreen, sunglasses, hats and thongs.
Features	- Toilets - Bike repair station - Lockers (e.g. Yellowbox storage) - Water fountain to refill water bottles - Potential for public sunscreen dispenser and vending machines
User groups and offer	- Cyclists - Visitors to the beach - Local community
Community benefits	Free, safe and convenient public amenities
Identified partnership opportunities	- Yellowbox lockers - Cancer Council sunscreen machines

Yellowbox

40 yellowboxes are in operation at Coogee Beach. All beach yellowboxes have external keypads, which can be programmed with the users own personal PIN, allowing visitors to store their phone inside. Insert photos

Yellowbox supplies lockers for free and provides a revenue share to the venue as customers pay for use per hour. Venue pays only for installation.

"Yellowbox lockers are one of the most visible smart city initiatives we've delivered for residents and visitors at our beaches and aquatic centres. Residents love the ability to reserve a locker in advance and swim without having to worry about their belongings."



City of Stirling
17 Jan 2025
RECEIVED

6.2.3 Terraced pocket park

Overview	• Corner pocket park landscaped with coastal and native vegetation and terrace seating. • Plants to be selected for their nutritional properties and use in bush tucker and medicine. • Connection to community room and café for bush-tucker workshops and cooking demonstrations. • Pocket park landscaped with stepped seating areas to address the natural slope of the land.
Features	• Public seating • Aromatic, medicinal and edible native planting
User groups and offer	• Local community • Visitors • Café/bar (to use in their menu) • Local community groups eg: scouts
Community benefits	• Bush tucker healthy eating workshops, demonstrations and masterclasses. • Learn about traditional and medicinal values of bush foods for better health.
Identified partnership opportunities	• Bush-tucker specialists



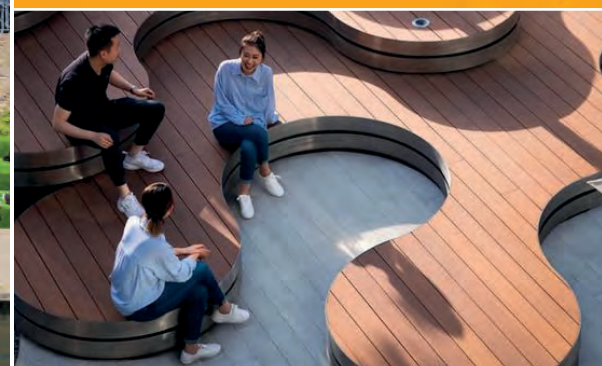


Native River Mint
Mentha axerifolia

Makes 1 ltr

- ½ cup castor sugar
- 600ml ml water
- 100ml lime juice
- 100g picked River mint leaves, chopped
- ½ tsp vanilla paste
- 3 egg whites
- 1 tbsp Xanthum gum (optional)

- Combine the water and sugar and stir over low heat, without boiling, until dissolved. Simmer for 5 mins.
- Add mint leaves and lime juice and vanilla, and simmer further 2 mins
- Let steep and infuse for 1 hour.
- Once cooled, blitz with stick blender adding xanthum gum until it thickens slightly (this just helps with mouth-feel and is not a necessary component).
- Beat egg whites until soft peaks form, fold completely into sugar mix.
- Allow to cool in refrigerator.
- Put in ice cream churner until it reaches desired consistency.



6.2.4 Viewing platform

Overview	• Expansive public viewing platform to enjoy unique vistas to Scarborough Beach, Indian Ocean, sunsets and people watching • Seating areas for casual enjoyment – reflection, catch up with a friend, enjoy a bite to eat • Accessed directly from Reserve Street • Protected from rain and sun to encourage regular use • Option to screen off viewing platform for private functions
Features	• Open deck area • Interpretive integrated artworks – e.g. soffit, panels
User groups and offer	• Local residents • Local community groups • Tourists • Photographers
Community benefits	• Distinctive vista of beach and ocean • Unique public place to relax, gather, celebrate
Identified partnership opportunities	• Space to Co

SpacetoCo allows anyone to share and book community spaces by the hour.

- Sustainability - We believe that there are plenty of spaces and it's not always necessary to build more. By utilising existing assets more efficiently and by making it easier to book spaces online, we all play a part in a more sustainable future.
- Local Economies - We believe in the importance of driving growth to local area economies. By providing a means for people to access local spaces, we hope to stimulate a buzz of activity within towns, precincts and localities. We believe that when local economies thrive, communities come to life.
- Community Connection - We believe space activation plays an important role in community development and building connectedness between people. It is through this that we work towards building a supportive, inclusive and diverse society.



6.2.5 'The Sandbox' multi-purpose community room

Overview	- Indoor space with west facing glazed walls towards sunset and ocean views - Available for affordable hire by community groups and small businesses workshops, meetings etc - Available for affordable hire by residents for private functions, birthdays and celebrations - Bookings to be managed and promoted by strata - Accessible by internal stairs from café below to facilitate private function catering - Potential to extend out onto viewing platform for larger events and gatherings
Features	- Kitchenette - Drop-down projection screen - AV equipment - Tables and chairs - Equipment storage space - Glazed wall looking out to ocean and sunset views
User groups and offer	- Local residents - Local community groups - Parents groups
Community benefits	Affordable, indoor space for hire
Identified partnership opportunities	Space to Co



City of Stirling
17 Jan 2025
RECEIVED

6.2.6 Retail kiosks

Overview	• Two flexible 60+sqm retail units with unique vistas out to Scarborough Beach and the Indian Ocean • Elevated position lends spaces towards destination retail/commercial activities • The sweeping ocean aspect creates the ideal location for such businesses as health and fitness, beauty or day spa businesses supporting the Scarborough community's focus on health and wellbeing • Accessed from Reserve Street • Space for small mat classes • Potential to connect to the viewing platform for outdoor meditative or exercise activities
Features	• Glazed walls looking out to ocean and sunset views • Secure covered entrance
User groups and offer	• Beauty, health and wellbeing operators • Local residents and visitors
Community benefits	• Supports the mental and physical health of the local community
Identified partnership opportunities	• Day spa operators • Health and beauty operators • Yoga, Pilates and meditation instructors

City of Stirling
17 Jan 2025
RECEIVED



6.2.7 Sunset wine and tapas bar

Overview	• Modern, refined and welcoming wine bar serving tapas-style food • Providing a different offer to the Scarborough hospitality scene • Designed with floor to ceiling glazing to take full advantage of the south and west views across the foreshore and renowned Scarborough sunsets
Features	• Mix of seating spaces • High quality menu and drinks selection • Glazed walls • Sunset views
User groups and offer	• Local community • Visitors and tourists • Private groups
Community benefits	• Expand local food and beverage offer beyond abundance of family-friendly venues • New place for private functions and celebrations



City of Stirling
17 Jan 2025
RECEIVED

7. Management and Governance

'If you build it, they will come' is no longer relevant in a world that better grasps the importance of community development, place making and activation as critical to meet the needs of a multi-generational and multi-cultural community. This requires new ways of management and unlocking the capacity of the community to deliver activities for and on behalf of its residents.

Ensuring the publicly accessible spaces at The Dunes are activated for the life of the development is key to successful place management. A strata plan will be developed outlining strata body responsibility to manage the outdoor spaces, public amenities, viewing platform and community room to the satisfaction of the City of Stirling. The strata body will maintain ownership of the commercial tenancies, leasing these spaces to operators. The strata body will require signing of a contract stipulating the retail/café operator's responsibilities to promote the use of and manage bookings for the community room at affordable rates agreed by the City.

The strata body will enter into a Deed with the City to ensure all spaces are used and maintained for the life of the development, preventing the delivery of redundant infrastructure and reducing place management impost on the City.

- The title will enforce the proposed uses (or other use as approved by DevelopmentWA / the City)
- Operational hours for the community room to be agreed and not only restricted to standard business hours
- Insurance to be provided by the strata body, including indemnity clauses to protect the City
- Strata body will become a party to the Deed when it is formed at the time the developer hands over the building
- Strata body to attract and manage commercial tenants

- Conditions will entitle the City and strata body to carry out tasks as necessary – such as repairs, maintenance, inspections – to ensure ongoing use and activation of the spaces as intended. All such costs will be borne by the strata body
- Hire fees from the community room will be allocated to the retail/café operator, providing an incentive to ensure the room is well used and an income stream to promote the space

Space	Proposed management arrangements
Lower ground retail kiosks and café	Operator to run and manage retail kiosks and café
Public amenities	Strata to manage cleaning of public toilets and parents' room
Terrace pocket park and bush tucker garden	Strata to manage cleaning of outdoor areas and upkeep of landscaping Café and wine/tapas bar operators to have access to bush tucker produce
Beachside viewing platform and community room	Strata to manage community room bookings and oversee facility Strata to manage cleaning and maintenance of community room, viewing platform and communal access areas – lifts, stairs, lobby areas etc
Sunset wine and tapas bar	Wine and tapas bar operator to manage and maintain space

City of Stirling
17 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED

8. Public Art

8.1 Public art

Supporting the overall project vision and identity, opportunities have been identified to embed fine grain artworks throughout the development, contributing significantly to the character of the precinct and enhance the built form. Integrated and functional works have been designed in a way to facilitate exploration and circulation, while statement works will differentiate the development and assist with wayfinding.

A Preliminary Public Art Plan has been developed to support this Place Strategy, expanding on the architectural response through the curatorial theme of 'Ripples' – ensuring the public realm, architecture and public art is cohesively curated to create a distinctive sense of place.

City of Stirling
17 Jan 2025
RECEIVED

8.1.1 Key opportunities



1. Integrated artistic details

Artworks integrated into the landscape and building design to elevate the development with fine-grain artistic details visible to pedestrians at ground and podium level.

- Textures, inlays and small sculptural works integrated into the landscape along Reserve Street, and the facades at street and podium level
- Details cast into concrete, ground and facades
- Small sculptural works through the landscaping
- Patterning and text artworks
- Enhance texture and interest

2. Interpretive artworks

Inspiring artworks communicating heritage stories, themes and values integrated into the design of the viewing deck and pocket park.

- Educational content relating to native plantings and views to ocean and sites of significance
- Bring Whadjuk stories and narratives to life
- Connect to existing Bidi Trail

City of Stirling
17 Jan 2025
RECEIVED

9. Appendix: Strategic Documents

Scarborough Master Plan, 2015		
Themes		Opportunities
Place Values:	1. Remarkable and iconic	Perth's primary beachfront destination that's not afraid to make a statement; built on existing character.
	2. Enabling	A place that facilitates investment and leverages opportunity; that has a sense of community ownership.
	3. Enriching	Sun, sea and surf to enrich the body; exciting experiences to enrich the soul.
	4. As One	- More than just a beach, Scarborough is a total destination offering residential, commercial, entertainment and recreational uses. - Hubs of activity connect to the beachfront.
Masterplan Drivers:	Need to 'renew'	Opportunity for high quality redevelopment to support the community's housing needs, attract investment and optimise underutilised sites.
	Village Node	Provide retail and commercial uses to create a 'village node' to service local needs.
Located within Precincts 1 and 2	Beach Front Precinct	- Forms the central core of the Scarborough Redevelopment Area, providing for a wide range of active recreational, retail, commercial, community, entertainment and tourism uses. - As the entry point to the beach itself, it will have a strong sense of arrival and be focussed on the beach, its activities and complementary uses. - A permanent population will be provided through the redevelopment of existing sites providing the community with improved 'ownership' of the area.
	Gateway Precinct	Creates the northern gateway into the Scarborough Beach area. The physical form will: - create a sense of arrival and a transition into the intensity of the beachfront core from the surrounding residential areas. - cater for high density residential development and tourism accommodation.

City of Stirling
17 Jan 2025
RECEIVED

Scarborough Design Guidelines, 2016

Precinct: Gateway (Gateway West)

“The longer term intent for the under-utilised car park on the corner of Reserve Street and West Coast Highway is for this land to be developed for a mix of residential, retail and hospitality uses.”

Themes		Opportunities
Design and Character	Character	- Scarborough's urban-coastal character is a combination of the unique ocean-edge environment and proudly nonconformist recreational culture. - Sense of 'edginess': youth culture, irregularity, sense of intrigue and discovery, laneways and secondary spaces, casual atmosphere, surf/skate culture references, unique architecture, creativity. - Playful, holiday references: use of colour, public art, unexpected shapes and forms, casual atmosphere, 'follies', outdoor showers/board washing areas. - Facilities to support active, outdoor lifestyle: bicycle storage, pedestrian pathways through sites especially where they facilitate beach access, outdoor showers and board washing areas, children's play equipment and play spaces, basketball hoops or tennis/squash courts. - Public art influenced by the local youth culture. - Small tenancies for local, independent or start-up businesses. - Other interpretations of Scarborough's unique urban-coastal character that can be expressed in bespoke, creative built form.
	Design intent	- The Gateway Precinct forms the northern and southern gateways into the Scarborough Beach area. Gateway West in particular will cater for high density residential development and short stay accommodation. The physical form will create a sense of arrival and provide a transition from the high density urban core of the Redevelopment Area to the low density residential development to the northeast and foreshore reserve. - New development will strengthen Scarborough's urban-coastal character, and in particular, the natural setting of the adjacent foreshore reserve. - Landscaping, including mature vegetation that has been chosen for its ability to thrive in the coastal conditions will be a key component of any new development. - Gateway West benefits from direct access to the foreshore and in the future, vehicular access from the proposed Esplanade road extensions.
Public Realm Interface	Design intent	- Streets, meeting places, and landscaped environments should communicate a strong 'sense of place'. This is achieved when built form, public realm design, programming and economic activity reinforce a distinct, locally recognisable cultural and environmental experience. - The design of public open space is informed by users to accommodate a range of uses and activities that are complementary to the location. - Uses within buildings abutting streets and other public spaces will incorporate 'active' ground floor uses that promote surveillance of the street and visible indoor activity.
Public Art	Design intent	Public art that is integrated with the public realm will deliver an interesting and creative environment that reflects the cultural context of the Redevelopment Area and celebrates the unique character of Scarborough.
	Role	- Activate the Redevelopment Area with both permanent and temporary art opportunities. Permanent artworks will enhance the amenity and attractiveness of the public realm while a temporary art program can stimulate and refresh the visitor experience. - Act as place makers for visitors to Scarborough. - Enhance the regional and national profile of Scarborough with iconic artworks that contribute to and draw upon the uniqueness of the location.

City of Stirling
17 Jan 2025
RECEIVED

Scarborough Redevelopment Strategy and Scheme, 2016

Key Objectives	1. To build a sense of place by supporting high-quality urban and architectural design, heritage protection, public art and cultural activities that respond to Perth's environment, climate and lifestyle. 2. To promote economic wellbeing by supporting, where appropriate, development that facilitates investment and provides opportunity for local businesses and emerging industries to satisfy market demand. 3. To promote urban efficiency through infrastructure and buildings, a mix of land use and facilitating a critical mass of population and employment. 4. To enhance connectivity and reduce the need for private vehicular travel by supporting development aimed at well-designed places that support walking, cycling and public transit. 5. To promote social inclusion by encouraging, where appropriate, a diverse range of housing and by supporting community infrastructure and activities and opportunities for visitors and residents to socialise. 6. To enhance environmental integrity by encouraging ecologically sustainable design, resource efficiency, recycling, renewable energy and protection of the local ecology.
Social Inclusion	• Valuing and integrating all people, including marginalised groups, into the social, economic, cultural and political life of a place and community. Social inclusion means an outcome that is inclusive of the needs of both residents and visitors. • A priority for social inclusion is to enhance community infrastructure and activities in addition to the beach.
Community infrastructure	• Create functioning communities by supporting social health and wellbeing through appropriate infrastructure provision • Build community comfort and ownership of places by providing infrastructure that encourages informal uses and caters to the different ways people use, occupy, or interact with places
Sense of place	• A successful 'place responsive' outcome in Scarborough must appreciate those elements that are uniquely Scarborough such as its beach life and surf culture, edgy vibe and appeal to day trippers.
Located in the Gateway Precinct	• The physical form will create a sense of arrival and a transition into the intensity of the beachfront core from the surrounding residential areas.

Scarborough Edge, Creative Template for the Scarborough Redevelopment Area

Objective	The 'creative DNA' of the place	• A common language that can inspire all aspects of the development process for future project and design teams.
	The resilience and vitality of future Scarborough	• Depends on including the creative threads described in the physical design and cultural program of the redevelopment
Themes	'Edginess'	• Where the land meets the sea; a place of recreation where boundaries of convention are tested.
	'Cycles'	• Creative energy transforms a circle into a growing spiral, a cycle • Lifetime is measured in cycles • Waves are cyclical in movement • The Noongar people returned to the coast in cyclical, seasonal visits.

City of Stirling
17 Jan 2025
RECEIVED

City of Stirling
17 Jan 2025
RECEIVED

element.
the art and science of place

Level 18, 191 St Georges Tce, Perth WA 6000
T. (08) 9289 8300 – E. hello@elementwa.com.au
elementwa.com.au

City of Stirling
17 Jan 2025
RECEIVED

Car Parking and Traffic Management Plan

Lot 500 Reserve Street, Scarborough, WA 6019



Stantec Australia Pty Ltd

Prepared for:	17 December 2024
Edge Visionary Living	
Prepared by:	Project/File:
Talia Bradmore / Sebastian Cano	304900165

Car Parking and Traffic Management Plan

Revision	Description	Author	Date	Quality Check	Date	Independent Review	Date
01	Final	TB / SC	17/12/24	PM	11/12/2024	DH	17/12/24

City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

The conclusions in the Report titled Car Parking and Traffic Management Plan are Stantec's professional opinion, as of the time of the Report, and concerning the scope described in the Report. The opinions in the document are based on conditions and information existing at the time the scope of work was conducted and do not take into account any subsequent changes. The Report relates solely to the specific project for which Stantec was retained and the stated purpose for which the Report was prepared. The Report is not to be used or relied on for any variation or extension of the project, or for any other project or purpose, and any unauthorized use or reliance is at the recipient's own risk.

Stantec has assumed all information received from Edge Visionary Living (the "Client") and third parties in the preparation of the Report to be correct. While Stantec has exercised a customary level of judgment or due diligence in the use of such information, Stantec assumes no responsibility for the consequences of any error or omission contained therein.

This Report is intended solely for use by the Client in accordance with Stantec's contract with the Client. While the Report may be provided by the Client to applicable authorities having jurisdiction and to other third parties in connection with the project, Stantec disclaims any legal duty based upon warranty, reliance or any other theory to any third party, and will not be liable to such third party for any damages or losses of any kind that may result.

Prepared by  

Signature
Talía Bradmore Sebastian Cano

Printed Name

Reviewed by 

Signature
Desmond Ho

Printed Name

Approved by 

Signature
Desmond Ho

Printed Name

City of Stirling
17 Jan 2025
RECEIVED



Table of Contents

1	Introduction	3
2	Background	5
2.1	Site Location	5
2.2	Proposed Development.....	6
3	Access Control.....	7
3.1	Access Arrangements	7
3.2	Provision for Service/Waste Vehicles	11
3.3	Access Management.....	12
4	Parking Requirements and Provision	18
4.1	Car Parking Requirements and Provision.....	18
4.2	Parking Compliance	19
4.3	Sightline Checks	20
4.4	ACROD Car Parking	23
4.5	Public Car Parking	23
4.6	Bicycle Parking and End of Trip Facilities.....	24
5	Car Parking Allocation.....	27
6	Parking Management and Enforcement	32
6.1	Tenant/Visitor Feedback	32
6.2	Monitoring Carpark Compliance	32
6.3	Demonstrating Compliance.....	32
6.4	Review of Parking Management Plan.....	32
7	Safety and Security Measures	33
7.1	CCTV Cameras	33
7.2	Monitoring Carpark Safety and Security	33

List of Appendices

Appendix A Detailed Drawings

Appendix B Public Carpark Access Driveway Ramp Assessment

Appendix C Public Carpark Internal Ramp Assessment

List of Tables

Table 4-1 Car Parking Requirements and Provision	18
Table 4-2 Parking Compliance Review	19
Table 4-3 Bicycle Parking and End of Trip Facilities Requirements and Provision	24
Table 5-1 Parking Allocation Legend	27

City of Stirling
17 Jan 2025
RECEIVED



List of Figures

Figure 2-1 Site Location	5
Figure 2-2 Ground Floor Plan	6
Figure 3-1 Vehicle Access (Ground Floor)	7
Figure 3-2 Vehicle Access (Basement 01)	8
Figure 3-3 Pedestrian Access (Lower Ground 02)	9
Figure 3-4 Pedestrian Access (Lower Ground 01)	10
Figure 3-5 Pedestrian Access (Ground Floor).....	10
Figure 3-6 Waste Collection Area (Ground Floor)	11
Figure 3-7 Example of Loading Zone Sign	11
Figure 3-8 Recommended Public Carpark Pedestrian and The Esplanade Traffic Priority Treatments	12
Figure 3-9 Proposed Pedestrian Access Provisions in Carparking Areas	13
Figure 3-10 Recommended Public Carpark Real-time Car Bay Availability Signage	14
Figure 3-11 Recommended Wayfinding Signage in Carparking Areas off Reserve Street	15
Figure 3-12 Recommended Wayfinding Signage within Public Carpark	16
Figure 3-13 Recommended Signage at Entrance of Public Carpark.....	17
Figure 4-1 Reserve Street Sightline Checks	21
Figure 4-2 Reserve Street Crossover Sightline Checks	22
Figure 4-3 The Esplanade Crossover Sightline Checks.....	23
Figure 4-4 Left – T1 Bike Store (Ground Floor), Right – T2 Bike Store (Ground Floor)	25
Figure 4-5 Bicycle Parking and EoT Facilities (Lower Ground 02)	26
Figure 5-1 Parking Allocation (Ground Floor).....	28
Figure 5-2 Parking Allocation (Mezzanine)	29
Figure 5-3 Parking Allocation (Lower Ground 01)	29
Figure 5-4 Parking Allocation (Lower Ground 02)	30
Figure 5-5 Parking Allocation (Basement 01).....	30
Figure 5-6 Parking Allocation (Basement 02).....	31

City of Stirling
17 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED

1 Introduction

Stantec has been engaged by Edge Holdings No 16 Pty Ltd to undertake a Car Parking and Traffic Management Plan (PMP) for the proposed development located at Lot 500 Reserve Street, Scarborough, WA 6019, within the jurisdiction of the City of Stirling.

This PMP aims to satisfy the Development Application (DA) Condition 3 stipulated by the City of Stirling, which states:

“A Car parking and Traffic Management plan demonstrating management and allocation of car parking in accordance with section 5.2 of the Scarborough Design Guidelines, as well as a minimum of 100 car bays made available to the public in perpetuity in accordance with section 4.1 of the Scarborough Design Guidelines, is to be provided prior to planning condition clearance (working drawings stage) and implemented thereafter to the satisfaction of the authority, in consultation with the City of Stirling. (Refer advice note c).”

The PMP includes details on the following as outlined in advice note (c) of DA condition 3:

- Provision of adequate sightlines at crossovers to ensure safe movement of pedestrians and vehicles.
- Vehicle accesses are to comply with AS2890.1, including geometry, signage and line marking, to ensure the appearance and character of the driveway shall be such that it will be clear to vehicle drivers that pedestrians and external traffic have priority of movement.
- Identification and implementation of management strategies which mitigate the potential for conflict between through traffic and parking traffic on The Esplanade car park.
- Implementation of real time, digital signage, advising of public bay capacity.
- Provision of availability to the public lobby to facilitate secondary access to public car bays during the hours of public car park operation.
- Allocation of car parking bays to specific non-residential uses within the development in accordance with the minimum requirements under section 5.2 of the Scarborough Design Guidelines.
- Allocation of residential car parking bays to specific residential dwellings up to a maximum average of 1.5 bays per dwelling, being a total of 334 residential bays.
- Provision of a minimum of 100 public car parking bays within the development, to be maintained as such in perpetuity, in accordance with the section 4.1 of the Scarborough Design Guidelines and delivered as the first stage of development.
- End of trip facilities are provided in accordance with section 5.3 of the Scarborough Design Guidelines.
- Identification and management of ACROD bays in accordance with AS 2890.6.
- Effective and safe management of traffic movements to, from and within the car parking areas, with particular consideration to measures which reduce the potential for conflict with adjacent sites crossovers along Reserve Street.
- The dimensions and numbering of all car parking bays, loading bays, vehicle entrances, crossovers, aisle widths and circulation areas complying with Australian Standard (AS) 2890.1, AS2890.2, AS2890.3 and AS/NZS2890.6.



Car Parking and Traffic Management Plan

- Identification of clear, safe and accessible pedestrian paths through car parking and delivery areas.
- Provision of wheel stops in bays perpendicular to other bays.

City of Stirling
17 Jan 2025
RECEIVED



2 Background

2.1 Site Location

The site is located at Lot 500 Reserve Street, Scarborough, within the City of Stirling. The Site is bounded by Reserve Street to the south, Scarborough Beach parking to the west, residential developments to the north, and West Coast Highway to the east. An aerial image of the Site is shown in **Figure 2-1**.

Figure 2-1 Site Location



2.2 Proposed Development

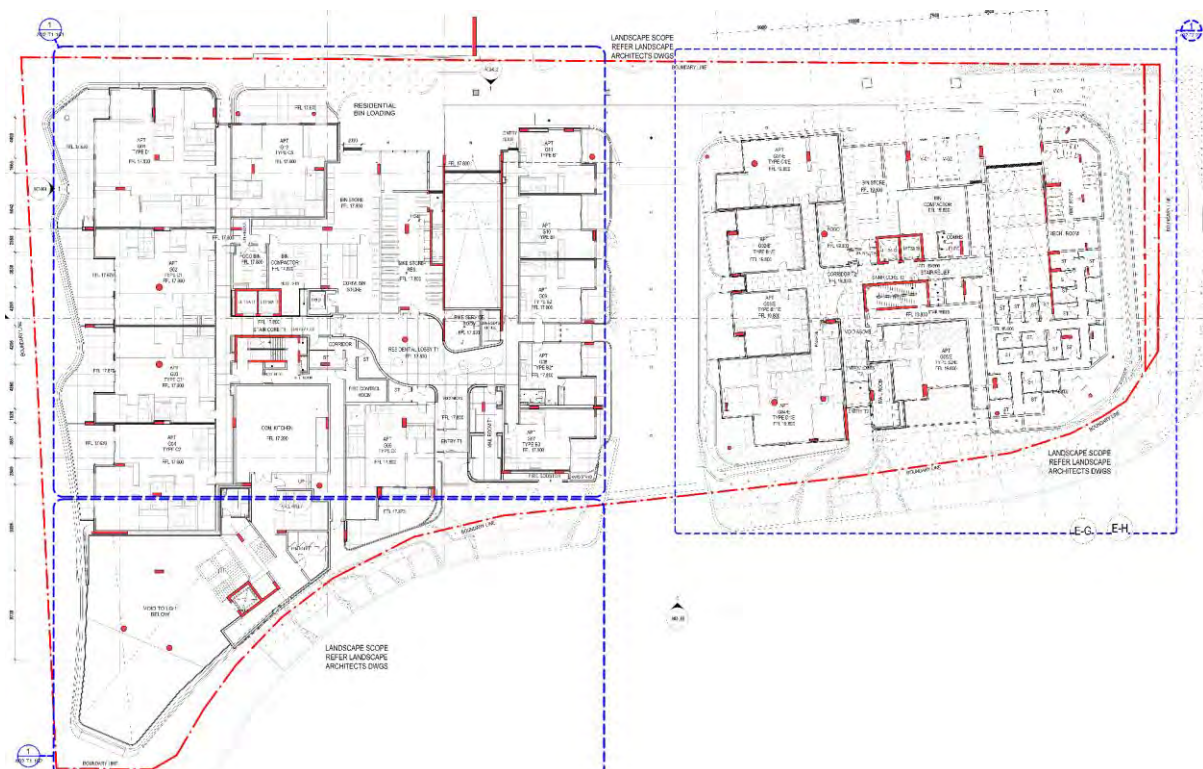
The proposed development is anticipated to be built into two stages. The first stage is a 15-storey residential building located between Reserve Street and The Esplanade (T1), while the second stage is an 18-storey residential building located between Reserve Street and West Coast Highway (T2).

The proposed mixed-use development comprises the following land uses:

- 223 residential apartments comprising the following:
 - » 16 (1-bedroom apartment)
 - » 96 (2-bedroom apartment)
 - » 67 (3-bedroom apartment)
 - » 1 (4-bedroom apartment)
 - » 10 (sub-penthouse and penthouse)
 - » 33 affordable housing
- 332 m² commercial tenancies

The ground floor layout of the proposed development is shown below in **Figure 2-2**. Detailed drawings are attached in **Appendix A**.

Figure 2-2 Ground Floor Plan



Source: Hillam (2024)



3 Access Control

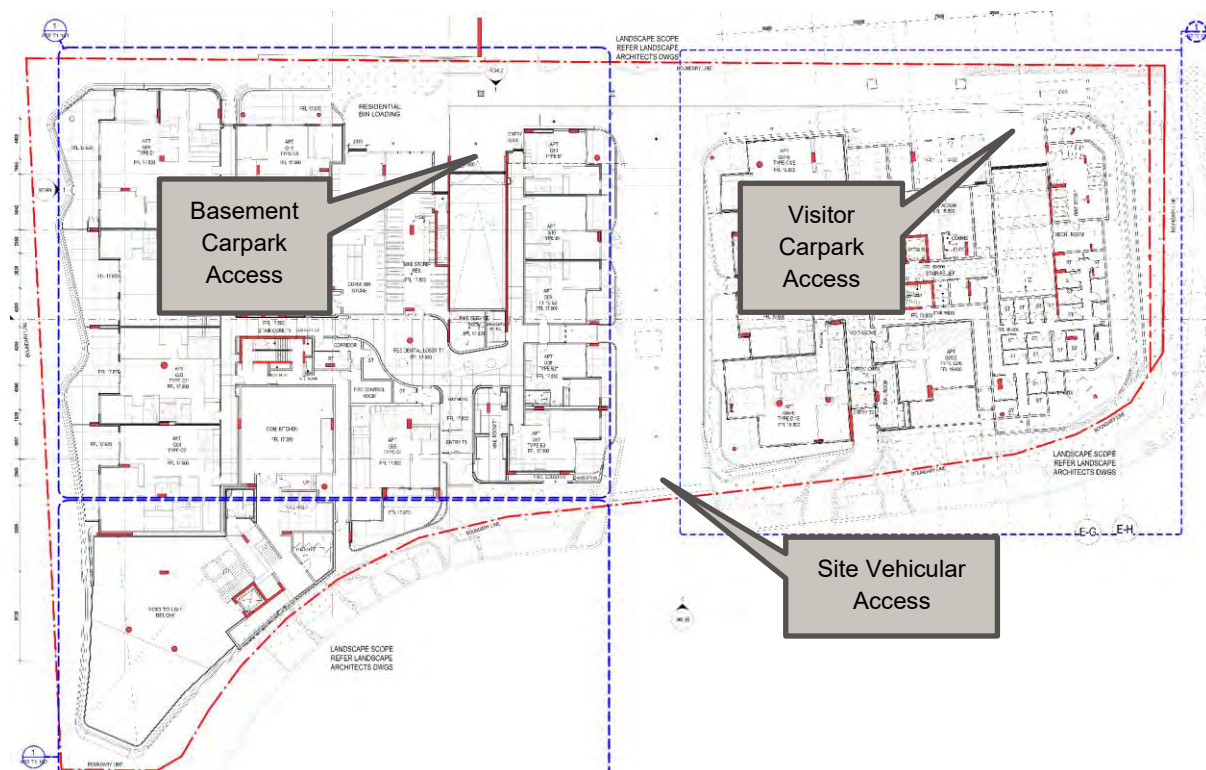
3.1 Access Arrangements

The proposed main vehicle access point to the Site is located along Reserve Street on the southern boundary of the Site. The vehicle crossover allows vehicles to access the basement carpark ramp to the west and ground floor and mezzanine visitor carpark to the east as shown in **Figure 3-1**.

Access to the basement carpark is proposed to be controlled by a security gate on the ground floor. Residents and commercial staff will be able to access the basement carpark via a key card or remote. Residential visitors can access the basement carpark via the security gate intercom. After entering the resident's number, the resident can remotely grant them entry. Access to the residential visitor carpark on the mezzanine floor is also proposed to be controlled by a security gate on the ground floor, providing residential visitors access via the security gate intercom.

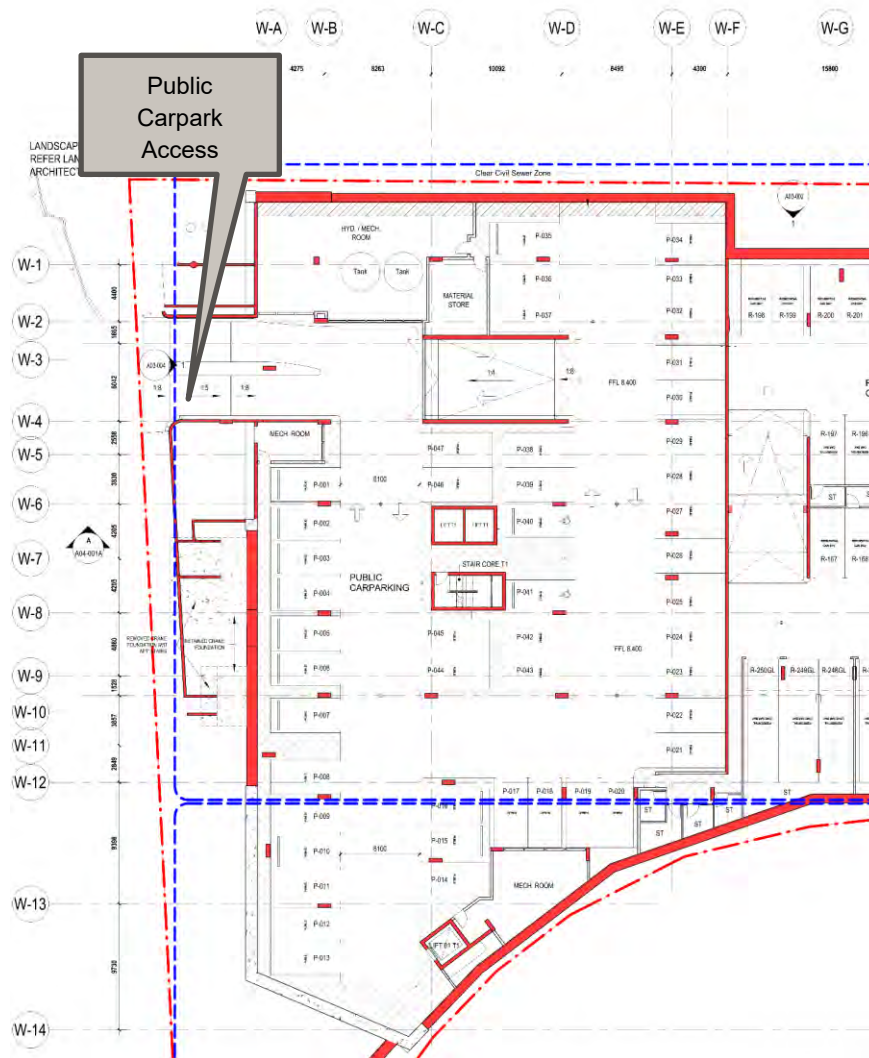
The proposed access to the underground public carpark is via The Esplanade on the western boundary of the Site as shown in **Figure 3-2**. All users will have access to the public carpark from The Esplanade.

Figure 3-1 Vehicle Access (Ground Floor)



Car Parking and Traffic Management Plan

Figure 3-2 Vehicle Access (Basement 01)



City of Stirling
17 Jan 2025
RECEIVED

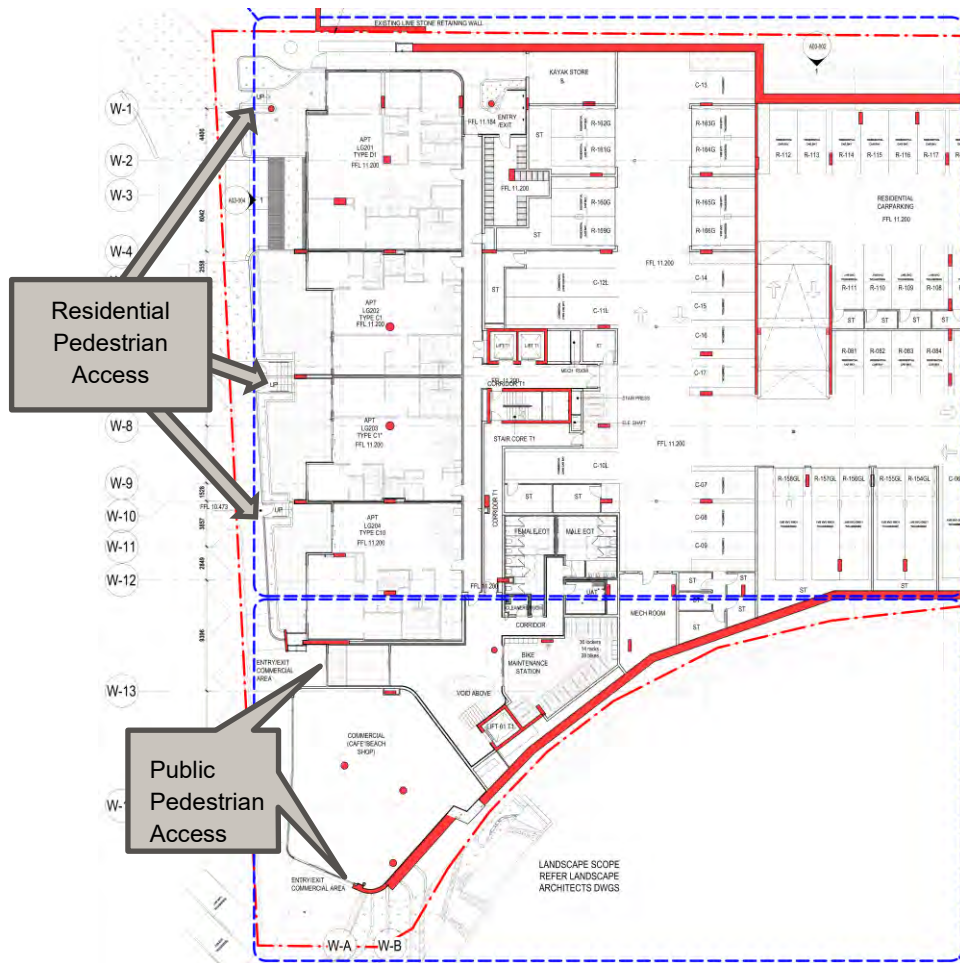
The proposed public pedestrian access points to the Site are located on the Lower Ground 02 and Lower Ground 01 as shown in **Figure 3-3** and **Figure 3-4**. Secondary access to the public carpark is proposed via a lift from the commercial lobby during the hours of operation of the carpark (See **Figure 3-4**).

The proposed residential access points to the Site are on Lower Ground 02 as shown in **Figure 3-3** and access to the residential apartments and lobbies for T1 and T2 are accessible via the Ground Floor as illustrated in **Figure 3-5**.



Car Parking and Traffic Management Plan

Figure 3-3 Pedestrian Access (Lower Ground 02)



City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

Figure 3-4 Pedestrian Access (Lower Ground 01)

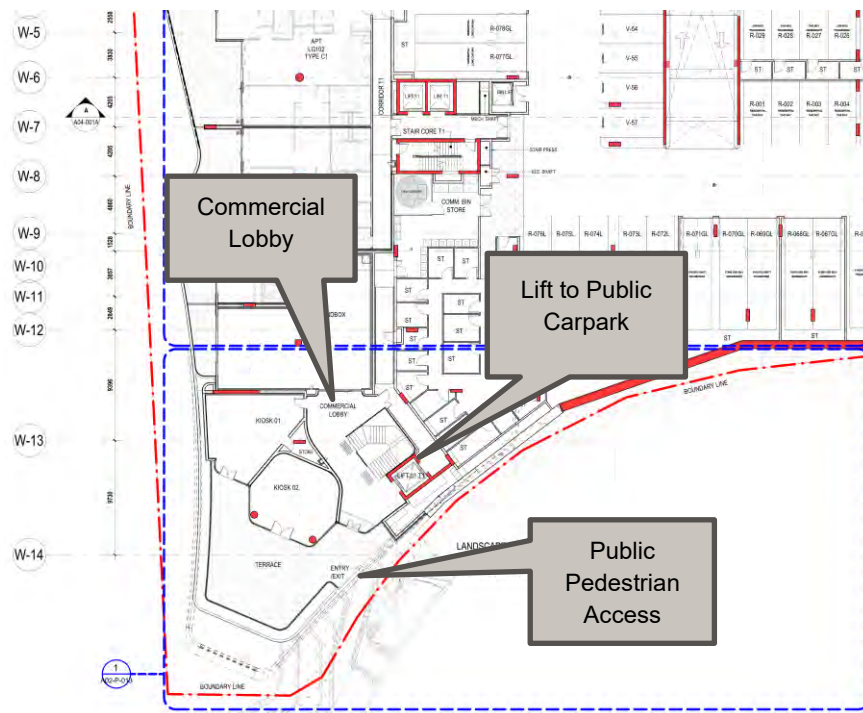
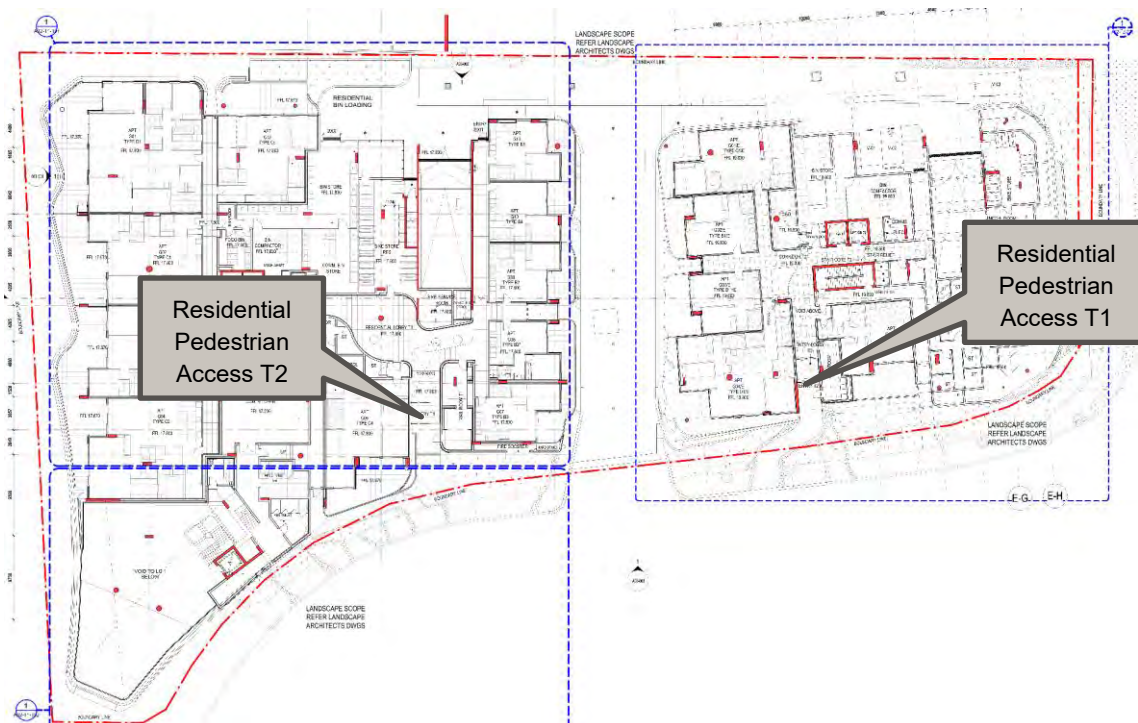


Figure 3-5 Pedestrian Access (Ground Floor)



3.2 Provision for Service/Waste Vehicles

Waste is proposed to be collected on-site at the proposed collection area located on the northeast section of the Site, accessible from Reserve Street, as shown in **Figure 3-6**.

Figure 3-6 Waste Collection Area (Ground Floor)



Appropriate signage and line marking should be provided to clearly indicate the waste collection area is for loading only (See example sign in **Figure 3-7**). To minimise conflicts with other vehicles, waste collection and deliveries should be conducted outside of the morning and afternoon peak periods or after business hours.

Figure 3-7 Example of Loading Zone Sign



City of Stirling
17 Jan 2025
RECEIVED

The following access management strategies should be considered to enhance operational efficiency and safety outcomes for the development:

- The left-in/left-out arrangement at The Esplanade carpark interface minimises turning conflicts. Implementation of the following treatments is recommended to establish movement priorities, ensuring vehicles entering and exiting the site yield appropriately to through traffic and pedestrians:
 - » A continuous footpath across the entry/exit should be provided to indicate clear priority to pedestrians and The Esplanade traffic (shown in **Figure 3-8**). The arrangement should be constructed with a concrete (or similar contrasting material) apron to distinguish as a property access.
 - » A splitter island should be provided at the entry/exit to delineate in/out movements, provide a pedestrian refuge, and to enforce the left-out exit (shown in **Figure 3-8**).

Recommend concrete (or other contrasting material) apron to distinguish as a property access.

Recommend traffic island to separate in vs out and enforce left-out manoeuvre.

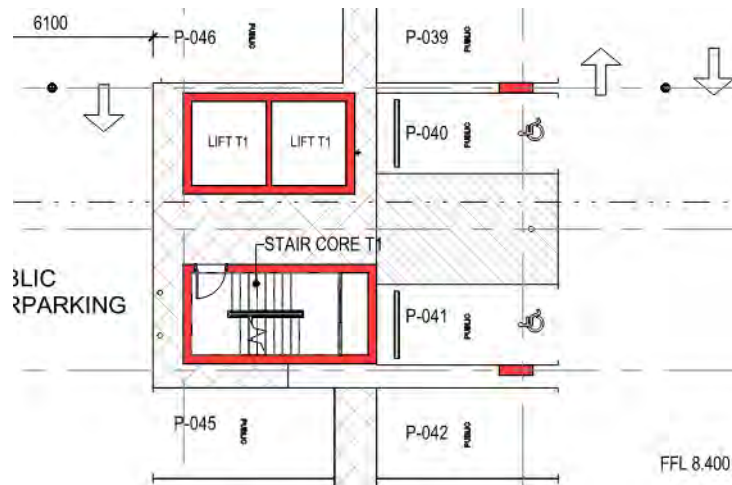
City of Stirling
17 Jan 2025
RECEIVED

- The small scale of the carpark means pedestrians should be able to safely traverse parking aisles to reach the centrally located lifts and stairs, which are surrounded by pedestrian paths (**Figure 3-9**).
 - » ACROD bays are accessible without crossing or walking along aisles and the lifts and stairs can be accessed externally without entering the carpark as per the plans below (**Figure 3-9**).

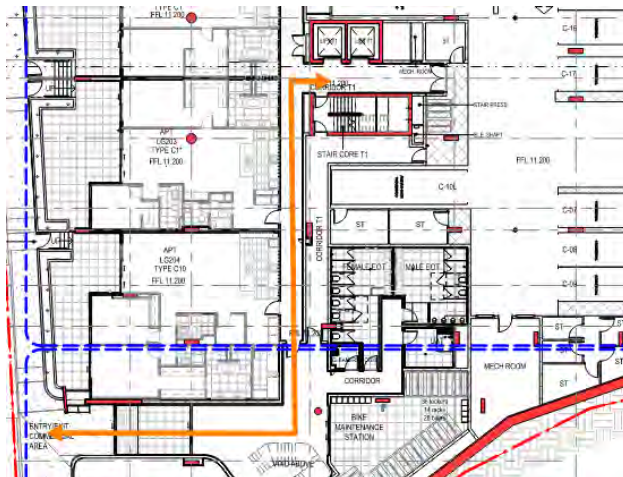


Car Parking and Traffic Management Plan

Figure 3-9 Proposed Pedestrian Access Provisions in Carparking Areas



City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

- Pedestrian movement through the residential bin loading area is unlikely as the bin store is located adjacent to the residential bin loading area, with all main pedestrian access points positioned away from this service area. Therefore, dedicated pedestrian paths in this zone are not necessary, though the space remains traversable if required.
- Implementation of an advanced parking guidance system incorporating dynamic capacity monitoring and real-time bay availability information for the public carpark. This technology would optimise parking facility operations while reducing circulation and search times for visitors of the Site.
 - » A real-time 'Bays Available' sign is recommended above the entry to the public carpark (example shown in **Figure 3-10**).

Figure 3-10 Recommended Public Carpark Real-time Car Bay Availability Signage



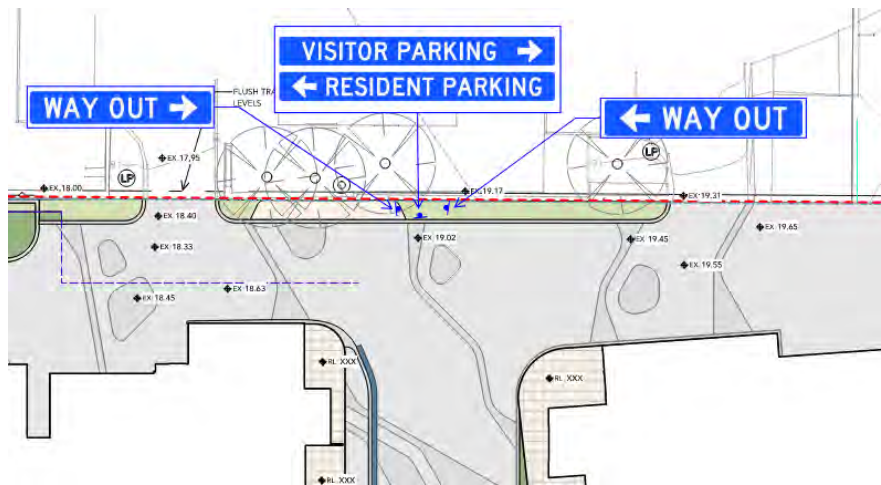
- No speed signage for car parking areas is recommended as:
 - » the carpark is already located in a Speed Limit Area (30km/h) as part of the Scarborough Beach precinct, and
 - » aisle lengths are short so speeds are expected to be low.
- Low clearance signs recommended on entry to multi-storey carpark areas since vertical clearance is less than 3m.
- ACROD Parking signs at ACROD parking spaces.
- Guide signs recommended to assist in finding way out of carparking areas (**Figure 3-11**).

City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

Figure 3-11 Recommended Wayfinding Signage in Carparking Areas off Reserve Street

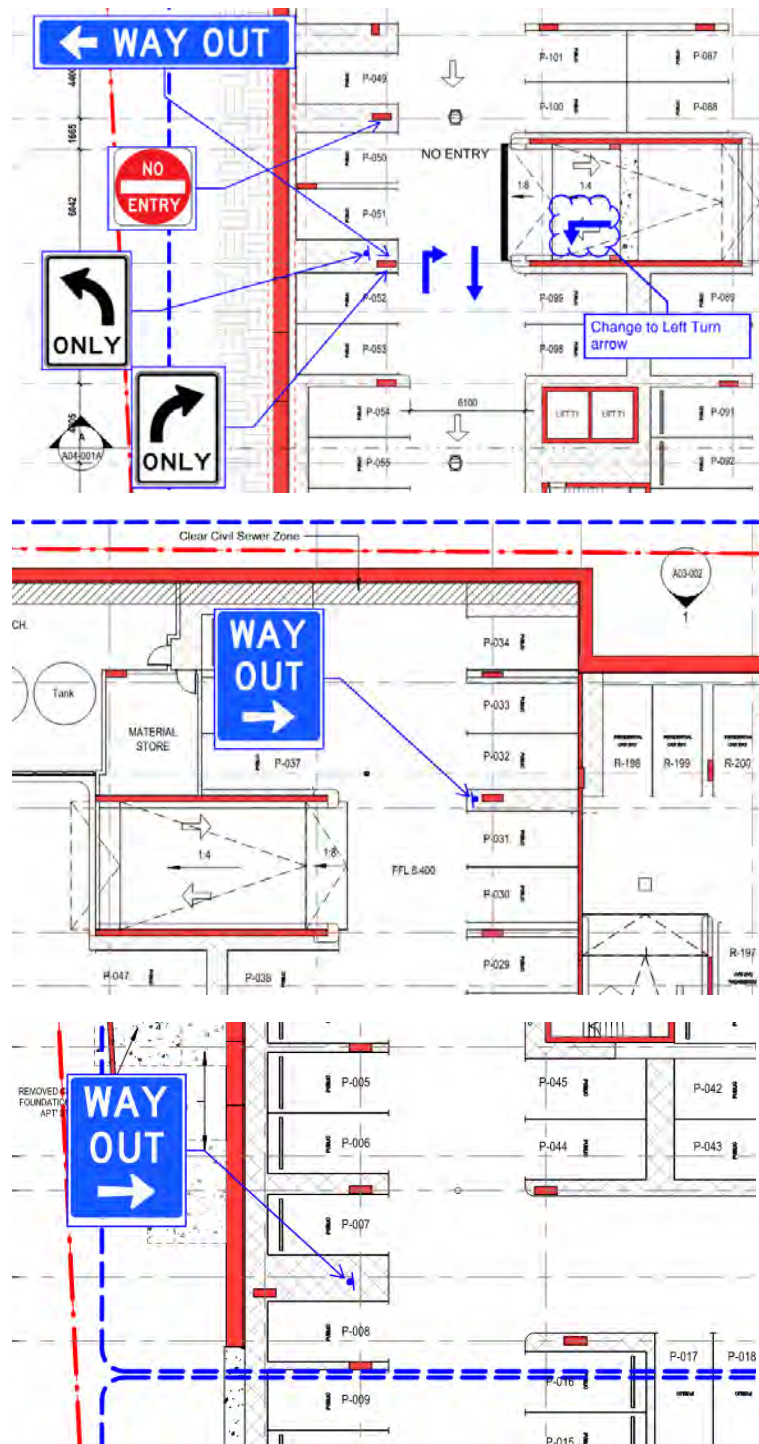


- Pedestrian warning sign recommended departing the public carpark due to the steep grade of the preceding ramp
- Signage to enforce one-way traffic flow within public carpark (**Figure 3-12**).

City of Stirling
17 Jan 2025
RECEIVED

Car Parking and Traffic Management Plan

Figure 3-12 Recommended Wayfinding Signage within Public Carpark



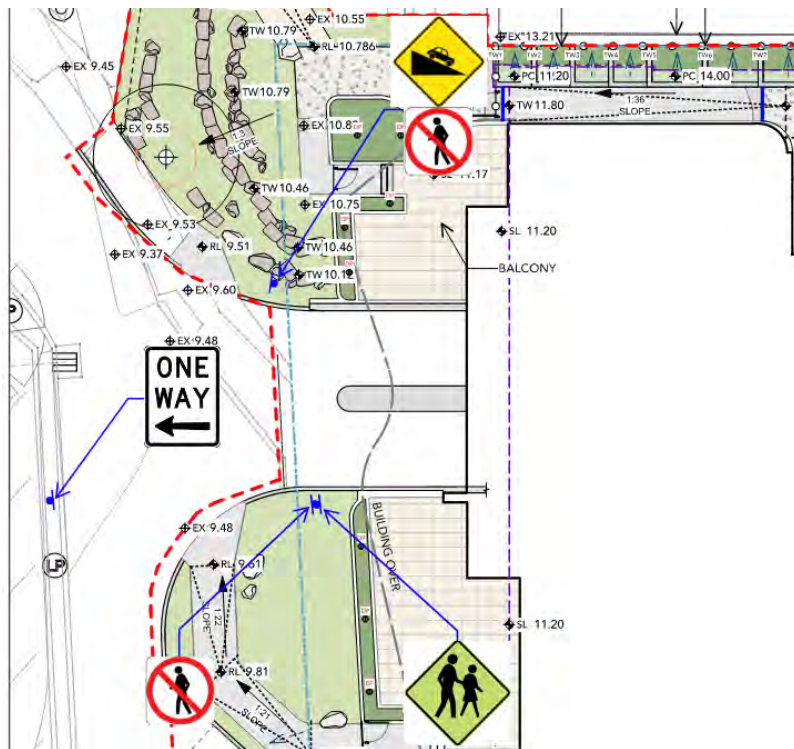
City of Stirling
17 Jan 2025
RECEIVED

- Steep Grade warning signs recommended for ramps in public carpark as they exceed 1:6 (**Figure 3-13**).
- Pedestrian Prohibition signs recommended for all ramps (**Figure 3-13**).



Car Parking and Traffic Management Plan

Figure 3-13 Recommended Signage at Entrance of Public Carpark



City of Stirling
17 Jan 2025
RECEIVED



4 Parking Requirements and Provision

4.1 Car Parking Requirements and Provision

The statutory car parking requirements for the proposed development is set out in the *Scarborough Redevelopment Area Guidelines*. **Table 4-1** provides a summary of the car parking requirements and provision.

Table 4-1 Car Parking Requirements and Provision

Land Use	Yield	Parking Category	Minimum Parking Requirement		Maximum Parking Requirement		Provision
Residential apartments	223 apartments	Residential	0.75 bays per dwelling	168 bays	1.5 bays per dwelling	334 bays	334 bays
		Residential visitor	0.25 bays per dwelling	56 bays	N/A	-	57 bays
Commercial	332 m ² (NLA)*	Commercial	1 bay per 100 m ²	4 bays	1 bay per 20 m ²	17 bays	17 bays
Public Parking	-	Public Parking	100 bays	100 bays	-	-	101 bays

*NLA calculated based on 80% GFA

Table 4-1 shows that proposed parking is provided in accordance with the minimum and maximum car parking requirements as described in the *Scarborough Redevelopment Area Design Guidelines*.

A total of 540 parking bays are proposed on the subject site, which is distributed between the Ground Floor, Mezzanine, Lower Ground 01, Lower Ground 02, Basement 01 and Basement 02 as follows:

- Ground Floor
 - » 3 residential visitor bays (including 1 ACROD bay)
 - » 1 residential bin loading bay
- Mezzanine
 - » 30 residential visitor bays
 - » 14 motorcycle bays
- Lower Ground 01
 - » 24 residential visitor bays
 - » 20 residential long bays
 - » 60 residential bays
 - » 4 motorcycle bays
- Lower Ground 02
 - » 77 residential bays
 - » 9 residential long bays
 - » 10 commercial bays
 - » 7 commercial long bays

City of Stirling
17 Jan 2025
RECEIVED



- » 4 motorcycle bays
- Basement 01
 - » 71 residential bays
 - » 13 residential long bays
 - » 47 public bays (including 2 ACROD bays)
 - » 4 motorcycle bays
- Basement 02
 - » 75 residential bays
 - » 9 residential long bays
 - » 54 public bays
 - » 4 motorcycle bays
 - » Parking bay allocations for each level are further detailed in **Section 5**.

City of Stirling
 17 Jan 2025
 RECEIVED

4.2 Parking Compliance

The dimensions and numbering of all car parking bays, loading bays, vehicle entrances, aisle widths and circulation areas meet the requirements of Australian Standard (AS) 2890.1, AS2890.2, AS2890.3 and AS/NZ2890.6. Wheel stops in bays perpendicular to other bays have been clearly marked and are in accordance with AS2890.1, as shown in **Table 4-2**.

Table 4-2 Parking Compliance Review

Parameter	Subcategory	Required	Provided	Remarks
Width	User Class 1A (Resident Parking)	2.4m	2.4m	No non-compliance identified
	User Class 2 (Public Parking)	2.7m	2.5m	No non-compliance identified
Length	User Class 1A (Resident Parking)	5.4m	5.4m	No non-compliance identified
	User Class 2 (Public Parking)	5.4m	5.4m	No non-compliance identified
Aisle width	User Class 1A (Resident Parking)	5.8m	5.8 - 6.1m	No non-compliance identified
	User Class 2 (Public Parking)	5.8m	6.1 - 6.2m	No non-compliance identified
ACROD bay length	-	5.4m	5.4m	No non-compliance identified
ACROD bay width	-	2.4m	2.4m	No non-compliance identified
Bollard distance from aisle	-	750-850mm	800mm	No non-compliance identified
Circulation roadway width	User Class 1A (Resident Parking)	One Way – 3m Two Way – 5.5m	5.8 - 6.1m	No non-compliance identified
	User Class 2 (Public Parking)	One Way – 3m Two Way – 5.5m	6.1m	No non-compliance identified
Blind aisle extension	User Class 2 (Public Parking)	1	1.5	No non-compliance identified



	User Class 1A (Resident Parking)	1	1	No non-compliance identified
Vehicle envelope requirements	-	Vehicle envelope clear of permanent obstructions	-	No non-compliance identified

The proposed public carpark driveway access ramp does not strictly comply with the gradient requirement of *AS2890.1 Clause 3.3(a)*, which states that the space between the edge of the frontage road and the property line shall have a maximum gradient of 1 in 20 (5%) and for at least the first 6m into the car park. A technical letter prepared by Stantec dated 30 November 2022 (see **Appendix A**) demonstrated that the purpose of this requirement can still be achieved by the subject ramp access, due to the sufficient offset of pedestrian crossing from the property boundary. This non-conformance is not expected to result in any significant operational and safety concerns.

Additional mitigation measures as detailed in **Section 3.3** are recommended for consideration to further improve the overall safety of the access and achieve better outcomes in relation to the Australian Standards requirements.

The proposed public carpark internal ramps connecting Basement 01 and Basement 02 are also not strictly compliant with the required ramp gradients indicated in *AS2890.1 Clause 3.3(a)*. A technical letter from Stantec dated 20 October 2023 (see **Appendix C**) demonstrated that the ramp arrangement is appropriate for its intended purpose. The ramp design is unlikely to result in queuing or operational concerns and is not expected to pose significant safety risks.

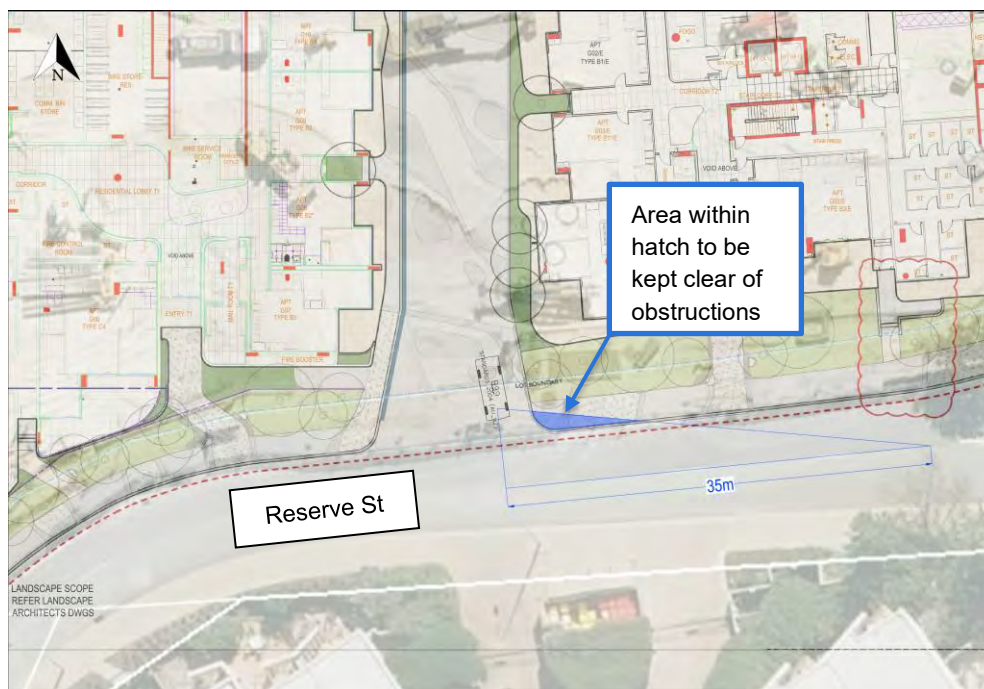
4.3 Sightline Checks

The Reserve Street crossover provides adequate sightlines for vehicles and pedestrians. Based on *AS2890.1*, the minimum stopping sight distance is estimated to be 35m, given that Reserve Street's posted speed limit is 30km/h. The sight triangle in **Figure 4-1** shows the minimum stopping sight distance required for vehicles at the crossover to see incoming vehicles along Reserve Street approaching from the east. The horizontal curvature of Reserve Street provides adequate sightlines for a vehicle at the crossover to observe incoming vehicles along Reserve Street from the east approach.

City of Stirling
17 Jan 2025
RECEIVED



Figure 4-1 Reserve Street Sightline Checks

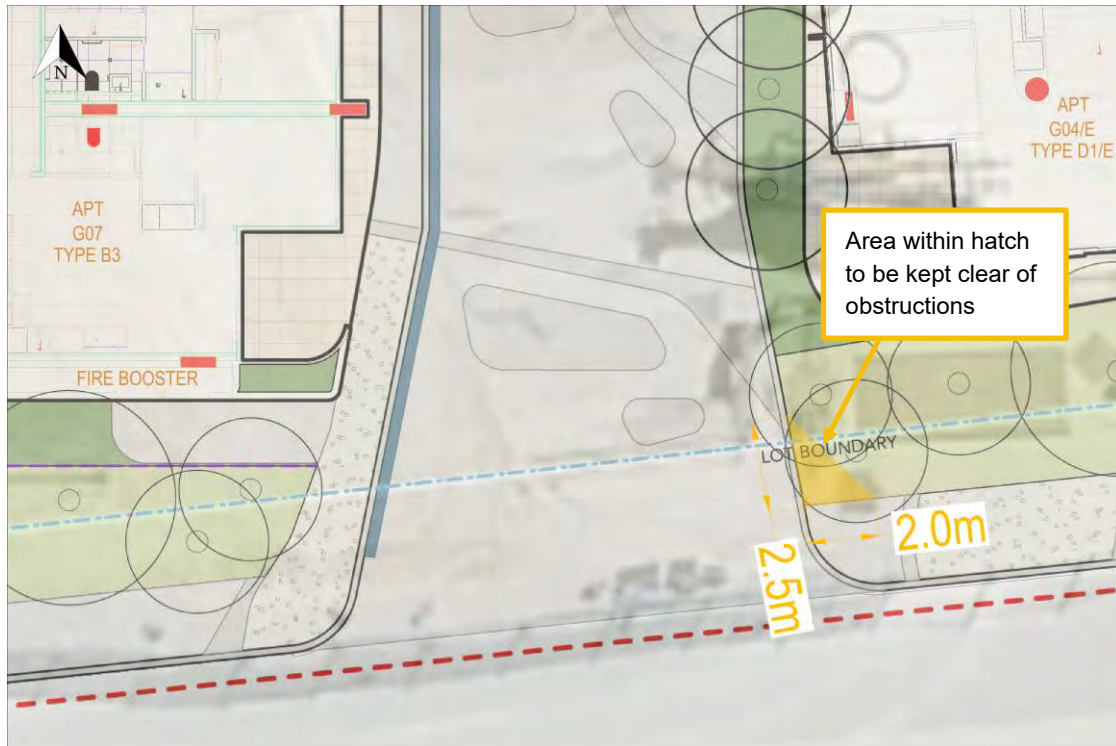


The location of the Reserve Street crossover is directly opposite another driveway. Given that Reserve Street is generally a low-speed area with a posted speed limit of 30km/h, conflicts are not anticipated.

The required truncation (as shown by the yellow hatch) at the footpath and crossover intersection will provide adequate sightlines for pedestrians as illustrated in **Figure 4-2**. The truncation is clear of any obstructions to visibility.

City of Stirling
17 Jan 2025
RECEIVED

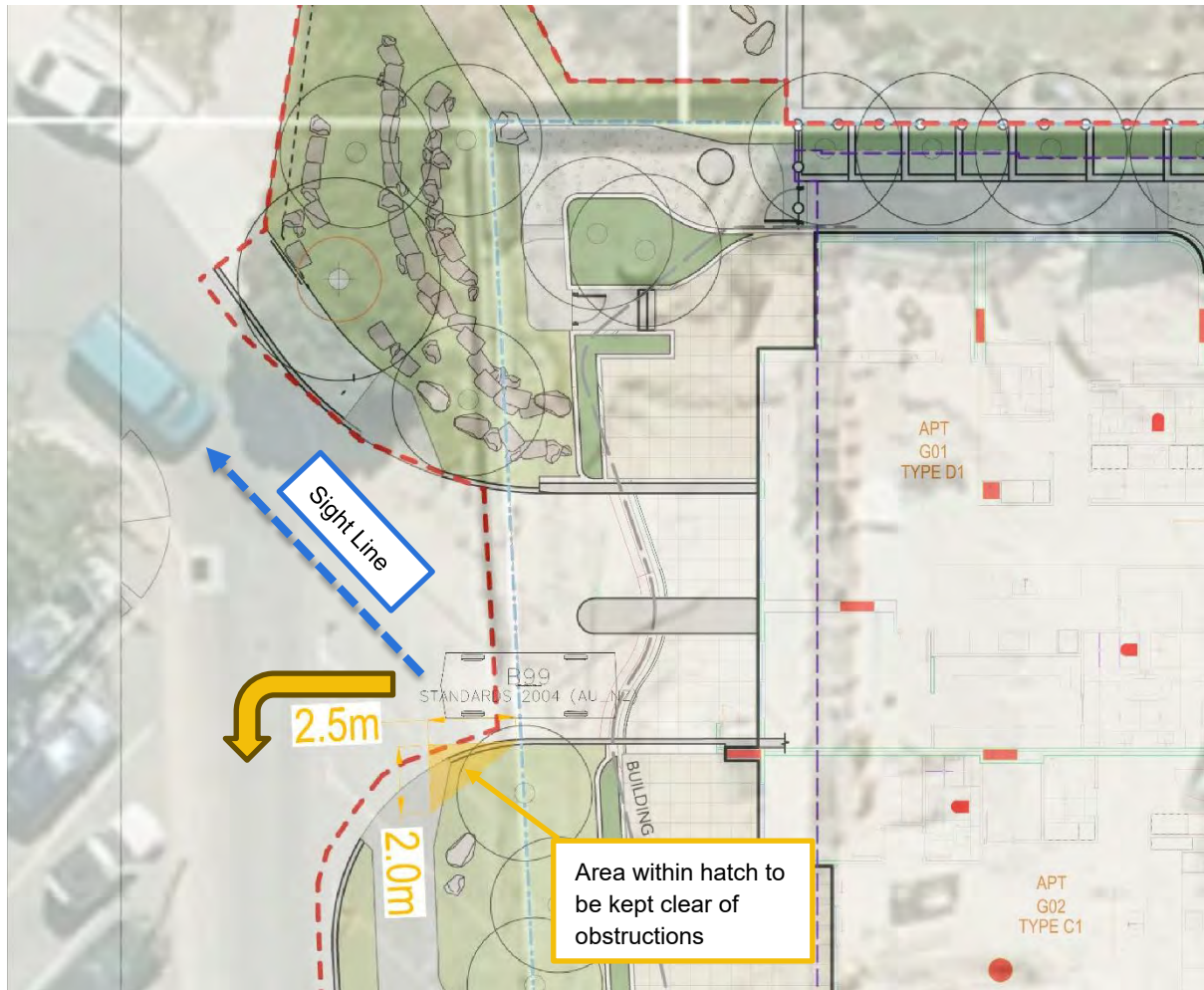
Figure 4-2 Reserve Street Crossover Sightline Checks



The crossover along The Esplanade for the public carpark access also provides adequate sightlines for vehicles and pedestrians. The minimum stopping sight distance required along The Esplanade is 35m. Exiting vehicles at the crossover are expected to turn left into The Esplanade and due to current one-way traffic circulation, it is anticipated that exiting vehicles will have clear visibility of any incoming vehicles on The Esplanade as illustrated in **Figure 4-3**. The required pedestrian truncation (yellow hatch) at the crossover are adequate as shown in **Figure 4-3**.

City of Stirling
17 Jan 2025
RECEIVED

Figure 4-3 The Esplanade Crossover Sightline Checks



4.4 ACROD Car Parking

Three ACROD accessible parking bays are proposed on-site and distributed as follows:

- 1 residential visitor ACROD bay located on the ground floor
- 2 public ACROD bays situated in Basement 01

The proposed ACROD bays meet the requirements of AS2890.6.

4.5 Public Car Parking

The Scarborough Redevelopment Area Design Guidelines requires public car parking on the Site to be delivered as the first stage of development and maintained in perpetuity. The public car parking in Basement 01 and 02 is proposed to be delivered as Stage 1 and maintained as public parking in perpetuity.



4.6 Bicycle Parking and End of Trip Facilities

Bicycle parking and end of trip (EoT) facilities requirements for the proposed development are set out in the *Scarborough Redevelopment Area Design Guidelines* and summarised in **Table 4-3**.

Table 4-3 Bicycle Parking and End of Trip Facilities Requirements and Provision

Land Use	Yield	Minimum Parking Requirements	Minimum Parking Requirement	Provision
Commercial buildings less than 500 m ² in floor area	332 m ² (NLA)* (4 tenancies)	A minimum of 1 space	4 spaces	28 spaces
Residential	223 apartments	1 bay for every unit	223 spaces	223 spaces

*NLA calculated based on 80% GFA

The commercial and residential bicycle parking meets the requirements set out in the *Scarborough Redevelopment Area Design Guidelines*.

Storerooms are proposed for each residential unit which could store residential bikes. **Figure 4-4** shows two secured residential bike stores accessible via key card or remote that are proposed on the ground floor of T1 and includes the following:

- 59 bike parking spaces
- bike service room

And T2 which includes the following:

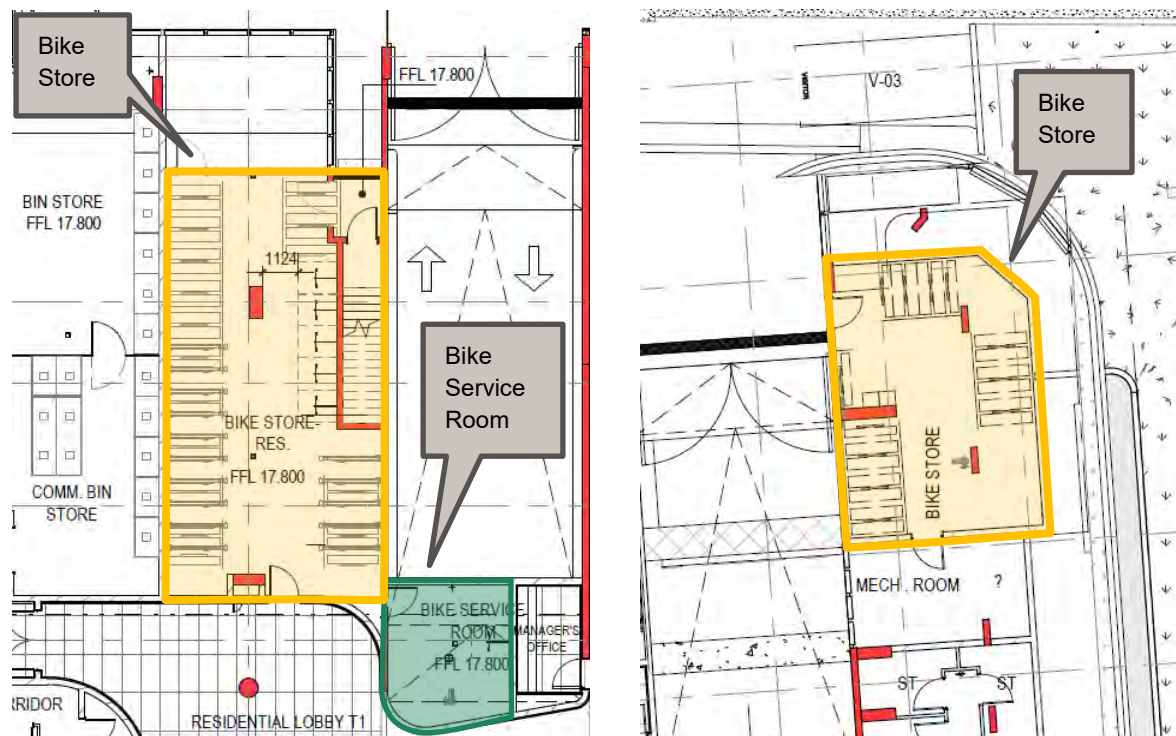
- 20 bike parking spaces
- bike maintenance station

City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

Figure 4-4 Left – T1 Bike Store (Ground Floor), Right – T2 Bike Store (Ground Floor)



Source: Hillam (2024)

Figure 4-5 illustrates the proposed EoT facilities to be provided for commercial and public use on the lower ground and includes the following:

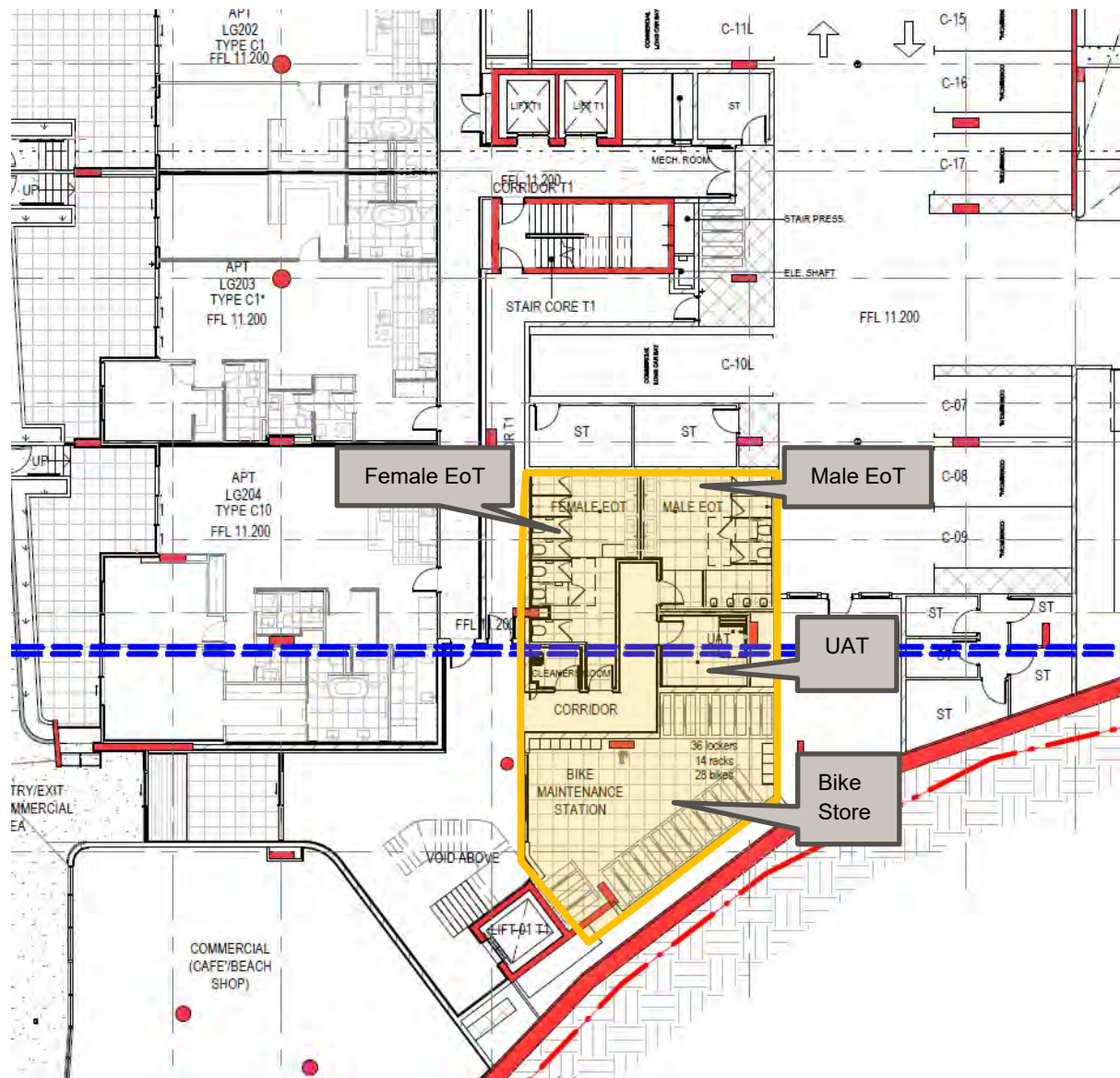
- 28 bike parking spaces
- 2 male showers / 2 female showers / 1 UAT facilities
- 36 Lockers
- bike maintenance station

City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

Figure 4-5 Bicycle Parking and EoT Facilities (Lower Ground 02)



Source: Hillam (2024)

City of Stirling
17 Jan 2025
RECEIVED



5 Car Parking Allocation

Figure 5-1 through **Figure 5-6** illustrates the parking allocation on each level by type of user.

Table 5-1 Parking Allocation Legend

Parking User Bay	Reference
Residential Bays	ORANGE
Residential Long Bays	RED
Residential Visitor Bays	PINK
Commercial Bays & Commercial Long Bays	GREEN
Public Bays	YELLOW
ACROD Bays	BLUE
Motorcycle Bays	LIGHT GREEN

City of Stirling
17 Jan 2025
RECEIVED



Car Parking and Traffic Management Plan

Figure 5-1 Parking Allocation (Ground Floor)



City of Stirling
17 Jan 2025
RECEIVED



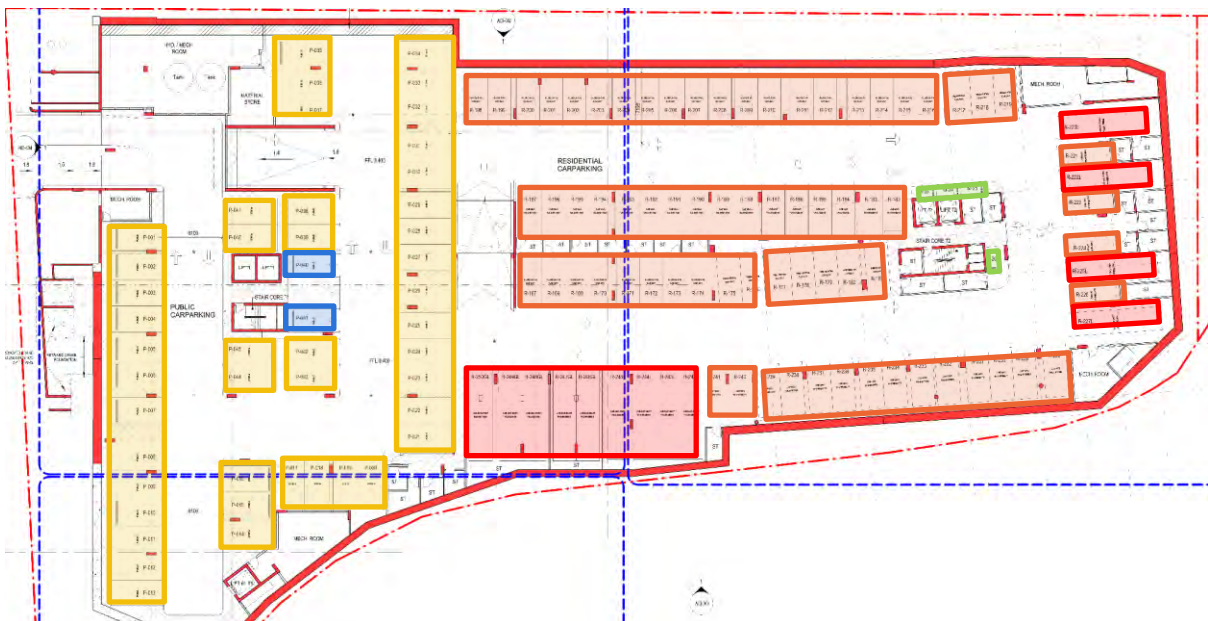
The site plan illustrates the layout of the Visitor Car Park, featuring a central area with a Visitor Car Park (FFL 16.800) and a central core area (FFL 16.800). The plan includes various vehicle stalls (V-01 to V-33) and motorcycle stalls (M-01 to M-14). Key features include a Transformer (FFL 16.800), an Electrical Room (FFL 16.800), a Stair Core T2, and a Stair Relief. The plan also shows dimensions (e.g., 5800, 18, 16) and directional arrows indicating traffic flow. The overall site is bounded by a red line, likely representing the site boundary or a major road.

Car Parking and Traffic Management Plan

Figure 5-4 Parking Allocation (Lower Ground 02)



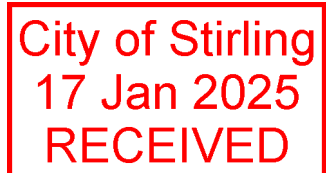
Figure 5-5 Parking Allocation (Basement 01)



City of Stirling
17 Jan 2025
RECEIVED



Figure 5-6 Parking Allocation (Basement 02)



6 Parking Management and Enforcement

6.1 Tenant/Visitor Feedback

Feedback from residents, commercial staff and visitors of the Site will provide a good indication of parking compliance. A reporting system shall be implemented to allow residents to easily report any parking non-compliances occurring on Site (e.g. filling out a form, online reporting and/or reporting via phone/in person).

6.2 Monitoring Carpark Compliance

The building caretaker and/or security staff will be tasked with patrolling the carparks periodically to ensure compliance with the parking conditions and restrictions on-site and report damaged or worn-out signage.

6.3 Demonstrating Compliance

A warning will be issued to those who fail to comply with the conditions and restrictions set for the parking area. Multiple offences will incur further disciplinary action which may include having the vehicle towed off the Site or a fine issued.

Any non-compliances should be kept on record and an annual/biannual review should be conducted to determine the effectiveness of the implemented parking management plan. Modifications to the PMP should be made if further restrictions are required to ensure compliance.

6.4 Review of Parking Management Plan

The measures implemented in this PMP should be reviewed periodically (ideally once every 12-18 months) to evaluate which management measures were most/least effective. This allows for the inclusion of new measures and modifications of existing measures to improve parking management.

City of Stirling
17 Jan 2025
RECEIVED



7 Safety and Security Measures

7.1 CCTV Cameras

CCTV cameras are proposed to be installed in the carpark to provide an additional layer of security and surveillance throughout the carpark, as required. The placement of any CCTV cameras intend to cover all areas of the carpark and ensure that there are no blind spots.

7.2 Monitoring Carpark Safety and Security

The building caretaker and/or security staff shall be tasked with patrolling the carpark areas periodically and using the CCTV system to monitor any suspicious behaviour and ensure that residents, commercial staff and visitors can feel safe and secure when entering and leaving this Site.

City of Stirling
17 Jan 2025
RECEIVED



1.

Appendices

City of Stirling
17 Jan 2025
RECEIVED



Appendix A

Detailed Drawings

City of Stirling
17 Jan 2025
RECEIVED



- GENERAL NOTES
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

PARKING ABBREVIATIONS

C-xx COMMERCIAL PARKING ALLOCATION
C-xxL COMMERCIAL PARKING LONG ALLOCATION
M-xx MOTOR CYCLE PARKING ALLOCATION
P-xxx PUBLIC PARKING ALLOCATION
R-xxx RESIDENTIAL PARKING ALLOCATION
R-xxxL RESIDENTIAL PARKING LONG ALLOCATION
R-xxxG RESIDENTIAL PARKING GARAGE ALLOCATION
R-xxxGL RESIDENTIAL PARKING GARAGE LONG ALLOCATION
V-xx VISITOR PARKING ALLOCATION

2.12.24	9	Parking Updates to Suit Consultant Feedback	MK
15.11.24	8	Issue Preliminary DA Drawings	MK
14.11.24	7	Parking Updates To Suit Traffic Review	MK
11.06.24	6	Issue For Coordination	YV
05.11.24	5	Issue For Information	MK
18.03.24	4	Issue For IFC	MK
23.01.24	3	Issue For IFC	SG
12.01.24	2	Issue For information	SG
20.12.23	1	Issue For information- Piling Layout Revised (Tolerance added)	SG
29.05.23	0	Issue For Tender	JG
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM
ARCHITECTS

CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

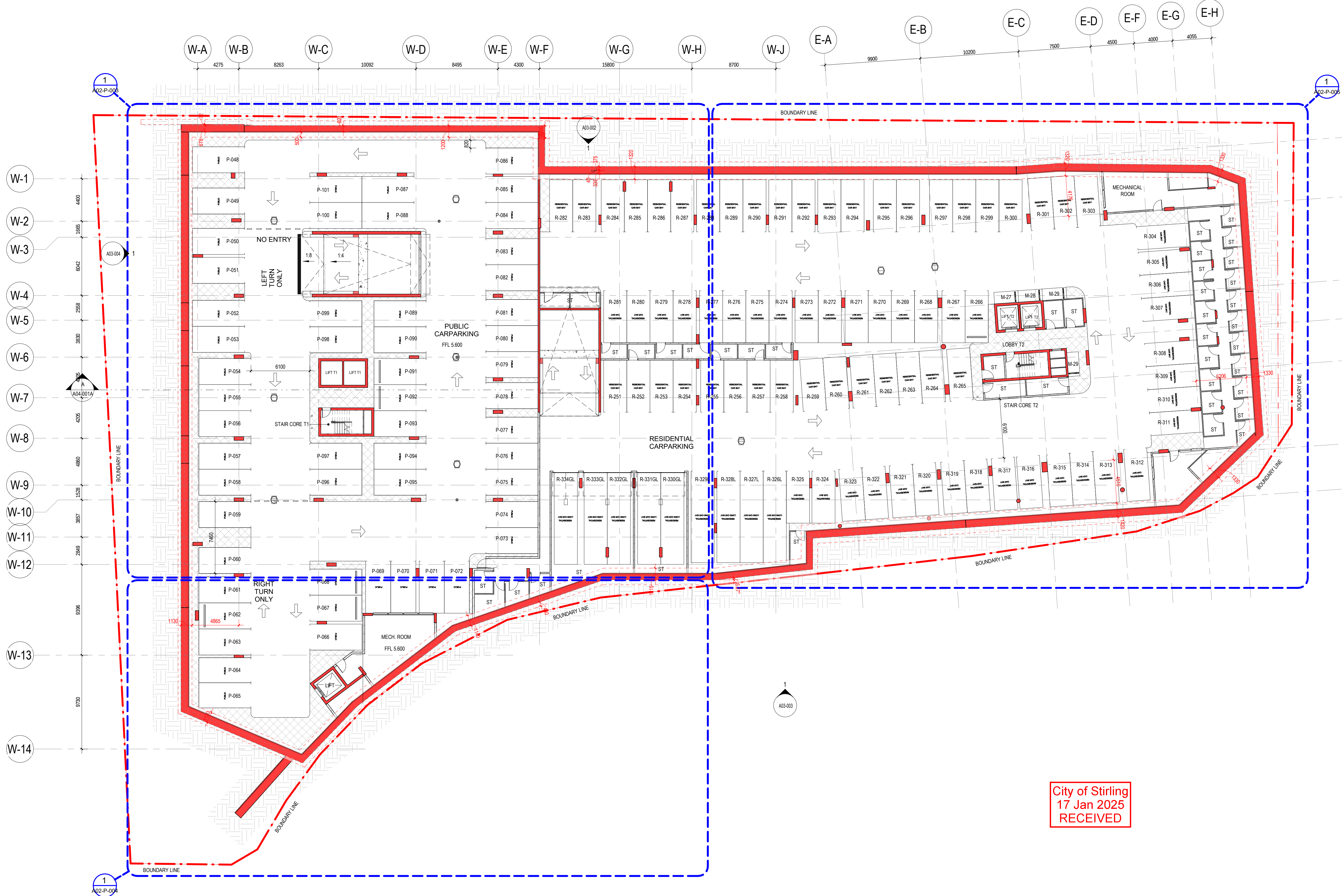
DRAWING NAME
OVERALL BASEMENT 02

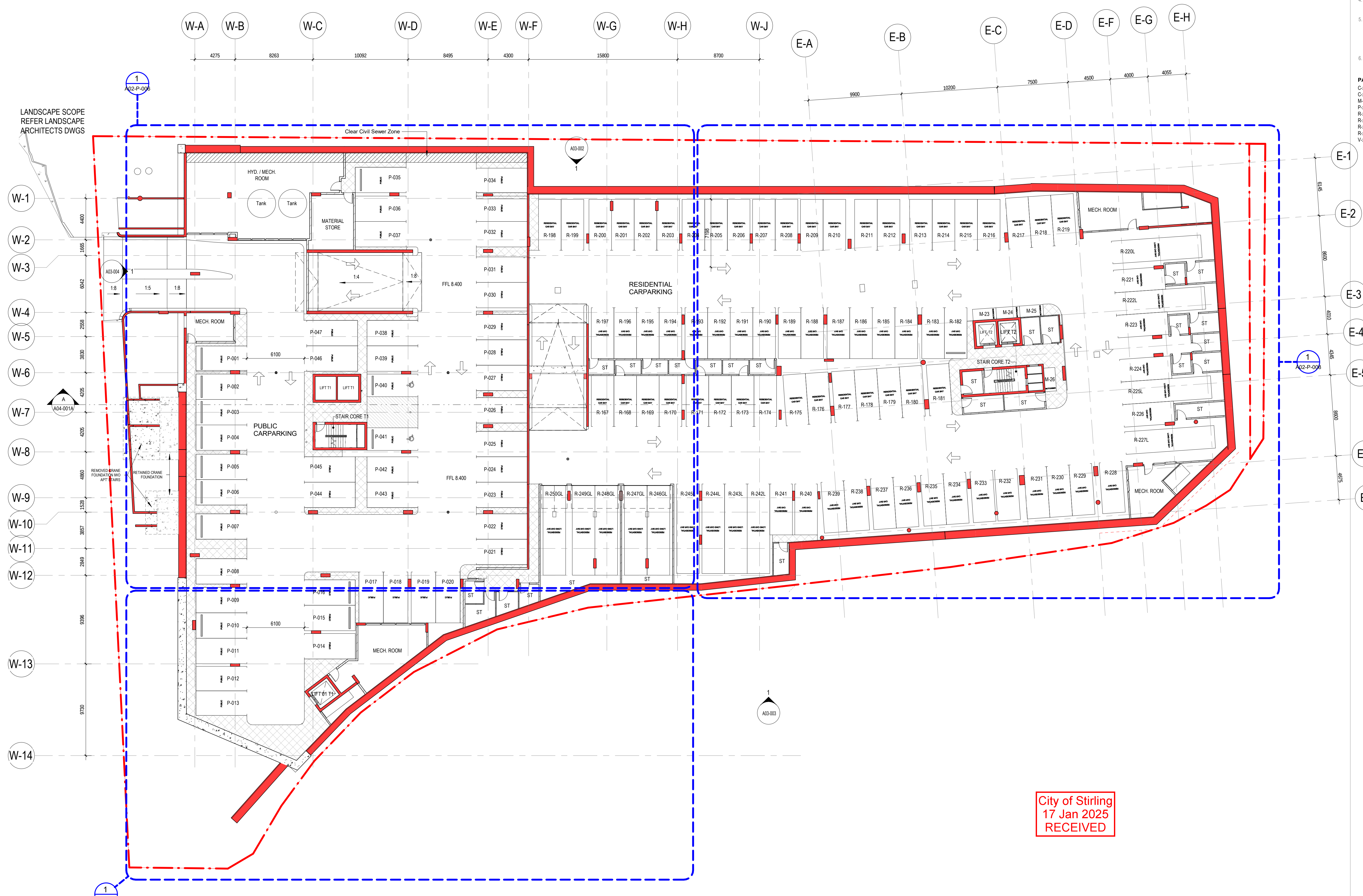
SCALE 1 : 200 (A1)

PROJECT No.	DRAWING No.	REV
2005	A01-102	9

DRAWN BY	Author
----------	--------

© Hillam Architects Pty Ltd





- GENERAL NOTES**
1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

- PARKING ABBREVIATIONS**
- C-xx COMMERCIAL PARKING ALLOCATION
 - C-xxL COMMERCIAL PARKING LONG ALLOCATION
 - M-xx MOTOR CYCLE PARKING ALLOCATION
 - P-xxx PUBLIC PARKING ALLOCATION
 - R-xxx RESIDENTIAL PARKING ALLOCATION
 - R-xxL RESIDENTIAL PARKING LONG ALLOCATION
 - R-xxGL RESIDENTIAL PARKING GARAGE ALLOCATION
 - R-xxGL RESIDENTIAL PARKING GARAGE LONG ALLOCATION
 - V-xx VISITOR PARKING ALLOCATION

2.12.24	9	Parking Updates to Suit Consultant Feedback	MK
15.11.24	8	Issue Preliminary DA Drawings	MK
14.11.24	7	Parking Updates To Suit Traffic Review	MK
11.08.24	6	Issue for Coordination	YV
05.11.24	5	Issue for information	MK
18.03.24	4	Issue for IFC	MK
23.01.24	3	Issue for IFC	SG
12.01.24	2	Issue For information	SG
20.12.23	1	Issue For information- Piling Layout Revised (Tolerance added)	SG
29.05.23	0	Issue For Tender	JG
DD.MM.YY	REV	DESCRIPTION	CHECKED

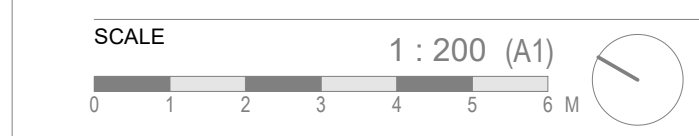
ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



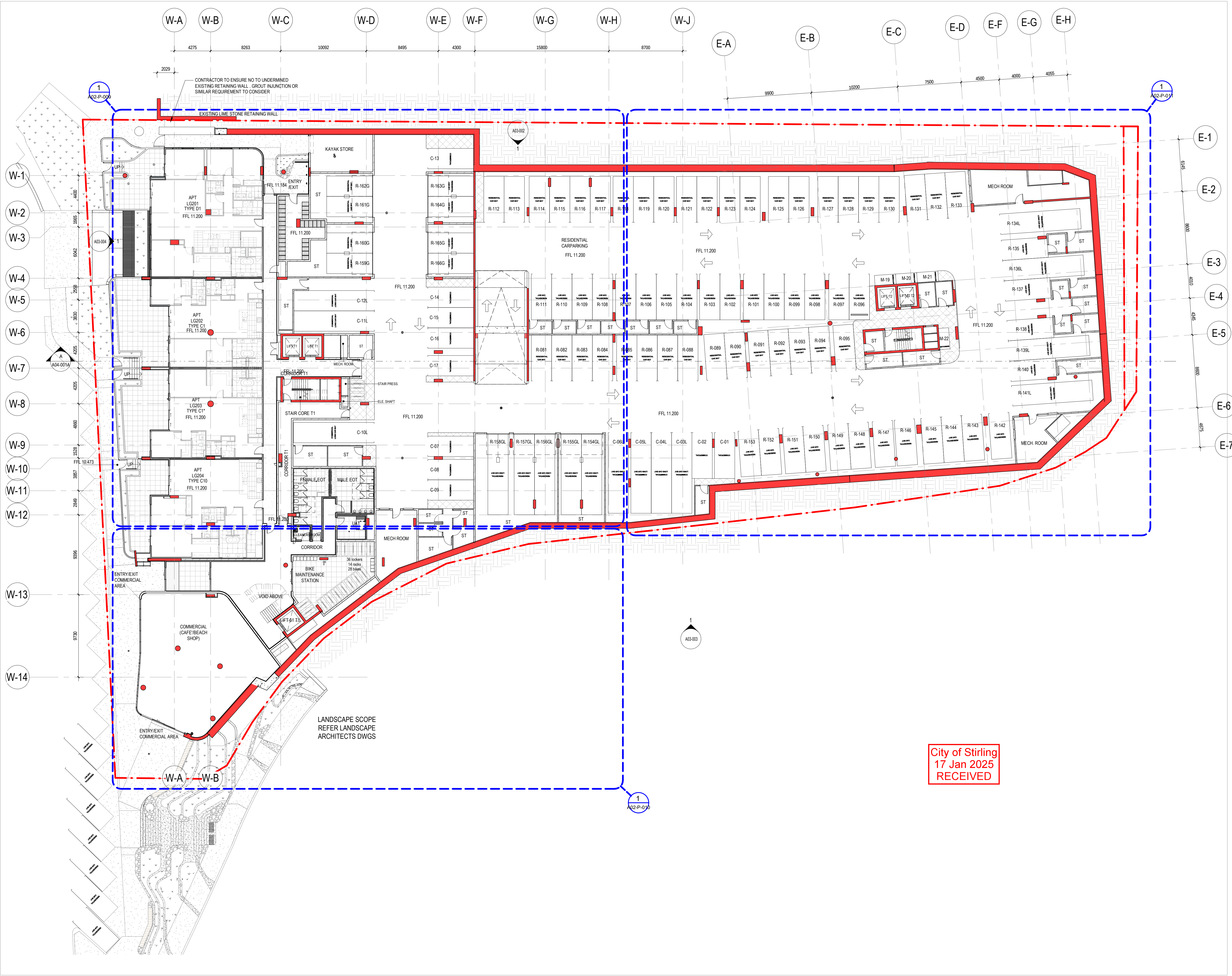
CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
OVERALL BASEMENT 01



PROJECT No.	DRAWING No.	REV
2005	A01-103	9
DRAWN BY	Author	



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

PARKING ABBREVIATIONS

C-xx	COMMERCIAL PARKING ALLOCATION
C-xxL	COMMERCIAL PARKING LONG ALLOCATION
M-xx	MOTOR CYCLE PARKING ALLOCATION
P-xx	PUBLIC PARKING ALLOCATION
R-xx	RESIDENTIAL PARKING ALLOCATION
R-xxL	RESIDENTIAL PARKING LONG ALLOCATION
R-xxG	RESIDENTIAL PARKING GARAGE ALLOCATION
R-xxGL	RESIDENTIAL PARKING GARAGE LONG ALLOCATION
V-xx	VISITOR PARKING ALLOCATION

2.12.24	8	Parking Updates to Suit Consultant Feedback	MK
15.11.24	7	Issue Preliminary DA Drawings	MK
14.11.24	6	Parking Updates To Suit Traffic Review	MK
11.08.24	5	Issue for Coordination	YW
05.11.24	4	Issue for Information	MK
18.03.24	3	Revised Tender Issue	MK
22.02.24	2	Re-issue For Tender (Not for construction)	MK
13.11.23	1	Issue For Information	SG
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au

HILLAM ARCHITECTS

CLIENT

EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1

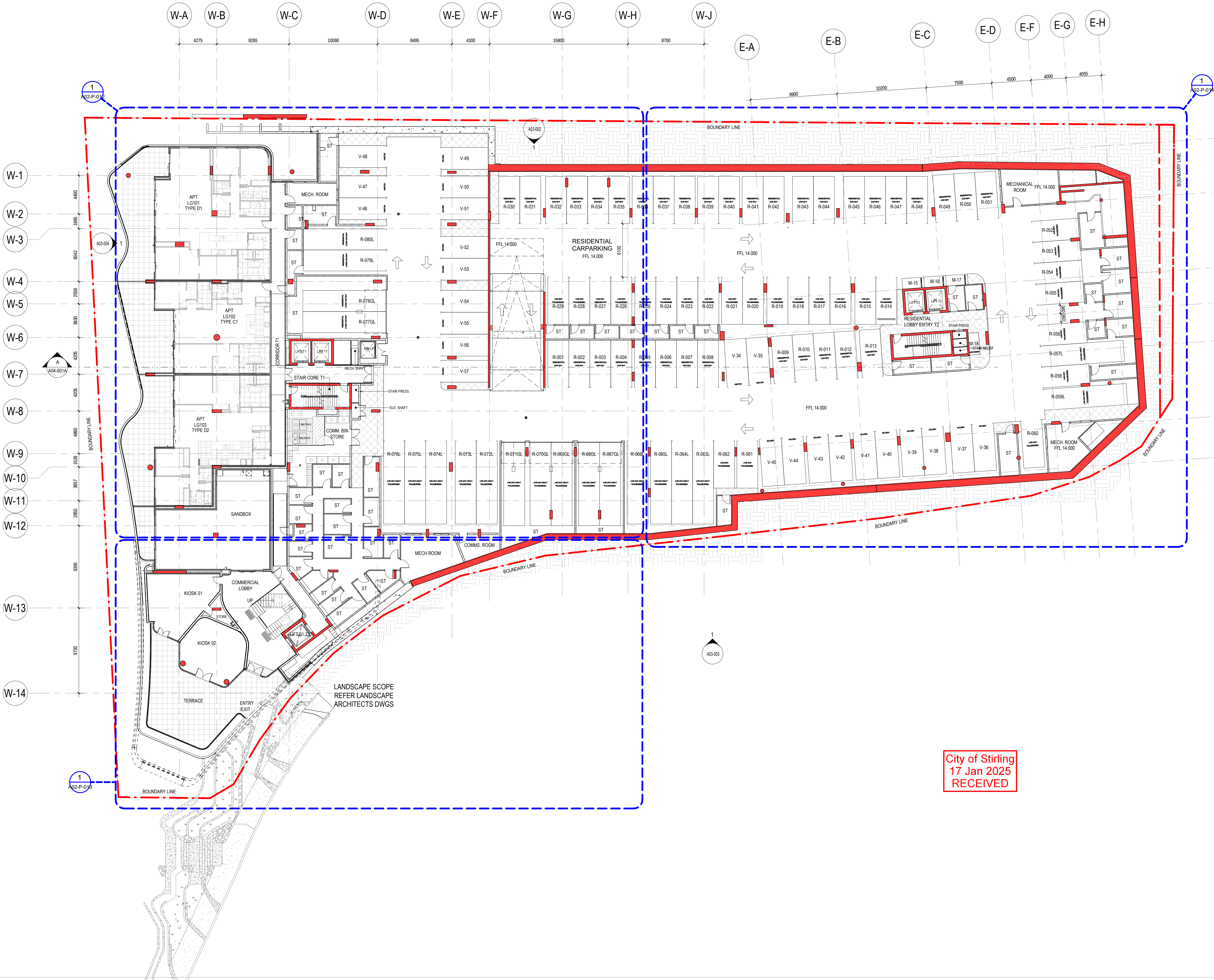
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

**OVERALL LOWER GROUND
02**

SCALE 1 : 200 (A1)		
PROJECT No.	DRAWING No.	REV
2005	A01-104	8
DRAWN BY		Author

City of Stirling
17 Jan 2025
RECEIVED



- GENERAL NOTES
- THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
 - THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
 - ALL DIMENSIONS ARE MEASURED FROM STUD WALL, NOT WALL FINISH
 - ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
 - THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
 - THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED
- PARKING ABBREVIATIONS
- | | |
|--------|--|
| C-xx | COMMERCIAL PARKING ALLOCATION |
| C-xxL | COMMERCIAL PARKING LONG ALLOCATION |
| M-xx | MOTOR CYCLE PARKING ALLOCATION |
| P-xx | PUBLIC PARKING ALLOCATION |
| R-xx | RESIDENTIAL PARKING ALLOCATION |
| R-xxL | RESIDENTIAL PARKING LONG ALLOCATION |
| R-xxG | RESIDENTIAL PARKING GARAGE ALLOCATION |
| R-xxGL | RESIDENTIAL PARKING GARAGE LONG ALLOCATION |
| V-xx | VISITOR PARKING ALLOCATION |

10.12.24	8	Amendment to Suit Waste Consultant Feedback	MK
2.12.24	7	Parking Updates to Suit Consultant Feedback	MK
15.11.24	6	Issue Preliminary DA Drawings	MK
14.11.24	5	Parking Updates To Suit Traffic Review	MK
11.08.24	4	Issue for Coordination	YW
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

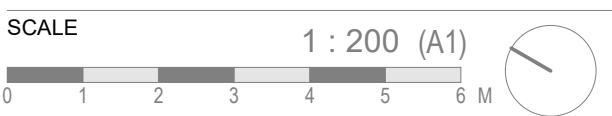
ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT
EDGE VISIONARY LIVING

PROJECT NAME
THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME
OVERALL LOWER GROUND
01



PROJECT No.	DRAWING No.	REV
2005	A01-105	8
DRAWN BY	Author	

City of Stirling
17 Jan 2025
RECEIVED



GENERAL NOTES

1. THIS DRAWING IS COPYRIGHT (C) AND REMAINS THE PROPERTY OF HILLAM ARCHITECTS. IT MUST NOT BE RETAINED, COPIED OR USED WITHOUT THE AUTHORITY OF HILLAM ARCHITECTS
2. THE CONTRACTOR TO CHECK ALL DIMENSIONS ON SITE OR OFF SITE BEFORE COMMENCING WORK OR PROCEEDING WITH PREPARATION OF SHOP DRAWINGS. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
3. FIGURED DIMENSIONS TAKE PRECEDENCE OVER SCALED DIMENSIONS. DO NOT SCALE FROM REDUCED DRAWINGS
4. ALL WORK MUST BE IN ACCORDANCE WITH THE NATIONAL CONSTRUCTION CODE OF AUSTRALIA AND THE APPLICABLE AUSTRALIAN STANDARDS
5. THE CONTRACTOR TO ENSURE THAT THIS DRAWING IS READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECTURAL, STRUCTURAL, HYDRAULIC, MECHANICAL AND ELECTRICAL DOCUMENTATION AND TO COORDINATE BETWEEN TRADES PRIOR TO COMMENCEMENT OF WORK. ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT FOR CLARIFICATION
6. THE CONTRACTOR SHALL MARK "SUPERSEDED" ON ALL DRAWINGS FOR WHICH A REVISION HAS BEEN ISSUED

PARKING ABBREVIATIONS

C-xx	COMMERCIAL PARKING ALLOCATION
C-xxL	COMMERCIAL PARKING LONG ALLOCATION
M-xx	MOTOR CYCLE PARKING ALLOCATION
P-xxx	PUBLIC PARKING ALLOCATION
R-xxx	RESIDENTIAL PARKING ALLOCATION
R-xxL	RESIDENTIAL PARKING LONG ALLOCATION
R-xxG	RESIDENTIAL PARKING GARAGE ALLOCATION
R-xxGL	RESIDENTIAL PARKING GARAGE LONG ALLOCATION
V-xx	VISITOR PARKING ALLOCATION

2.12.24	7	Parking Updates to Suit Consultant Feedback	MK
15.11.24	6	Issue Preliminary DA Drawings	MK
14.11.24	5	Parking Updates To Suit Traffic Review	MK
11.08.24	4	Issue for Coordination	YW
05.11.24	3	Issue for Information	MK
18.03.24	2	Revised Tender Issue	MK
22.02.24	1	Re-Issue For Tender (Not for construction)	MK
13.03.23	0	Issue For Tender	TH
DD.MM.YY	REV	DESCRIPTION	CHECKED

ARCHITECT 1/15 ROYDHOUSE ST SUBIACO WA
P (08) 6380 1877
E info@hillam.com.au



CLIENT

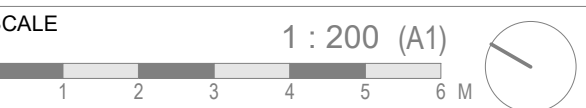
EDGE VISIONARY LIVING

PROJECT NAME

THE DUNES-T1
LOT 500 RESERVE STREET
SCARBOROUGH

DRAWING NAME

MEZZANINE LEVEL



PROJECT No.	DRAWING No.	REV
2005	A01-106	7
DRAWN BY		MM

Appendix B

Public Carpark Access Driveway Ramp Assessment

City of Stirling
17 Jan 2025
RECEIVED



Subject	Access Ramp – Gradients of Access Driveways		
Client	Edge Visionary Living	Project No.	CW1200385 / 304900772
Date	30/11/2022	Revision	A
Prepared by	Brian Sii	Reviewed by	Scott Lambie

1 Introduction

1.1 Background

Cardno now Stantec previously prepared a Transport Impact Assessment (TIA) for the proposed redevelopment of Lot 500, Reserve Street, Scarborough (dated – 15/7/2022-Rev B). Since the submission of the development approval, the design of the public car park access has been modified as part of the design refinement.

1.2 Purpose of Report

The Client (Edge Visionary Living) has engaged Cardno now Stantec to conduct a review and compliance check on the modified public car park access of the Site against AS2890.1 requirements. The outcomes of the review are summarised in this technical memorandum.

Figure 1-1 Site and access location



City of Stirling
17 Jan 2025
RECEIVED

2 Ramp Grade Assessment

2.1 Australian Standard Requirements

According to *AS2890.1, Clause 3.3(a)*, the space between the edge of frontage road and the property line shall have a maximum gradient of 1 in 20 (5%) and the same applies for at least the first 6m into the car park where the access has a downward slope. As noted under this Clause, this requirement aims to minimise problems associated with footpath users crossing the footpath while vehicles entering and exiting the driveway.

However, it should be noted that the Australian Standards are generally written to cover the worst-case design scenarios, which does not necessary apply to all scenarios. In reference to the aim of this requirement and the supporting diagram within *AS2890.1*, it is suggested that the requirements have been written with the assumption that the footpath is located directly adjacent to the property boundary. Thus, the requirement for the first 6m of the ramp to be low gradient (1:20) is to provide sufficient time for vehicles exiting the driveway to observe and react to footpath activities on the frontage road/footpath occurring at the property boundary.

Figure 2-1 AS2890.1 – Figure 3.3 Extract

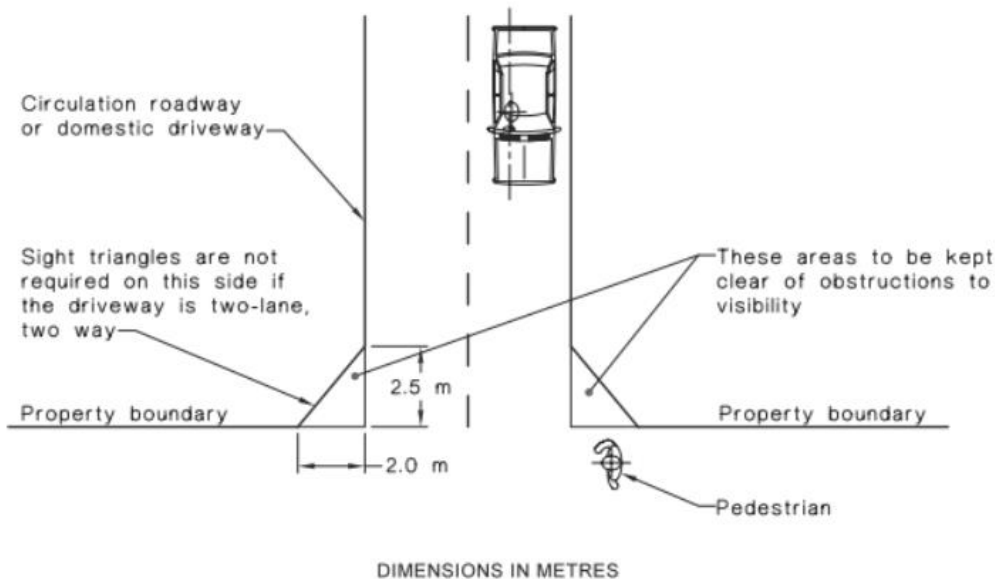


FIGURE 3.3 MINIMUM SIGHT LINES FOR PEDESTRIAN SAFETY

3.3 GRADIENTS OF ACCESS DRIVEWAYS

At entry and exit points, the access driveway should be graded to minimize problems associated with crossing the footpath and entering the traffic in the frontage road.

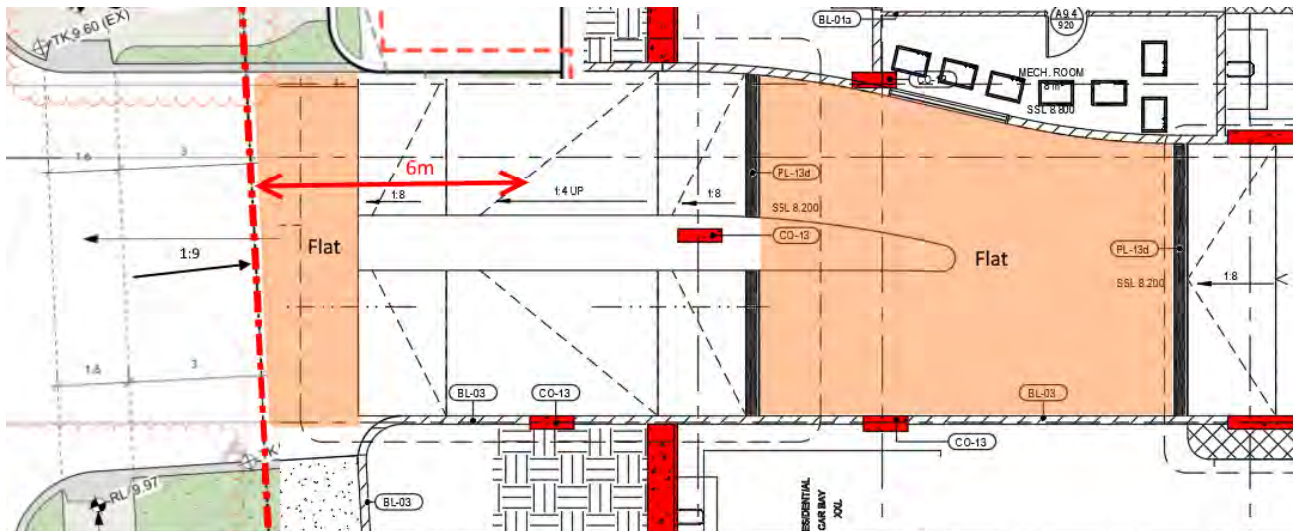
Maximum gradients on and near access driveways, other than at domestic properties (see Clause 2.6), shall be as follows:

- (a) *Property line/building alignment/pedestrian path*—max. 1 in 20 (5%) between edge of frontage road and the property line, building alignment or pedestrian path (except as provided in Item (d)), and for at least the first 6 m into the car park (except as provided below).

2.2 Proposed Ramp Design and footpath location

As shown in **Figure 2-2**, the proposed driveway access ramp of the public carpark does not strictly comply with the gradient requirement for the first 6m into the car park, particularly the later part of the ramp with proposed gradient of 1:8 and 1:4.

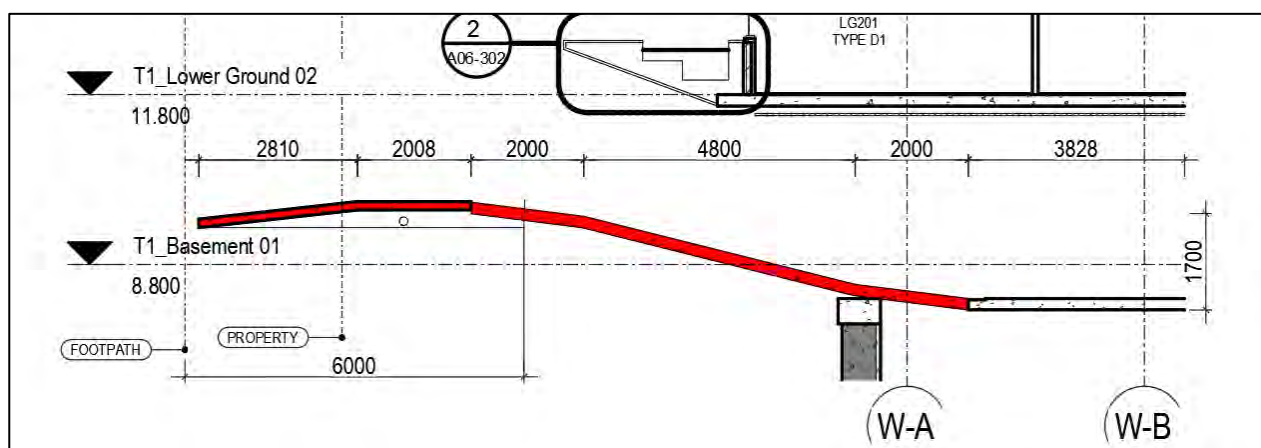
Figure 2-2 Proposed Driveway Ramp – Plan View



However, it is noted that the proposed footpath is to be offset approximately 3m from the property boundary, with an upward gradient of 1:8 from the frontage road as illustrated in **Figure 2-3**.

By applying the similar thought process of the AS2890.1 requirement noted in **Section 2.1**, the first 6m of the ramp can be measured from the edge of the footpath, which is approximately 1:46 grade, lower than the required 1:20 gradient.

Figure 2-3 Ramp Cross Section



City of Stirling
17 Jan 2025
RECEIVED

Additionally, the provision of an approximately 2m flat section within the ramp allow drivers to properly observe the activities along the footpath and pedestrian crossing fronting the ramp before exiting the driveway. According to *Austrroads Guide to Road Design Part 4A*, the driver eye height shall be taken as 1.1m from the ground. As demonstrated in **Figure 2-4**, a driver in an exiting vehicle will have sufficient visibility of the activities along the pedestrian crossing fronting the driveway, while being approximately 6m from the edge of the footpath/crossing point.

Figure 2-4 Driver visibility on proposed ramp

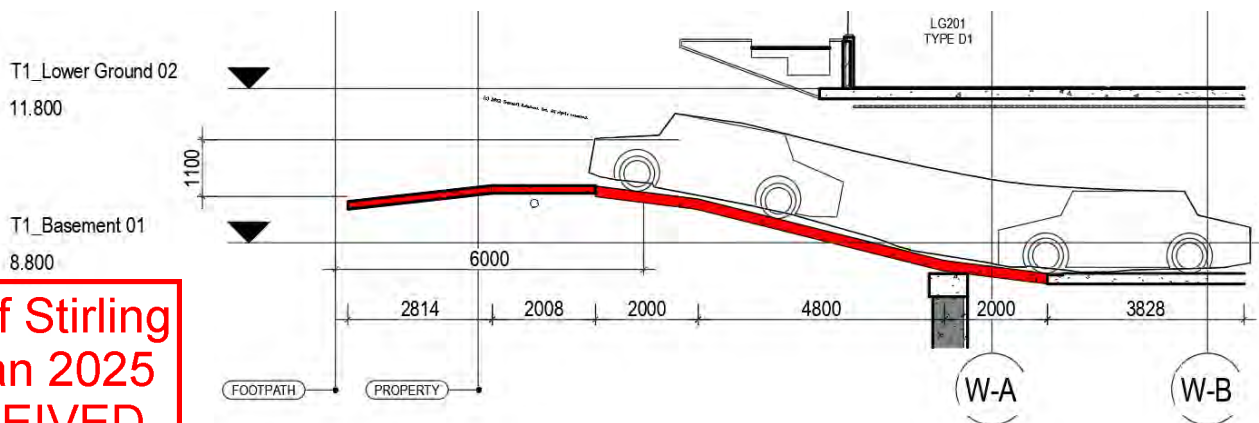
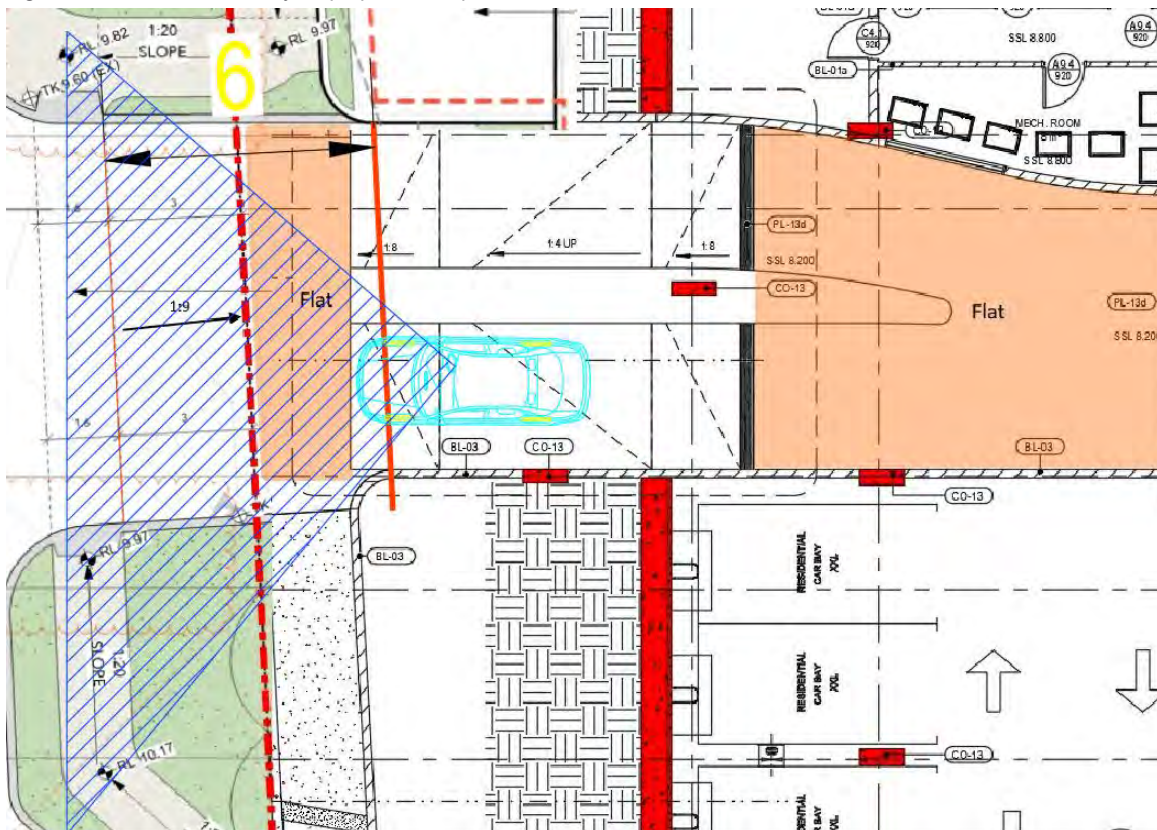


Figure 2-5 Driver visibility on proposed ramp – Plan view



3 Additional Mitigation Measures

3.1 Wombat Crossing

As the ramp services a public carpark, the car park users may not be familiar with the overall car park access arrangement and may not be aware of the pedestrian crossing point fronting the driveway.

As part of the design improvement process, the development proposes that the physical pedestrian crossing across the driveway could be installed as a wombat crossing (See example in **Figure 3-1**). A wombat crossing will act as a speed calming device (speed hump), to slow down vehicles entering the car park and to encourage exiting vehicles to maintain the low travelling speed upon exiting the car park. This will allow more time for drivers to react to the activities along the pedestrian crossing point.

The elevated presentation and line marking of a wombat crossing would sufficiently inform drivers of the pedestrian crossing arrangement. Additionally, the slightly elevated wombat crossing from the existing ground level also allow drivers exiting the car park to observe the footpath crossing activities from further back of the ramp, providing even more reaction time.

The benefits of installing a wombat crossing are expected to improve the overall outcome in terms of achieving greater pedestrian safety which is the aim of the Australian Standard's requirement.

Figure 3-1 An Example of Wombat Crossings



City of Stirling
17 Jan 2025
RECEIVED

Figure 3-2 illustrated the proposed wombat crossing and low retaining walls upgrades.

[illegible]

Stantec Australia Pty Ltd | ABN 17 007 820 322
226 Adelaide Terrace , Perth
WA,6000
+61 8 9273 3888 | www.cardno.com | www.stantec.com

Appendix C

Public Carpark Internal Ramp Assessment

City of Stirling
17 Jan 2025
RECEIVED



Our Ref: 304900165:SJL
Contact: Scott Lambie

20 October 2023

Edge Holdings No 16 Pty Ltd
2/31 Hood St
Subiaco WA 6008

Attention: Admir Dulic

Dear Admir,

**RIVIERE– LOT 500 RESERVE STREET, SCARBOROUGH
PROPOSED PUBLIC CAR PARK – RAMP GRADIENT**

Stantec (under the Cardno banner) previously prepared a Transport Impact Assessment for the subject development dated 15th July 2021. The TIA was based on the latest architectural layout provided at the time of assessment.

It is noted that the development layout has since been updated with minor modification to the apartment dwelling yields, access arrangements and parking bay provisions, which were addressed within Stantec's letter dated 29th August 2022.

PUBLIC CARPARK RAMP

A technical memo (dated 30th November 2022) was previously prepared by Stantec after a review and compliance check on the modified public car park access to the Site, of which it is understood the resolutions have been accepted by the City of Stirling officers.

Subsequently, It has been noted that the internal vehicle ramps connecting B1&B2, and B2&B3 are required to be constructed with a maximum ramp gradient of 1:4 (the maximum grade permitted for private residential car parks). It is noted that the proposed ramp gradient does not strictly comply with the public assess ramp grade requirement of 1 in 5 (20%) as set out in AS2890.1.

The requirement for a maximum ramp grade of 1 in 5 in a public car park is likely associated with the anticipated higher vehicle volume expected to use the ramp at any one time compared to a private residential car park. During peak hours where the public car park may be fully occupied, vehicles may have to stop within the steep ramp, which could increase the risk of a vehicle rolling backward on re-start.

The 2.0m transition provided on the upper and lower ramp allows a vehicle to comfortably stop on the extremities of the ramp should they be required to give way. Due to the short ramp length, vehicles are less likely to queue within the steep ramp section due to insufficient space. Furthermore, drivers on the lower end of the ramp would be able to observe the activities on the top of the ramp (vehicle stopping to give-way) and would be likely to wait on the flatter surfaces instead of stopping halfway on the ramp (see image below).

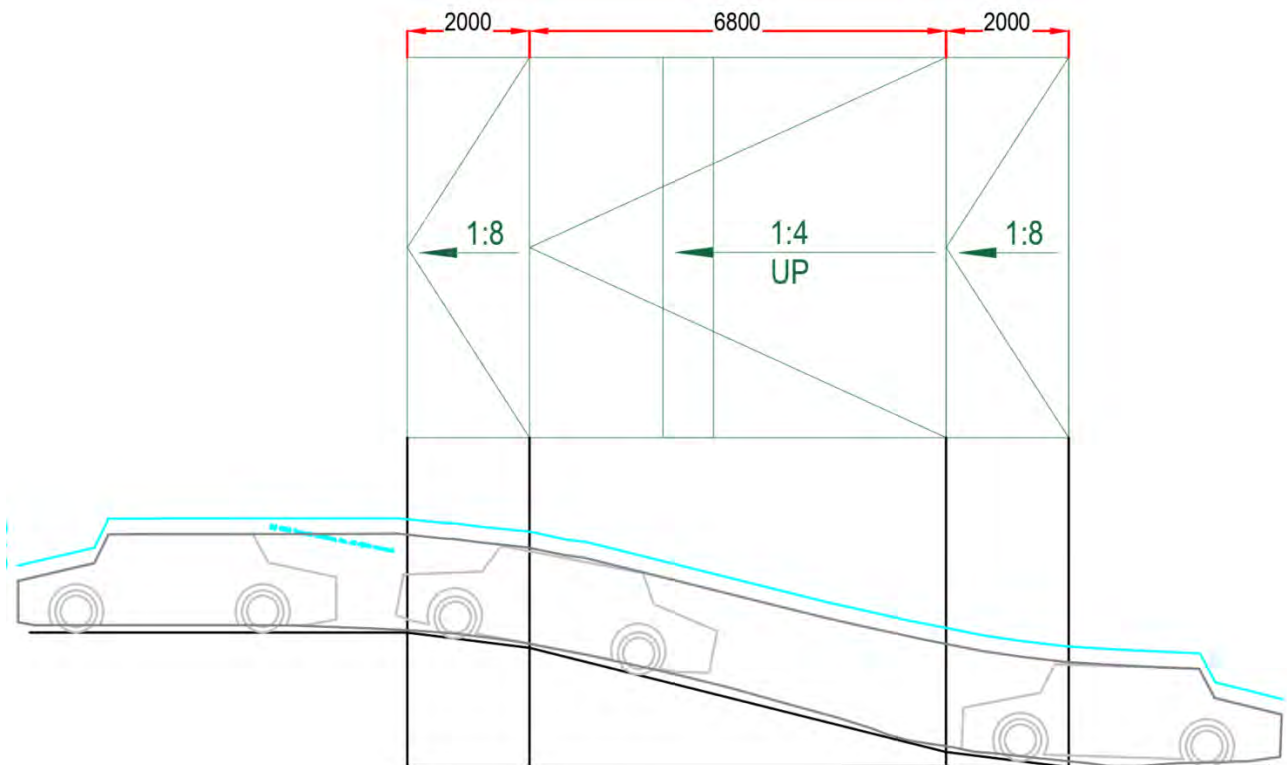
City of Stirling
17 Jan 2025
RECEIVED

Stantec Australia Pty Ltd
ABN 17 007 820 322

226 Adelaide Terrace
Perth WA 6000
PO Box 447 West Perth WA 6872

Phone +61 8 9273 3888
Fax +61 8 9486 8664

www.stantec.com



SUMMARY

Overall, due to the short length and straight layout of the ramps, the non-compliant maximum ramp grade is unlikely to impact the operation and traffic safety of the car park. Good signage provision and car parking management devices could also be considered to reduce the potential queueing within the public car park.

Yours sincerely,



Scott Lambie
Senior Principal – Transport
Direct Line: +61 8631 54848
Email: scott.lambie@stantec.com

City of Stirling
17 Jan 2025
RECEIVED

With every community, we redefine what's possible.

Stantec is a global leader in sustainable architecture, engineering, and environmental consulting. The diverse perspectives of our partners and interested parties drive us to think beyond what's previously been done on critical issues like climate change, digital transformation, and future-proofing our cities and infrastructure. We innovate at the intersection of community, creativity, and client relationships to advance communities everywhere, so that together we can redefine what's possible.

City of Stirling
17 Jan 2025
RECEIVED





Operational Waste Management Plan

The Dunes - Lot 500 Reserve Street, Scarborough

City of Stirling
17 Jan 2025
RECEIVED

Prepared for Edge Visionary Living

18 December 2024

Project Number: TW20140

City of Stirling
17 Jan 2025
RECEIVED

DOCUMENT CONTROL					
Version	Description	Date	Author	Reviewer	Approver
0a	Internal Review	12/03/2021	DP	RH	DP
1a - Draft	First Approved Release	12/03/2021	DP	Client	DP
1a – Final	First Approved Release	18/03/2021	DP	Client	DP
2.0	Second Approved Release	18/12/2024	MA	AB	AB
Approval for Release					
Name	Position	File Reference			
Ann Brouwer	Waste Management Consultant	TW20140 - Operational Waste Management Plan_2.0			
Signature					
Copyright of this document or any part of this document remains with Talis Consultants Pty Ltd and cannot be used, transferred or reproduced in any manner or form without prior written consent from Talis Consultants Pty Ltd.					

Executive Summary

Edge Visionary Living is seeking development approval for the proposed mixed-use development located at Lot 500 Reserve Street, Scarborough (the Proposal).

To satisfy the conditions of the development application the City of Stirling (the City) requires the submission of an Operational Waste Management Plan (OWMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this OWMP to satisfy the City's requirements.

The report provides a framework to implement a real and operational solution that complies with the City's local law and planning policies and has used best practice for waste management in support of Green Star accreditation. The waste management measures provided enhance outcomes for waste avoidance, reuse, reprocessing and recycling.

A summary of the bin size, numbers, collection frequency and collection method is provided in the below table.

Proposed Waste Collection Summary

Waste Type	Generation (L/week)	Bin Size (L)	Number of Bins	Collection Frequency	Collection
Residential Stage 1 – West Tower Bin Storage Area					
Refuse (compacted 2:1)	15,540	660	6	Twice each week	City of Stirling
Recycling	13,320	660	11	Twice each week	
FOGO	-	240	14	Once each week	
Residential Stage 2 – East Tower Bin Storage Area					
Refuse (compacted 2:1)	16,100	660	7	Twice each week	City of Stirling
Recycling	13,800	660	11	Twice each week	
FOGO	-	240	14	Once each week	
Commercial Bin Storage Areas					
Refuse	13,224	660	11	Twice each week	City of Stirling
Recycling	9,703	660	8	Twice each week	
FOGO	3,343	240	14	Once each week	

Sufficiently sized waste storage facilities have been provided, and adequate clearances and collection methods delivered, which indicates that the anticipated volumes of waste can be stored and efficiently collected from the Proposal.

The caretaker/building management will oversee the relevant aspects of waste management at the Proposal.

City of Stirling
17 Jan 2025
RECEIVED

Table of Contents

1	Introduction	1
1.1	Location.....	1
1.2	Objectives of the Operational Waste Management Plan	1
1.3	Scope of the Operational Waste Management Plan	1
2	Waste Generation	2
2.1	Proposed Tenancies	2
2.2	Waste Generation Rates	2
2.3	Waste Generation Volumes	3
2.3.1	Residential Waste Generation	3
2.3.2	Commercial Waste Generation.....	4
3	Internal Transfer of Waste	5
3.1	Residential Internal Bins	5
3.2	Commercial Internal Bins.....	5
3.3	Waste Chute System	5
4	Waste Storage	7
4.1	Bin Sizes.....	7
4.2	Residential Bin Storage Areas	7
4.2.1	Residential Stage 1 – West Tower Bin Storage Area.....	7
4.2.2	Residential Stage 2 – East Tower Bin Storage Area	8
4.2.3	Provision for Food Organics Garden Organics (FOGO)	9
4.3	Commercial Bin Storage Areas.....	10
4.4	Bin Storage Areas Design	11
5	Waste Collection	13
5.1	Residential Waste	13
5.1.1	Residential Bulk Waste.....	13
5.2	Commercial Waste.....	14
	Waste Management.....	15
6	Conclusion.....	16

Tables

Table 2-1: Waste Generation Rates

Table 2-2: Estimated Waste Generation – Residential Stage 1 – West Tower

City of Stirling
17 Jan 2025
RECEIVED

Table 2-3: Estimated Waste Generation – Residential Stage 2 – East Tower

Table 2-4: Estimated Waste Generation – Commercial

Table 4-1: Typical Bin Dimensions

Table 4-2: Bin Requirements for Bin Storage Area – Residential Stage 1 – West Tower

Table 4-3: Bin Requirements for Bin Storage Area – Residential Stage 2 – East Tower

Table 4-4: Bin Requirements for Bin Storage Areas – Commercial

Figures

Figure 1: Locality Plan

Diagrams

Diagram 1: Example of a Typical Residential Waste Chute Room

Diagram 2: Residential Stage 1 – West Tower Bin Storage Area

Diagram 3: Residential Stage 2 – East Tower Bin Storage Area

Diagram 4: Lower Ground 01 Commercial Bin Storage Area

Diagram 5: Ground Floor Commercial Bin Storage Area

Diagram 6: Residential Bin Loading Areas

City of Stirling
17 Jan 2025
RECEIVED

1 Introduction

Edge Visionary Living is seeking development approval for the proposed mixed-use development located at Lot 500 Reserve Street, Scarborough (the Proposal).

To satisfy the conditions of the development application the City of Stirling (the City) requires the submission of an Operational Waste Management Plan (OWMP) that will identify how waste is to be stored and collected from the Proposal. Talis Consultants has been engaged to prepare this OWMP to satisfy the City's requirements.

The report provides a framework to implement a real and operational solution that complies with the City's local law and planning policies and has used best practice for waste management in support of Green Star accreditation. The intention of this OWMP is to establish recycling and waste systems to reduce the quantity of waste going to landfill and provide documented guidance to residents, future staff and tenants.

1.1 Location

The Proposal is bordered by mixed use developments to the north, West Coast Highway to the east, Reserve Street to the south and The Esplanade to the west, as shown in Figure 1.

1.2 Objectives of the Operational Waste Management Plan

The objective of this OWMP is to outline the equipment and procedures that will be adopted to manage refuse, commingled recyclables and food organics garden organics (FOGO) at the Proposal. Specifically, the OWMP demonstrates that the Proposal has been designed to:

- Adequately cater for the anticipated quantities of waste to be generated the Proposal;
- Provide suitable waste storage facilities to adequately accommodate the appropriate quantity of bins; and
- Allow for efficient collection of bins by appropriate waste collection vehicles.

1.3 Scope of the Operational Waste Management Plan

To achieve the objective, the scope of the OWMP comprises:

- Section 2: Waste Generation;
- Section 3: Internal Transfer of Waste;
- Section 4: Waste Storage;
- Section 5: Waste Collection;
- Section 6: Waste Management; and
- Section 7: Conclusion.

City of Stirling
17 Jan 2025
RECEIVED

2 Waste Generation

The following sections show the waste generation rates used and the estimated waste volumes to be generated at the Proposal.

2.1 Proposed Tenancies

The anticipated volume of refuse, commingled recyclables and FOGO is based on the number of apartments and the floor area (m²) of the commercial tenancies at the Proposal. The Proposal consists of the following:

- **Residential Stage 1 – West Tower Bin Storage Area:**
 - o Residential Apartments – 111.
- **Residential Stage 2 – East Tower Bin Storage Area:**
 - o Residential Apartments – 115.
- **Commercial Bin Storage Areas:**
 - o Lower Ground Terrace – 99m²;
 - o Kiosk 01 – 46m²;
 - o Kiosk 02 – 44m²;
 - o Multi-Purpose Room ‘Sandbox’ – 115m²;
 - o Café/‘Beach’ Shop – 200m²; and
 - o Wine Bar – 303m².

2.2 Waste Generation Rates

Previous correspondence with the City was undertaken to determine waste generation rates for the high density residential apartments, based on the City’s standard service (communal bin use).

In order to achieve an accurate projection of waste volumes for the Proposal, consideration was also given to the City of Vincent’s *Waste Guidelines for New Developments* (2020) as these guidelines have dedicated rates for food organics for a range of commercial tenancy types.

It should also be noted that a conservative approach has been taken with regards to waste generation across the Proposal by overestimating the potential waste volumes for the commercial tenancies. This includes assuming seven days of operation for all commercial tenancies. This is considered to be an over estimation as it is not uncommon for food and beverage tenancies to close operations post weekend trading therefore resulting in an over estimation of waste volumes generated.

Table 2-1 shows the waste generation rates which have been applied to the Proposal.

City of Stirling
17 Jan 2025
RECEIVED

Table 2-1: Waste Generation Rates

Tenancy Use Type	Guideline Reference	Refuse Generation Rate	Recycling Generation Rate	FOGO Generation Rate
Residential				
Residential Apartments	Stirling – Standard Waste Service (Individual Bins)	140L/week	120L/week	-
Commercial				
Lower Ground Terrace	Vincent – Offices	15L/100m ² /day	15L/100m ² /day	5L/100m ² /day
Kiosk 01 & 02	Vincent – Delicatessen	50L/100m ² /day	50L/100m ² /day	50L/100m ² /day
Multi-Purpose Room ‘Sandbox’	Vincent – Offices	15L/100m ² /day	15L/100m ² /day	5L/100m ² /day
Café / Beach Shop	Vincent – Café	300L/100m ² /day	200L/100m ² /day	120L/100m ² /day
Wine Bar	Vincent – Tavern/Small Bar	400L/100m ² /day	300L/100m ² /day	60L/100m ² /day

2.3 Waste Generation Volumes

Waste generation is estimated by volume in litres (L) as this is generally the influencing factor when considering bin size, numbers and storage space required.

2.3.1 Residential Waste Generation

2.3.1.1 Residential Stage 1 – West Tower

City of Stirling
17 Jan 2025
RECEIVED

Residential Stage 1 – West Tower waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-2. It is estimated that the residential apartments within Stage 1 – West Tower will generate 15,540L of refuse and 13,320L of recyclables each week.

Table 2-2: Estimated Waste Generation – Residential Stage 1 – West Tower

Waste Streams	Number of Apartments	Waste Generation Rate (L/week)	Waste Generation (L/week)
Refuse	111	140	15,540
Recyclables	111	120	13,320
Total			28,860

2.3.1.2 Residential Stage 2 – East Tower

Residential Stage 2 – East Tower waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-3. It is estimated that the residential apartments within Stage 2 – East Tower will generate 16,100L of refuse and 13,800L of recyclables each week.

Table 2-3: Estimated Waste Generation – Residential Stage 2 – East Tower

Waste Streams	Number of Apartments	Waste Generation Rate (L/week)	Total Waste Generation (L/week)
Refuse	115	140	16,100
Recyclables	115	120	13,800

Waste Streams	Number of Apartments	Waste Generation Rate (L/week)	Total Waste Generation (L/week)
Total			29,900

2.3.2 Commercial Waste Generation

Commercial waste generation volumes in litres per week (L/week) adopted for this waste assessment are shown in Table 2-4. It is estimated that the commercial tenancies at the Proposal will generate 13,224L of refuse, 9,703L of commingled recyclables and 3,343L of FOGO each week.

Table 2-4: Estimated Waste Generation – Commercial

Tenancy Use Type	Floor Area (m ²)	Waste Generation (L/100m ² /day)	Waste Generation (L/week)
Refuse			
Lower Ground Terrace	99	15	104
Kiosk 01	46	50	161
Kiosk 02	44	50	154
Multi-Purpose Room 'Sandbox'	115	15	121
Café/Beach Shop	200	300	4,200
Wine Bar	303	400	8,484
Total			13,224
Recyclables			
Lower Ground Terrace	99	15	104
Kiosk 01	46	50	161
Kiosk 02	44	50	154
Multi-Purpose Room 'Sandbox'	115	15	121
Café/Beach Shop	200	200	2,800
Wine Bar	303	300	6,363
Total			9,703
FOGO			
Lower Ground Terrace	99	5	35
Kiosk 01	46	50	161
Kiosk 02	44	50	154
Multi-Purpose Room 'Sandbox'	115	5	40
Café/Beach Shop	200	120	1,680
Wine Bar	303	60	1,273
Total			3,343

City of Stirling
17 Jan 2025
RECEIVED

3 Internal Transfer of Waste

To ensure that waste is managed appropriately at the Proposal, it is important to allow for sufficient space to accommodate the required quantity of bins within the Bin Storage Areas. The transfer of bins, quantity, size and design of the Bin Storage Areas are described in the following sections.

3.1 Residential Internal Bins

To promote positive recycling behaviour and maximise diversion from landfill, the residential apartments will have room to accommodate two under counter/kitchen bins for the separate disposal of refuse and commingled recyclables. Residents will then take the contents of these internal bins to the waste chute system, as described below.

Residents on Lower Ground 01, Lower Ground 02 and Ground levels will transfer their waste directly to the Residential Stage 1 – West Tower Bin Storage Area for consolidation into the appropriate bins.

All bins will be colour coded and labelled in accordance with Australian Standards (AS 4123.7) to assist the residents to dispose of their separate waste materials in the correct bins.

3.2 Commercial Internal Bins

The commercial tenancies at the Proposal will also have a minimum of three bins to facilitate the separate disposal of refuse, commingled recyclables and FOGO.

The contents of the Lower Ground 01 commercial tenancies bins will be transferred by the cleaners/staff/tenants to the respective Commercial Bin Storage Area for disposal into the appropriate bins. Waste from the Level 01 Wine Bar/Ground Floor Commercial Kitchen will be deposited into the waste chute system, as described below.

Full and empty bins will be rotated between the Commercial Bin Storage Areas regularly by the building manager/caretaker. On collection days the bins will be transported to the Ground Floor Commercial Bin Storage Area via the bin lift for servicing, and following collection the empty bins will be divided between the two Commercial Bin Storage Areas.

All bins will be colour coded and labelled in accordance with Australian Standards (AS 4123.7) to assist the cleaners, staff and tenants to dispose of their separate waste materials in the correct bins.

3.3 Waste Chute System

To assist with efficient disposal of waste to each Residential Bin Storage Area (Stage 1 – West Tower and Stage 2 – East Tower) as well as to the Lower Ground 01 Commercial Bin Storage Area, a dual chute waste system will be utilised. The dual chute utilises separate chutes for refuse and recycling waste.

The waste chutes will be located in close proximity to the elevators on each residential level and in the commercial kitchen on the Ground Floor, have self-closing doors with and bottom hinge and fire rated to AS1530.4-2005. Chutes are typically 610mm in diameter and are ventilated with an extraction fan at the top to reduce odour and insulated for noise reduction. The chutes will be routinely cleaned via chute flushing operations. Please note, the exact design of the systems to be utilised at the

Proposal will be determined at a later date following discussions with waste chute providers as the designs are finalised.

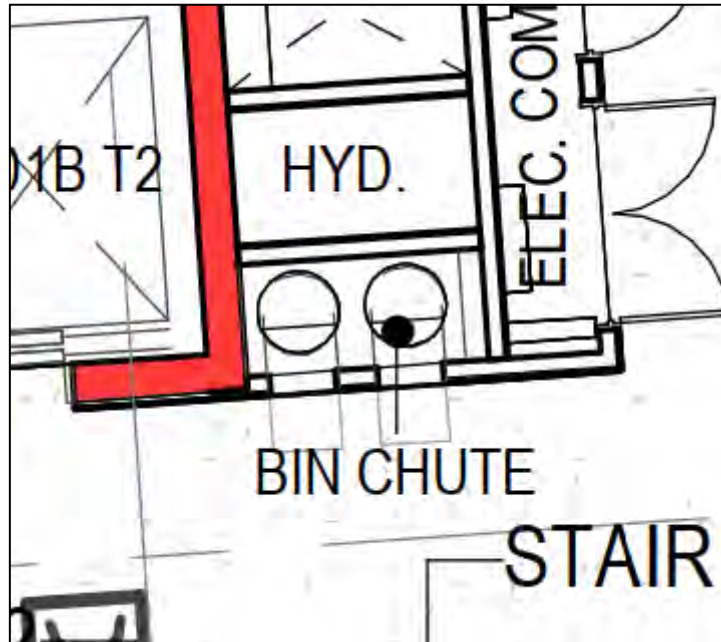
The Proposal is intending to utilise a linear/carousel track system at the terminus of each of the waste chutes to improve the efficiency of the caretaker/building management manoeuvring bins within each Bin Storage Area. Each track system will be capable of accommodating two/three 660L bins which can be automatically or manually rotated to ensure the capture of waste material exiting the chute system. It can also be designed to send the caretaker/building management a digital alert of the bins capacity to ensure the swapping of empty and full bins is done in a timely manner.

It is proposed that the linear/carousel systems at the terminus of the Residential refuse chutes will be fitted with a compaction unit. Residential refuse would be compacted to maximum compaction of 2 to 1 as higher compaction rates may result in heavier bins, causing Occupational Health and Safety (OH&S) problems and/or mechanical damage.

The building manager/caretaker will provide training materials for all new staff/residents on how to use the waste system (typically within a and new staff/resident/tenant's handbook). The building manager/caretaker will advise staff/residents of any changes to the waste system. In addition, signage could be included in the waste chute rooms to remind staff/residents how to correctly dispose of their waste materials in the chute, and to provide relevant contact details for waste management at the Proposal.

Diagram 1 indicates the waste chute room for a typical floor at the development.

Diagram 1: Example of a Typical Residential Waste Chute Room



City of Stirling
17 Jan 2025
RECEIVED

4 Waste Storage

Waste materials generated within the Proposal will be collected in the bins located in the respective Bin Storage Areas, as discussed in the below sections.

4.1 Bin Sizes

Table 4-1 gives the typical dimensions of standard bins sizes that may be utilised at the Proposal. It should be noted that these bin dimensions are approximate and can vary slightly between suppliers.

Table 4-1: Typical Bin Dimensions

Dimensions	Bin Sizes	
	240L	660L
Depth (mm)	730	780
Width (mm)	585	1,260
Height (mm)	1,060	1,200
Area (mm ²)	427	983

Reference: SULO Bin Specification Data Sheets

4.2 Residential Bin Storage Areas

The following subsections describe the number of bins required for each Residential Tower (West and East).

4.2.1 Residential Stage 1 – West Tower Bin Storage Area

To ensure sufficient area is available for storage of the residential bins, the amount of bins required for the Residential Stage 1 – West Tower Bin Storage Area was modelled utilising the estimated waste generation in Table 2-2, bin sizes in Table 4-1 and based on collection of refuse and recyclables twice each week and FOGO once each week from the Proposal.

Based on the results shown in Table 4-2 the Residential Stage 1 – West Tower Bin Storage Area has been sized to accommodate:

- Six 660L refuse bins;
- Eleven 660L recycling bins; and
- Fourteen 240L FOGO bins.

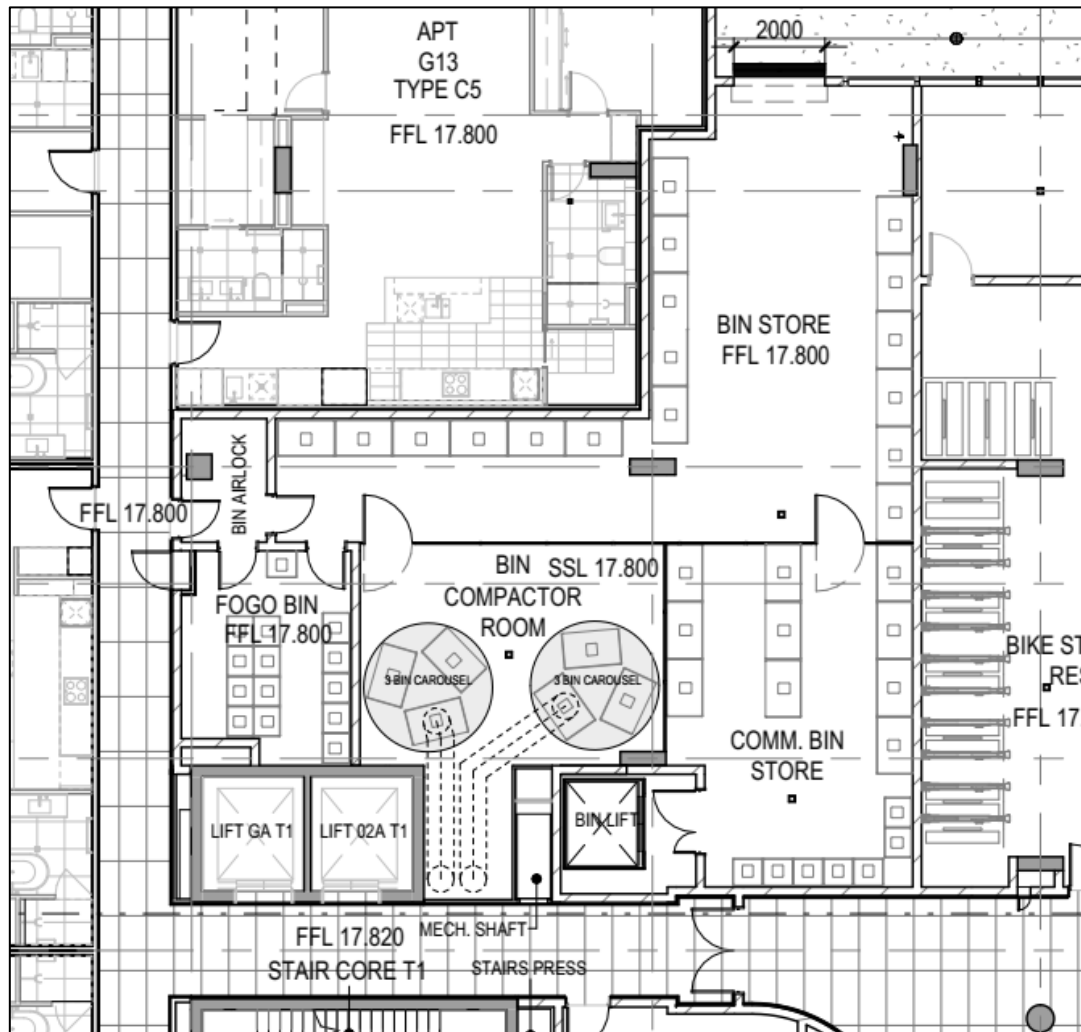
City of Stirling
17 Jan 2025
RECEIVED

Table 4-2: Bin Requirements for Bin Storage Area – Residential Stage 1 – West Tower

Waste Stream	Waste Generation (L/week)	Number of Bins Required	
		240L	660L
Refuse (compacted 2:1)	15,540	-	6
Recycling	13,320	-	11
FOGO	-	14	-

The configuration of these bins within Residential Stage 1 – West Tower Bin Storage Area is shown in Diagram 2. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 2 represents the maximum requirements assuming two collections each week of refuse and recyclables and one collection each week of FOGO.

Diagram 2: Residential Stage 1 – West Tower Bin Storage Area



4.2.2 Residential Stage 2 – East Tower Bin Storage Area

To ensure sufficient area is available for storage of the residential bins, the amount of bins required for the Residential Stage 2 – East Tower Bin Storage Area was modelled utilising the estimated waste generation in Table 2-3, bin sizes in Table 4-1 and based on collection of refuse and recyclables twice each week and FOGO once each week from the Proposal.

Based on the results shown in Table 4-3 the Residential Stage 2 – East Tower Bin Storage Area has been sized to accommodate:

- Seven 660L refuse bins;
- Eleven 660L commingled recycling bins; and
- Fourteen 240L FOGO bins.

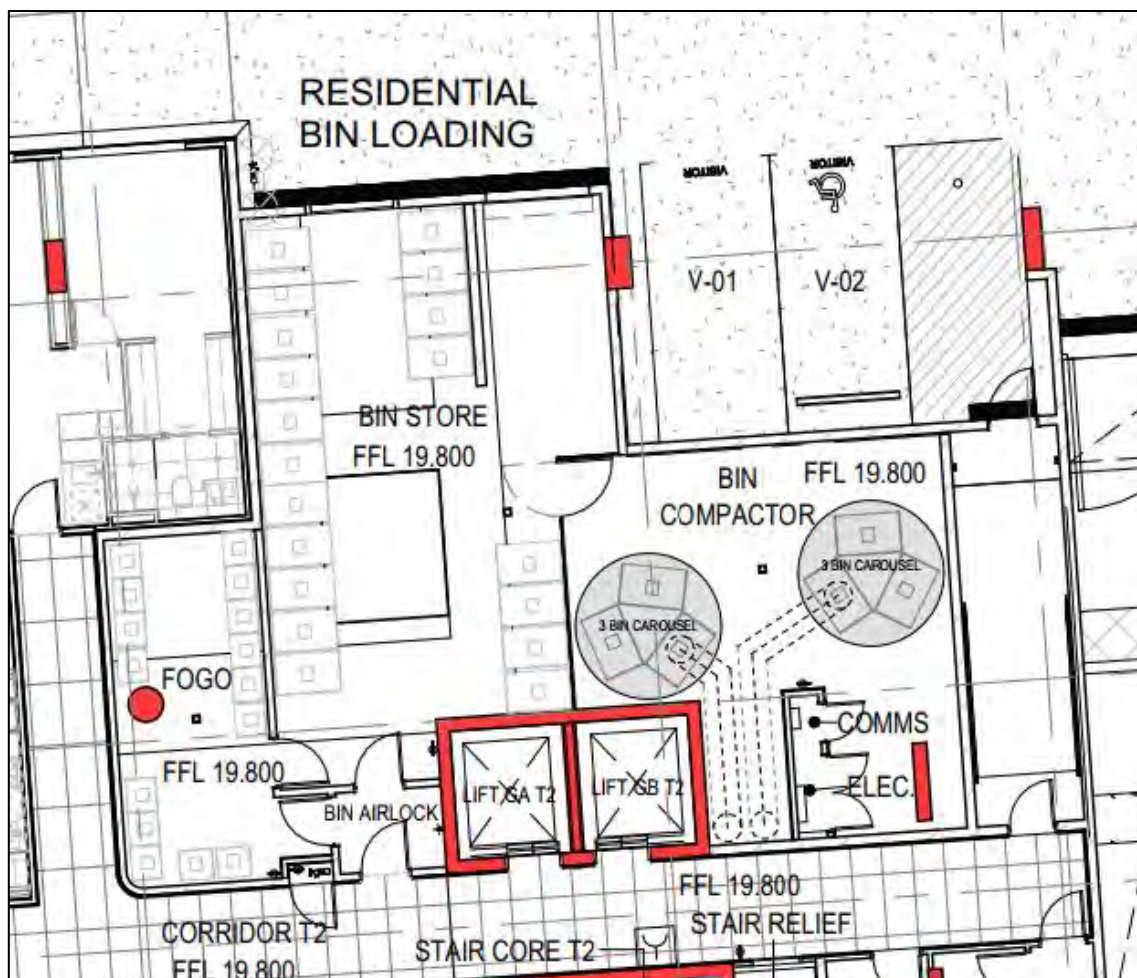
City of Stirling
17 Jan 2025
RECEIVED

Table 4-3: Bin Requirements for Bin Storage Area – Residential Stage 2 – East Tower

Waste Stream	Waste Generation (L/week)	Number of Bins Required	
		240L	660L
Refuse (compacted 2:1)	16,100	-	7
Commingle Recycling	13,800	-	11
FOGO	-	14	-

The configuration of these bins within Residential Stage 2 – West Tower Bin Storage Area is shown in Diagram 3. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 3 represents the maximum requirements assuming two collections each week of refuse and recyclables and one collection each week of FOGO.

Diagram 3: Residential Stage 2 – East Tower Bin Storage Area



4.2.3 Provision for Food Organics Garden Organics (FOGO)

In the near future it is expected that the City will be introducing bins for the separate collection of food organics and garden organics (FOGO) within multi-unit residential properties in line with the state government's Waste Avoidance and Resource Recovery (WARR) Strategy 2030. As such, each Residential Bin Storage Area has sufficient space to accommodate fourteen additional 240L FOGO bins, should the development be required to separate food waste for collection in the future.

Kitchen caddies would be used in each residential apartment to collect FOGO, which will then be taken by residents directly to their respective Residential FOGO Bin Storage Area located on the Ground Floor for depositing into communal 240L lime green lidded FOGO bins. These dedicated FOGO Bin Storage Areas are located in close proximity to each building core and lifts so that they are easily accessible by residents.

4.3 Commercial Bin Storage Areas

To ensure sufficient area is available for storage of the commercial bins, the amount of bins required for the Commercial Bin Storage Areas was modelled utilising the estimated waste generation in Table 2-4, bin sizes in Table 4-1 and based on collection of refuse and recyclables twice each week and FOGO once each week from the Proposal.

Based on the results shown in Table 4-4 the Commercial Bin Storage Areas have been sized to accommodate:

- Eleven 660L refuse bins;
- Eight 660L commingled recycling bins; and
- Fourteen 240L FOGO bins.

Table 4-4: Bin Requirements for Bin Storage Areas – Commercial

Waste Stream	Waste Generation (L/week)	Number of Bins Required	
		240L	660L
Refuse (compacted)	13,224	-	11
Commingled Recycling	9,703	-	8
FOGO	3,343	14	-

The configuration of these bins within Commercial Bin Storage Areas is shown in Diagram 4 and Diagram 5. It is worth noting that the number of bins and corresponding placement of bins shown in Diagram 4 and Diagram 5 represents the maximum requirements assuming two collections each week of refuse and recyclables and one collection each week of FOGO.

City of Stirling
17 Jan 2025
RECEIVED

Diagram 4: Lower Ground 01 Commercial Bin Storage Area

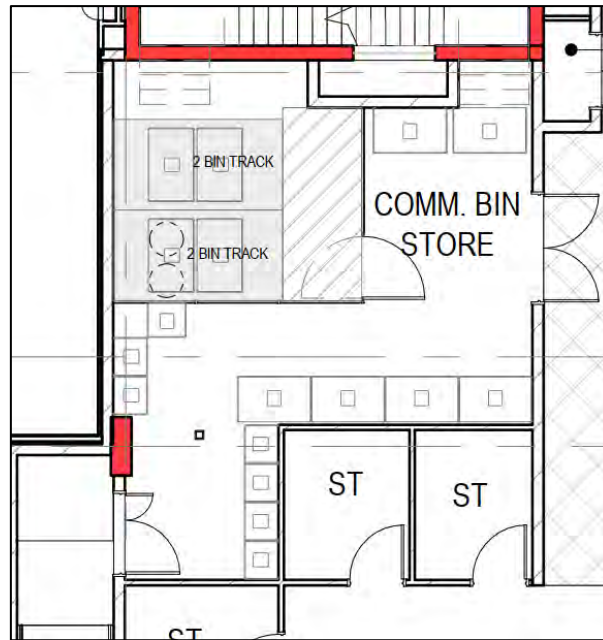


Diagram 5: Ground Floor Commercial Bin Storage Area



City of Stirling
17 Jan 2025
RECEIVED

4.4 Bin Storage Areas Design

The design of the Bin Storage Areas will take into consideration:

- Smooth impervious floors sloped to a drain connected to the sewer system;
- Taps for washing of bins and Bin Storage Areas;
- Adequate aisle width for easy manoeuvring of bins;
- Doors to the Bin Storage Areas self-closing and vermin proof;
- Doors to the Bin Storage Areas wide enough to fit bins through;
- Ventilated to a suitable standard;

- Appropriate signage;
- Undercover where possible and be designed to not permit stormwater to enter into the drain;
- Located behind the building setback line;
- Bins not to be visible from the property boundary or areas trafficable by the public; and
- Bins are reasonably secured from theft and vandalism.

Bin numbers and storage space within the Bin Storage Areas will be monitored by the building manager/caretaker during the operation of the Proposal to ensure that the number of bins and collection frequency is sufficient.

City of Stirling
17 Jan 2025
RECEIVED

5 Waste Collection

The following sections describe the waste collection methodologies for the development.

City of Stirling
17 Jan 2025
RECEIVED

5.1 Residential Waste

The City will service the residential component of the Proposal and collect refuse and recyclables twice each week and FOGO once each week utilising their rear loader waste collection vehicle.

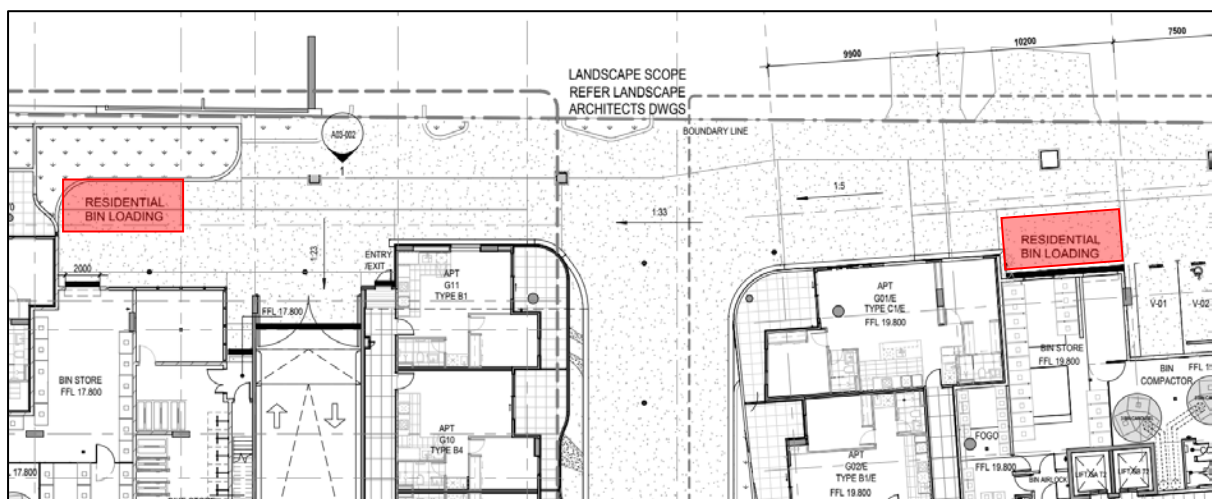
The City's rear loader waste collection vehicle will service the residential bins directly from the Residential Bin Loading Areas adjacent to each Residential Bin Storage Area on the Ground Floor (refer Diagram 6).

The City's waste collection staff will ferry bins to and from the rear loader waste collection vehicle and the Residential Bin Storage Areas during servicing. The travel path is of flat surface and will be kept free of obstacles. The City will be provided with key/PIN code access to the Residential Bin Storage Areas and security access gates to facilitate servicing, if required.

Once servicing is complete the City's waste collection vehicles will exit in a forward motion moving with traffic flow.

The above servicing method will preserve the amenity of the area by removing the requirement for bins to be presented to the street on collection days. In addition, servicing of bins onsite will reduce the noise generated in the area during collection.

Diagram 6: Residential Bin Loading Areas



5.1.1 Residential Bulk Waste

To assist with the reduction of illegal dumping of bulky wastes, a Bulk Waste storage area has been allocated on the Ground Floor for each tower at the Proposal adjacent to the Bin Storage Areas for the temporary storage of bulky wastes. In addition, each residential apartment has an allocated storage room which could be used for the temporary storage of bulk waste, if required.

The City offers residents the following on demand collection services annually:

- One – 3m³ skip bin
- One – E-waste collection;
- One – Whitegoods collection; and
- One – Mattress collection.

An area that is clear of overhanging trees and services, will be designated for the placement of a skip bin, and for use as a collection point for e-wastes, whitegoods and mattresses, as required. Alternatively, there is sufficient space within the Bin Loading Area for the provision of bulk waste collection onsite.

Bulk waste material would be removed from the Proposal as it is generated and would be the responsibility of the resident, with assistance from the caretaker/building management.

5.2 Commercial Waste

The City will also service the commercial tenancies at the Proposal and collect refuse and recyclables twice each week and FOGO once each week utilising their rear loader waste collection vehicle.

The City's rear loader waste collection vehicle will service the commercial bins directly from West Tower Residential Bin Loading Area on the Ground Floor (refer Diagram 6).

The City's waste collection staff will ferry bins to and from the rear loader waste collection vehicle and the Ground Floor Commercial Bin Storage Area during servicing. The travel path is of flat surface and will be kept free of obstacles. The City will be provided with key/PIN code access to the Ground Floor Commercial Bin Storage Area and security access gates to facilitate servicing, if required.

Bins will be returned to the Ground Floor Commercial Bin Storage Area following servicing and half will be transferred to the Lower Ground Floor Commercial Bin Storage Area by the building manager/caretaker.

Once servicing is complete the City's waste collection vehicles will exit in a forward motion moving with traffic flow.

The above servicing method will preserve the amenity of the area by removing the requirement for bins to be presented to the street on collection days. In addition, servicing of bins onsite will reduce the noise generated in the area during collection.

City of Stirling
17 Jan 2025
RECEIVED

Waste Management

A building manager/caretaker will be engaged to complete the following tasks:

- Monitoring and maintenance of bins and the Bin Storage Areas;
- Cleaning of bins and Bin Storage Areas, when required;
- Exchange full bins with empty bins at the terminus of the waste chutes;
- Rotating full and empty bins within the Commercial Bin Storage Areas utilising the bin lift;
- Ferrying of bins to and from the Lower Ground Commercial Bin Storage Area and Ground Floor Commercial Bin Storage Area on collection days;
- Ensure all staff/residents at the Proposal are made aware of this WMP and their responsibilities thereunder;
- Monitor staff/resident behaviour and identify requirements for further education and/or signage;
- Monitor bulk and speciality waste accumulation and assist with its removal, as required;
- Regularly engage with staff/residents to develop opportunities to reduce waste volumes and increase resource recovery; and
- Regularly engage with the City to ensure efficient and effective waste service is maintained.

City of Stirling
17 Jan 2025
RECEIVED

6 Conclusion

As demonstrated within this WMP, the Proposal provides a sufficiently sized Bin Storage Area for storage of refuse and recyclables, based on the estimated waste generation and suitable configuration of bins. This indicates that adequately designed Bin Storage Areas have been provided, and collection of refuse, comingled recyclables and FOGO can be completed from the Proposal.

The above is achieved using:

- **Residential Stage 1 – West Tower:**
 - o Six 660L refuse bins, collected twice each week;
 - o Eleven 660L recycling bins, collected twice each week; and
 - o Fourteen 240L FOGO bins, collected twice each week.
- **Residential Stage 2 – East Tower:**
 - o Seven 660L refuse bins, collected twice each week;
 - o Eleven 660L recycling bins, collected twice each week; and
 - o Fourteen 240L FOGO bins, collected twice each week.
- **Commercial Bin Storage Areas:**
 - o Eleven 660L refuse bins, collected twice each week;
 - o Eight 660L recycling bins, collected twice each week; and
 - o Fourteen 240L FOGO bins, collected twice each week.

Sufficiently sized waste storage facilities have been provided, and adequate clearances and collection methods delivered, which indicates that the anticipated volumes of waste can be stored and efficiently collected from the Proposal.

The building manager/caretaker will oversee the relevant aspects of waste management at the Proposal.

City of Stirling
17 Jan 2025
RECEIVED

Figures

Figure 1: Locality Plan

City of Stirling
17 Jan 2025
RECEIVED



LEGEND

- Site Boundary
- Cadastral

City of Stirling
17 Jan 2025
RECEIVED

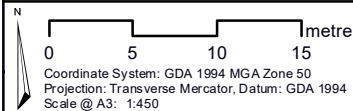
© Talis Consultants Pty Ltd ("Talis") Copyright in the drawings, information and data recorded in this document ("the information") is the property of Talis. This document and the information are solely for the use of the authorised recipient and this document may not be used, transferred or reproduced in whole or part for any purpose other than that which it is supplied by Talis without written consent. Talis makes no representation, undertakes no duty and accepts no responsibility to any third party who may use or rely upon this document or the information.



LOCALITY

Lot 500 Reserve Street
Scarborough, WA 6019

Edge Visionary Living



Prepared:	E Dolecki	Date:	27/10/2020
Reviewed:	D Patel	Revision:	A
Project:	TW20140		



Figure 01



Assets | Engineering | Environment | Noise | Spatial | Waste

Talis Consultants

Head Office
Level 1, 604 Newcastle Street,
Leederville
Western Australia 6007

PO Box 454,
Leederville
Western Australia 6903

NSW Office
5/62 North Street, Nowra
New South Wales, 2541

PO Box 1189, Nowra
New South Wales, 2541

P: 1300 251 070
E: info@talisconsultants.com.au

City of Stirling
17 Jan 2025
RECEIVED



City of Stirling
17 Jan 2025
RECEIVED

Universal Access Statement
The Dunes – Reserve Street, Scarborough

For: Edge Living
Submitted: 24 February 2021
Prepared By: Milestone Certifiers
Revision: 0



Universal Access Statement

Prepared by:

Richard Attiwell

Director

Western Australia Building Surveyor accredited Level 1 (No. 124)

BSc (Hons) Building Surveying

Diploma Building Studies

MBSCQ

MAIBS

Work: 08 9330 7476

Email: richarda@milestonebc.com.au Mobile: 0400 247 328

City of Stirling
17 Jan 2025
RECEIVED

ADDRESS | C3, 1 THE ESPLANADE
MOUNT PLEASANT WA 6153

PH | 08 9330 7476
ACN | 127 451 889

WWW.MILESTONEBC.COM.AU



1.0	INTRODUCTION	2
1.1	Project Description:	2
1.2	Statement of Expertise:.....	2
1.3	Scope and Limitations:.....	2
2.0	UNIVERSAL ACCESS STATEMENT	3
2.1	Assessment Benchmark.....	3
2.2	Assessment Areas.....	3
2.3	Statement	3

City of Stirling
17 Jan 2025
RECEIVED

1.0 INTRODUCTION

This Universal Access Statement has been prepared pursuant to instructions received from Edge Living by email on 22nd February 2021. The provision of a Universal Access Statement for the project is a statutory Town Planning requirement.

1.1 Project Description:

The subject development is to be located at Lot 500 Reserve Street, Scarborough and will comprise of two residential apartment towers, three levels of basement parking, shared amenity facilities, commercial tenancies and external alfresco area and 'pocket park'. There will be public access available to specific areas of the site such as the 'pocket park', commercial tenancies and 'public facilities' (changerooms and the like).

1.2 Statement of Expertise:

This report has been prepared by Richard Attiwell, Director of Milestone Certifiers – a registered building service provider (building surveying contractor) in Western Australia.

Professional Experience and Qualifications:

- Bachelor of Science (Honours) in Building Surveying – Heriot-Watt University, Edinburgh, United Kingdom.
- Member of the Australian Institute of Building Surveyors (AIBS).
- Current sitting member of the AIBS Western Australian Chapter Committee.
- A total of 26 years of Building Surveying experience in Western Australia, including 12 years in Local Government and 14 years in private practice as a Director of Milestone Certifiers.
- Level 1 building surveying practitioner (unrestricted) – Western Australia (No. 124).
- Have provided certification services on a significant number of medium and high-rise residential developments in Perth and surrounding area since the introduction of the Building Act and private certification in Western Australia.

1.3 Scope and Limitations:

This Universal Access Statement has been prepared with specific regard to the statutory provisions prescribed with the Premises Standard and the National Construction Code (Building Code of Australia Volume 1). This assessment is based upon a review of the schematic design prepared for the subject development and our commentary is limited to the general accessibility provisions – a more detailed review relevant to the detail of accessways (ramp gradients, stair design etc) will be conducted during the design development stage of the project

2.0 UNIVERSAL ACCESS STATEMENT

2.1 Assessment Benchmark

Our assessment is based on architectural drawings prepared by Hillam Architects issued on 19 February 2021. The assessment has been conducted with respect to the provisions of the Premises Standard and Part D3 of the National Construction Code (BCA Volume 1) 2019 and the relevant sections of Australian Standard AS1428.1.

2.2 Assessment Areas

The following areas have been assessed with respect to this Universal Access Statement:

- Basement carparking levels. Passenger lift access is available to other parts of the building from these levels. Accessways from designated accessible bays to the passenger lifts will comply with AS1428.1.
- Lower Ground levels. Access to public facilities and private residential lobbies is available from principle entry points at the allotment boundary and from within the building from carparking areas on these levels. Access to these levels from other levels is available via passenger lifts.
- Ground Floor level. Direct access to the eastern residential tower is available from the allotment boundary along Reserve Street. The Resource Centre/residential lobby has direct access from Reserve Street.
- Level 01. Passenger lift access is available for the public to the commercial tenancy (wine bar) in addition to an internal stairway. Access to the residential apartments is via internal passenger lifts and common corridors.
- Level 02. The western side of the site comprises of shared common facilities on this level, accessed via internal passenger lifts. Access through to the various amenity areas is along common accessways which will comply with the provisions of AS1428.1. The external pavilion is required to be accessible as a common space and can be accessed via external walkways directly from the common facility spaces.
- Typical residential apartment levels. Access to the residential apartments is via internal passenger lifts and common corridors.

2.3 Statement

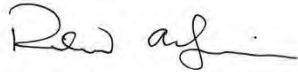
Accessways to and within the site that will be utilised by persons with a disability are capable of meeting the relevant accessibility standards of the Premises Standard and the National

Universal Access Statement

Construction Code and will be subject to further, detailed scrutiny during the design development phase to ensure that compliance with this Statement is achieved.

If there is anything further you require, please do not hesitate to contact the undersigned by telephone on 08 9330 7476, mobile 0400 247 328 or contact via email at richarda@milestonebc.com.au.

Yours sincerely



Richard Attiwell

Director - MILESTONE CERTIFIERS

Building Surveyor - WA accredited practitioner Level 1 (No. 124)

City of Stirling
17 Jan 2025
RECEIVED



**METROPOLITAN REDEVELOPMENT AUTHORITY
SCARBOROUGH REDEVELOPMENT SCHEME
FORM 4**

APPLICATION NO: MRA-13231

Approval of Application to Amend a Development Approval

Applicant's Name:	Edge Holdings No. 16 Pty Ltd		
Address of Applicant:	Level 3, 502 Hay Street, Subiaco		
Address of Development:	Lot 500 Reserve Street, Scarborough		
	Lot: 500	Plan/Diagram: 413012	
	Vol: 4007	Folio: 352	
Description of Development Approval:	17 Storey Mixed-Use Development		
Original Development Approval Date:	24 November 2021		
Application for Amendment Received:	12 September 2022		
Description of Proposed Amendment:	Design Modifications and Condition Amendments		

The application to amend the development approval is granted subject to the following conditions:

NEW CONDITIONS:

33. All exposed parapet walls and walls adjacent to boundaries are to be finished to the same standard as the remainder of the development, to the satisfaction of the Authority.

AMENDED CONDITIONS:

1. The development is to be undertaken in accordance with the approved plans attached to this approval, details of which are to be provided at working drawings stage, to the satisfaction of the Metropolitan Redevelopment Authority (the Authority). The approved plans and documents of development are listed as follows:

Plan / Document Name	Ref.	Date Received
Existing Site Survey	A20-001	30 January 2023
Basement 03 Floor Plan	A20-002	30 January 2023
Basement 02 Floor Plan	A20-003	30 January 2023
Basement 01 Floor Plan	A20-004	30 January 2023
Lower Ground 02	A20-005	30 January 2023
Lower Ground 01	A20-006	30 January 2023
Mezzanine Level	A20-007	30 January 2023
Ground Floor Plan	A20-008	30 January 2023
Level 01 Floor Plan	A20-009	30 January 2023
Level 02 Floor Plan	A20-010	30 January 2023
Level 03 Floor Plan	A20-011	30 January 2023
Typical Lower Floor Plate	A20-012	30 January 2023
Middle Typical Floor Plate	A20-013	30 January 2023

Typical Upper Floor Plate	A20-014	30 January 2023
Typical Sub Penthouses Floor Plan	A20-015	30 January 2023
Typical Penthouse Floor Plan	A20-016	30 January 2023
Penthouse Mezz & Sub-penthouse	A20-017	30 January 2023
Typical Floor Plate		
Penthouse Typical Floor Plate	A20-018	30 January 2023
Penthouse Mezzanine Typical Floor Plate	A20-019	30 January 2023
Overall Cross Section 01	A20-020	30 January 2023
Cross Section 02	A20-021	30 January 2023
Cross Section 03	A20-022	30 January 2023
External East Elevations Overall	A03-001	30 January 2023
GA Elevation - North	A03-002	7 February 2023
External South Elevations Overall	A03-003	30 January 2023
External West-East & East-West Elevations	A03-005	30 January 2023
External West Elevations Overall	A03-004	30 January 2023

4. An easement(s) or other legal agreement confirming in perpetuity public access rights, generally consistent with the extent shown on the approved Basement 03 Floor Plan (A20-20), Basement 02 Floor Plan (A20-003), Lower Ground 02 (A20-005), Lower Ground 01 (A20-006), Ground Floor Plan (A20-008) and Level 01 Floor Plan (A20-009) is to be provided prior to planning condition clearance (working drawings stage), and executed prior to occupancy, to the satisfaction of the Authority, in consultation with the City of Stirling. (Refer Advice Note d).
5. A legal agreement confirming the operation and management of the identified Community Offerings shown on the approved Basement 03 Floor Plan (A20-002), Basement 02 Floor Plan (A20-003), Lower Ground 02 (A20-005), Lower Ground 01 (A20-006), Ground Floor Plan (A20-008) and Level 01 Floor Plan (A20-009) in perpetuity, including public access rights, to be provided prior to planning condition clearance (working drawings stage), and executed prior to occupancy, to the satisfaction of the Authority in consultation with the City of Stirling. (Refer to Advice Note e).
13. Public art is to be provided in accordance with Development Policy 4 - Providing Public Art, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority, in consultation with the City of Stirling. (Refer to Advice Note I).
16. The development is to be undertaken in accordance with a detailed wind environment assessment, prepared by a suitably qualified consultant, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note o)



**Executive General Manager Planning and Transition
Metropolitan Redevelopment Authority**

16 February 2023

Date

AMENDED ADVICE NOTES:

- c) With regard to Condition 3, the Car Parking and Traffic Management Plan should include details on the following, and be reflected in the working drawings:
- provision of adequate sightlines at crossovers to ensure safe movement of pedestrians and vehicles;
 - vehicle accesses are to comply with AS2890.1, including geometry, signage and line marking, to ensure the appearance and character of the driveway shall be such that it will be clear to vehicle drivers that pedestrians and external traffic have priority of movement;
 - identification and implementation of management strategies which mitigate the potential for conflict between through traffic and parking traffic on The Esplanade car park;
 - implementation of real time, digital signage, advising of public bay capacity;
 - provision of availability to the public lobby to facilitate secondary access to public car bays during the hours of public car park operation;
 - allocation of car parking bays to specific non-residential uses within the development in accordance with the minimum requirements under section 5.2 of the Scarborough Design Guidelines;
 - allocation of residential car parking bays to specific residential dwellings up to a maximum average of 1.5 bays per dwelling, being a total of 334 residential bays;
 - provision of a minimum of 100 public car parking bays within the development, to be maintained as such in perpetuity, in accordance with the section 4.1 of the Scarborough Design Guidelines, and delivered as the first stage of development;
 - end of trip facilities are provided in accordance with section 5.3 of the Scarborough Design Guidelines;
 - identification and management of ACROD bays in accordance with AS 2890.6;
 - effective and safe management of traffic movements to, from and within the car parking areas, with particular consideration to measures which reduce the potential for conflict with adjacent sites crossovers along Reserve Street;
 - the dimensions and numbering of all car parking bays, loading bays, vehicle entrances, crossovers, aisle widths and circulation areas complying with Australian Standard (AS) 2890.1, AS2890.2, AS2890.3 and AS/NZS2890.6;
 - identification of clear, safe and accessible pedestrian paths through car parking and delivery areas; and
 - provision of wheel stops in bays perpendicular to other bays.
- d) With regard to Condition 4, the public access easement is to be registered on the certificate of title for the property in accordance with sections 195 and 196 of the Land Administration Act 1997 and notice of the easement is to be included on the diagram or plan of survey (deposited plan), unless subject to an alternative legal agreement agreed to by the Authority in consultation with the City of Stirling.

The public access easement(s) or alternative legal agreement are to include the following, generally noted on the approved plan(s) A20-002, A20-003, A20-005, A20-006, A20-008 and A20-009:

- The central Right of Way (ROW), generally described as 9m in width with a 1.5m pedestrian path, connecting Reserve Street to adjacent

sites described as No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough;

- The northern pedestrian access linking West Coast Highway and the central ROW;
- The 102 public car bays, and associated infrastructure, located on Basement 02 and 03, and connecting to The Esplanade carpark;
- The raised footpath, generally 1.5m in width, traversing the western boundary in a north-south direction; and
- The facilities identified in Condition 4.

A legal mechanism is required to be implemented to allow continued, uninterrupted and unencumbered access to No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough while construction of Lot 500 Reserve Street, Scarborough is occurring.

- e) With regard to Condition 5, the legal agreement is to address the long term operation, management, maintenance and costs associated with the Community Benefit Areas. The legal agreement is to be prepared by the applicant in consultation with the City of Stirling with all costs to be borne by the applicant.

The legal agreement is to include the following areas:

- Basement 03 Floor Plan (A20-002): 51 public car bays
- Basement 02 Floor Plan (A20-003): 51 public car-bays
- Lower Ground 02 (A20-005): Public Lobby, Public Facilities and Public Stairs;
- Lower Ground 01 (A20-006): Multi-Purpose Room, Public Lobby and Public Lookout; and
- Level 01 (A20-009): Public Lobby

The legal agreement shall also consider the inclusion of the proposed pocket park and in particular full details of redevelopment, long term maintenance and operation consistent with the high standard provided within the submitted development application and further detailed as a component of the landscaping plan.

- j) With regard to Condition 11, the development application has committed to providing a minimum 15% affordable housing in accordance with section 4.1 of the Scarborough Design Guidelines, over and above the requirement under Development Policy 9 – Affordable Housing. Unless otherwise agreed the following shall be provided:

- 15% of the total number of dwellings are to be provided within the development, in compliance with Development Policy 9 - Affordable and Diverse Housing;
- the affordable housing units are to be sold by the developer to the Department of Communities (or alternative housing provider approved by the Authority) at construction cost at the time of practical completion of the development;
- a draft strata plan and management statement is to be prepared at the applicant's expense and provided at working drawings stage demonstrating how ongoing costs of the affordable housing units will be minimised including but not limited to:
 - o minimising unit entitlements; and
 - o restricted access to common amenity areas (with potential to opt in).

- q) With regard to Condition 18, the Signage Strategy should provide an indicative plan of all proposed signage (including wayfinding signage) outlining the locations and dimensions demonstrating that such signage will be complementary to the architectural design. Consideration shall be given to the integration of wayfinding signage to and from the public car park, as well as the central ROW connecting No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough to Reserve Street, with a view to enhance overall legibility to these separate entities.

Development Policy 6 — Signage requires signage to demonstrate restraint in scale, size and collective amount of signage installed, in order to minimise visual clutter, protect amenity, and support a safe, attractive and legible public realm.

- s) With regard to Condition 20, the Venue Management Strategy is intended to provide guidance for all future tenancies and may inform the development of individual Venue Management Plans as required. The Strategy is to include, but not be limited to the following:
- hours of operation, including the operation of the public lobby;
 - types of proposed liquor licences;
 - location of alfresco/service/back of house areas for each tenancy, ensuring an active interface between the tenancies and the street is maintained, including unobstructed pedestrian movement;
 - any proposed entertainment or music, including noise attenuation reports and plans for any premises proposing live music, amplified music or other entertainment with noise levels above ordinary background music;
 - management of noise and patron behaviour to minimise adverse impacts on residents within the development and the locality;
 - alfresco management, including location of alfresco, proposed temporary structures and furniture, wind impact management, operating times, alcohol service and any music/entertainment; and
 - any other matters deemed appropriate by the Authority.

NEW ADVICE NOTES:

- ff) All Conditions and Advice Notes of the Form 2 Approval to Undertake Development issued by the Authority on 24 November 2021 remain valid unless specified otherwise.

**METROPOLITAN REDEVELOPMENT AUTHORITY
SCARBOROUGH REDEVELOPMENT SCHEME
FORM 2**

APPLICATION NO: MRA-13231

Approval to Undertake Development

Applicant's Name:	Edge Holding No 16 Pty Ltd
Address of Applicant:	2/31 Hood Street, Subiaco
Address of Development:	Lot 500 Reserve Street, Scarborough
	Lot: 500 Plan/Diagram: 413012
	Vol: LR3171 Folio: 315
Application Received:	21 April 2021
Description of Development:	17 Storey Mixed-Use Development

The application for approval to undertake development in accordance with the plans attached thereto is granted subject to the following conditions:

CONDITIONS:

1. The development is to be undertaken in accordance with the approved plans and documents attached to this approval, details of which are to be provided at working drawings stage, to the satisfaction of the Metropolitan Redevelopment Authority (the Authority). The approved plans and documents of development are listed as follows:

Plan / Document Name	Ref.	Date Received
Site Plan	A01-00	10 September 2021
Feature and Contour Survey	-	10 September 2021
Basement 03 Floor Plan	A2-01 E	10 September 2021
Basement 02 Floor Plan	A2-02 E	10 September 2021
Basement 01 Floor Plan	A2-03 E	10 September 2021
Lower Ground 02	A2-04 D	10 September 2021
Lower Ground 01	A2-05 E	10 September 2021
Ground Floor Plan	A2-06 E	10 September 2021
Level 01 Floor Plan	A2-07 D	10 September 2021
Level 02 Floor Plan	A02-09 D	10 September 2021
Typical Lower Floor Plate	A02-10 D	10 September 2021
Mid Typical Floor Plate	A02-11 D	10 September 2021
Typical Upper Floor Plate	A02-12 D	10 September 2021
Typical Sub Penthouse	A02-13 B	10 September 2021
Penthouse Typical Floor Plate	A02-14 B	10 September 2021
Penthouse Mezzanine	A02-15 B	10 September 2021
North Elevation	A03-01 B	10 September 2021
South Elevation	A03-02 B	10 September 2021
East Elevation	A03-03 B	10 September 2021
West Elevation	A03-04 B	10 September 2021
Indicative Section	A04-01 C	10 September 2021
Section D Northern Boundary	A04-02 A	10 September 2021
Section EE	A04-03 A	10 September 2021

Preliminary Public Art Plan – Lot 500	20-343	21 April 2021
Reserve Street, Scarborough		
Windtech - Pedestrian Wind	WF825-	21 April 2021
Environment Statement	01F02(REV0)	

2. The hardstand location identified on Reserve Street is not included in this approval. Hardstand is to be relocated, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with the City of Stirling. (Refer to Advice Note b).
3. A Car Parking and Traffic Management Plan demonstrating management and allocation of car parking in accordance with section 5.2 of the Scarborough Design Guidelines, as well as a minimum of 100 car bays made available to the public in perpetuity in accordance with section 4.1 of the Scarborough Design Guidelines, is to be provided prior to planning condition clearance (working drawings stage) and implemented thereafter to the satisfaction of the Authority, in consultation with the City of Stirling. (Refer to Advice Note c).
4. An easement(s) or other legal agreement confirming in perpetuity public access rights, generally consistent with the extent shown on the approved Basement 2 Floor Plan (A2-02 E), Basement 1 Floor Plan (A2-03 E), Lower Ground Floor 02 (A2-04 D), Lower Ground Floor 01 (A2-05 E), Ground Floor Plan (A2-06 E) and Level 01 Floor Plan (A2-07 D), is to be provided prior to planning condition clearance (working drawings stage), and executed prior to occupancy, to the satisfaction of the Authority, in consultation with the City of Stirling. (Refer Advice Note d).
5. A legal agreement confirming the operation and management of the identified Community Offerings shown on the approved Basement 2 Floor Plan (A2-02 E), Basement 1 Floor Plan (A2-03 E), Lower Ground Floor 02(A2-04 D), Lower Ground Floor 01 (A2-05 E) and Level 01 Floor Plan (A2-07 D), in perpetuity, including public access rights, to be provided prior to planning condition clearance (working drawings stage), and executed prior to occupancy, to the satisfaction of the Authority in consultation with the City of Stirling. (Refer to Advice Note e).
6. The provision of an easement for existing infrastructure as may be required by the City of Stirling, or other relevant statutory entity, being granted free of cost to that body, to the satisfaction of the Authority in consultation with the City of Stirling. (Refer to Advice Note f).
7. Elevations and specification detailing high quality materials, finishes and colours for the development (including “colour swatches” or material samples are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with its appointed Design Review Panel. (Refer to Advice Note g).
8. Evidence that the project has been registered with the Green Building Council of Australia, and provision of an updated Sustainability Report from a qualified professional which demonstrates that the proposal has been designed to achieve a minimum 5 Star Green Star rating in accordance with Development Policy 1 Green Building, is provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note h).

9. A report and certification from the Green Building Council of Australia is to be provided within 12 months of practical completion, confirming each building has achieved the minimum 5 Star Green Star 'As-Built' rating, to the satisfaction of the Authority.
10. A final Landscape Plan detailing both 'soft' and 'hard' landscaping elements for the development, including a refined design of the pedestrian pathway along the western boundary to achieve improved connectivity with The Esplanade car park, is to be provided prior to planning condition clearance (working drawings stage), with all landscaping to be installed and maintained in accordance with the Landscape Plan thereafter to the satisfaction of the Authority, in consultation with the Authority's Design Review Panel, the City of Stirling and Main Roads WA. (Refer to Advice Note i).
11. Affordable Housing is to be provided in accordance with Development Policy 9 - Affordable and Diverse Housing, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with the Department of Communities. (Refer to Advice Note j).
12. Adaptable Housing is to be provided in accordance with Development Policy 10 - Adaptable Housing, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note k).
13. Public art is to be provided in accordance with the approved *Preliminary Public Art Plan* and Development Policy 4 - Providing Public Art, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority, in consultation with the City of Stirling. (Refer to Advice Note l).
14. An Acoustic and Vibration Attenuation Report and certification from a qualified acoustic consultant, confirming that the design and construction of the building will achieve an appropriate level of sound and vibration attenuation in accordance with Development Policy 3 – Sound and Vibration Attenuation, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note m).
15. A report and certification from a qualified acoustic consultant is to be submitted at practical completion stage and prior to occupation of the building, confirming that all recommendations of the Acoustic and Vibration Report integral to achieving compliance with Development Policy 3 – Sound and Vibration Attenuation, have been implemented, to the satisfaction of the Authority. (Refer to Advice Note n).
16. The development is to be undertaken in accordance with the recommendations of the approved *Windtech - Pedestrian Wind Environment Statement*, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note o).
17. A Waste Management Plan, demonstrating that bin collection and waste management services can be adequately provided for and managed within the development, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with the City of Stirling. (Refer to Advice Note p).

18. A Signage Strategy, detailing the proposed location and size of all external signage consistent with Development Policy 6 – Signage, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note q).
19. A Lighting Strategy, detailing lighting of the building exterior and ground floor public areas to enhance building features, amenity and security, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note r).
20. A Venue Management Strategy for the Dining and Entertainment tenancies of the development is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with the City of Stirling, and implemented thereafter by each venue operator. (Refer to Advice Note s).
21. A Universal Access Statement for the ground floor public areas and building entries, prepared by a suitably qualified professional, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note t).
22. A Crime Prevention Through Environmental Design Statement for the public areas of the development, prepared by a suitably qualified professional, is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note u).
23. A detailed Staging Plan, outlining the proposed staging scenario for the development is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note v).
24. A Demolition and Construction Management Plan is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority, in consultation with the City of Stirling. (Refer to Advice Note w).
25. A Stormwater and Dewatering Management Plan is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with the City of Stirling. (Refer to Advice Note x).
26. All service areas, service related hardware and piped or wired services (such as car park gates, plant areas, fire booster cabinets, service meters, exhaust systems and air-conditioning units) are to be designed as an integral component of the development or screened from public view, to minimise any detrimental impact on the architectural quality of the building and the public realm, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority. (Refer to Advice Note y).
27. All building and tenancy entrance levels are to be consistent with the constructed paving levels of the adjoining public realm, details of which are to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority.
28. A development contribution payment, in accordance with the Scarborough Development Contribution Plan, is to be provided prior to planning condition clearance (working drawings stage), to the satisfaction of the Authority. (Refer to Advice Note z).

29. A dilapidation survey of the footpaths, kerbs, roads, buildings and open space areas within the immediate locality surrounding the site is to be provided prior to planning condition clearance (working drawings stage) to the satisfaction of the Authority in consultation with the City of Stirling. Any damage caused to the footpaths, kerbs, roads, buildings and open space areas is to be made good at the applicant's expense, prior to occupation of the development. (Refer to Advice Note aa).

30. A notification, pursuant to Section 70A of the Transfer of Land Act 1893 is to be placed on the certificates of title of future residential lots at the site. The notification is to state as follows:

'The lot is situated in the vicinity of a transport corridor and is currently affected, or may in future be affected by transport noise.'

31. Redundant vehicle crossover(s) are to be removed and the kerbing, verge, and footpath (where relevant) made good to the satisfaction the Authority.

32. The development must be substantially commenced within four (4) years from the date of this approval, to the satisfaction of the Authority.

Where an approval has so lapsed, no development shall be carried out without the further approval of the Authority having first been sought and obtained. (Refer to Advice Note bb).



4/ **Chief Executive Officer**
Metropolitan Redevelopment Authority

24/11/21
Date

Advice Notes

- a) A covering letter, final working drawings (digital) and a material samples board are to be submitted to the Authority prior to an application being made to the City of Stirling for a building permit and must be cleared prior to the commencement of any works on site. Working drawings are to comply with all of the above conditions and any variations from the approved drawings and documentation are required to be clearly identified.

In accordance with section 62(3) of the *Metropolitan Redevelopment Authority Act 2011* no works are to be undertaken prior to obtaining development approval or in contravention of any condition to which the approval is subject.

Following satisfactory assessment of the working drawings, the Authority will provide a clearance letter and a digital copy of the plans to the City of Stirling to enable building permit assessment.

- b) With regard to Condition 2, hardstand for emergency services should be relocated so that no hardstand encroaches into the surrounding road reserve. The relocation of hardstand may require fire booster cabinet relocation, relocated infrastructure should be integrated into the development and achieve a high quality design outcome which minimises any visual impact on the public realm.
- c) With regard to Condition 3, the Car Parking and Traffic Management Plan should include details on the following, and be reflected in the working drawings:
- provision of adequate sightlines at crossovers to ensure safe movement of pedestrians and vehicles;
 - vehicle accesses are to comply with AS2890.1, including geometry, signage and line marking, to ensure the appearance and character of the driveway shall be such that it will be clear to vehicle drivers that pedestrians and external traffic have priority of movement;
 - identification and implementation of management strategies which mitigate the potential for conflict between through traffic and parking traffic on The Esplanade car park;
 - implementation of real time, digital signage, advising of public bay capacity;
 - provision of 24 hour availability to public lobby to facilitate secondary access to public car bays;
 - allocation of car parking bays to specific non-residential uses within the development in accordance with the minimum requirements under section 5.2 of the Scarborough Design Guidelines;
 - allocation of residential car parking bays to specific residential dwellings up to a maximum average of 1.5 bays per dwelling, being a total of 352 residential bays;
 - provision of a minimum of 100 public car parking bays within the development, to be maintained as such in perpetuity, in accordance with the section 4.1 of the Scarborough Design Guidelines, and delivered as the first stage of development;
 - end of trip facilities are provided in accordance with section 5.3 of the Scarborough Design Guidelines;
 - identification and management of ACROD bays in accordance with AS 2890.6;
 - effective and safe management of traffic movements to, from and within the car parking areas, with particular consideration to measures which reduce the potential for conflict with adjacent sites crossovers along Reserve Street;

- the dimensions and numbering of all car parking bays, loading bays, vehicle entrances, crossovers, aisle widths and circulation areas complying with Australian Standard (AS) 2890.1, AS2890.2, AS2890.3 and AS/NZS2890.6;
 - identification of clear, safe and accessible pedestrian paths through car parking and delivery areas; and
 - provision of wheel stops in bays perpendicular to other bays.
- d) With regard to Condition 4, the public access easement is to be registered on the certificate of title for the property in accordance with sections 195 and 196 of the *Land Administration Act 1997* and notice of the easement is to be included on the diagram or plan of survey (deposited plan), unless subject to an alternative legal agreement agreed to by the Authority in consultation with the City of Stirling.

The public access easement(s) or alternative legal agreement are to include the following, generally noted on the approved plan(s) A2-02 E, A2-03 E, A2-04 D, A2-05 E and A2-07 D:

- The central Right of Way (ROW), generally described as 9m in width with a 1.5m pedestrian path, connecting Reserve Street to adjacent sites described as No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough;
- The northern pedestrian access linking West Coast Highway and the central ROW;
- The 100 public car bays, and associated infrastructure, located on Basement 1 and 2, and connecting to The Esplanade carpark;
- The raised footpath, generally 1.5m in width, traversing the western boundary in a north-south direction; and
- The facilities identified in Condition 4.

A legal mechanism is required to be implemented to allow continued, uninterrupted and unencumbered access to No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough while construction of Lot 500 Reserve Street. Scarborough is occurring.

- e) With regard to Condition 5, the legal agreement is to address the long term operation, management, maintenance and costs associated with the Community Benefit Areas. The legal agreement is to be prepared by the applicant in consultation with the City of Stirling with all costs to be borne by the applicant. The legal agreement is to include the following areas:
- Basement 2 (A2-02 E): 51 public car bays
 - Basement 1 (A2-03 E): 49 public car bays
 - Lower Ground Floor 2 (A2-04 D): Public Lobby, Public Facilities and Public Stairs;
 - Lower Ground Floor 1 (A2-05 E): Multi-Purpose Room, Public Lobby, Public Lookout
 - Level 1 (A2-07 D): Public Lobby

The legal agreement shall also consider the inclusion of the proposed pocket park and in particular full details of redevelopment, long term maintenance and operation consistent with the high standard provided within the submitted development application and further detailed as a component of the landscaping plan.

- f) With regard to Condition 6, the easement for infrastructure, nominally located along the northern boundary of Lot 500 Reserve Street, Scarborough is to be prepared by the applicant in consultation with the affected operator, with all costs to be borne by the applicant.
- g) With regard to Condition 7, details and information of external colours and finishes, including specifications and samples, are to be provided for all external elevations, demonstrating a well resolved high-quality materials palette for the whole project, which has been further detailed and/or enhanced from development application stage through to the final constructed outcome.

Elevations and specifications shall confirm the use of pre-cast concrete for all edge conditions and architectural expression.

To demonstrate that an exemplary design outcome will be achieved through to construction, detailed information regarding the tower façade glazing types, colours and level of transparency is to be provided. The facade glazing should achieve a high level of solar performance without a dark or highly reflective finish, demonstrating a level of visual permeability generally consistent with the development application perspectives.

- h) With regard to Condition 8, the development application has committed to the achievement of a minimum certified 5 Star Green Star rating from the Green Building Council of Australia (GBCA) in accordance with section 4.1 of the Scarborough Design Guidelines, over and above the requirement under Development Policy 1 – Green Buildings on Tier 3 sites.

In achieving the 5 Star Green Star rating the development should be designed to comply with the Redevelopment Area Objective of Environmental Integrity, by including ecologically sustainable design, resource efficiency, recycling, renewable energy and protection of local ecology and microclimate. In particular, the design, construction and operation/management of the building and associated areas of open space should demonstrate a 'whole of site' approach to sustainable design and address, as a minimum:

- methodologies to reduce operational and embodied carbon;
 - water efficiency;
 - strategies and methodology to minimise potable water usage through rain water capture and reuse and/or water recycling;
 - energy efficiency and energy efficient fixtures and appliances; and
 - a naturally comfortable indoor environment, including access to natural light and ventilation as well as thermal comfort levels.
- i) With regard to Condition 10, the Landscape Plan is to include the following:
- details of the proposed pocket park and how it may be delivered, including soft and hard landscaping, maintenance, management, reticulation and use;
 - increase the width of the Esplanade carpark path to 1.8m and provide convenient, mid-block pedestrian access;
 - introduction of a handrail and/or low wall to the west of the Esplanade pathway, including materiality and dimensions, to simultaneously optimise visual permeability and satisfy universal access requirements;
 - details of how the landscape design, materials, plantings and levels will effectively integrate with the adjacent public realm and coastal aesthetic;
 - additional soft landscaping introduced to the central laneway;

- existing and proposed site levels, ensuring universal access across the site;
- species, sizes and types of plantings;
- details of seating, paving and other infrastructure, with consideration for the appropriate integration of the central laneway with Reserve Street and overall paving aesthetic;
- detail of soft landscaping on West Coast Highway such that no encroachment into the future road reserve occurs;
- reticulation to plantings including rain/grey water capture and re-use;
- paving, kerbs and other surface treatments;
- details of all proposed planting on structure, demonstrating that these landscaped areas are viable, will survive in the incumbent environmental conditions and are capable of being maintained in perpetuity;
- integration of wind amelioration strategies into the design to ensure pedestrian/user comfort consistent with the intended use of the outdoor spaces; and
- details of the ongoing maintenance requirements for the landscaped spaces including responsibilities, reticulation, access and safety systems. Management strategies should consider how maintenance may occur in a strata titled development.

The applicant is advised to liaise with the City of Stirling and Main Roads WA to ensure the integration of paving materials and landscaping between the public and private realm and any ongoing maintenance requirements are appropriately considered.

While the pocket park works are not included in this application the necessary documentation should be prepared concurrently to ensure integration with adjacent landscaping and materiality.

- j) With regard to Condition 11, the development application has committed to providing a minimum 15% affordable housing in accordance with section 4.1 of the Scarborough Design Guidelines, over and above the requirement under Development Policy 9 – Affordable Housing. Unless otherwise agreed the following shall be provided:
- 15% of the total number of dwellings are to be provided within the development and maintained in perpetuity, in compliance with Development Policy 9 - Affordable and Diverse Housing;
 - the affordable housing units are to be sold by the developer to the Department of Communities (or alternative housing provider approved by the Authority) at construction cost (based on the Authority's construction cost chart dated July 2016), at the time of practical completion of the development;
 - a restrictive covenant is to be registered against the certificates of title of the relevant affordable housing units (the subject units are to be identified on the working drawings) restricting the use of the units for affordable housing in perpetuity pursuant to section 129BA of the Transfer of Land Act 1893;
 - the restrictive covenant is to be prepared at the applicant's expense and must be executed in registrable form prior to the clearance of working drawings to the satisfaction of the Authority. A template document is available from the Authority, which is to be completed by the applicant and reviewed by its lawyers prior to submission; and
 - a draft strata plan and management statement is to be prepared at the applicant's expense and provided at working drawings stage demonstrating

how ongoing costs of the affordable housing units will be minimised including but not limited to:

- minimising unit entitlements; and
- restricted access to common amenity areas (with potential to opt in).

- k) With regard to Condition 12, an Accessibility Report should be provided demonstrating that a minimum 20% of the total number of dwellings conform to the Core Liveable Housing Design Elements outlined in Development Policy 10 – Adaptable Housing.
- l) With regard to Condition 13, the provision of public art is to be in accordance with Development Policy 4 – Providing Public Art, with a minimum contribution, either as public art or cash-in-lieu, of \$850,000.00 based on the development value of \$120 million.
- m) With regard to Condition 14, the Acoustic and Vibration Report should be informed by the Acoustic Report prepared for the development by Stantec, Revision 4 dated 15 May 2020, and identify the location, extent and impact of all noise and vibration sources and confirm that the design of the building will achieve an appropriate level of attenuation in accordance with Development Policy 3 – Sound and Vibration Attenuation. In particular, the report should address:
 - Potential noise and vibration impacts from adjacent uses including traffic;
 - Further detailed consideration of acoustic attenuation measures relative to the different land uses/elements of the proposal, including:
 - Small Bar and Café/Restaurant operational noise, noting full details will be the responsibility of the future tenants;
 - Communal areas, gym, pool operational noise; and
 - Basement car parking.
 - Mechanical service systems (such as exhaust systems and air-conditioning) selection, design and location to prevent emitted noise levels from exceeding the relevant decibel levels as provided by the *Environmental Protection (Noise) Regulations 1997*; and
 - Confirmation that the design meets the maximum internal criteria for all bedrooms.
- n) With regard to Condition 15, the certification submitted at practical completion stage should include results of onsite testing to confirm appropriate levels of sound attenuation / mitigation have been achieved.
- o) With regard to Condition 16, wind amelioration strategies are to be integrated into the final building design, detailing and function. The use of wind break 'add-ons' such as screens and physical barriers are typically not supported as these are considered to obstruct visual and physical permeability of the public realm and limit the integration and activation of the ground floor land uses.
- p) With regard to Condition 17, the Waste Management Plan is to ensure all collections occur within the development, including adequate loading, storage, vehicle manoeuvring and general maintenance of waste infrastructure. The Waste Management Plan should also demonstrate how noise, odour and general nuisance will be minimised.

The applicant is advised to liaise with the City of Stirling regarding the City's standards for waste management plans.

- q) With regard to Condition 18, the Signage Strategy should provide an indicative plan of all proposed signage (including wayfinding signage) outlining the locations and dimensions demonstrating that such signage will be complementary to the architectural design. Consideration shall be given to the integration of wayfinding signage to and from the public car park, including 24 hour access, as well as the central ROW connecting No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough to Reserve Street, with a view to enhance overall legibility to these separate entities.

Development Policy 6 – Signage requires signage to demonstrate restraint in scale, size and collective amount of signage installed, in order to minimise visual clutter, protect amenity, and support a safe, attractive and legible public realm.

- r) With regard to Condition 19, the Lighting Strategy should:
- include a plan which illustrates how the building will be illuminated to highlight architectural elements, to provide an attractive building at night;
 - demonstrate how lighting and safe access will be provided between the development and the public realm and within loading areas and pedestrian pathways; and
 - be designed to comply with Australian Standard 1158 (Public Lighting Code) and Australian Standard 4282 (Control of the Effects of Outdoor Lighting) in order to ensure that any nuisance light to adjoining properties and to passing vehicular traffic are controlled to an acceptable level.
- s) With regard to Condition 20, the Venue Management Strategy is intended to provide guidance for all future tenancies and may inform the development of individual Venue Management Plans as required. The Strategy is to include, but not be limited to the following:
- hours of operation, including the operation of the public lobby for 24 hours a day;
 - types of proposed liquor licences;
 - location of alfresco/service/back of house areas for each tenancy, ensuring an active interface between the tenancies and the street is maintained, including unobstructed pedestrian movement;
 - any proposed entertainment or music, including noise attenuation reports and plans for any premises proposing live music, amplified music or other entertainment with noise levels above ordinary background music;
 - management of noise and patron behaviour to minimise adverse impacts on residents within the development and the locality;
 - alfresco management, including location of alfresco, proposed temporary structures and furniture, wind impact management, operating times, alcohol service and any music/entertainment; and
 - any other matters deemed appropriate by the Authority.
- t) With regard to Condition 21, the development should comply with the requirements of Part D3 of the Building Code of Australia (Access for People with Disabilities) and Australian Standard 1428.1 and the *Disability Discrimination Act 1992*. The Universal Access report should include particular consideration of the central laneway, the access/egress from public carpark and The Esplanade edge pedestrian path.
- u) With regard to Condition 22, the CPTED Statement should address the safety of publicly accessible / communal areas of the development including the pedestrian link, resident amenities level, end of trip facilities, as well as CCTV locations and

management. The CPTED Statement should inform the final Landscape Plan and Lighting Strategy.

- v) With regard to Condition 23, the Staging Plan is to outline the confirmed staging scenario for the development and should address the following:
- how the facilities identified in Condition 4 will be delivered in the first stage of development, including the 100 public car bays, and maintained thereafter;
 - proposed development staging including any factors that may affect the intended staging approach;
 - demonstrate how the amenity of the locality and safety of the public will be protected and maintained throughout the staged development of the proposal, including ongoing and unencumbered access (pedestrian and vehicle) for No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, Scarborough;
 - the extent of early structural (and any other) work that would need to be undertaken in the first stage to enable later tower development above; and
 - details of how the basement and vehicle access ways would be constructed in a staged scenario.
- w) With regard to Condition 24, the Demolition and Construction Management Plan should address the following matters, which are to address all phases of development including demolition and construction:
- establishment and continuation of tree protection zones for all street trees, maintained throughout the period of demolition and construction;
 - continuous and unobstructed access for No. 1 (SP5210) and No. 5 (SP62323) Reserve Street, consistent with the Staging Plan;
 - construction operation days / hours, with consideration for surrounding premises and residents;
 - management of dust, noise, vibration and other construction activities;
 - details of construction deliveries, collections and on-site storage;
 - workers car parking arrangements;
 - traffic management, including management of all construction works traffic and all measures to minimise disruption to traffic and pedestrian movements within the vicinity of the site;
 - details of construction signage and fencing, including high quality site hoardings;
 - community consultation plan and details to notify surrounding premises of the works and outlining procedures to manage enquiries and complaints;
 - measures to limit the impact of disturbance to the operation and amenity of surrounding buildings; and
 - any other matters deemed appropriate by the Authority and/or the City of Stirling.
- x) With regard to Condition 25, the Stormwater and Drainage Management Plan should demonstrate that stormwater from all roofed and paved areas shall be collected and contained on site. Stormwater must not affect or be allowed to flow onto or into any other property or road reserve. Particular matters to be resolved include:
- Infiltration methods resolved due to the potential geotechnical conditions not conducive to standard approach;
 - Account for a 1% AEP event;
 - Relocation of existing City of Stirling drainage assets in a position:
 - agreed with the City of Stirling;
 - which is clear of other extant services and allows ongoing access for maintenance; and

- o which manages flow rates given gradient fall from east to west

The applicant is advised to implement WSUD initiatives into the stormwater design where appropriate, particularly for the range of plantings proposed.

The applicant is advised to liaise with the City of Stirling regarding drainage design.

- y) With regard to Condition 26, services and service related infrastructure includes but is not limited to all piped and wired services, car parking areas and associated ventilation, roof plant / plant areas, bin storage areas, service meters and related infrastructure, fire booster cabinets, exhaust systems, air-conditioning units, antennae and satellite dishes.

Fire booster hydrants and service meter boxes should be designed, located, oriented and finished to minimise any visual impact on the adjacent streetscape and maximise visual interaction between the development and the street. The applicant is advised to liaise with service authorities to rationalise and consolidate service infrastructure, where possible.

- z) With regard to Condition 28, the development contribution payment is calculated on the total site area (excluding areas required to be ceded for road widening or otherwise) and the maximum 'base height' permitted to be delivered on the site, in accordance with the following table and Schedule 2 – Maximum Building Heights Plan in the Scarborough Development Contribution Plan.

The contribution payable for the site is calculated at **\$430,454.13**, based on:

- an estimated site area of **6,397m²** and permitted maximum (base) building height of 8 storeys. Excluding areas to be ceded for road widening.

Maximum Building Height (Base)	Cost/Site Area (\$/m2)
2 storeys / 8 metres	\$16.82
3 storeys / 11.5 metres	\$25.23
4 storeys / 15 metres	\$33.64
8 storeys / 29 metres	\$67.29
12 storeys / 43 metres	\$100.93

- aa) With regard to Condition 29, the applicant is advised that the dilapidation survey should include, as a minimum, all public realm features immediately surrounding the development and all buildings within close proximity to the site. The final extent of the survey is to be agreed to by the Authority prior to the surveys being undertaken. No groundworks shall occur prior to the clearance of Condition 28.
- bb) With regard to Condition 32, notwithstanding clause 5.24 of the Scarborough Redevelopment Scheme, which provides for a standard two (2) year validity period for development approvals, due to the impact of the COVID-19 pandemic and the potential delays associated with this situation, a four (4) year validity period applies to this approval. This has been applied in this unique circumstance only and any application to extend the validity period beyond four (4) years will require a full assessment under the relevant statutory planning framework.
- cc) The land required for road widening on West Coast Highway will be required to be ceded to the Crown free of cost. Main Roads WA and the City of Stirling will determine future arrangements for ceding of the land.

- dd) This approval does not constitute approval of any Crossover Permits or permission to undertake works outside of the lot boundary. The applicant is required to make a separate application to the City of Stirling or Main Roads WA for any works located outside of the lot boundary.
- ee) The City of Stirling has provided the following advice in relation to the occupancy and operation of the proposed development:
- All food premises to comply with the Food Act 2008 and the Food Standards Code and to be registered with the City. This will involve an inspection of the premises prior to commencement of operation of each food premise.
 - Mechanical services to AS 1668.2 will require certificate of compliance of installation.
 - Hydraulic services to Plumbing Code of Australia certificate of compliance required of installation.
 - Swimming pool to comply with the Aquatic Facilities Regulations 2007 and will require approval by the Department of Health.
 - Compliance with Health (Public Building) Regulations 1992 maximum certificate of accommodation required (multiple).
 - Provide details of mechanical ventilation in basement & enclosed car parks.
 - All bin areas to be provided with a tap and drainage connection (industrial trap).



mainroads
WESTERN AUSTRALIA

21 March 2025

Chief Executive Officer
City of Stirling
PO Box 1533
OSBORNE PARK WA 6916

Email: planning@stirling.wa.gov.au (via email)

Dear Sir/Madam,

**PROPOSED AMENDMENT TO PLANNING APPROVAL – REF DA24/1902 – LOT 500 (12)
RESERVE STREET SCARBOROUGH**

In response to correspondence received on 21 February 2025, Main Roads supports the proposal and recommends that if development approval is granted, the following conditions are imposed:

Conditions

1. No part of the building/development (inclusive of awnings, subterranean anchors and utilities) is to be located within the land required for future West Coast Highway upgrades as detailed in the enclosed land requirement plan.

Justification for Condition

This development must not compromise the ultimate road design. No form of the development should encroach upon the road reservation. This includes building anchors below the surface, whether temporary or permanent.

2. Any development (above or below ground) located within the land required for future road purposes, shall only be permitted for the purpose of landscaping, outdoor seating and pedestrian access. Landscaping must be limited and maintained to a mature height of (1) metre.

Justification for Condition

No part of the development should encroach upon the designated land for Westcoast Highway within the Primary Regional Road Reserve (PRRR). This includes, but is not limited to, building anchors, awnings, and any related infrastructure services. This condition ensures that the proposal will not interfere with the final road design.

Temporary elements such as removable potted plants, low-level landscaping, and street furniture are generally acceptable. Any development within the PRRR should not be counted towards the specific requirements for bicycle parking, public open space, or landscaping, as it is temporary in nature.



mainroads
WESTERN AUSTRALIA

3. Prior to the issue of a building permit, an acoustic report by a qualified acoustic consultant consistent with WAPC State Planning Policy 5.4 – Road and Rail Noise is to be prepared and submitted to the satisfaction of the Cit of Stirling in consultation with Main Roads. Any recommendations contained in the acoustic report shall be thereafter implemented and maintained for the duration of the development.

Justification for Condition

To ensure State Planning Policy 5.4 – Road and Rail Noise requirements are implemented.

4. Prior to the issue of a building permit, certification from a qualified acoustic consultant being submitted, confirming that the recommendations of the acoustic report (as required by condition 3) have been implemented. This certification is to be provided to the satisfaction of the City of Stirling.

Justification for Condition

To ensure State Planning Policy 5.4 – Road and Rail Noise requirements are implemented

5. A notification, pursuant to Section 70A of the *Transfer of Land Act 1893* is to be placed on the certificates of title of existing lots. The notification is to state as follows:

'The lots are situated in the vicinity of a transport corridor and are currently affected, or may in the future be affected, by transport noise'

Justification for Condition

To ensure State Planning Policy 5.4 – Road and Rail Noise requirements are implemented.

6. Prior to the occupation of the development, modified public easements in accordance with the development plans are the be created to facilitate access to Oceanview Apartments and Bluewater apartments.

Justification for Condition

To ensure suitable access arrangements are provided for the neighbouring properties.

7. No works are to encroach onto the West Coast Highway road reserve or the widened road reservation.
8. Stormwater drainage (if any) shall not exceed predevelopment discharge to the West Coast Highway road reserve or the widened road reservation.

Advice

- a) Lot 500 is impacted by Planning Control Area No. 177 for the future upgrade of West Coast Highway, as shown on the enclosed Planning Control Area No. 177 Plan 1.8083 (attached). The land will be required for road purposes sometimes in the future.
- b) The upgrading/widening of West Coast Highway is not in Main Roads current 4-year forward estimated construction program and all projects not listed are subject to change without notice, and Main Roads assumes no liability for the information provided.



mainroads
WESTERN AUSTRALIA

- c) The applicant is required to submit an application form to undertake works within the road reserve prior to undertaking any works within the road reserve. Application forms and supporting information about the procedure can be found on the Main Roads website > Technical & Commercial > Working on Roads.
- d) Where a Planning Control Area (PCA) is in place, approval for development is required from the Western Australian Planning Commission (WAPC), as well as under any relevant planning scheme, unless the PCA imposes requirements to the contrary.

Advice to the City

In relation to the unapproved ground anchors recently installed within the West Coast Highway road reserve, Main Roads is actively working with the applicant to find a solution through a separate process.

Should the City disagree with the above conditions or require further information please do not hesitate to contact Didier Ah-Sue on (08) 9323 4806.

Please ensure a copy of the City's final determination is sent to planninginfo@mainroads.wa.gov.au.

Yours sincerely

Enclosed:

1. West Coast Highway Land Requirement Plan Extract



From: "DFES Land Use Planning" <advice@dfes.wa.gov.au>
Sent: Wed, 12 Mar 2025 15:02:29 +0800
To: "Michael Italiano" <Michael.Italiano@stirling.wa.gov.au>
Subject: DA24/1902 - 12 Reserve Street Scarborough - Development Assessment Panel Form 1 Application which seeks to Amend the Development Approval for the Mixed-Use Development. - DFES Response

DFES Ref: D38370
City Ref: DA24/1902

Hi Michael,

The below advise provided in relation to *State Planning Policy 3.7 Bushfire* (SPP 3.7) and associated *Planning for Bushfire Guidelines* (Guidelines).

I've spoken with the BAL assessor to gain some background on the proposal.

My understanding is that a BMP was never provided for the last application, and it is unclear how the management (of areas outside of the site) required to achieve a lower BAL rating was to be enforced.

As discussed, a BAL assessment (as a stand-alone document) shouldn't be reliant on the exclusion of any land that is not currently managed to low threat (in accordance with AS3959) by a legally enforceable mechanism.

As such the BAL rating of FZ provided in the BAL assessment is considered accurate, however as discussed above DFES cannot validate the reduced (post development) BAL rating.

Moving forward the City should consider the need for a BMP to address the requirements of SPP3.7 and the associated Guidelines.

Please let me know if you require any further comment from DFES regarding the proposal.

Kind regards,



FOR A SAFER STATE



**CHANGES TO
FIRE DANGER RATINGS**

As of 1 September 2022, WA is implementing simplified and nationally consistent Fire Danger Ratings.

  **HOW FIREPROOF
IS YOUR PLAN?**  dfes.wa.gov.au/prepare

Acknowledgement of Country: DFES acknowledges the Traditional Owners of Country throughout Australia, and their connections to land, sea and community. We pay our respects to Elders past and present.

Re: Advertisement Submission Comments - DA24/1902 - 12 Reserve Street Scarborough



Cale Otter <cale.otter@elementadvisory.com.au>

To: Michael Italiano

Cc: Daniel Lees

Attachment 10 - Applicant's Response to Public Consultation and Main Roads Western Australia Comments received on 6 November 2024

↩ Reply

↩ Reply All

→ Forward

⋮

Tue 1/04/2025 9:28 AM

Follow up. Start by Tuesday, 1 April 2025. Due by Tuesday, 1 April 2025.

Response to Council DA24 1902 - DAP 25 02855 - Amendment to MRA-13404 - Lot 500 (12) Reserve ~ City of Stirling (002)[2].pdf

.pdf File

Hi Michael,

Please find our response to the public submissions below:

- Submission 1 (object): The proposal does not seek to change the number of parking bays which had already been approved as part of the Development WA approval, which includes the provision of public car parking bays.
- Submission 2: The development proposes a sufficient number of ACROD bays having regard for the relevant planning framework.
- Submission 3 (support): We acknowledge that the community wish for development to be delivered, and this application enables the continued delivery of the development under construction. There are no orderly and proper planning grounds for a “bond” to guarantee construction within any timeframe. This is considered to be beyond the ability of the decision maker and cannot reasonably be imposed on a development approval.

Additionally, we wish to provide the following responses regarding the conditions suggested by Main Roads:

- Condition 3 (acoustic report): The requirement for an acoustic report has already conditioned as part of the original development approval (DWA DA Conditions 14 and 15), with the acoustic report having already been prepared and submitted to the City of Stirling in request for DA condition clearance. As such, imposing this condition would only serve to duplicate, and complicate the clearance of another active condition, and therefore this ought not to be imposed.
- Condition 4 (acoustic confirmation): For the same reasoning as outlined above for condition 3, this would duplicate and complicate the clearance of an already active condition on the original development approval (DWA DA Conditions 14 and 15). Therefore, this ought not to be imposed.
- Condition 5 (notification on title): This has already been conditioned as part of the original DWA DA (condition 30). Therefore, this ought not to be imposed.
- Condition 6 (easement for adjacent property access): An easement has already been proposed as part of the draft strata plan. As this matter is already being actioned, this ought not to be imposed.
- Condition 8: Stormwater discharge to West Coast Highway and future land will not exceed predevelopment volumes. Condition 25 of the original DWA DA which deals with stormwater has already been cleared and therefore this condition should not be reimposed.

Kind regards,

Cale Otter

Consultant



d: 08 9289 8359

elementadvisory.com.au

Whadjuk Country

Level 1, 500 Hay Street, Subiaco, WA, Australia 6008



We acknowledge the Whadjuk people of the Noongar nation as Traditional Owners of the land on which we live and work. We acknowledge and respect their ongoing culture, their contribution to the life of this city, and Elders, past and present.