HillPDA CONSULTING

GREEN OUR CITY ACTION PLAN – DRAFT PLANNING REQUIREMENTS

5 Additional Sites

Prepared for City of Melbourne

February 2022

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Key Terms

GOCAP	**Green Our City Action Plan:** the City of Melbourne's four-year plan aiming to improve the quality and quantity of green roofs and vertical greening in the municipality to support amenity, liveability and adapt to climate change.
GOCAP Minimum Standards	Key 'mandatory' elements proposed associated with Overarching ESD, Energy Efficiency, Water Efficiency and Urban Ecology. Secondary 'mandatory' elements proposed associated with Integrated Flood Management, Water & Resource Recovery, Urban Heat Island Response and Stormwater Management.
GOCAP Preferred Standards	Higher 'mandatory' benchmarks proposed associated with Overarching ESD, Energy Efficiency, Water Efficiency and Urban Ecology. Secondary 'mandatory' elements proposed associated with Integrated Flood Management, Water & Resource Recovery, Urban Heat Island Response and Stormwater Management.
ESD	**Environmentally sustainable design:** seeks to reduce negative impacts on the environment, and the health and comfort of building occupants, thereby improving building performance. The basic objectives of sustainability are to reduce consumption of non-renewable resources, minimize waste, and create healthy, productive environments.
GFA	**Gross floor area:** a measurement of the total building area including net sellable area, common areas and service areas.
NSA	**Net sellable area**: a measurement of area of floorspace that can be sold under a purchase transaction; excludes common areas and service areas of a building.
NLA	**Net leasable area**: a measurement of area of floorspace that can be leased under a lease transaction; excludes common areas and service areas of a building.
MV	**Market value:** is the estimated amount for which an asset or liability should exchange on the valuation date between a willing buyer and a willing seller in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion.
DCF	**Discounted cash flow**: a valuation method that seeks to determine the feasibility of an investment by examining projected future income and costs, or cash flow from the investment, and then discounting that cash flow at a selected rate to arrive at an estimated current value of the investment.
RLV	**Residual land value**: defined as the maximum price a developer would be prepared to pay for a site in exchange for the opportunity to develop the site, based on development assumptions, whilst achieving target hurdle rates for profit and project return. The residual value must be of a sufficient amount to encourage an owner to sell and/or displace the current use of the land. For development to be viable, the residual land value of a development opportunity must exceed the 'as is' value of the property.
TP	**Tipping point:** is the point at which a development becomes financially viable.
IRR	**Internal rate of return**: is the actual return of an investment on an annualised basis and expressed as a percentage. The internal rate of return considers the cost of time in its calculation within a cash flow and indicates average returns over a period of time which can be compared to other investment opportunities.
DM	**Development margin:** is the net profit expressed as a percentage of the development costs.

INTRODUCTION

1.0 INTRODUCTION

1.1 Purpose

This report is an addendum to the report: Green Our City Action Plan – Draft Planning Requirements: Economic Feasibility Testing, November 2020 (prepared by HillPDA, Breathe Architecture and Rider Levett Bucknall (RLB) for the City of Melbourne).

This report provides analysis for five additional sites.

The purpose is to explore the potential impact of proposed GOCAP (Green Our City Strategic Action Plan 2017-2021 (GOCAP)) environmentally sustainable design (ESD) standards and targets on five sites as follows:

- Site 1. Small scale residential
- Site 2. Large scale residential
- Site 3. Large commercial project
- Site 4. High rise office building
- Site 5. Small commercial building.

1.2 Study structure

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January 2023 Note:

This report was prepared in February 2022 based on data supplied by Breathe Architecture and RLB in 2021 and HillPDA research.

In January 2023, Breathe Architecture revised its report to address a bike parking shortfall in its plans for test sites, in addition to other text changes to its report. Refer to the Breathe Architecture report dated January 2023 for details.

The cost analysis and feasibility analysis in this February 2022 report does not include adjustments to account for Breathe Architecture changes in January 2023.

FEASIBILITY TESTING METHOD

2.0 FEASIBILITY TESTING METHOD

2.1 Qualifications

The information within this study is provided for the purpose of the project brief only and should not be used for any other purpose or by any other party. This study does not provide a formal valuation. All feasibility information within this study is indicative and based on supplied information and stated assumptions. This includes assumptions provided by the City of Melbourne and Breathe Architecture and quantity surveyor cost assumptions provided by RLB.

The results of the financial analysis are indicative of how the minimum and preferred GOCAP standards will impact the viability of the five test sites.

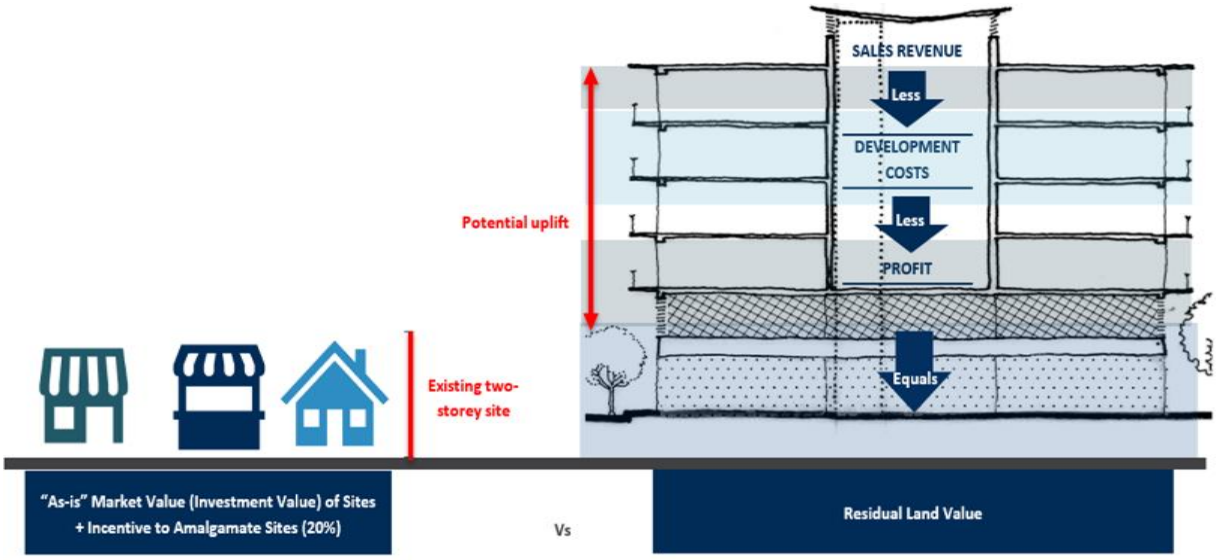
2.2 Approach

It is assumed that a developer will seek to purchase and develop the relevant test site for a short-term return, by selling the finished units/floorspace as soon as possible post-construction. The method selected for feasibility testing is discounted cash flow (DCF) analysis. DCF analysis is an appropriate method when project timelines extend beyond one year, and time value of money considerations are included in the analysis.

DCF is a valuation method that seeks to determine the feasibility of an investment by examining projected future income and costs or cash flow from the investment, and then discounts that cash flow at a selected rate (discount rate) to arrive at an estimated current value of the investment/residual land value. For comparison, this is then expressed as a benchmark dollar rate per sqm of GFA.

The residual land value is the maximum price a developer would be prepared to pay for a site in exchange for the opportunity to develop the site, whilst achieving target hurdle rates for profit and project return. The residual value must be of a sufficient amount to encourage an owner to sell and/or displace the current use of the land. For development to be viable, the residual land value of a development opportunity must exceed the 'as is' value of the land (see Figure 1). Note, in some cases, the residual land value is lower than its market value. This means that the existing improvements are substantial and that redevelopment under existing planning controls would not be viable.

Figure 1: 'As is' Market value vs residual land value assessment



Source: HillPDA 2020

The EstateMaster Development Feasibility software is used for this evaluation and will show a summary of:

- Project revenue, which is escalated to point of sale
- Project costs including construction, professional fees, charges, taxes and finance escalated if required to point of payment
- Calculation of profit margin and residual land value.

2.3 Development scenarios

The key figure in this assessment is residual land value (under the hypothetical development concepts shown for each site).

The residual land value is assessed under scenarios:

- **Base Case:** Without GOCAP standards; this shows the existing residual land value under the proposed plans
- **Option 1:** With minimum GOCAP standards but with all other elements held constant; this shows the impact on residual land value as a result of the standards
- **Option 2:** With preferred GOCAP standards but with all other elements held constant; this shows the impact on residual land value as a result of the standards.

The increase in sales revenue required to return the project to the base model is compared to findings in the literature and other market research to determine if such a premium is within the realms of possibility.

2.4 Overview of test sites

The test sites selected for this addendum are as follows:

- Site 1. Small scale residential
- Site 2. Large scale residential
- Site 3. Large commercial project
- Site 4. High rise office building
- Site 5. Small commercial building.

2.5 Assumptions

The application of the proposed standards on the test sites is shown in concept drawings and specifications by Breathe Architecture.

RLB provided cost data for each test sites baseline development with and without GOCAP standards.

The assumptions used in the feasibility assessment include land costs, construction costs, project timing and staging, professional fees, development contributions and end sale values. Refer to Attachment A to C for market research information and Attachment D for a summary of feasibility assumptions.

2.5.1 Market value of test sites

To assess feasibility, the existing market value for each test site is estimated based on its residual land value.

2.5.2 Maintenance costs capitalised in sale values

The literature research of developments with ESD features shows the market's assessment of maintenance costs and other ESD elements in sale prices. That is, the ongoing costs are capitalised into the sale price.

2.6 Performance indicators

A feasibility assessment is based on profit and risk factors. These two factors are subjective elements that determine the minimum level a developer is willing to purchase a site for, factoring in the risk associated with a proposed development. For the purpose of our hypothetical modelling, regard has been given to the following:

- **Project Internal Rate of Return (IRR):** is the actual return of the investment on an annualised basis and expressed as a percentage. This approach considers the cost of time in its calculation within a cash flow and indicates the average return over a period of time.
- **Residential Land Value:** is the maximum price that a hypothetical developer would pay for the land to achieve acceptable hurdle rates (IRR) based on the highest and best use or optimal development option for the land.

To test the viability of the proposed developments, residual land value analysis is the primary method of assessment used for the sites.

Table 1 highlights the varying target internal rate of returns that have been adopted within the modelling.

For the developments, a rate of 16% p.a. has been adopted.

For small scale residential projects, like Test Site 1, a lower return than 16% IRR would usually be sought (such as 12% to 14%) however for this project 16% was selected because of the high end nature and complicated refurbishment elements of the project.

The table below shows the performance indicators that are used to assess each test site. The outcome of the financial analysis can result in an option being feasible, marginal or not feasible based on its IRR. If a test site results in being marginal, it is likely that development would not proceed at the current time given the current economic climate and property market conditions in Victoria.

Table 1: Test site target internal rate of return (p.a.)

Test Site Target Internal Rate of Return					
Test Site	Site 1	Site 2	Site 3	Site 4	Site 5
Land Use	Small Scale Residential	Large Scale Residential	Large Commercial Project	High rise office building	Small Commercial building
Feasible	16%	16%	16%	16%	16%
Marginal	14-16%	14-16%	14-16%	14-16%	14-16%
Not Feasible	<14%	<14%	<14%	<14%	<14%

Source: HillPDA 2021

GOCAP INFRASTRUCTURE COSTINGS

3.0 GOCAP INFRASTRUCTURE COSTINGS

3.1 Overview

This section summarises the estimated cost data for each test site.

3.2 Impact of GOCAP standards on total construction costs

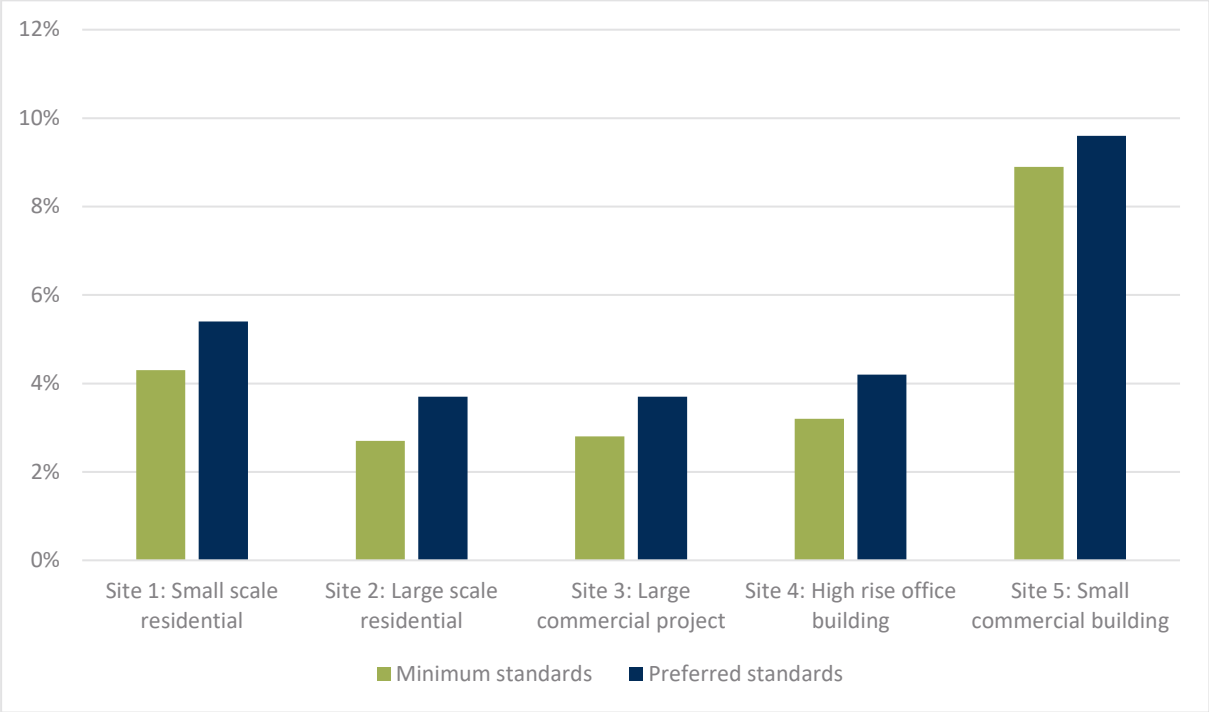
The estimated costs associated with the proposed GOCAP standards are as follows:

- The uplift on the total baseline costs ranges from 2.7% to 9.6%
- The highest cost impact (of these five sites) applies to Site 5 (8.9% to 9.6%)
- As a rule of thumb, a cost impact beyond 5% would be of concern to most development projects. This is because many construction contingencies are set at around this level
- ESD features do not just add costs but can also yield a premium for the sale of floorspace
- The increase in sales revenue for all types of developments that include ESD features is dependent on the quality and quantity of the elements
- The cost estimation found that there is only a minor difference in cost between minimum and preferred standards.

Figure 2: Estimate of GOCAP Standards on Total Construction Costs

	Base Line	Base Line Cost*	Minimum Option	% Uplift from Base Line	Preferred Option	% Uplift from Base Line
Site 1	Small scale residential. 3 storey apartment building comprising 4 No. apartments, including basement parking spaces.	$8,776,250	$9,156,054	4.3%	$9,246,054	5.4%
Site 2	Large scale residential 11 storey high rise residential building.	$98,402,700	$101,070,766	2.7%	$102,013,360	3.7%
Site 3	Large Commercial project 17 storey commercial office building with a basement level and lower ground level.	$77,906,730	$80,114,886	2.8%	$80,809,384	3.7%
Site 4	High rise Office Building (Warm Shell, Fitout Excluded) 18 storey commercial / R&D building with 2 level basement	$86,101,550	$88,856,415	3.2%	$89,690,965	4.2%
Site 5	Small Commercial Building on top of existing car park	$21,452,190	$23,352,975	8.9%	$23,502,129	9.6%

Figure 3: Chart of GOCAP Standards on Total Construction Costs



FEASIBILITY TESTING RESULTS

TEST SITE 1: SMALL SCALE RESIDENTIAL

Development overview

Test Site 1 proposes a partial demolition of an existing building to extend and reconfigure the structure into four apartments of three storeys with basement car parking.

Total costs

RLB estimated the baseline construction cost for the proposed development at $8.8m.

- **Minimum GOCAP standards:** added $379,804 or 4.3% to the total construction costs ($9.16)
- **Preferred GOCAP standards:** added $469,809 or 5.4% to the total construction costs ($9.25m).

Feasibility testing results

Assuming there is no change to the purchase price or other variables of Test Site 1, the ESD features within the minimum and preferred GOCAP standards would flow through to impact residual land value as follows:

- **Minimum GOCAP standards**: residual land value is decreased by 5%
- **Preferred GOCAP standards:** residual land value is decreased by 6.4%.

As the target internal rate of return has been set at 16.0%, introducing the ESD features under the minimum and preferred GOCAP standards causes these options to become borderline in terms of viability.

As noted above, small scale residential projects would usually seek a lower return than 16% IRR (such as 12% to 14%) however for this project 16% was selected because of the high end nature and complicated refurbishment elements of the project.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (without price premium)			
Total Revenue	$22,816,353	$22,816,353	$22,816,353
Costs			
Baseline Cost	$8,776,250	$8,776,250	$8,776,250
GOCAP Infrastructure Cost	-	$379,804	$469,804
Total Building Cost	$8,776,250	$9,156,054	$9,246,054
% Uplift from Base Line	-	4.30%	5.40%
Performance Indicator			
Target Internal Rate of Return	16.00%	16.00%	16.00%
Financial Results			
Land Purchase Price	$5,700,000	$5,700,000	$5,700,000
Residual Land Value	$5,700,000	$5,412,916	$5,331,448
Internal Rate of Return	16%	14%	13.40%
(+/-) to Existing Market Value	-	-$287,084	-$368,552
Viability	Viable	Marginally Viable	Not Viable

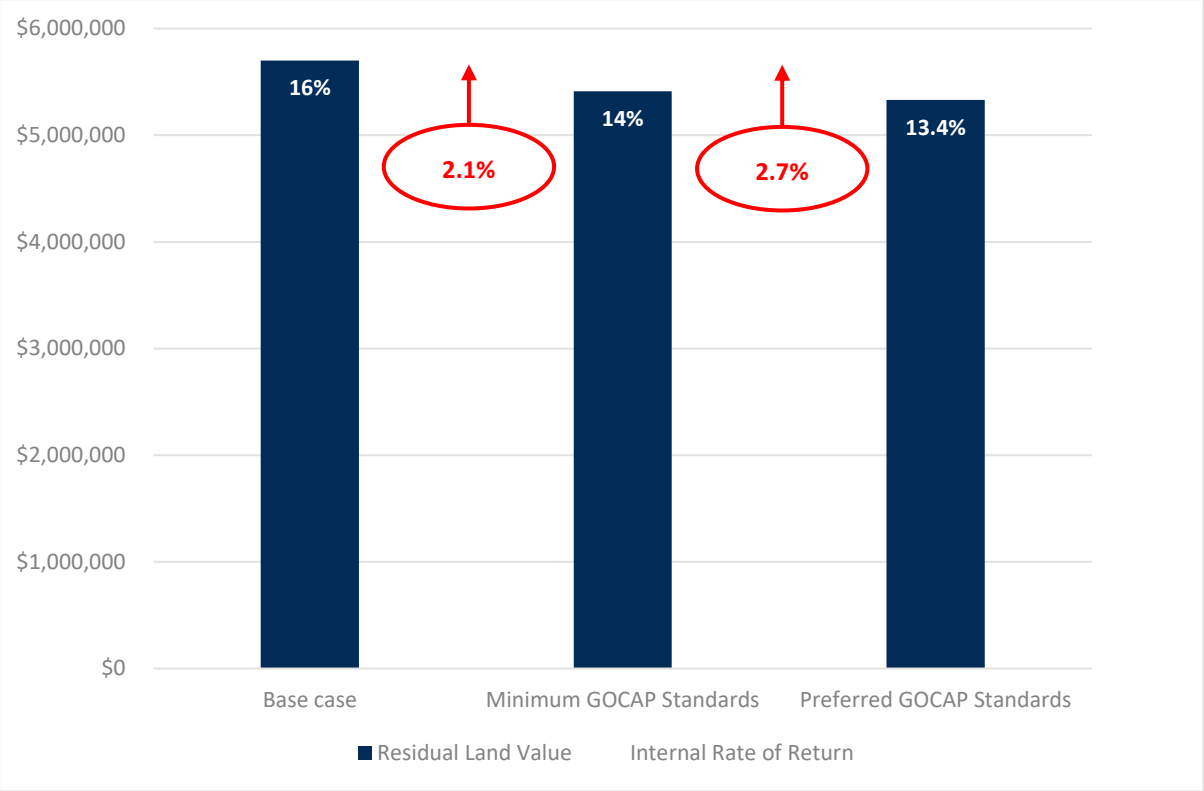
Increase in sales revenue to off-set GOCAP standards

Testing has found the increase in sales revenue required to enable the minimum and preferred options to achieve a target internal rate of return of 16.0% are:

- **Minimum GOCAP standards**: sales revenues would need to increase by 2.1%
- **Preferred GOCAP standards**: sales revenues would need to increase by 2.7%.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (with price premium)			
Total Revenue	$22,816,353	$23,295,496	$23,432,394
% Uplift from Base Case		2.1%	2.7%
Viability		**Viable at 16%**	**Viable at 16%**

The required revenue increases are considered achievable for Test Site 1 based on the market research, which shows that an increase in sales revenue of up to 8% can be achieved by higher quality residential based developments that include ESD features.



TEST SITE 2: LARGE SCALE RESIDENTIAL

Development overview

Test Site 2 comprises a 11-storey apartment building with 164 apartments. A total of 905 sqm is dedicated to retail space, and 239 basement car spaces are proposed.

Total costs

RLB estimated the baseline construction cost for the proposed development at $98.4m.

- **Minimum GOCAP standards:** added $2.6m or 2.7% to the total construction costs ($101m)
- **Preferred GOCAP standards:** added $3.6m or 3.7% to the total construction costs ($102m).

Feasibility testing results

Assuming there is no change to the purchase price or other variables of Test Site 2, the ESD features within the minimum and preferred GOCAP standards would flow through to impact residual land value as follows:

- **Minimum GOCAP standards**: residual land value is decreased by 25%
- **Preferred GOCAP standards:** residual land value is decreased by 30%.

As the target internal rate of return has been set at 16.0%, introducing the ESD features under the minimum and preferred GOCAP standards causes these options to be unviable.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (without price premium)			
Total Revenue	$193,277,810	$193,277,810	$193,277,810
Costs			
Baseline Cost	$98,402,700	$98,402,700	$98,402,700
GOCAP Infrastructure Cost	-	$2,668,066	$3,610,570
Total Building Cost	$98,402,700	$101,070,766	$102,013,360
% Uplift from Base Line	-	2.70%	3.70%
Performance Indicator			
Target Internal Rate of Return	16.00%	16.00%	16.00%
Financial Results			
Land Purchase Price	$16,740,000	$16,740,000	$16,740,000
Residual Land Value	$16,740,000	$12,465,058	$11,682,099
Internal Rate of Return	16.00%	13%	12%
(+/-) to Existing Market Value	-	-$4,274,942	-$5,057,901
Viability	Viable	Not Viable	Not Viable

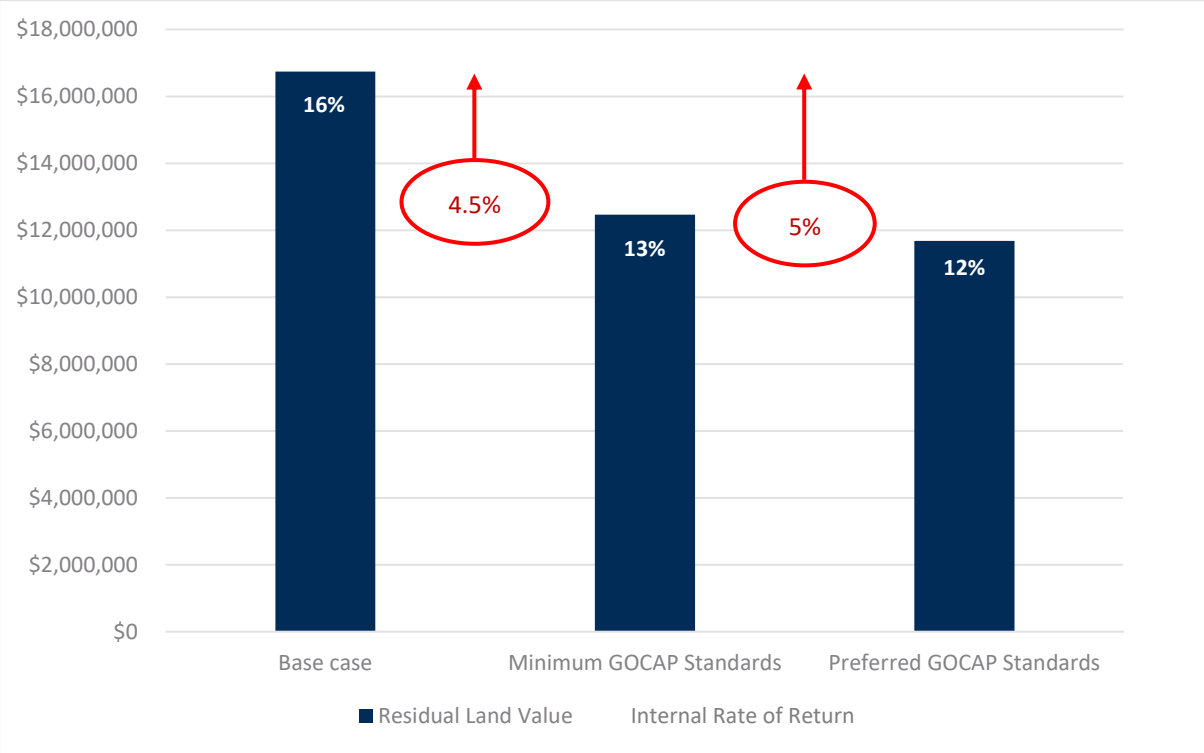
Increase in sales revenue to off-set GOCAP standards

Testing has found the increase in sales revenue required to enable the minimum and preferred options to achieve the target internal rate of return of 16.0% are:

- **Minimum GOCAP standards**: sales revenues would need to increase by 4.5%
- **Preferred GOCAP standards**: sales revenues would need to increase by 5%.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (with price premium)			
Total Revenue	$191,623,862	$201,892,738	$202,941,701
% Uplift from Base Case		4.50%	5%
Viability		**Viable**	**Viable**

The required revenue increases are considered achievable for Test Site 2 based on the market research, which shows that an increase in sales revenue of up to 8% can be achieved by higher quality residential based developments that include ESD features.



TEST SITE 3: LARGE COMMERCIAL PROJECT

Development overview

Test Site 3 is a 17-storey commercial office building with ground floor retail uses and car parking basement levels.

Total costs

RLB estimated the baseline construction cost for the proposed development at $77.9m.

- **Minimum GOCAP standards:** added $2.2m or 2.8% to the total construction costs ($80.1m)
- **Preferred GOCAP standards:** added $2.9m or 3.7% to the total construction costs ($80.8m).

Feasibility testing results

Assuming there is no change to the purchase price or other variables of Test Site 3, the ESD features within the minimum and preferred GOCAP standards would flow through to impact residual land value as follows:

- **Minimum GOCAP standards**: residual land value is decreased by 15.5%
- **Preferred GOCAP standards:** residual land value is decreased by 16.6%.

The baseline project is marginally viable based on the assumptions used for this analysis (achieving a 14% IRR). The additional cost pushes the project into a lower return outcome and is technically unviable using standard financial metrics, particularly if a 16% target return is adopted.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (without price premium)			
Total Revenue	$262,753,173	$262,753,173	$262,753,173
Costs			
Baseline Cost	$77,906,730	$77,906,730	$77,906,730
GOCAP Infrastructure Cost	-	$2,208,156	$2,902,654
Total Building Cost	$77,906,730	$80,114,886	$80,809,384
% Uplift from Base Line	-	2.80%	3.70%
Performance Indicator			
Target Internal Rate of Return	16.00%	16.00%	16.00%
Financial Results			
Land Purchase Price	$50,407,500	$50,407,500	$50,407,500
Residual Land Value	$44,784,386	$42,559,727	$42,006,474
Internal Rate of Return	14%	12.50%	12%
(+/-) to Existing Market Value	-	-$7,847,773	-$8,401,026
Viability	Marginally Viable	Not Viable	Not Viable

Based on the assumptions shown in this analysis, the revenue gain required to achieve a 16% IRR under the Base Case is approximately 4%.

The revenue gain required for the GOCAP minimum standards to achieve a 14% IRR (to align with the base case) is approximately 2.5%. For the preferred standards, the required gain is approximately 3%.

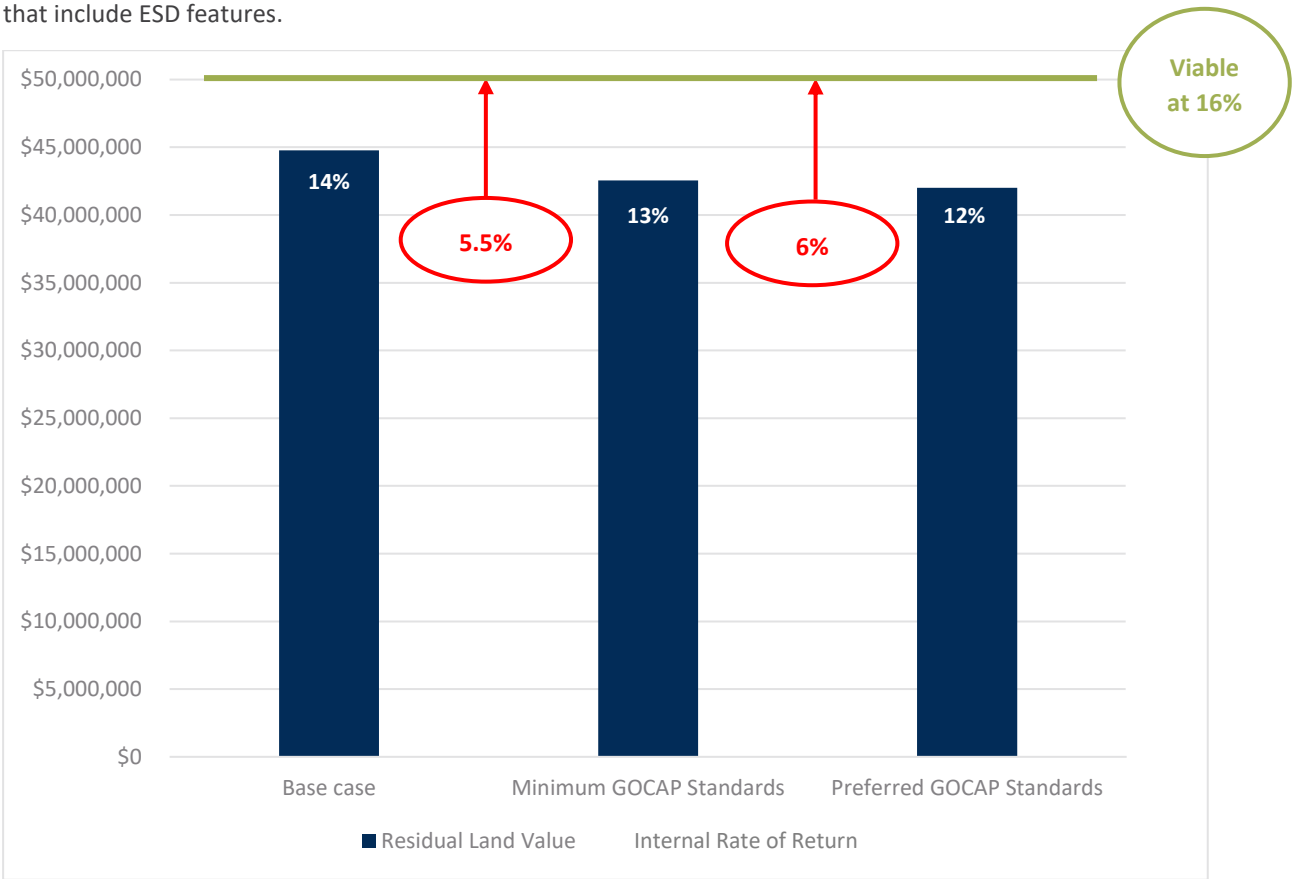
Increase in sales revenue to off-set GOCAP standards and achieve 16% IRR

The increase in sales revenue required to achieve an IRR to 16% is as follows:

- **Minimum GOCAP standards**: sales revenues would need to increase by 5.5%
- **Preferred GOCAP standards**: sales revenues would need to increase by 6%.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (with price premium)			
Total Revenue		$276,272,047	$277,581,394
% Uplift from Base Case		5.5%	6%
Viability		**Viable**	**Viable**

The required revenue increases are considered achievable for Test Site 3 based on the market research, which shows that an increase in sales revenue of up to 7% can be achieved by higher quality commercial developments that include ESD features.



TEST SITE 4: HIGH RISE OFFICE BUILDING

Development overview

Test Site 4 is an 18-storey commercial office building with ground floor land uses and two levels of car parking in the basement levels. A fit-out to the office levels is proposed.

Total costs

RLB estimated the baseline construction cost for the proposed development at $86.1m.

- **Minimum GOCAP standards:** added $2.7m or 3.2% to the total construction costs ($88.8m)
- **Preferred GOCAP standards:** added $3.5m or 4.2% to the total construction costs ($89.6m).

Feasibility testing results

Assuming there is no change to the purchase price or other variables of Test Site 4, the ESD features within the minimum and preferred GOCAP standards would flow through to impact the residual land value as follows:

- **Minimum GOCAP standards**: residual land value is decreased by 12.8%
- **Preferred GOCAP standards:** residual land value is decreased by 13.8%.

The baseline project is marginally viable based on the assumptions used for this analysis (achieving a 14% IRR). The additional cost pushes the project into a lower return outcome and is technically unviable on standard financial metrics, particularly if a 16% target return is adopted.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (without price premium)			
Total Revenue	$312,897,240	$312,897,240	$312,897,240
Costs			
Baseline Cost	$86,101,550	$88,856,415	$89,690,965
GOCAP Infrastructure Cost	-	$2,754,865	$3,589,415
Total Building Cost	$86,101,550	$88,856,415	$89,690,965
% Uplift from Base Line	-	3.20%	4.20%
Performance Indicator			
Target Internal Rate of Return	16.00%	16.00%	16.00%
Financial Results			
Land Purchase Price	$61,255,000	$61,255,000	$61,255,000
Residual Land Value	$55,568,074	$53,402,892	$52,746,978
Internal Rate of Return	14%	13%	13%
(+/-) to Existing Market Value	-	-$7,852,108	-$8,508,022
Viability	Marginally Viable	Not Viable	Not Viable

Based on the assumptions shown in this analysis, the revenue gain required to achieve a 16% IRR under the Base Case is approximately 3.5%.

The revenue gain required for the GOCAP minimum standards to achieve a 14% IRR (to align with the base case) is approximately 1.2%. For the preferred standards, the required gain is approximately 1.6%.

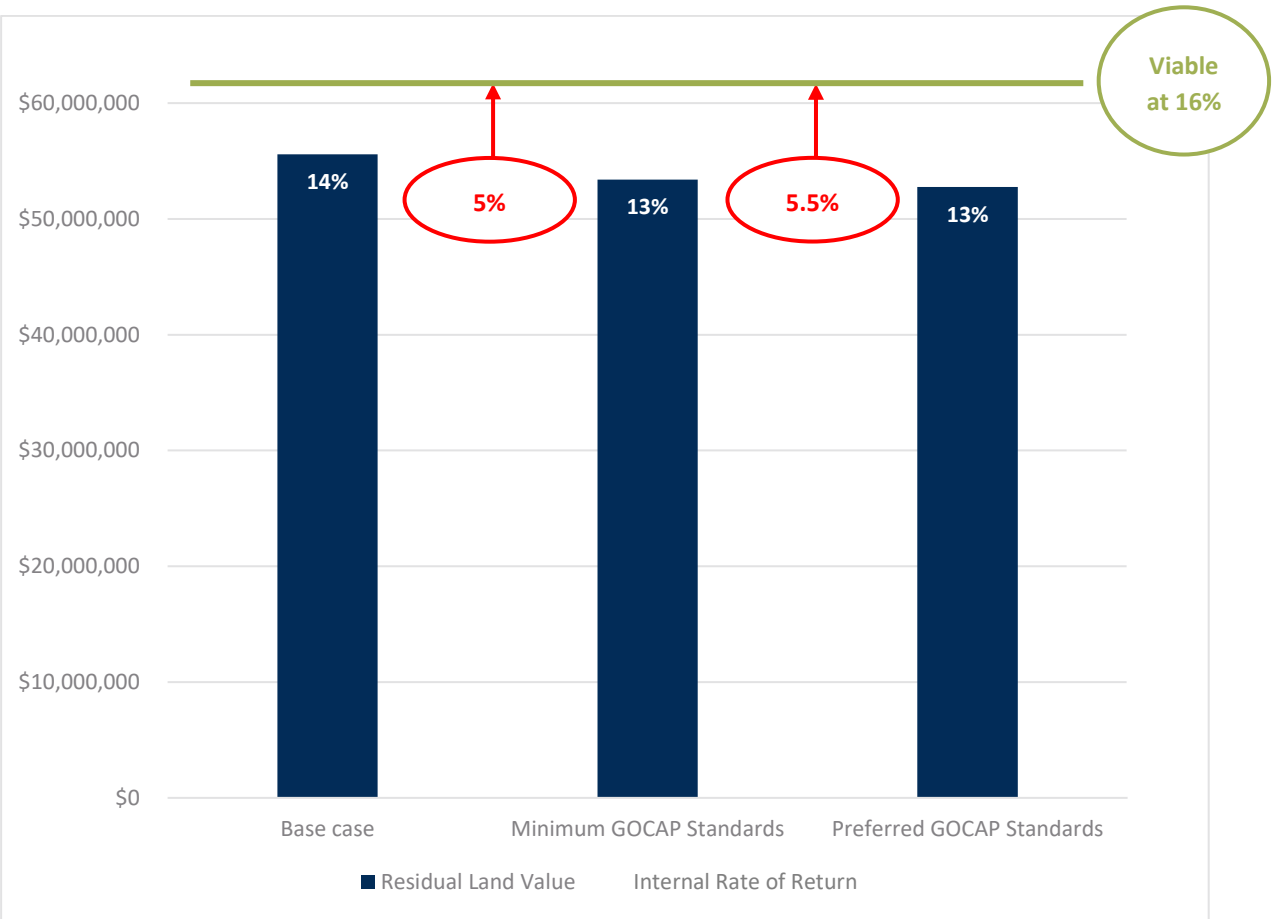
Increase in sales revenue to off-set GOCAP standards and achieve 16% IRR

The increase in sales revenue required to achieve an IRR to 16% is as follows:

- **Minimum GOCAP standards**: sales revenues would need to increase by 5%
- **Preferred GOCAP standards**: sales revenues would need to increase by 5.5%.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (with price premium)			
Total Revenue		$328,542,102	$330,106,588
% Uplift from Base Case		5%	5.5%
Viability		**Viable**	**Viable**

The required revenue increases are considered achievable for Test Site 4 based on the market research, which shows that an increase in sales revenue of up to 7% can be achieved by higher quality commercial developments that include ESD features.



TEST SITE 5: SMALL OFFICE BUILDING

Development overview

Test Site 5 comprises two levels of office space on top of an existing nine-storey carpark.

The proposed two levels of office space are located on level 9, with an additional storey being constructed to create level 10.

It is assumed a developer purchases the strata space for the office development and sells the newly constructed office space post completion.

Total costs

RLB estimated the baseline construction cost for the proposed development at $21.4m.

- **Minimum GOCAP standards:** added $1.9m or 8.9% to the total construction costs ($23.3m)
- **Preferred GOCAP standards:** added $2m or 9.6 % to the total construction costs ($23.5m).

Feasibility testing results

Assuming there is no change to the purchase price or other variables of Test Site 5, the ESD features within the minimum and preferred GOCAP standards would flow through to impact the residual land value as follows:

- **Minimum GOCAP standards**: residual land value is decreased by 30%
- **Preferred GOCAP standards:** residual land value is decreased by 32%.

The baseline project is viable based on the land (strata title) purchase assumptions used for this analysis (achieving a 16% IRR). The additional cost associated with ESD standards pushes the project into an unviable financial position (less than 10% IRR).

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (without price premium)			
Total Revenue	$42,690,081	$42,690,081	$42,690,081
Costs			
Baseline Cost	$21,452,190	$21,452,190	$21,452,190
GOCAP Infrastructure Cost	-	$1,900,785	$2,049,939
Total Building Cost	$21,452,190	$23,352,975	$23,502,129
% Uplift from Base Line	-	8.90%	9.60%
Performance Indicator			
Target Internal Rate of Return	16.00%	16.00%	16.00%
Financial Results			
Land Purchase Price	$5,490,000	$5,490,000	$5,490,000
Residual Land Value	$5,490,000	$3,860,487	$3,740,000
Internal Rate of Return	16%	9.80%	9.30%
(+/-) to Existing Market Value	-	-$1,629,513	-$1,750,000
Viability	Viable	Not Viable	Not Viable

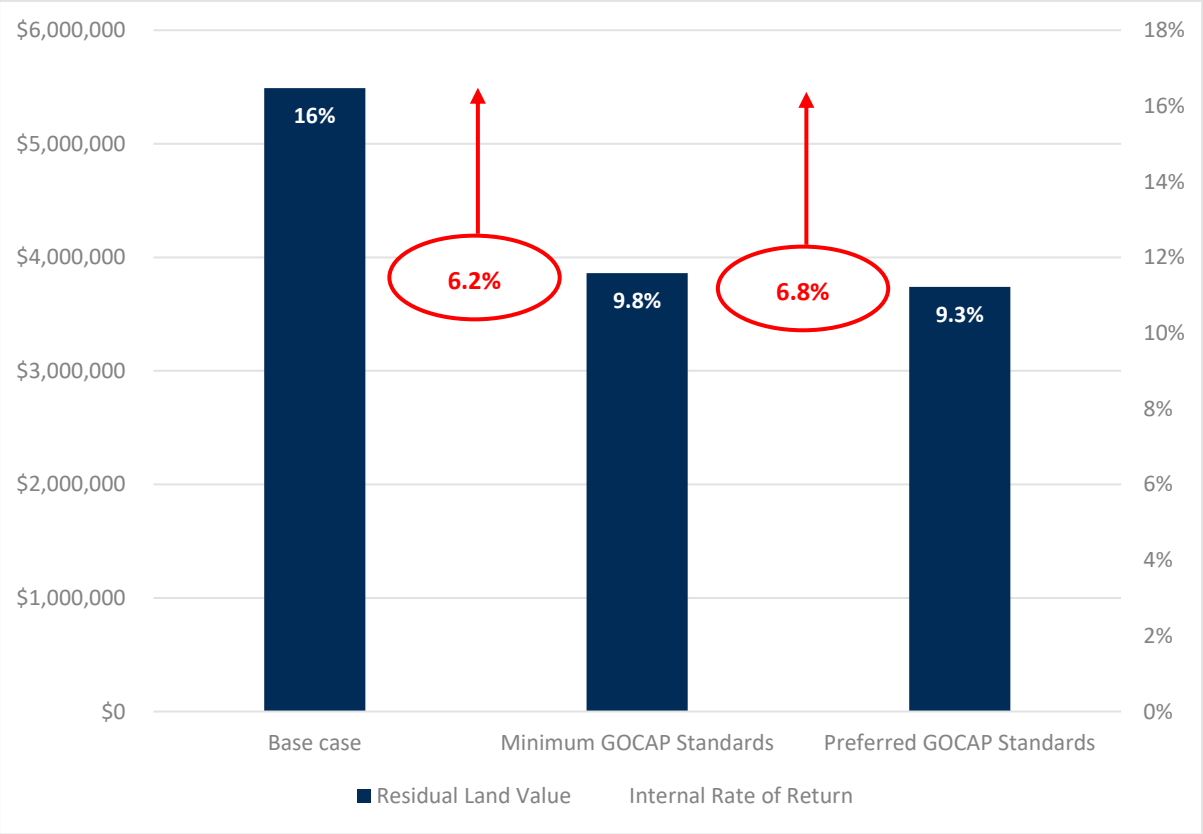
Increase in sales revenue to off-set GOCAP standards and achieve 16% IRR

The increase in sales revenue required to achieve an IRR to 16% is as follows:

- **Minimum GOCAP standards**: sales revenues would need to increase by 6.2%
- **Preferred GOCAP standards**: sales revenues would need to increase by 6.8%.

	Base Case	Minimum GOCAP Standards	Preferred GOCAP Standards
Revenue (with price premium)			
Total Revenue	$42,690,081	$45,336,866	$45,593,006
% Uplift from Base Case		6.2%	6.8%
Viability		**Viable at 16%**	**Viable at 16%**

The required revenue increases are considered challenging but potentially achievable for Test Site 5 based on the market research, which shows that an increase in sales revenue of up to 7% can be achieved by higher quality commercial developments that include ESD features.



FINDINGS

5.0 FINDINGS

5.1 Buildability and construction cost change

The proposed ESD standards can be included in the five case study developments and the impact on construction cost is estimated to be between +2.7% to +9.6% above the baseline cost.

5.2 Increase in sales revenue to offset GOCAP standards

Some planning or building standards have the potential to increase property value, whereas others are sunk costs that add no value. The latter can include changes to unseen elements that provide no additional space or amenity or ongoing cost savings. GOCAP standards, however, have the potential to increase amenity and in some cases provide ongoing cost savings, and as such the potential value uplift generated by delivering the standards must be considered when assessing the merits of such standards.

The analysis undertaken for this report finds that the required premium in sales revenue - to off-set the cost impacts from a developer's perspective for the five hypothetical test sites - is approximately 4% to 6%.

This scale of price change fits within the assessed market research which suggests it can be possible for ESD standards to provide an uplift of up to 7% for commercial property and up to 8% for residential property.

Based on the analysis shown in this report (five case studies), Test Site 5 (small office building within a car park redevelopment) would be most impacted by the ESD standards in terms of cost and would require a price premium gain on end sale values at the high end of observed results to off-set the higher costs from a feasibility perspective.

Figure 4: Required Increase in Sales Revenue to Offset GOCAP Standards

APPENDICES

APPENDIX A: MARKET CONDITIONS

Melbourne property market context

The metropolitan property market is characterised by the following conditions as at September 2021:

- From around January 2020, the COVID-19 pandemic impacted the economy and property market.
- Historically low interest rates are supporting higher values in some property sectors.
- High levels of consumer confidence in domestic property have supported a shift of capital into domestic consumption and property.
- Restrictions on immigration and tourism are negatively impacting some property sectors and locations.

Residential Sector

The inner Melbourne apartment market is experiencing relatively weak leasing and buyer demand conditions at the current time.

In contrast, apartment market conditions in suburbs and regional areas are more buoyant and closer to long term averages. Moreover, demand for separate houses and townhouses across the state is very strong and prices are at or near record highs.

The apartment market in inner Melbourne has been significantly impacted by the halt to international migration and in particular the suspension of the overseas student market. This immigration policy has been implemented by the Commonwealth Government to manage COVID-19.

The shift of demand away from higher-density living at the current time also relates to weaker investor activity and ongoing supply of units in the construction pipeline, which are having a compounding effect on the apartment market.

The inner city apartment market has experienced reduced sales volumes, increasing vacancy rates and lower rental values.

It is anticipated that as projects in construction are completed, the downward pressure on the apartment market will continue unless there is a shift in immigration policy.

However, a factor that is now working to support the inner city apartment market is the recent surge in house prices experienced across the state in 2021. The implication of this surge is that there is renewed pressure on housing affordability and therefore inner city apartments may become relatively more appealing based on price.

Moreover, interest in Australia as a place to live and invest may intensify in the future due in part to the nation's success in managing COVID-19. Realisation of this potential depends on immigration policy and intake.

At the current time, sale prices achieved in the region appear to be holding in the vicinity of $10,000/sqm (variable by precinct), primarily due to vendors and developers holding their asking prices with a view to 'ride out' the current conditions.

However, prices could decline in the next 12 to 18 months if immigration levels are not increased and stock levels for sale increase (such as via forced sales or discounted sales).

We expect the negative conditions impacting the apartment market to flow through to lower construction rates in the next year or two unless international migration is restored.

It is possible that international migration - particularly for students - could be resumed by the Commonwealth Government in late 2021 or early 2022.

The extent of the recovery in the apartment market will in large part depend on the number of international students that are permitted to enter the nation and select Melbourne as their destination.

Office Sector

The inner city office market is sensitive to COVID-19 outbreaks and related movement and business restrictions.

The trend to working from home and social distancing has reduced the use of CBD office space. The CBD and inner city office market is 'on pause' to some extent, with trends difficult to assess at this stage. Available data suggests occupied stock level are stable or in marginal decline, vacancy rates are on the rise and lease incentives are on the rise.

Some agents have reported an increase in demand for suburban office space as firms look to establish operations outside of the most densely populated parts of the city.

Moving forward, demand for flexible workspaces are likely to increase as tenants seek to accommodate staff demands for more flexibility and to better manage business growth uncertainty.

Retail Sector

Some sectors of retail have performed strongly and demand for property has been strong (such as supermarkets & groceries and household goods).

Traditional strip retail precincts - and CBD & inner city precincts that rely on office worker demand - have been weak in terms of leasing and buyer demand. Rising vacancy levels are being reported.

APPENDIX B: MARKET RESEARCH

B.1 Overview

This section provides market research of the residential, commercial and retail markets. The research has been conducted to gain an understanding of the appropriate end sale revenues that could be expected from the redevelopment of each test site.

We note the market evidence over the following pages are based on HillPDA's understanding of the transaction, and while we understand the facts to be generally reliable, we are unable to guarantee the accuracy. As such, the results of our analysis may change should new information come to light.

B.2 Residential market

'Off the plan' sales

Research undertaken for this study and discussions with local agents has identified that there is currently a range of medium and high-density projects in the locality. The table below provides information about both new developments and 'off the plan' sales information for apartments in Melbourne CBD, Southbank and West Melbourne.

Table 2: 'Off the plan' apartment sales, Melbourne

9 Dryburgh Street, West Melbourne

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$385,000-$450,000	52-56	$6,875-$8,653
2 bedrooms	$585,000-$625,000	63-73	$8,018-$9,841
3 bedrooms	-	-	-
Comments	This development is recently completed and is located directly opposite the North Melbourne Train Station. Finishes are standard.		

392 Spencer Street, West Melbourne

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$396,200-$438,000	46-56	$7,050-$9,500
2 bedrooms	$507,250-$688,000	74-76	$6,700-$9,300
3 bedrooms	$710,000	87	$8,150
Comments	392 Spencer Street is a city-fringe development, recently completed with mid-range finishes.		

133 Rosslyn Street, West Melbourne

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$395,000-$470,000	50-66	$5,985-$7,900

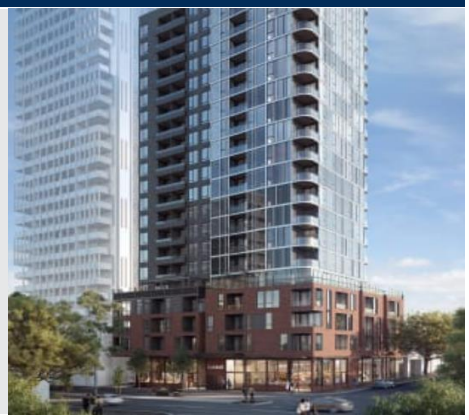
2 bedrooms	$650,000-$723,000	63-83	$7,594-$8,710
3 bedrooms	-	-	-
Comments	"Roslyn Apartments" consists of 165 apartments spread over one, two and three-bedroom apartments.		

'The Adderley', 112 Adderley Street, West Melbourne

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$526,000	50	$10,520
2 bedrooms	$770,000 - $890,000	85-95	$9,058 – $9,368
3 bedrooms	-	-	-
Comments	This apartment building is close to the Flagstaff, Queen Victoria Markets and Docklands, 800m from Southern Cross Station with mid-range finishes.		

'Parkhill Apartments', 408 Spencer Street, West Melbourne

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$479,000 – 489,000	48-54	$9,056 – $9,979
2 bedrooms	$579,000 - $669,000	62-89	$7,516 - $9,339
Comments	Located 100m from Flagstaff Gardens and 800m from Southern Cross Station, Parkhill Apartments is located in the high-growth area of West Melbourne. The building has mid to high range finishing with a rooftop garden, gym and concierge.		



Source: Sales Agents, RPData 2020-21 and Cordell Connect

Table 3: House sales in South Yarra

Site	Description	Sale date	Site area	GFA	Sale price	$/sqm GFA
36 Surrey Road South Yarra, VIC, 3141	4-bedroom heritage terrace house	10 Apr 2021	323	225	$3.3m	$14,667
8 Cassell Street South Yarra, VIC, 3141	4-bedroom recently renovated two-storey detached house	20 Apr 2021	335	204	$2.85m	$13,970
22 Palermo Street South Yarra, VIC, 3141	4-bedroom recently renovated single storey terrace house	13 May 2021	227	163	$2.2m	$13,496
13 Barry Street South Yarra, VIC, 3141	Single-storey duplex house with approval for two three-bedroom residences across three levels	6 Dec 2020	440	175	$1.85m	$10,571

Source: RPData 2020-21 and Cordell Connect

In analysing the data from the key developments in Melbourne and the surrounding areas show a wide range of achievable values per square metre of floor space for new apartment sales:

- **West Melbourne:** $7,000 to $9,500/sqm
- **South Yarra:** $13,500 to $14,500/sqm

Development site sales

The land value per unit is a measure derived by dividing the land value by the total number of units proposed on a site. The land value per proposed dwelling varies across Melbourne with higher rates within the CBD and surrounding areas.

Table 4: Land value per unit for Development Sites, Melbourne and Surrounds, Apartments

Address	Price	Date Reported	GFA	$/sqm GFA	Approval	Units	Land Value $/Unit
640-652 Bourke Street, Melbourne	$99.0mil	Apr-19	83,950	$1,179	No	857	$115,519
140-146 King Street, Melbourne	$31.9mil	Mar-19	15,215*	$2,097	Yes	202*	$157,921
145-147 Rosslyn Street, West Melbourne	$2.0mil	Sep-18	-	-	Yes	19	$105,263
32-44 Flinders Street, Melbourne	$87.1mil	Jul-18	39,000*	$2,233	No	496	$175,605
85 Spring Street, Melbourne	$75.0mil	Jan-17	18,875*	$3,974	No	225*	$333,333
51-65 Clarke Street, Southbank**	$30.4mil	Sep-14	7,204	$4,220	No	119	$255,462

* Estimate

Source: HillPDA 2020 and RPData

B.3 Commercial market

According to the Savills Research *Quarter Time – National Office Q1/2021* report the Melbourne CBD Office had office vacancy of 8.2% versus the national CBD rate of 11.1%. Southbank saw a 12.3% vacancy rate.

Net effective rents have dropped, vacancy rates and incentives have increased, and while there is limited sale data to show the current impacts of COVID-19, current yields should expand. The speculative development projects that are planned may be put on hold until additional evidence surrounding the complete impact of COVID-19 on the commercial property market is understood.

The table below highlights the key market indicators for the Melbourne CBD's office market by building grade.

Table 5: Melbourne CBD commercial market key indicators

	Premium		A Grade		B Grade	
	Low	High	Low	High	Low	High
Gross Face ($/sqm)	850	1,150	730	905	565	685
Net Face ($/sqm)	650	950	550	725	400	520
Incentive (%)	30%	40%	30%	40%	30%	40%
Net Effective ($/sqm)	425	620	360	470	260	340
Outgoings	170	225	160	195	145	185
Typical Lease Term	5	8	4	8	2	5
Market Yield (%)	4.25	4.75	4.5	4.88	5.00	5.50
IRR (%)	6.00	6.25	6.00	6.25	6.25	6.75
Office Capital Values ($/sqm)	13,000	21,000	10,000	15,000	8,000	10,000

Source: Savills Research, 2021. *Quarter Time – National Office Q1/2021*. Savills, 2021. p. 9.

Recent commentary on COVID-19 economic impacts provided by Westpac valuation experts point towards a potential decrease in commercial asset values across Australia of up to 30-40%. The speculation relates to the decrease in market rents across the CBD's where tenants are receiving rent abatements from landlords as business' revenue has been severely impacted. While this will not impact the valuation of commercial office towers now, in a few months if the businesses are still unable to pay the rent and there are no prospective tenants seeking commercial office space substantial devaluations may occur.

Leasing evidence

Melbourne rental rates were steady in the December quarter, with slowed volumes a result of a lack of available options. Melbourne CBD and St Kilda Road rental growth was flat in the period, while the fringe continued to grow as tenant demand for space in the Richmond/Cremorne and Southbank locations increases.

Discussions with local leasing agents confirmed that prime grade office space within the Melbourne CBD would achieve $650 to $950/sqm net face plus $160 to $215/sqm for outgoings, A-grade office space would achieve $550 to $725/sqm net face plus $150 to $185/sqm for outgoings and secondary grade office buildings rents achieved a range from $440 to $560/sqm net face plus $135 to $175/sqm for outgoings.

We have had regard to the following leasing evidence, which we consider set the parameters by which the market rents may be determined. Recent rental transactions in the Melbourne CBD show a net rental range of $520 to $690/sqm per annum.

Table 6: Melbourne CBD commercial market leasing evidence

Address	Tenant	Date	Term (yrs)	NLA (sqm)	Rate $/sqm
447 Collins Street, Melbourne	ESuperFund	Apr-19	12	10,500	$670 (n)
447 Collins Street, Melbourne	Future Fund	Apr-19	-	4,500	$690 (n)
525 Collins Street, Melbourne	Public Transport Victoria	Mar-19	10	10,000	$550 (n)
120 Spencer Street, Melbourne	WeWork	Oct-18	15	8,720	$520 (n)
452 Flinders Street, Melbourne	VLine	May-19	-	5,972	$570 (n)
839 Collins Street, Melbourne	QBE	Feb-19	10	5,700	$550 (n)
130 Lonsdale Street, Melbourne	Servicenow	Feb-19	10	3,800	$650 (n)
130 Lonsdale Street, Melbourne	Telstra Super	Sep-18	10	3,300	$535 (n)
222 Exhibition Street, Melbourne	WeWork	Aug-18	12	5,250	$595 (n)

Source: Savills Research, 2019. *Briefing – Melbourne CBD Office June 2019*. Savills: Sydney, 2019. p. 5.

We would consider that a net rental of $500 to $650/sqm of NLA would be reasonable for the test sites given redevelopment.

Sales evidence

As of June 2021, average Premium-Grade capital values in the Melbourne CBD were between $13,000 to $21,000/sqm of NSA, A-grade capital values were between $10,000 to $15,000/sqm of NSA, while B-grade capital values were between $8,000 and $10,000/sqm of NSA.[1]

The research revealed the following sales, which showed a capital value rate between $6,156 to $14,057/sqm of NSA and equivalent yield ranged from 4.70-5.80%.

Table 7: Central Melbourne commercial market sales evidence

Address	Sale date	Sale price	NSA (sqm)	Rate ($/sqm)	Comments
505 Little Collins Street, Melbourne	Mar-21	$155mil	17,809	$8,703	B-Grade, eleven-storey office building in legal precinct.
405 Bourke Street, Melbourne	Nov-20	$800mil	66,000	$12,121	A-grade recently completed 5 Star Green Star Office Design rating and a minimum 5 Star NABERS Energy Rating post completion 100% pre-committed lease by NAB.
242 Exhibition Stree Melbourne	Jun-19	$830.0mil	65,398	$12,692	A-Grade 47-storey office tower. Telstra Headquarters.
212 King Street, Melbourne	Jun-19	$22.1mil	450	$49,111*	Three-storey mixed-use building with potential upside.
737 Bourke Street, Docklands	May-19	$192.0mil	18,500	$10,378	A-Grade eight-level office building with ground-floor retail. Sold on a 5.1% yield with 98% occupancy and a WALE 5.5 years.
85 Spring Street, Melbourne (Eastern Core)	Apr-19	$112.0mil	10,299	$10,874	B-grade 16-storey office building above Parliament station.
80 Collins Street, Melbourne (Eastern Core)	Mar-19	$1,476.0mil	105,000	$14,057	An existing A-Grade 47-storey office tower and a new 35-storey premium office and hotel building.
520 Collins Street, Melbourne (Western Core)	Feb-19	$78.0mil	8,554	$9,119	B-Grade 16-storey building in Melbourne's legal precinct.
501 Church St, Richmond	Feb-19	$7.0mil	502	$10,853	Two-level commercial building with showroom and offices.
288 Queen Street, Melbourne	Jan-19	$25.9mil	2,728	$9,494	B-Grade, six-storey mixed use building in legal precinct.

[1] Savills Research, 2021. Quarter Time – National Office Q1/2021

Address	Sale date	Sale price	NSA (sqm)	Rate ($/sqm)	Comments
104 Exhibition Stree Melbourne (Eastern Core)	Dec-18	$37.1mil	2,305	$16,095	B-Grade building in Melbourne's east end. Tenants include QIC Group, GSA and Multiplex.
818 Bourke Street, Docklands	Oct-18	$223.3mil	23,322	$9,575	Large floor-plate office in Docklands business district with water views.
555 Collins Street, Melbourne	Oct-18	$140.0mil	22,743	$6,156	B-Grade building on Collin St's west end.
26 King Street, Melbourne	Oct-18	$12.0mil	1,200	$9,983	Four storey mixed-use commercial office building.
225 Queensberry St, Carlton	Oct-18	$6.2mil	646	$9,559	Two-storey converted warehouse.
60 Collins Street (Eastern Core)	Sep-18	$160.0mil	13,817	$11,580	B-Grade building on Collin St's east end.
52 Collins Street, Melbourne (Eastern Core)	Sep-18	$70.0mil	3,454	$20,266	Boutique office above heritage building on Collins St's east end. Tenants include ANU, Netwealth Investments, Optus and Medici Capital.
105 York St, South Melbourne	Sep-18	$49.0mil	5,101	$9,606	Purchased by Patterson Cheney Holdings.
181-183 King Street, Melbourne	Aug-18	$5.9mil	150	$39,740*	Four level mixed use building with potential upside.
277 William Street, Melbourne	Jul-18	$93.9mil	12,080	$7,772	Fully leased, 12-storey, B-Grade office building in Melbourne's legal precinct.
160 Harbour Esplanade, Docklands	Jun-18	$100.0mil	7,980	$12,531	Decade-old 4-storey building fronting water.
189-191 King Street, Melbourne	Jun-18	$5.9mil	371	$15,768	Old two-level mixed-use building.
825 Bourke Street, Docklands	Nov-16	$72.7mil	10,164	$7,153	Built by Lendlease in 2008, first commercial sector development to win a six-star green star rating.

* Sold with development uplift potential

Source: Savills Research, 2019. *Briefing – Melbourne CBD Office June 2019*. Savills: Sydney, 2019. p. 5.

We would consider that a capital value of $12,000 to $15,000/sqm of NSA would be reasonable for the test sites given redevelopment.

Development site sales

The recent development site sales shows a rate range of $1,233 to $3,348/sqm of GFA. The wide range between the sales is due to two sites hosting existing commercial uses (greater improved value).

555 Collins Street, Melbourne

555 Collins Street, Melbourne is a site located on the corner of Collins and King Street in the Melbourne CBD. The development site was sold with a 25-storey modernist concrete office building that replaced the Federal Coffee Palace on the site in 1973. The site has a near regular shape enclosing approximately 2,298sqm of land. The land is currently zoned Capital City Zone – Schedule 1 with approval for 46,000sqm of mainly commercial floorspace with some ground-floor retail. The property was purchased by property investment fund Charter Hall.

555 Collins Street, Melbourne	
Sale Price	$154,000,000
Date	July 2018
Land Area	2,298sqm
Gross Floor Area (Net Leasable Area)	46,000sqm (39,100sqm)
Zoning	Capital City Zone – Schedule 1
Land analysis	$67,015/sqm of site area $3,348/sqm of GFA

Source: RPData 2020

1000 La Trobe Street, Docklands

1000 La Trobe Street, Docklands is a site located directly opposite Etihad Stadium on an in-fill site between 1010 La Trobe Street and the new Melbourne Water headquarters at 990 La Trobe Street. The land is currently zoned Docklands Zone – Schedule 5 with approval for a 37,650sqm of NLA of mainly commercial floorspace with ground and lower ground levels and podium retail. The property was purchased by property developer Poly.

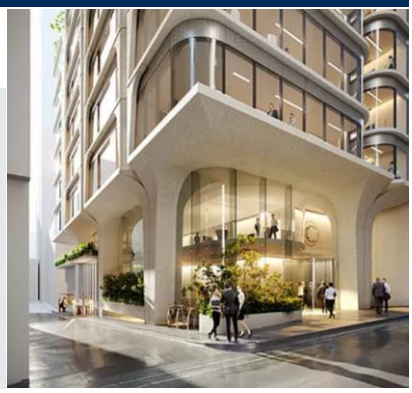
1000 La Trobe Street, Docklands	
Sale Price	$40,700,001
Date	August 2016
Land Area	5,136sqm
Gross Floor Area (Net Leasable Area)	37,650sqm (33,000sqm)
Zoning	Docklands Zone – Schedule 5
Land analysis	$7,924/sqm of site area $1,233/sqm of GFA

Source: RPData 2020

130 Little Collins Street, Melbourne

The 27-storey office building will provide car parking across three basement levels, end-of-trip facilities and garden terraces. The building will also look to target 5-Star NABERS, 5-Star Green Star Design & As-Built, in addition to WELL Certification. The project is due for completion by 2023.

130 Little Collins Street, Melbourne	
Sale Price	$40,500,000
Date	July 2019
Land Area	651sqm
Gross Floor Area (Net Leasable Area)	Estimated 16,000 NLA

130 Little Collins Street, Melbourne		
Zoning	Capital City Zone Schedule 1	
Land analysis	$62,222/sqm of site area $2,531/sqm of GFA (estimated)	

Source: RPData 2021

266-270 Queen Street Melbourne

The 3-storey office building offers significant redevelopment potential. It is located in the between the legal district and Melbourne Central.

266-270 Queen Street Melbourne		
Sale Price	$16,610,193	
Date	January 2021	
Land Area	457sqm	
Gross Floor Area (Net Leasable Area)	N/A	
Zoning	Capital City Zone Schedule 1	
Land analysis	$36,346/sqm of site area	

Source: RPData 2021

B.4 Retail market

Sales evidence

While there have been limited sales over the past year since COVID-19, we have investigated recent market activity in the Melbourne CBD and have had particular regard to the following sales evidence, which we consider setting the market parameters by which the end sale revenue may be determined:

- Transaction volumes across Australia over the 12 months to March 2021 were recorded at $5.2 billion, which was down 34% on the previous year
- Rents for prime retail in Melbourne CBD are down 22.5% from the previous year, and down 4.9% from the previous quarter
- Prime yields for freehold street frontage retail assets sit within a range of 3.00%-4.00%, and for strata retail assets sit between 3.50-4.50%. Melbourne CBD super prime yields are 3.75% as of Q1 2021.

The table below shows recent freehold transactions which indicate a range of $13,686 to $70,769/sqm of NSA. The net sellable area on a per square metre basis is heavily influenced by their location, yield, improvements, proximity to customers and transport infrastructure.

Table 8: Melbourne CBD Retail market sales evidence

Address	Sale Date	Sale Price	NSA (sqm)	Rate ($/sqm)	Comments
608-610 Collins Street, Melbourne	Dec-20	$19mil	418	$47,287	Prime Collins Street Southern Cross intersection property
26 Katherine Place, Melbourne	Jan-21	$933,713	31	$30,119	Ground floor lunch/café outlet in laneway in commercial district
39A/601-611 Little Collins Street, Melbourne	Feb-21	$1.68mil	26	$64,615	Ground floor café/retail shop on Little Collins beneath office building
375 King Street, West Melbourne	Mar-19	$460,000	57	$8,070	Ground floor restaurant or retail property at the base of a 10-year old office building.
187 King Street, Melbourne	Jun-18	$4.9mil	275	$17,745	Double-storey building with Japanese restaurant sold on a 3.32% yield.
189-191 Bourke Street, Melbourne	Oct-18	$13.0mil	576	$65,657	Old three storey building on the southern side of Bourke Street.
398 Elizabeth Street, Melbourne	Oct-18	$7.9mil	303	$29,373	Ground-floor retail shop. May have been apart of a larger development site.
620 Collins Street, Melbourne	Nov-18	$21.6mil	639	$33,725	Super prime corner position on Collins and Spencer Street. Sold on a 4.13% yield.
273 Swanston Street, Melbourne	Mar-20	$9.2mil	130	$70,769	Double storey building with hospitality operator with 4% fixed annual rental increases.
85 A'beckett Street, Melbourne	Oct-18	$1.45mil	60	$24,167	Retail with Elizabeth Street frontage with restaurant
199 William Street, Melbourne	Jan-19	$5.05mil	369	$13,686	Ground floor gym in western core
349 Elizabeth Street, Melbourne	Oct-18	$6.81mil	237	$28,692	Two-storey building opposite Melbourne Central

Source: RPData and Knight Frank Research, 2019. *Market Brief – Melbourne CBD Retail June 2019*. Knight Frank: Melbourne, 2019. p. 3.

APPENDIX C: ESD FEATURES MARKET RESEARCH

C.1 Overview

Literature and market research have been reviewed to assess the possible property value impacts of the proposed GOCAP standards and to specifically examine whether previous research has found a link between a sales premium and properties with ESD features.

C.2 Residential

ESD features price variation in existing literature

The findings of the research are:

- Greenery and sustainability both contribute to increased property values and reduced property spend. Proximity to green spaces was found to generally uplift property prices with the addition of tree canopy accounting for a 10% to 15% uplift in property value in Subiaco, Western Australia[2]
- Along with increased property value, there are economic benefits through costs savings due to the ESD designs. Green Star certified buildings were found to use 66% less electricity than the average Australian building
- A US report highlighted the implementation of green roofs in Washington D.C. would add an estimated $10 of value per square foot of green roof (and $13 when applied nationally).[3] The increased aesthetic of properties with greenery often results in more positive perceptions and in turn, increased value and sale prices
- Another report found that building improvements such as increased insulation, double glazed windows and ceiling fans amongst a variety of alterations could help reduce 19-25% of the energy required to deliver net-zero energy. Other benefits of sustainable design and greenery were noise reductions for residents, with one report finding that proximity to greenery and tree canopies contributed to sound-dampening effects
- The Arup *San Francisco Living Rod Cost-Benefit Study* in 2016 highlighted that inaccessible green roofs would add an estimated $27 of value per square foot (net 0.96%).

Other reports discussing the financial benefits of providing ESD features within developments showed improvements of 7-20% in value.

Research Paper	ESD Features Element	Estimated Premium
Valuing Green Guide: green roofs, walls and facades in the City of Melbourne	Inaccessible green roof	$172.56/sqm of roof (7-20%)
	Accessible green roof	$234.32/sqm of roof (7-20%)
	Walls and facades	1.4-3.9% of property value
Environmentally Efficient Design Planning Policies Pitt & Sherry (2013)	Energy efficiency, water efficiency, stormwater, urban ecology, innovation	$105/sqm GFA of large multi-unit residential buildings

[2] Yew, 2012
[3] United States General Services Administration, 2011

ESD features price variation examples

East Brunswick Village

East Brunswick Village is a residential and retail precinct located in Melbourne's inner north. It is marketed as an environmentally conscious development.

The developments achieves a 7.5-star average NatHERS rating and operationally carbon neutral status.

Premium ESD Features

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$430,000 - $469,000	52 – 71	$6,605 - $8,269
2 bedrooms	$595,000 - $760,000	69 – 74	$8,623 - $10,270
3 bedrooms	$750,000 - $930,000	79 – 96	$9,493 - $9,687

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
209/9 Village Avenue	**1 bedroom**	**$459,000**	**61**	**$7,524**
211/26 Barkly Street	1 bedroom	$405,000	56	$7,265
304/91-93 Nicholson Street	1 bedroom	$360,000	56	$6,428
104/6-8 Gamble Street	1 bedroom	$380,000	56	$6,817
303/9 Village Avenue	**2 bedroom**	**$639,500**	**77**	**$8,305**
206/65 Nicholson Street	2 bedroom	$520,000	64	$8,125
502/85 Nicholson Street	2 bedroom	$460,000	56	$8,214
Average Premium for ESD Features				**2-10%**

Source: RP Data 2021

'Breese Street' 58 Breese Street, Brunswick (estimated completion September 2020)

"Breese by Milieu is a collection of 1, 2 and 3-bedroom apartments designed by DKO Architecture and Brunswick locals Breathe Architecture. The development is inspired by other local, sensitively designed projects, and answers the community feedback received via Milieu's Liveability Survey".

Premium ESD Features

"The development will be fossil fuel-free, with a 7.9-star sustainability rating and a maximum of five neighbours per floor, it's a building designed for a daily life in easy synergy with our environment". The design includes pragmatic apartment layouts and a communal rooftop garden with veggie patches.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$485,000-$495,000	58	$8,362-$8,534
2 bedrooms	$750,00-$855,000	76-86	$9,868-$9,942
3 bedrooms	$1,025,000-$1,150,000	115-120	$8,913-$9,583

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
204A/58 Breese Street, Brunswick	**1 bedroom**	**$495,000**	**58**	**$8,534**
313/288 Albert Street, Brunswick	1 bedroom	$390,000	51	$7,647
414/8 Logon Street Brunswick East	1 bedroom	$360,000	52	$6,923
215/300 Victoria Street, Brunswick	1 bedroom	$496,000	51	$9,725
306A/58 Breese Street, Brunswick	**2 bedrooms**	**$855,000**	**87**	**$9,868**
207/300 Victoria Street, Brunswick	2 bedrooms	$515,000	62	$8,306
309/8 Lyon Street, Brunswick East	2 bedrooms	$708,000	75	$9,440
401A/58 Breese Street, Brunswick	**3 bedrooms**	**$1,150,000**	**125**	**$9,200**
905/288 Albert Street, Brunswick	3 bedrooms	$830,000	102	$8,137
506/11-15 Brunswick Road, Brunswick East	3 bedrooms	$963,000	120	$8,025
Average Premium for ESD Features				**5-14%**

Source: RPData 2020

'Little Miller' 55-63 Nicholson Street, Brunswick East (completed 2020)

East Brunswick's Little Miller is one of the most sustainable residential developments in Victoria with a 7.5-star average NatHERS thermal performance rating. It also provides abundant green spaces to the 100% fossil fuel-free building operations. Little Miller is a collaboration between ClarkeHopkinsClarke, Breathe Architecture and Openworks.

"Little Miller is a building for the future, using a largely renewable materials palate that also creates a healthier environment for its inhabitants. These homes also utilise an embedded energy network in conjunction with a renewable energy supplier".

"Electricity at Little Miller will be supplied via an embedded network which will use a variety of renewable energy sources to power all apartments as well as common areas. This ensures that all residents are supplied with green power, contributing to a fossil fuel-free development. Energy-saving LED light fittings will be used to reduce costs as LEDs use 25% to 30% less energy and last eight to 25 times longer than halogen incandescent".

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$558,372	55	$10,152
2 bedrooms	$648,472-$700,884	68-72	$9,536-$9,735
3 bedrooms	$833,869-$953,936	90-91	$9,265-$10,482

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
305/55 Nicholson Street, Brunswick East	**1 bedroom**	**$558,372**	**55**	**$10,152**
601/240-250 Lygon Street, Brunswick East	1 bedroom	$410,000	45	$9,111
103/100 Nicholson Street, Brunswick East	1 bedroom	$340,000	37	$9,189
403/55 Nicholson Street, Brunswick East	**2 bedrooms**	**$700,884**	**72**	**$9,735**
606/240-250 Lygon Street, Brunswick East	2 bedrooms	$535,000	57	$9,386
505/100 Nicholson Street, Brunswick East	2 bedrooms	$610,000	65	$9,384
506/55 Nicholson Street, Brunswick East	**3 bedrooms**	**$953,936**	**91**	**$10,482**
706/240-250 Lygon Street, Brunswick East	3 bedrooms	$1,050,000	115	$9,130
408/26 Lygon Street, Brunswick East	3 bedrooms	$864,000	86	$10,046
Average Premium for ESD Features				**3-11%**

Source: RPData 2020

'One Central Park' 28 Broadway, Chippendale (completed 2013)

One Central Park is an award-winning mixed-use building located in Sydney, Australia in the suburb of Chippendale. Developed as a joint venture between Frasers Property and Sekisui House, it was constructed as the first stage of the Central Park urban renewal project. It was designed by Jean Nouvel and PTW Architects and has won numerous awards for ESD and architecture.

The building comprises two residential apartment towers, an east and west tower, in addition to a six-level retail shopping centre at the base of the towers. In 2013, One Central Park was awarded a 5 Star Green Star – 'Multi-Unit Residential Design v1' Certified Rating by the Green Building Council of Australia, making it the largest multi-residential building (by net lettable area) in Australia to receive such a designation.

One Central Park is characterised by its low-emission central thermal tri-generation power plant, water recycling plant, light-reflecting heliostat, rooftop gardens, smart metering systems and wide-open green spaces. The building is coated in green walls which moderate temperature. It is located 200m from Central Station and is on a major bus route.

Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$750,000-$900,000	55-65	$13,636-$13,846
2 bedrooms	$765,000-$990,000	72-83	$10,625-$11,928
3 bedrooms	$865,000-$1,205,000	83-94	$10,422-$12,819

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
1202/3 Carlton Street, Chippendale	**1 bedroom**	**$750,000**	**59**	**$12,712**
814/349-357 Bulwara Road, Ultimo	1 bedroom	$585,000	47	$12,447
1310/8 Park Lane, Chippendale	1 bedroom	$565,000	52	$10,865
402/3 Park Lane, Chippendale	1 bedroom	$575,000	50	$11,500
512/3 Carlton Street, Chippendale	**2 bedrooms**	**$990,000**	**83**	**$11,928**
709/178 Thomas Street, Haymarket	2 bedrooms	$870,000	74	$11,757
404/8 Park Lane, Chippendale	2 bedrooms	$800,000	84	$9,524
1207/178 Thomas Street, Haymarket	2 bedrooms	$984,900	83	$11,866
Average Premium for ESD Features				**8-10%**

Source: RPData 2020

'Illura' 87-101 Roden Street, West Melbourne (completed 2013)

Superficial ESD Features

This architecturally designed modern apartment building is located in an older inner-city suburb of West Melbourne.

"The contemporary mixed with old suburban buildings works well with the vertical garden plus a deep soil zone in the rear courtyard of the property complementing the design".

"The vertical garden is made up of four sections and used as a street view making a powerful impact. The series of elevated sections of the gardens face north east hence they are all drought tolerant and sun hardy species".

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
211/89 Roden Street, West Melbourne	**1 bedroom**	**$415,000**	**45**	**$9,222**
215/89 Roden Street, West Melbourne	**1 bedroom**	**$435,000**	**45**	**$9,667**
202/118 Dudley Street, West Melbourne	1 bedroom	$365,000	44	$8,295
402/118 Dudley Street, West Melbourne	1 bedroom	$400,000	44	$9,091
111/97-103 Flemington Road, North Melbourne	1 bedroom	$335,000	42	$7,976
Average Premium for ESD Features				**5%**

Source: RPData 2020

'Triptych' 8 Kavanagh Street, Southbank (completed 2011)

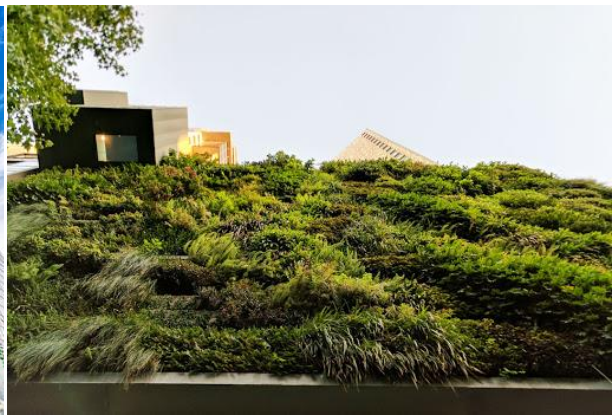
"The unique collaboration of designers, including Carr architects and public spaces designer team from Patio results in a living space that provides unique features such as its vertical villages and living walls. Doing away with dark and the disorientating effect of enclosed corridors, at Triptych each apartment opens out onto a vertical village featuring a nine-metre high glass atrium with a live green living wall and communal space for residents to enjoy".

Superficial ESD Features

Every three storeys at Triptych forms a vertical village, comprising between 10 and 27 apartments, these open spaces provide an open-air atrium with views toward Port Phillip Bay.

"Vertical villages with their three-storey open foyers bring swathes of light into the apartment's entry points while the living walls, featuring growing vines, bring a calming experience directly into each space".

The concept has arisen from the European idea of community living where one doorway leads to an enclave featuring five or six homes and becomes its own life force where neighbours can choose to interact or enjoy the open space.



Bedrooms	Price Range	Sqm (internal)	$/sqm (internal)
1 bedroom	$745,000	81	$9,198
2 bedrooms	$861,000	90	$9,567

Comparison with similar sales				
Address	**Bedrooms**	**Sale price**	**Sqm (internal)**	**$/sqm (internal)**
1707/8-10 Kavanagh Street, Southbank	**1 bedroom**	**$745,000**	**81**	**$9,198**
1111/118 Kavanagh Street, Southbank	1 bedroom	$406,000	44	$9,227
1209/135 City Road, Southbank	1 bedroom	$435,000	53	$8,207
1208/9 Power Street, Southbank	1 bedroom	$580,000	55	$10,545
1209/8-10 Kavanagh Street, Southbank	**2 bedrooms**	**$861,000**	**90**	**$9,567**
1305/118 Kavanagh Street, Southbank	2 bedrooms	$605,000	69	$8,768
1803/135 City Road, Southbank	2 bedrooms	$715,000	70	$10,214
1304/241-243 City Road, Southbank	2 bedrooms	$689,000	84	$8,202
Average Premium for ESD Features				**-1-10%**

Source: RPData 2020

Residential Sector Findings

The findings of the research follow:

- Properties with ESD features sold for between 3-14% greater than the average of comparable transactions
- Premiums below 5% may not be directly attributed to the ESD features and may be attributed to variations in location, size, fixtures and fittings, views or quality
- Properties with ESD features tended to have a larger NSA and higher quality fittings, indicating that ESD features are often part of a high-end or luxury apartment product
- It was assumed ongoing cost savings along with perceptions of amenity and image from ESD features are in part capitalised in the sales premium that people are willing to pay in exchange for future energy savings price paid
- The Triptych apartments in Southbank had conflicting price variations. The apartment sizes in Triptych are larger than the comparable developments, and they did not sell for proportionally higher under a luxury branding. Southbank had a large supply of apartments during this period, which may have led purchasers elsewhere. While this was only a marginal variation of -1 to 10%, this example shows that ESD features are often associated with higher NSA apartments, which at the time sold for lower per sqm
- One Central Park, Chippendale, was a landmark building designed by an award-winning architect, and therefore a premium can be attributed to design excellence when compared to comparable sales
- For transactions in 2020 comparable to 58 Breese Street in Brunswick, a premium of 5-14% was achieved. Other transactions in 2020 comparable to 55-63 Nicholson Street in Brunswick East, a premium of 3-11% was achieved.

Overall, premiums achievable in Melbourne as a result of ESD features are expected to be between 3-8%.

C.3 Commercial

ESD features price variation in existing literature

Research in commercial property found that if a single building cuts its peak demand by one kilowatt (kW), equivalent to the power used to run a small oil heater, it is estimated this will save almost $1,000 in required investment in electricity system infrastructure, reducing electricity prices for everyone.[4]

Research Paper	ESD Features Element	Estimated Premium
San Francisco Living Roof Cost-Benefit Study Arup, 2016	Inaccessible green roof	US$40/sq ft of roof Net 0.96%
The Benefits and Challenges of Green Roofs on Public and Commercial Buildings, Washington DC United States General Services Administration, 2011	Inaccessible green roof	2.5% nationally 3.3% in Washington DC US$130/sqm of roof nationally US$108/sqm of roof in Washington DC
Valuing Green Guide: green roofs, walls and facades in the City of Melbourne	Inaccessible green roof	Sole occupant: $132.14/sqm NLA Multiple occupants: $156.67/sqm NLA
	Accessible green roof	Sole occupant: $196.12/sqm NLA Multiple occupants: $229.28/sqm NLA

[4] Australian Sustainable Built Environment Council and ClimateWorks Australia, 2018

ESD features price variation examples

In the year to Dec-18, 90.3% of stock additions were Premium or A-grade office space.[5]

ESD features are often packaged with other amenities in new prime office stock. A higher NABERS and Green Star rating are coupled with ESD features in the NAB Building 700 Bourke Street and 839 Collins Street.

A retail offering is combined with ESD open space provisions for Melbourne Quarter.

Savills Research has found that pre-committed tenancies represent 85% of floorspace across eleven new developments slated for completion between 2019 and 2021.[6]

To understand this market, recent office leases in the CBD are seen in the table below, where green-highlighted transactions represent products with ESD features.

Table 9: Melbourne CBD commercial market leasing evidence

Address (CBD Submarket)	Date	Tenant	NLA (sqm)	Net rent ($/sqm/p.a.)	Type
222 Exhibition St (North eastern)	Aug-18	WeWork	5,250	$595	Direct
697 Collins St (Docklands)	**Jan-19**	**Spaces**	**3,000**	**$600**	**Pre-commit**
414 La Trobe St (Western core)	Jul-18	Fair Work Ombudsman	4,304	$460	Direct
L48/525 Collins St (Western core)	Mar-19	Jones Day Lawyers	1,000	$925	Direct
L9/179 Collins St (Eastern core)	Apr-19	Gatekeeper Vetting	82.5	$400	Direct
L10/379 Collins St (Western core)	Feb-19	Furla Australia	202	$520	Direct
447 Collins St (Western Core)	Apr-19	ESuperFund	10,500	$670	Pre-commit
525 Collins St (Spencer)	Mar-19	Public Transport Victoria	10,000	$550	Pre-commit
839 Collins St (Docklands)	**Feb-19**	**QBE**	**5,700**	**$550**	**Pre-commit**
130 Lonsdale St (North eastern)	Feb-19	Servicenow	3,800	$650	Pre-commit
130 Lonsdale St (North eastern)	Sep-18	Telstra Super	3,300	$535	Pre-commit
130 Lonsdale St (Northeastern	Dec-18	Australian Financial Complaints	7,600	-	Pre-commit
130 Lonsdale St (Northeastern)	Sep-18	CBus Super	9,600	-	Pre-commit
477 Collins St (Western core)	Mar-19	Urbis	5,300	-	Pre-commit

Source: Preston Rowe Paterson, *Transactions in review*, July 2018 – May 2019; Savills Research, *Briefing: Melbourne CBD Office*, June 2019

Some recent transactions in the Docklands and Western Core are shown below.

[5] Savills Research, 2019. *Briefing Notes – Melbourne CBD*. Savills: Melbourne. 2019.
[6] Savills Research, 2019. *Briefing Notes – Melbourne CBD*. Savills: Melbourne. 2019.

Table 10: Docklands and Melbourne CBD building sales evidence with ESD features

	Completion date	Sale date	Sale price	NLA	Price/sqm
NAB Building 700 Bourke Street	2013	Sep-14	$433.5mil	63,000	$6,880
Gauge Building	2008	Nov-16	$72mil	10,000	$7,200
839 Collins St	2019	Dec-16	$430mil	39,000	$11,026
Olderfleet	2020	Jul-17	$800mil	52,000	$15,385
MQ Tower 2	2020	Mar-18	$550mil	46,000	$11,957
800 Collins St	2010	Sep-18	$295.2mil	28,619	$10,314
Victoria Police	2020	Nov-18	$280mil	26,000	$10,769
Bendigo Bank HQ	2005	Feb-19	$80mil	8,300	$9,638

Source: Preston Rowe Paterson, *Transactions in review*, July 2018 – May 2019; Savills Research, *Briefing: Melbourne CBD Office*, June 2019

Commercial Sector Findings

The findings of the research are summarised as follows:

- Price variations for ESD features in office buildings are generally associated with premium and A-grade products
- ESD features are often packaged with amenities such as childcare centres, gyms, retail, restaurants a high NABERS and Green Star rating or views as part of a premium and A-grade product
- A premium for office space with ESD features can be attributed to worker productivity, company image or the cost savings associated with a higher NABERS rating (which accompanies Premium/A-grade space)
- Pre-committed tenants may prefer office space with ESD features
- The price variation of leases of buildings would indicate tenant preference for ESD features
- Some premium and A-grade office tenants are currently paying a premium for ESD features
- The ability to deliver ESD features cost-effectively is dependent on the site
- Most of the existing stock with ESD features are single-tenant or owner-occupied buildings. Often, they are occupied by institutions. Examples include:
  - Bendigo Hospital, Bendigo
  - Parliament of Victoria Annex, East Melbourne
  - Victorian Cancer Centre, Parkville
  - RMIT University Building 21
  - Burnley Living Roofs, UniMelb Burnley Campus
  - NAB Building, Docklands
  - Melbourne Quarter, Docklands
  - Kangan Institute, Docklands
  - Growing Up Rooftop Garden, Melbourne CBD.

Notwithstanding some outlying results, premiums achievable in central Melbourne commercial developments are expected to be between 2-7%.

APPENDIX D: FEASIBILITY ASSUMPTIONS

Table 11: Feasibility Assumptions

	Assumptions
Escalation	3.0% escalation was applied to costs and 3.0% to revenues
Professional Fees	8% of CC
Development Management	1.5% of CC
Construction Costs	As per Rider Levett Bucknall costings. Demolition and Site Preparation: $300/sqm to $750/sqm site area
Contingency	5% of CC
Statutory Fees	Public Open Space levy: 5% Metropolitan Planning Levy: 0.0013% of CC DA & CC Fees: 0.5% of CC Long service levy: 0.35% of CC
Site Costs & External Works	Included in Rider Levett Bucknall costings
Selling Costs	**Sales Commissions** Residential apartments: 2% of gross revenue Non-residential: 1.75% of gross revenue **Other Costs** Marketing 1% of gross sales Legal 0.25% of gross sales
Land Holding Costs	Based on unimproved land value
Incentives	Retail: 20% of gross saleable area Allied health: 22.5% of gross saleable area Commercial: 22.5% of gross saleable area
Sales	
End Sale Revenues	See body of report.
Financing	
Equity	20% of the total project cost
Loan	4.5% per annum compounded

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GOCAP Standards Testing

Categories of Standards

01 Overarching ESD

02 Energy Efficiency & Renewables

03 Sustainable Transport

04 Urban Heat Island Response

05 Urban Ecology

06 Waste & Resource Recovery

07 Stormwater Management

08 Water Efficiency

09 Integrated Flood Management

Category		Standard	Minimum	Preferred
Overarching ESD	1.1	Greenstar or BESS Certification	>50 dwellings: 5 star green star rating >5000sqm GFA: 5 star green star rating <5000sqm GFA or non res >1000sqm GFA: 50% BESS	>50 dwellings: 6 star green star rating >5000sqm GFA: 6 star green star rating <5000sqm GFA or non res >1000sqm GFA: 70% BESS

Category		Standard	Minimum	Preferred
Energy Efficiency and Renewables	2.1	NatHERS Rating	>50 dwellings: 7.5 star NatHERs rating >5000sqm GFA: 5.5 star NABERS rating <5000sqm GFA or non res >1000sqm GFA: 60% BESS & ave. 7.5 NatHERs, min. 6.5 NatHERs for each dwelling	>50 dwellings or >5000sqm: >6 star NABERS rating <5000sqm GFA: >70% BESS
	2.2	On-site Renewable Energy Generation	Yes	Yes
	2.3	No Gas	Yes	Yes

Category		Standard	Minimum	Preferred
Sustainable Transport	3.1	Car parking titled as common property	Yes	
	3.2	Car parking designed to be adaptable	Yes	
	3.3	Car parking includes features that support more sustainable forms of private car ownership	Yes	
	3.4	Compliance with car parking design standards	Yes	
	3.5	EV ready spaces	5% of car parking spaces	
	3.6	EV infrastructure provision	20% of car parking spaces	
	3.7	Bicycle spaces	1 per dwelling	

Category		Standard	Minimum	Preferred
Urban Heat Island Response	4.1	% of site area comprised of elements that reduce UHIE	75%	
	4.2	Non-glazed facade materials exposed to sun should have high solar reflectivity	Yes	
	4.3	Passive cooling techniques	Yes	
	4.4	Paving treatments that assist in cooling	Yes	

Category		Standard	Minimum	Preferred
Urban Ecology	5.1	Minimum CoM Green Factor Tool Score	0.55	
	5.2	Green cover supports habitat	Yes	
	5.3	Green cover is layered	Yes	
	5.4	Green cover is native, indigenous, or climate change resistant	Yes	
	5.5	Green cover supports vegetation links between areas of high biodiversity	Yes	
	5.6	Species selected are drawn from CoM preferred species list	Yes	
	5.7	Existing mature trees retained	Yes	
	5.8	Impact on canopy trees on adjoining lots minimised	Yes	

Category		Standard	Minimum	Preferred
Waste & Resource Recovery	6.1	Waste Management Plan in accordance with CoM guidelines	Yes	
	6.2	Meet requirements of Precinct Waste Management Plan	Yes	

Category		Standard	Minimum	Preferred
Stormwater Management	7.1	Water Quality Performance Objectives (CSIRO)	Best Practice	Exceeding Best Practice
	7.2	Stormwater treatment measures	Improve quality, reduce flow of water discharged	
	7.3	Greenstar Certification		Category B Water Credit

Category		Standard	Minimum	Preferred
Water Efficiency	8.1	Provide precinct scale recycled water source	Yes	
	8.2	Rainwater tank	Sized to supply minimum 10% internal water demand	
	8.3	Use alternative water for non-potable uses		
	8.4	BESS Water category score	Min. 50%	

Category		Standard	Minimum	Preferred
Integrated Flood Management	9.1	Essential services located above flood levels	Yes	
	9.2	Design includes elements/ materials resilient to flood events	Yes	
	9.3	Land use at ground can recover from flooding	Yes	
	9.4	Level differences maintain connection to street	Yes	
	9.5	Raising internal ground level avoided/used as last resort	Yes	

5 new sites in the City of Melbourne were selected to represent a range of standard alterations and additions developments across multiple typologies. Each site has a real planning application that represents a baseline ESD response.

Each of these baseline cases were reviewed against the proposed GOCAP standards and assumptions were made for potential changes to bring the development up to the minimum and preferred standards where applicable.

The changes proposed fall under two categories — spatial design changes and non-spatial design changes.

Spatial design changes include reducing the area of glazing, adding new services with significant footprints, etc. These are annotated over the baseline planning application drawings.

Non-spatial design changes include upgrading standard building materials and product specifications, payment for certification, etc. These are noted in summary tables following the annotated drawings.

These changes have been costed to determine the potential development feasibility implications of changing existing typical development approaches to meet the GOCAP standards.

Specification Assumptions for Non-Spatial Changes

The following specifications have been used as assumptions for costing the baseline case, and non-spatial changes for the minimum and preferred scenarios, unless otherwise noted.

Note that these represent typical specifications in average, above average, and exceptional ESD approaches respectively, and are used to reflect a material cost premium in achieving higher performance. The developments tested may adopt alternative approaches that do not require this extent of upgrade in order to achieve the minimum and preferred Green Star and BESS scores outlined in the standards.

	B Baseline	M Minimum	P Preferred
External Walls	R1.5 Average	R2.5 Average	R3.5 Average
Glazing	Single Glazed Low E	Double Glazed Clear	Double Glazed Low E
Roofing	Slab Roof R2	Slab Roof R3.5 Colorbond Surfmist	Slab Roof R5 Bluescope Coolmax Ultra
Heating/Cooling	5kW A/C per dwelling	4kW A/C per dwelling	3kW A/C per dwelling
Shading	No shading	75% of shading shown in spatial design changes	100% of shading shown in spatial design changes
Air Tightness	No air tightness measures	Basic sealing & testing	Air tight with balanced mech ventilation/HRVs

Legend

Change Number

Floor Level

Change 11.2

Area of change

01
02
05

Provide climbing plants to facade from L2 to L4

B 234m^2 Total on facade

M 624m^2 Total on facade

P 624m^2 Total on facade

Description of change

B — Baseline
M — Minimum
P — Preferred

Implication of change on building design

Category/categories of Standard that the change pertains to

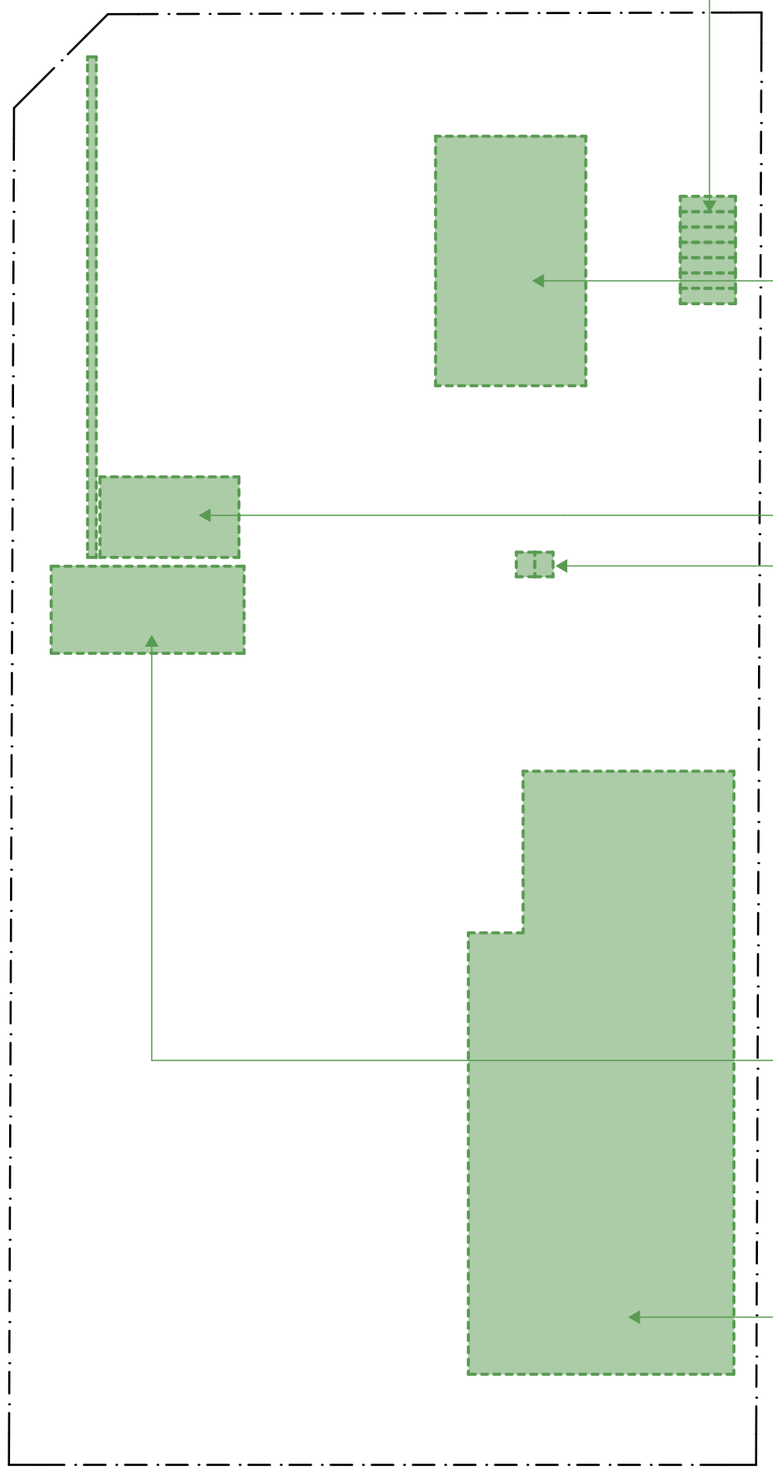
1

Site 1

Small scale residential

Basement Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management



Change 1.B

03	Additional bike parking (total 7)	B	—
		M	Lose 1 storage space
		P	Lose 1 storage space

Change 2.B

03	Allocate 1x visitor, 1x disabled, 1x car share	B	—
		M	Lose 3 res. spaces
		P	Lose 3 res. spaces

Change 3.B

03	EV ready space and infrastructure provision	B	-
		M	+1 EV. + 5 Provisional
		P	+1 EV. + 5 Provisional

Change 4.B

06	Provide organic waste bin	B	—
		M	+ 2 Bins
		P	+ 2 Bins

Change 5.B

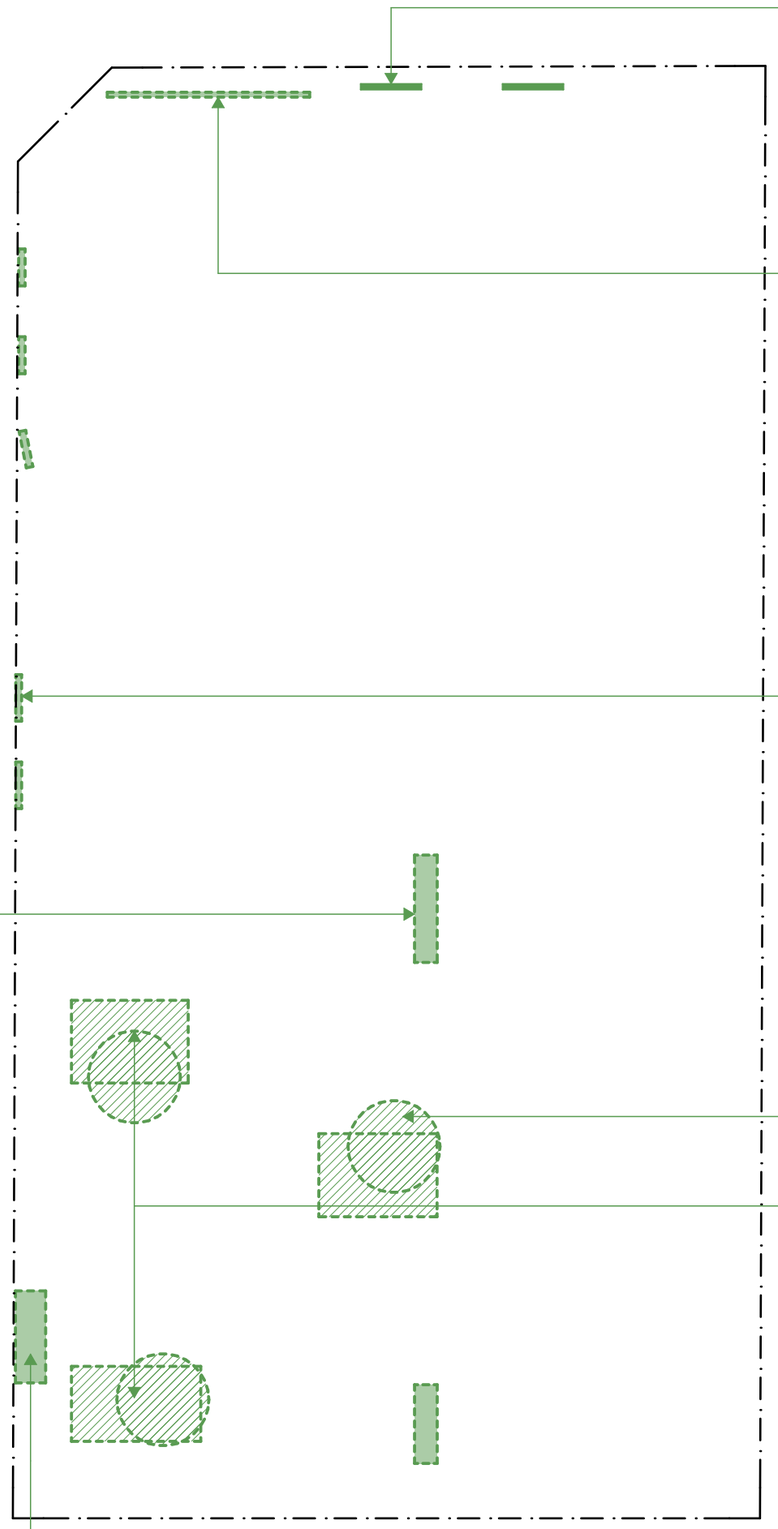
08	Greywater treatment system	B	—
		M	Nom. 18m^2
		P	Nom. 18m^2

Change 6.B

03	Provision to make adaptable	B	—
		M	+161m^2 Communal
		P	+161m^2 Communal

Ground Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management



Change 7.G

01, 02 — Reduce extent of north facing glazing

- B — 2000W x 2700H
- M — 1500W x 2700H
- P — 1500W x 2700H

Change 8.G

01, 02, 05 — Provide Climbing plants in strip from G to L 2

- B — No shading
- M — + 155m² Total on facade
- P — + 155m² Total on facade

Change 9.G

01, 02 — Operable external blinds

- B — No shading
- M — + 5 lin. m shading
- P — + 6.6 lin. m shading

Change 10.G

05 — Add trees to landscape

- B — —
- M — + 3 small trees total
- P — + 3 small trees total

Change 10.G

05 — Add in ground planters/grass as indicated

- B — —
- M — + 30 m² grass/landscape
- P — + 30 m² grass/landscape

Change 11.G

01, 02 — Remove gas connection

- B — —
- M — + 3 m² planting
- P — + 3 m² planting

Change 6.G

01 — Provide light & vent. to basement

- B — —
- M — - 5m² Landscape
- P — - 5m² Landscape

BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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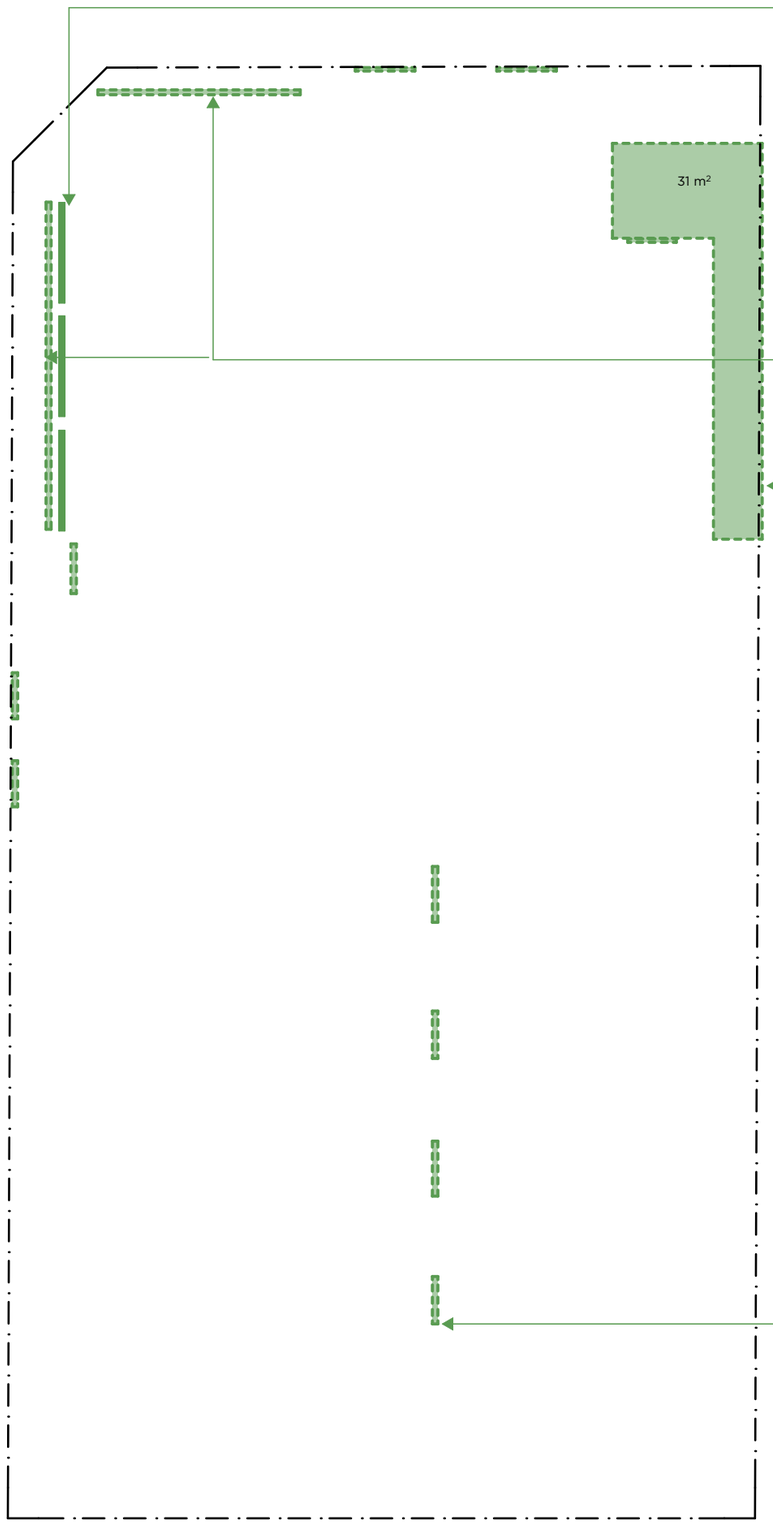
Level 1 Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management



Change 7.1

01 02	Reduce extent of west facing glazing	B	3300W x 2700H
		M	1500W x 2700H
		P	1500W x 2700H

Change 8.1

01 02 05	Provide Climbing plants in strip from G to L 2	B	No shading
		M	+ 155m² Total on facade
		P	+ 155m² Total on facade

Change 12.1

05	Grass/meadow landscape to provide green roof	B	
		M	+ 31m² Green Roof
		P	+ 31m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	143m2 PV & Landscape
		M	+ 31m² Green Roof
		P	+ 31m² Green Roof

Change 9.1

01 02	Operable external blinds	B	No shading
		M	+ 12.6 lin. m shading
		P	+ 16.8 lin. m shading

BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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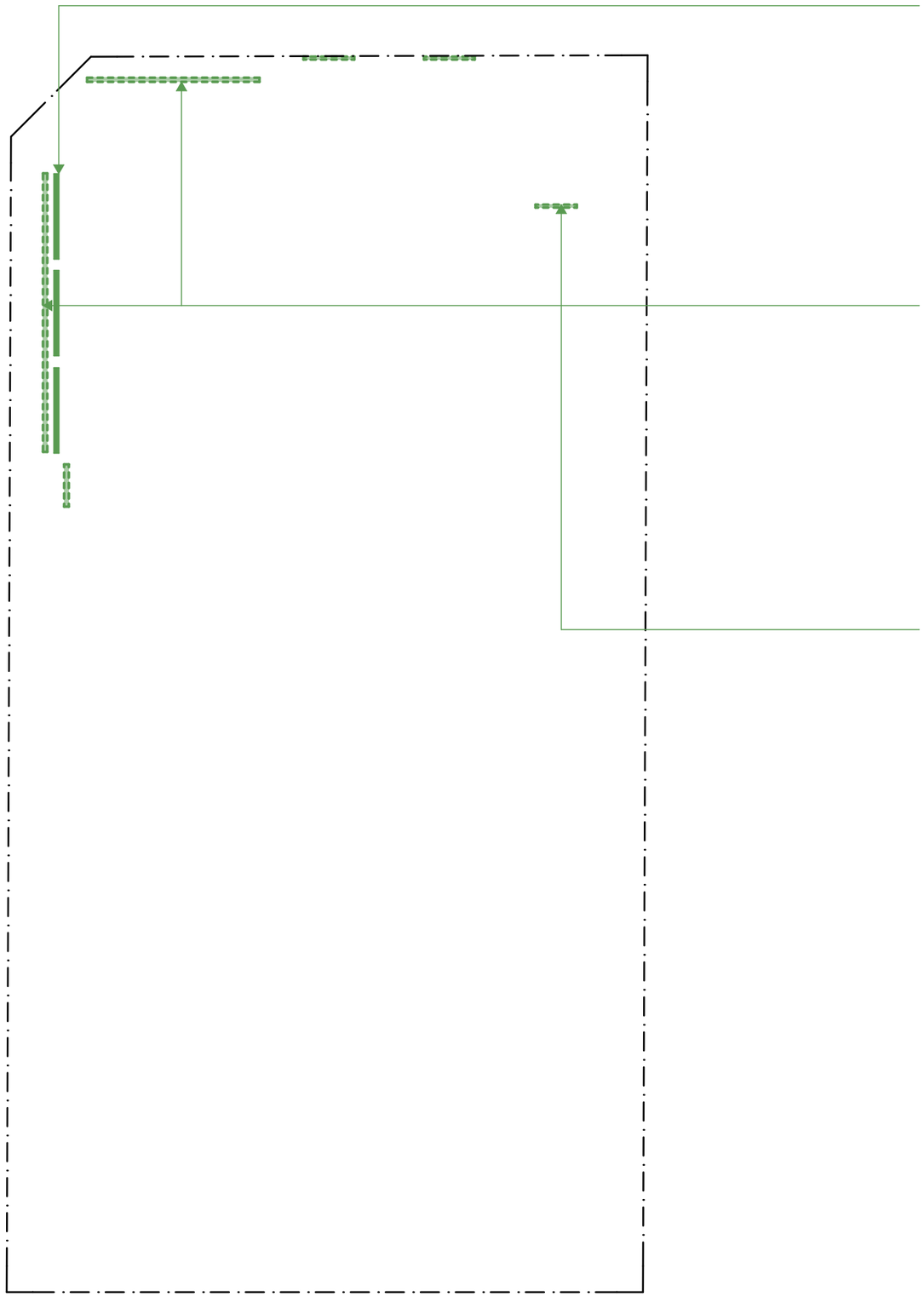
Level 2 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 7.2

01 02 Reduce extent of west facing glazing

- (B) 3300W x 2700H
- (M) 1500W x 2700H
- (P) 1500W x 2700H

Change 8.2

01 02 05 Provide Climbing plants in strip from G to L 2

- (B) No shading
- (M) + 155m^2 Total on facade
- (P) + 155m^2 Total on facade

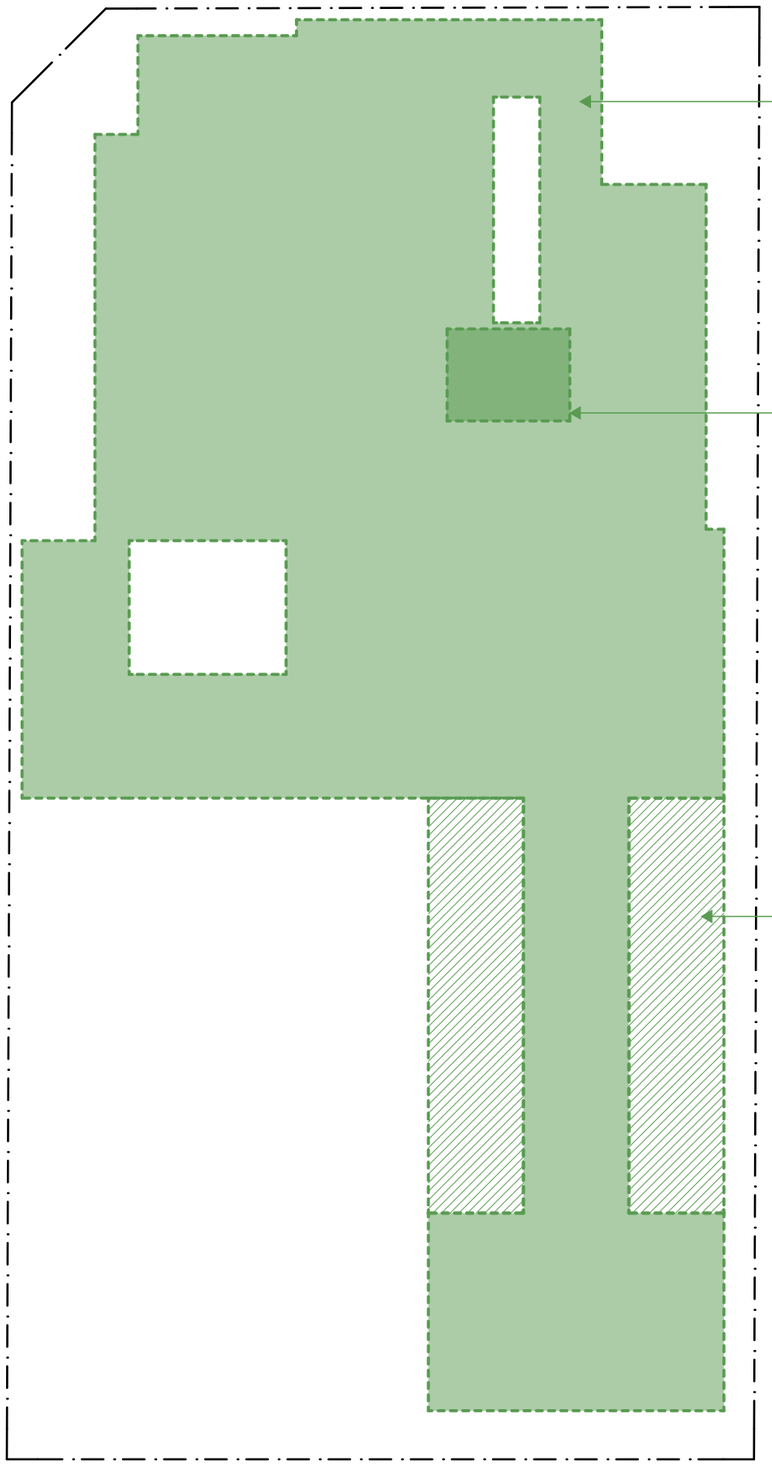
Change 9.2

01 02 Operable external blinds

- (B) No shading
- (M) + 4 lin. m shading
- (P) + 5.5 lin. m shading

Rooftop Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 13.R

04 75% target coverage with elements to reduce impact of UHIE: High solar reflectivity roof

- (B) 143m2 PV & Landscape
- (M) + 580m^2 HR Roof
- (P) + 580m^2 HR Roof

Change 11.R

01 02 Remove gas connection

- (B) —
- (M) + Packaged Heat Pump & Induction cooktops
- (P) + Packaged Heat Pump & Induction cooktops

Change 14.R

01 02 On-site renewable energy generation

- (B) 11m^2 PV Array Area
- (M) + 84m^2 PV Array Area
- (P) + 84m^2 PV Array Area

04 75% target coverage with elements to reduce impact of UHIE: Solar PV Array

- (B) 143m2 PV & Landscape
- (M) + 84m^2 PV Array Area
- (P) + 84m^2 PV Array Area

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
01	Overarching ESD	1.1	Greenstar or BESS Certification	>50 dwellings: 5 star green star rating >5000sqm GFA: 5 star green star rating <5000sqm GFA or non res >1000sqm GFA: 50% BESS	>50 dwellings: 6 star green star rating >5000sqm GFA: 6 star green star rating <5000sqm GFA or non res >1000sqm GFA: 70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Pay for certification		Changes 7, 8, 9, 10 and 13 Change 7: 8 glazing suites resized as per drawings		Upgrade material, window, door, etc. specs to indicative preferred specs. Pay for certification		Changes 7, 8, 9, 10 and 13 Change 7: 8 glazing suites resized as per drawings	
02	Energy Efficiency and Renewables	2.1	NatHERS Rating	>50 dwellings: 7.5 star NatHERs rating >5000sqm GFA: 5.5 star NABERS rating <5000sqm GFA or non res >1000sqm GFA: 60% BESS & ave. 7.5 NatHERs, min. 6.5 NatHERs for each dwelling	>50 dwellings or >5000sqm: >6 star NABERS rating <5000sqm GFA: >70% BESS		No (6.4 star average)		Upgrade material, window, door, etc. specs as required Pay for certification		Changes 7, 8, 9, 10 and 13. See 1.1		Upgrade material, window, door, etc. specs as required Pay for certification		Changes 7, 8, 9, 10 and 13. See 1.1	
		2.2	On-site Renewable Energy Generation	Yes	Yes		No				Change 14				Change 14	
		2.3	No Gas	Yes	Yes		No				Change 11				Change 11	
03	Sustainable Transport	3.1	Car parking titled as common property	Yes			No		Building management policy				Building management policy			
		3.2	Car parking designed to be adaptable	Yes			No				Change 6				Change 6	
		3.3	Car parking includes features that support more sustainable forms of private car ownership	Yes			No				Change 2				Change 2	
		3.4	Compliance with car parking design standards	Yes			No				Change 2				Change 2	
		3.5	EV ready spaces	5% of car parking spaces			No				Change 3				Change 3	
		3.6	EV infrastructure provision	20% of car parking spaces			No				Change 3				Change 3	
		3.7	Bicycle spaces	1 per dwelling			No				Change 1				Change 1	

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
04	Urban Heat Island Response	4.1	% of site area comprised of elements that reduce UHIE	75%			No				Changes 10, 12, 13 and 14				Changes 10, 12, 13 and 14	
		4.2	Non-glazed facade materials exposed to sun should have high solar reflectivity	Yes			No		Change material specs as required				Change material specs as required			
		4.3	Passive cooling techniques	Yes			Yes									
		4.4	Paving treatments that assist in cooling	Yes			No (assume concrete screed unless otherwise noted in provided documentation)		Change material specs to permeable paving on min. 100mm soil applied to 50% of all courtyard areas.				Change material specs to permeable paving on min. 100mm soil applied to 50% of all courtyard areas.			
05	Urban Ecology	5.1	Minimum CoM Green Factor Tool Score	0.55 Note: score of exactly 0.55 achieved in minimum and preferred cases to determine potential changes noted. Location of additional landscaping is indicative only.			No (0.21)		Change planting species to indigenous		Changes 8, 10 and 12		Change planting species to indigenous		Changes 8, 10 and 12	
		5.2	Green cover supports habitat	Yes			Unknown		See 5.1				See 5.1			
		5.3	Green cover is layered	Yes			Unknown		See 5.1				See 5.1			
		5.4	Green cover is native, indigenous, or climate change resistant	Yes			Unknown		See 5.1				See 5.1			
		5.5	Green cover supports vegetation links between areas of high biodiversity	Yes			Unknown		See 5.1				See 5.1			
		5.6	Species selected are drawn from CoM preferred species list	Yes			Unknown		See 5.1				See 5.1			
		5.7	Existing mature trees retained	Yes			N/A									
		5.8	Impact on canopy trees on adjoining lots minimised	Yes			N/A									

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
06	Waste & Resource Recovery	6.1	Waste Management Plan in accordance with CoM guidelines	Yes			Unknown		Prepare WMP		Change 4		Prepare WMP		Change 4	
		6.2	Meet requirements of Precinct Waste Management Plan	Yes			Unknown		See 6.1				See 6.1			
07	Stormwater Management	7.1	Water Quality Performance Objectives (CSIRO)	Best Practice	Exceeding Best Practice		Unknown									
		7.2	Stormwater treatment measures	Improve quality, reduce flow of water discharged			Unknown		Garden designed to perform as rain garden				Garden designed to perform as rain garden			
		7.3	Greenstar Certification		Category B Water Credit		Unknown		Pay for certification				Pay for certification			
08	Water Efficiency	8.1	Provide precinct scale recycled water source	Yes			No				Change 5				Change 5	
		8.2	Rainwater tank	Sized to supply minimum 10% internal water demand			Yes									
		8.3	Use alternative water for non-potable uses				No		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 5		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 5	
		8.4	BESS Water category score	Min. 50%			Unknown		Pay for certification				Pay for certification			
09	Integrated Flood Management	9.1	Essential services located above flood levels	Yes			Yes									
		9.2	Design includes elements/ materials resilient to flood events	Yes			Unknown									
		9.3	Land use at ground can recover from flooding	Yes			Unknown									
		9.4	Level differences maintain connection to street	Yes			Yes									
		9.5	Raising internal ground level avoided/used as last resort	Yes			Yes									

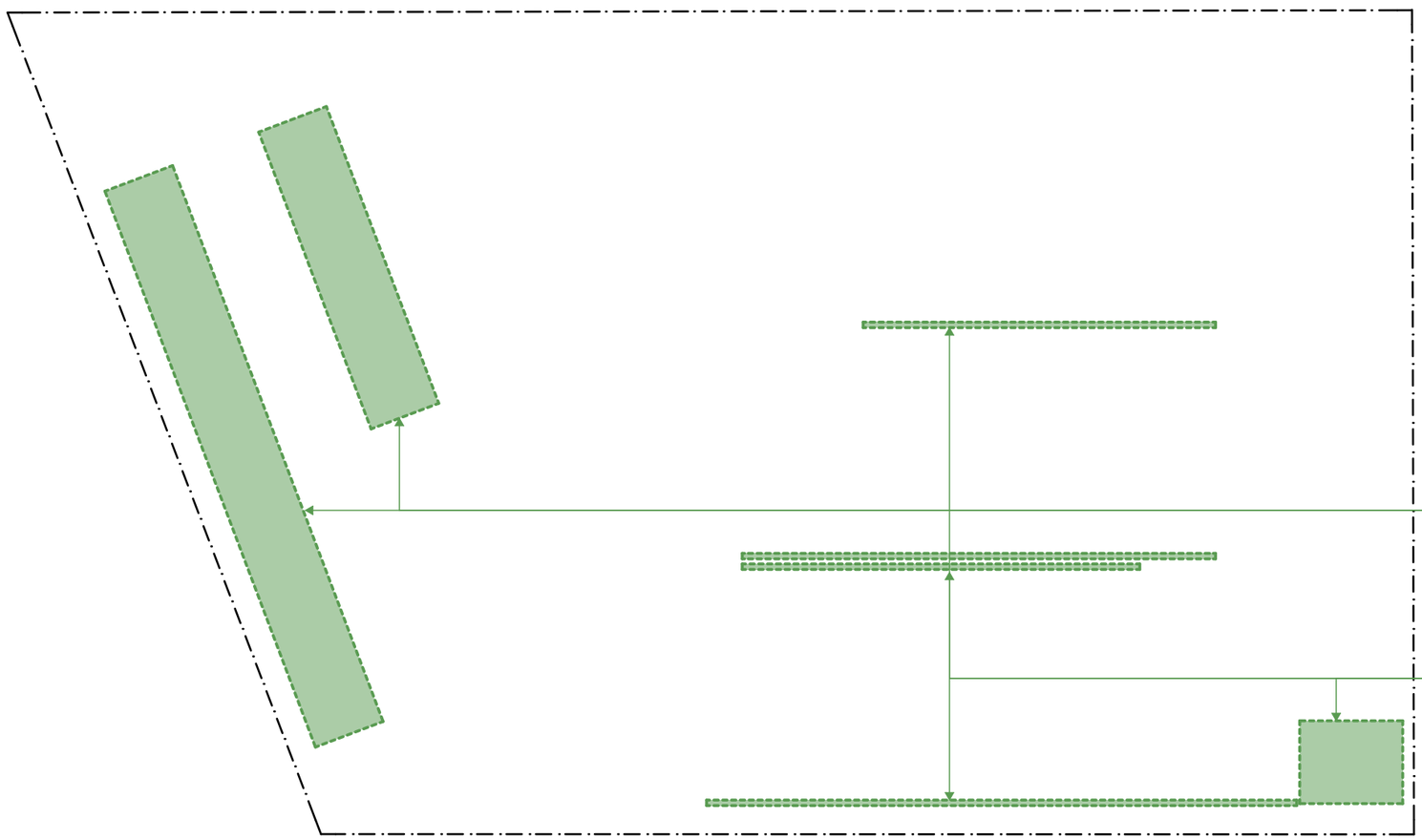
2

Site 2

Large scale residential

Basement 2 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 1.B2

03 Allocate 12 x car share and 12 x visitor car parks

B —
M Lose 24 res. car parks
P Lose 24 res. car parks

Change 2.B2

03 12 x EV ready space
36 x infrastructure provision for EV

B —
M + 12 EV, + 36 provisional
P + 12 EV, + 36 provisional

BREATHE ARCHITECTURE

Scale — 1:400 at A3
North —

Date — 31/01/23
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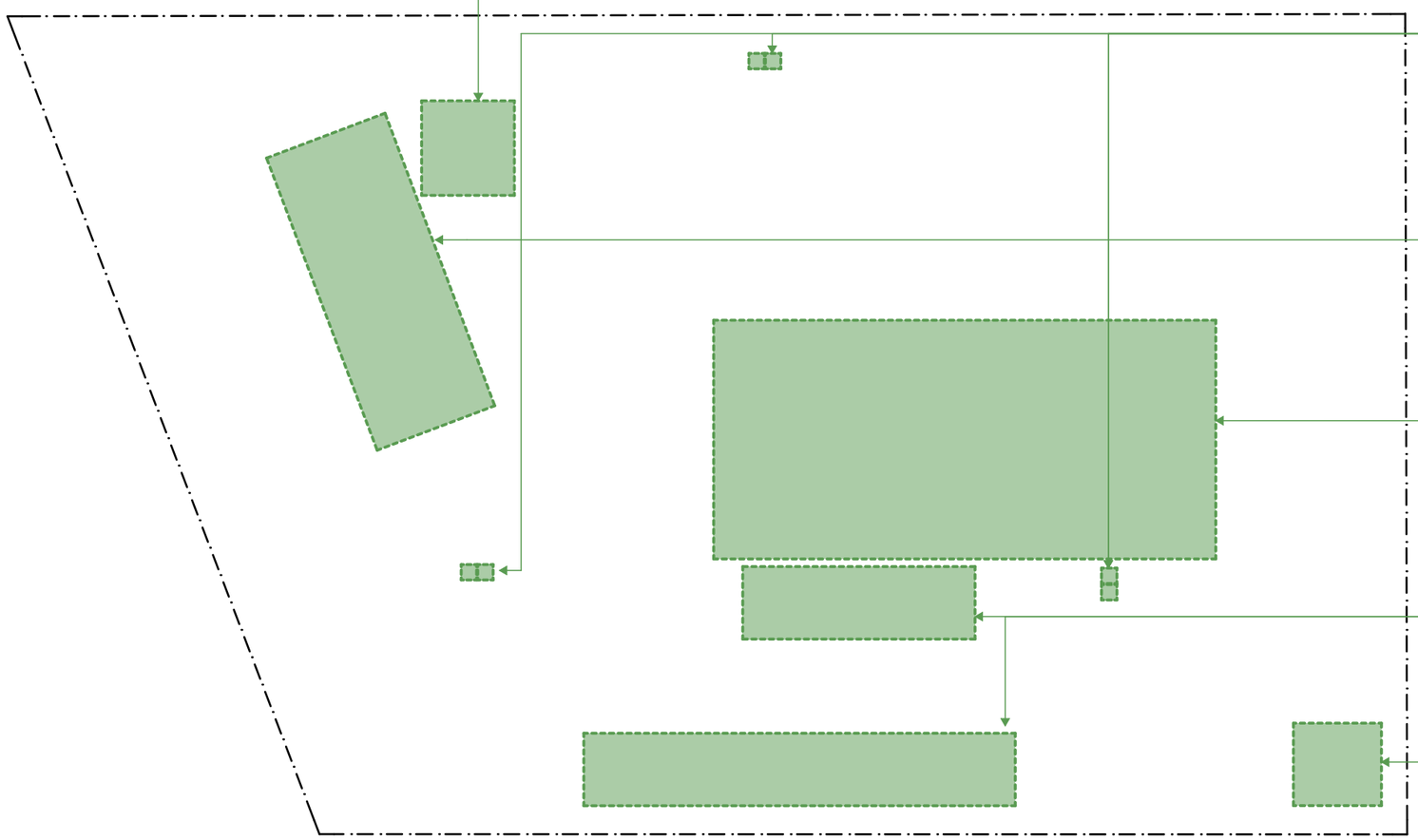
Basement 1 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 3.B1

08	Greywater tank and treatment system	B	—
		M	- 40 m² BOH Nom.
		P	- 40 m² BOH Nom.

Change 4.B1

06	Provide organic waste bin	B	—
		M	+ 6 bins
		P	+ 6 bins

Change 5.B1

03	Additional 133 bike parks	B	48 Bike parks
		M	- 8 car spaces, - 85m² BOH
		P	- 8 car spaces, - 85m² BOH

Change 6.B1

03	Provision to make adaptable	B	—
		M	+ 565m² Communal
		P	+ 565m² Communal

Change 7.B1

03	Allocate 11 x DDA car parks	B	1 DDA Car park
		M	Lose 6 car parks
		P	Lose 6 car parks

Change 18.B1

02	Allocate BOH space to battery sized to suit Solar PV Array	B	—
		M	- 34m² storage, + Battery
		P	- 34m² storage, + Battery

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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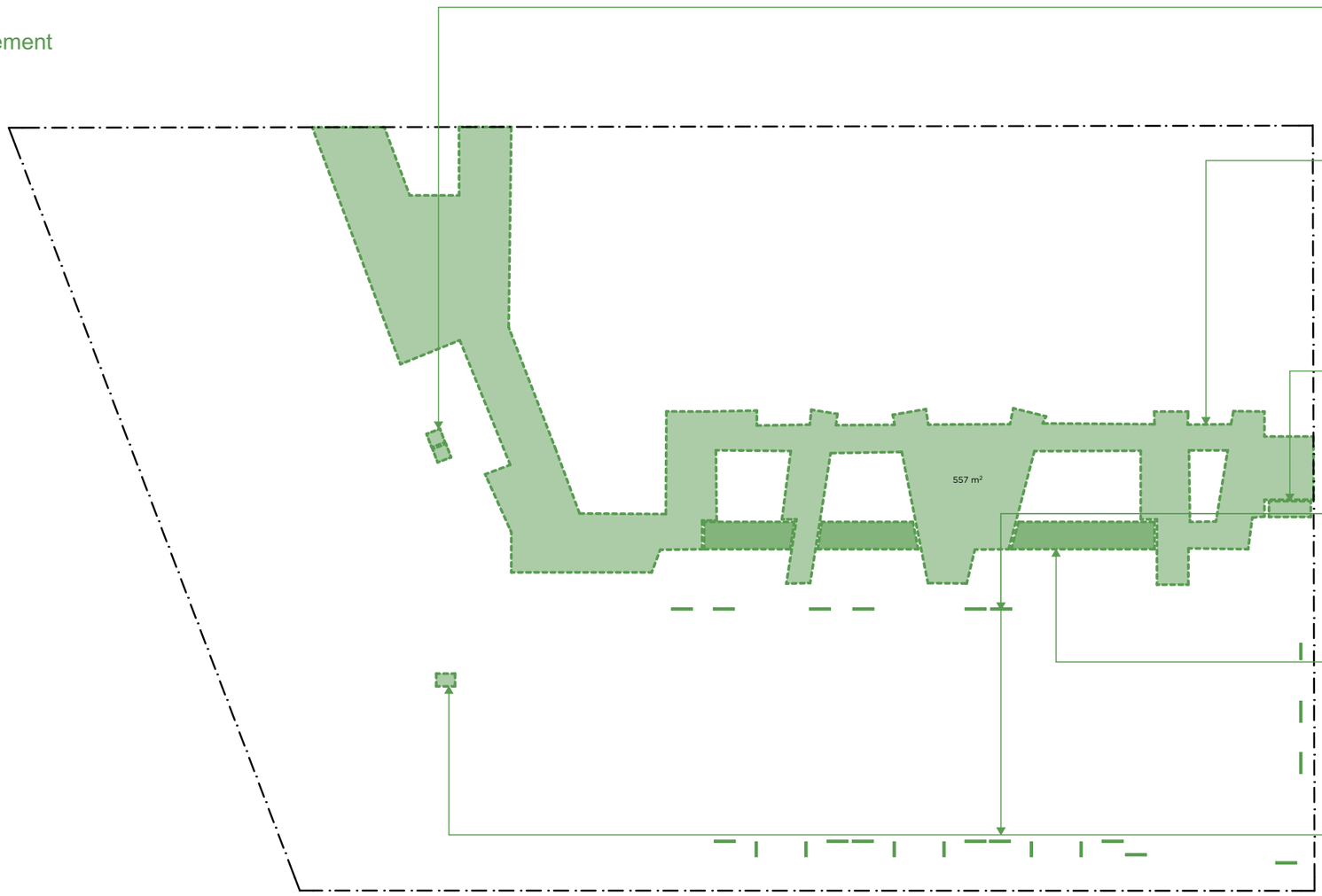
Ground Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 4.G

06	Provide organic waste bin	B - M + 2 bins P + 2 bins

Change 8.G

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Paving	B — M + 557m² HR Paving P + 557m² HR Paving

Change 9.5

01 02	Remove gas connection	B — M + Packaged Heat Pump & P Induction cooktops

Change 14.G

01 02	Reduce/remove glazing to extent shown	B — M 1500W x 2700H glazing P to bedroom windows

Change 6.G

03	Provide light & vent. to basement	B — M + Windows & Vents P + Windows & Vents

Change 10.G

06	Remove waste chutes	B — M + 1m² BOH P + 1m² BOH

BREATHE ARCHITECTURE

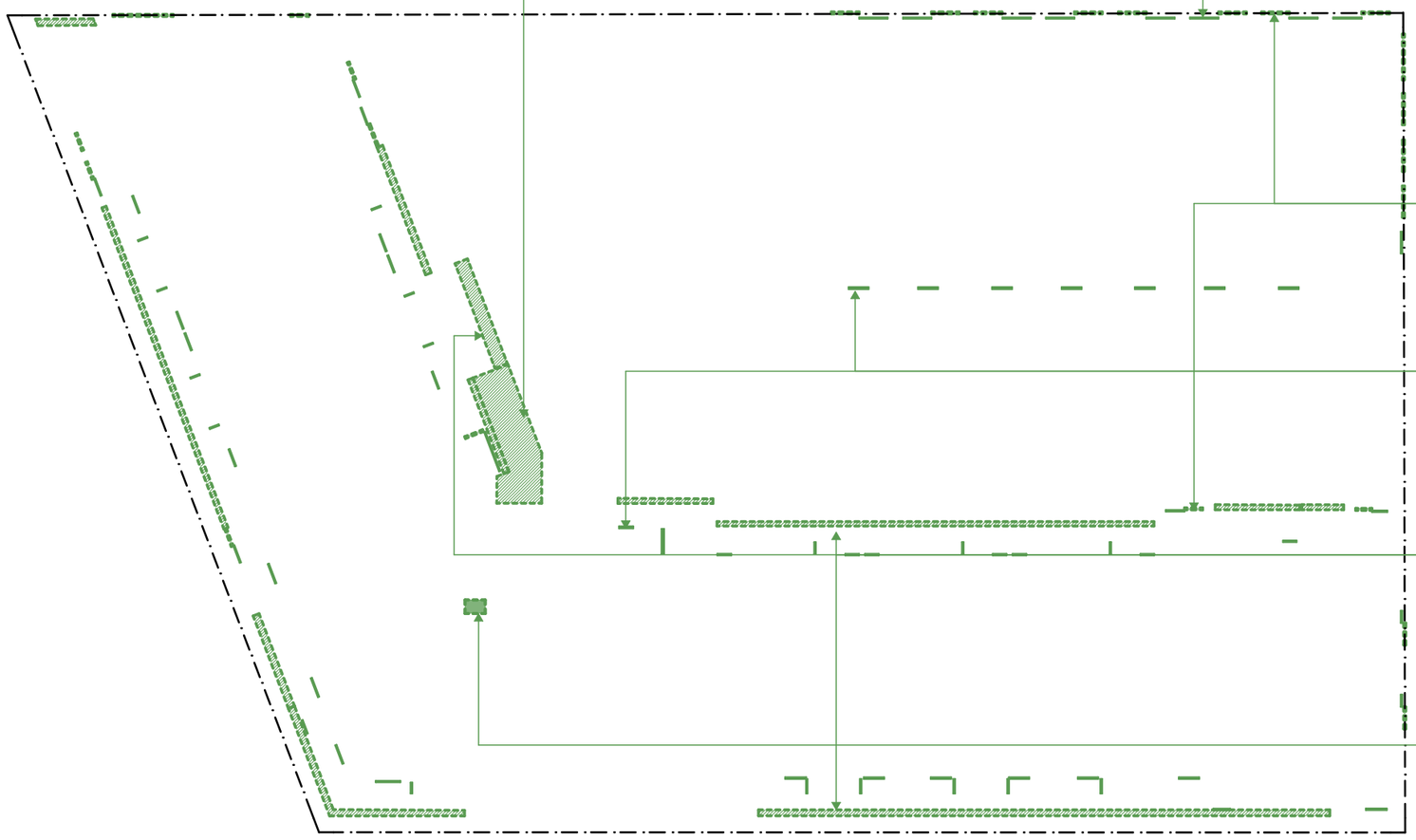
Scale — 1:400 at A3

North —

Date — 31/01/23

Level 1 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 11.1

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 25m² Green Roof
		P	+ 25m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	—
		M	+ 25m² Green Roof
		P	+ 25m² Green Roof

Change 12.1

01 02	Replace existing glazing suite and add insulated panels to extent shown	B	—
		M	+ 15.5 lin. m insulated
		P	+ 15.5 lin. m insulated

Change 13.1

01 02	Operable external blinds	B	No shading
		M	+ 30 lin. m shading
		P	+ 40 lin. m shading

Change 14.1

01 02	Reduce/remove glazing to extent shown	B	—
		M	1500W x 2700H glazing
		P	to bedroom windows

Change 15.1

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	B	—
		M	+ 55m² planting
		P	+ 55m² planting

Change 10.1

06	Remove waste chutes	B	—
		M	+ 1m² BOH
		P	+ 1m² BOH

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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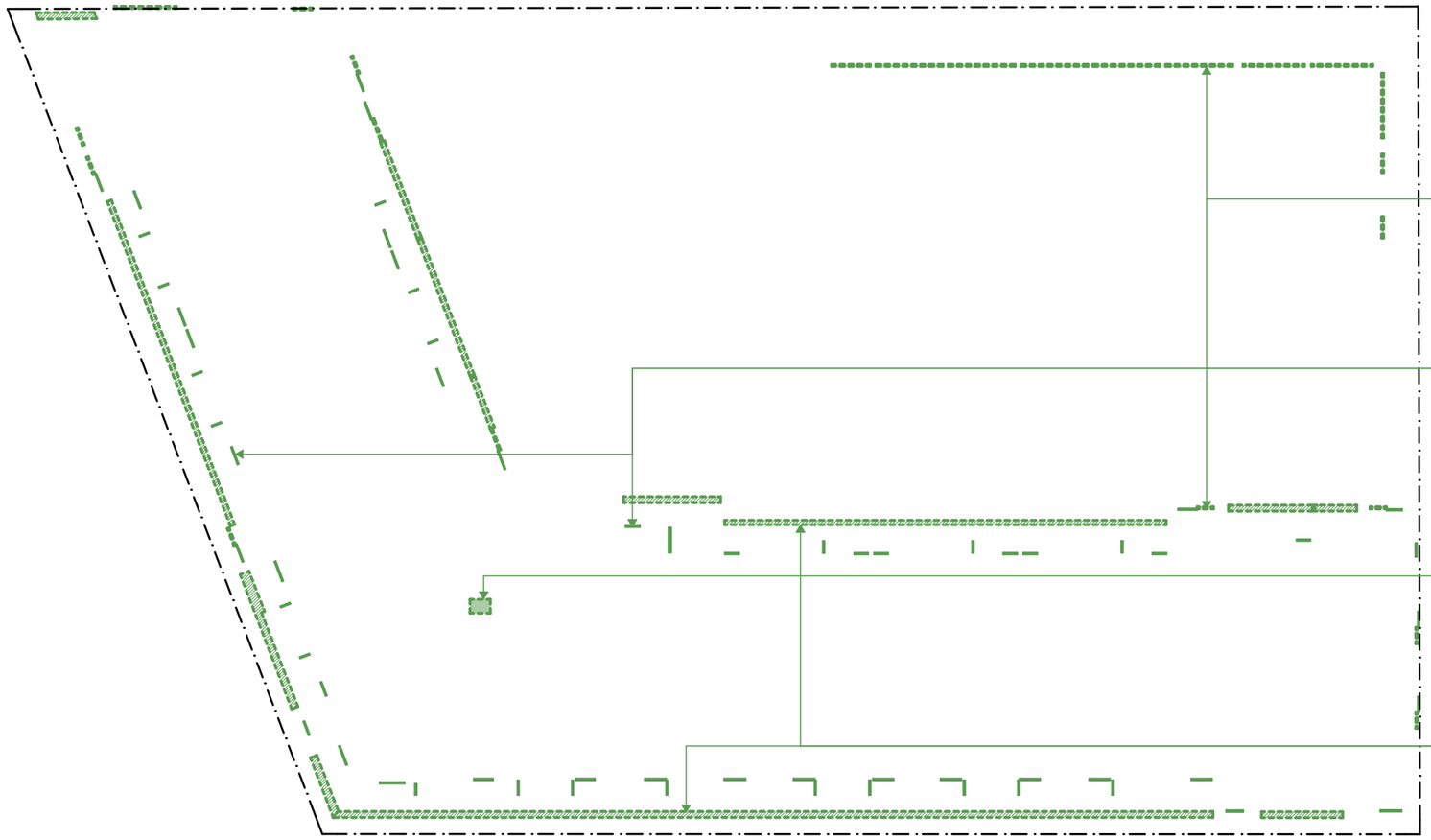
Level 2 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 13.2

01 02 Operable external blinds

- (B) No shading
- (M) + 45 lin. m shading
- (P) + 60 lin. m shading

Change 14.2

01 02 Reduce/remove glazing to extent shown

- (B) —
- (M) 1500W x 2700H glazing
- (P) to bedroom windows

Change 10.2

06 Remove waste chutes

- (B) —
- (M) + 1m² BOH
- (P) + 1m² BOH

Change 15.2

05 New planter box on balcony and/or to be fixed on facade Nom. 500mm deep

- (B) —
- (M) + 64m² planting
- (P) + 64m² planting

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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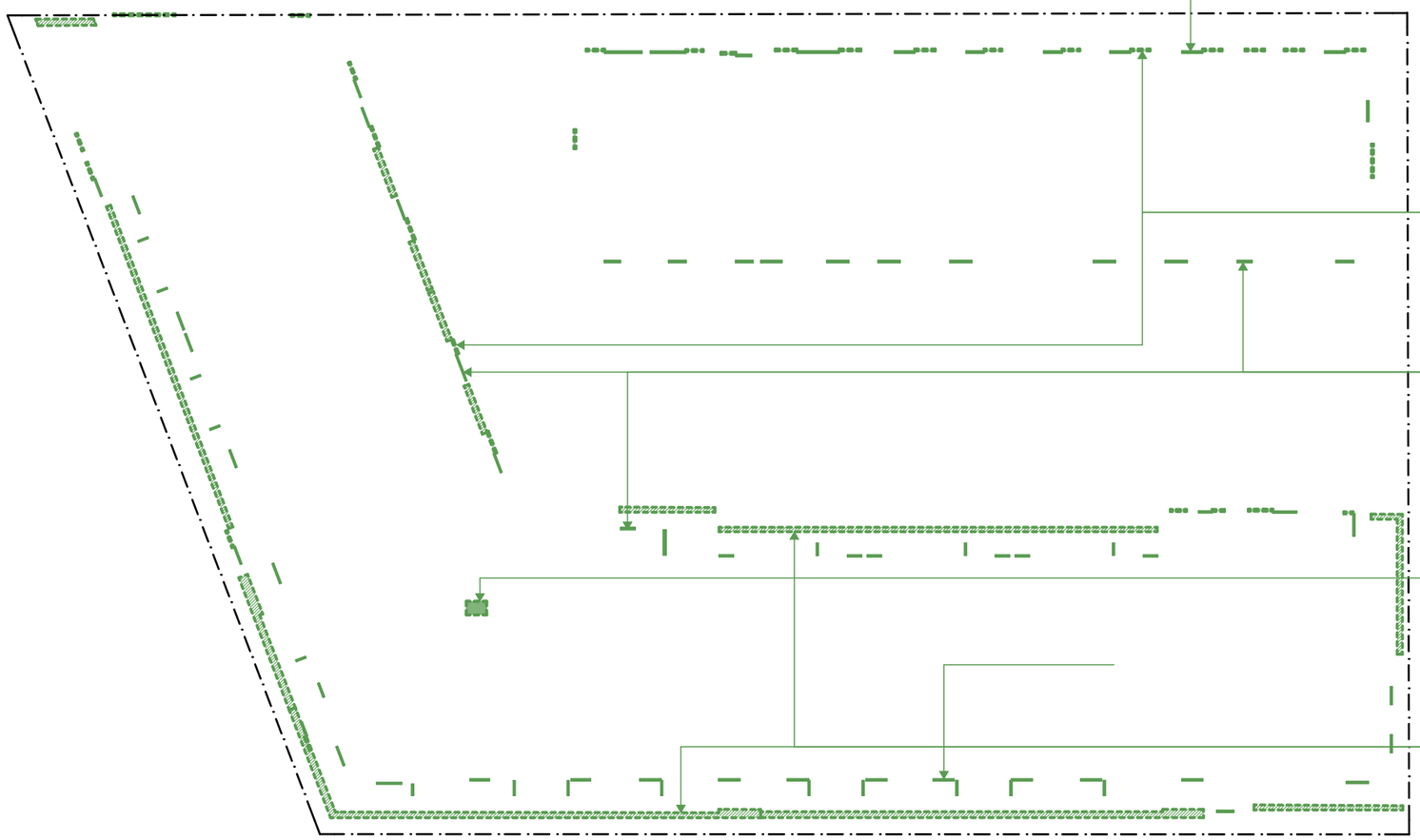
Level 3 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 12.3

01 02	Replace existing glazing suite and add insulated panels to extent shown	B	—
		M	+ 16 lin. m insulated
		P	+ 16 lin. m insulated

Change 13.3

01 02	Operable external blinds	B	No shading
		M	+ 31.5 lin. m shading
		P	+ 42 lin. m shading

Change 14.3

01 02	Reduce/remove glazing to extent shown	B	—
		M	1500W x 2700H glazing
		P	to bedroom windows

Change 10.3

06	Remove waste chutes	B	—
		M	+ 1m² BOH
		P	+ 1m² BOH

Change 15.3

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	B	—
		M	+ 64m² planting
		P	+ 64m² planting

BREATHE ARCHITECTURE

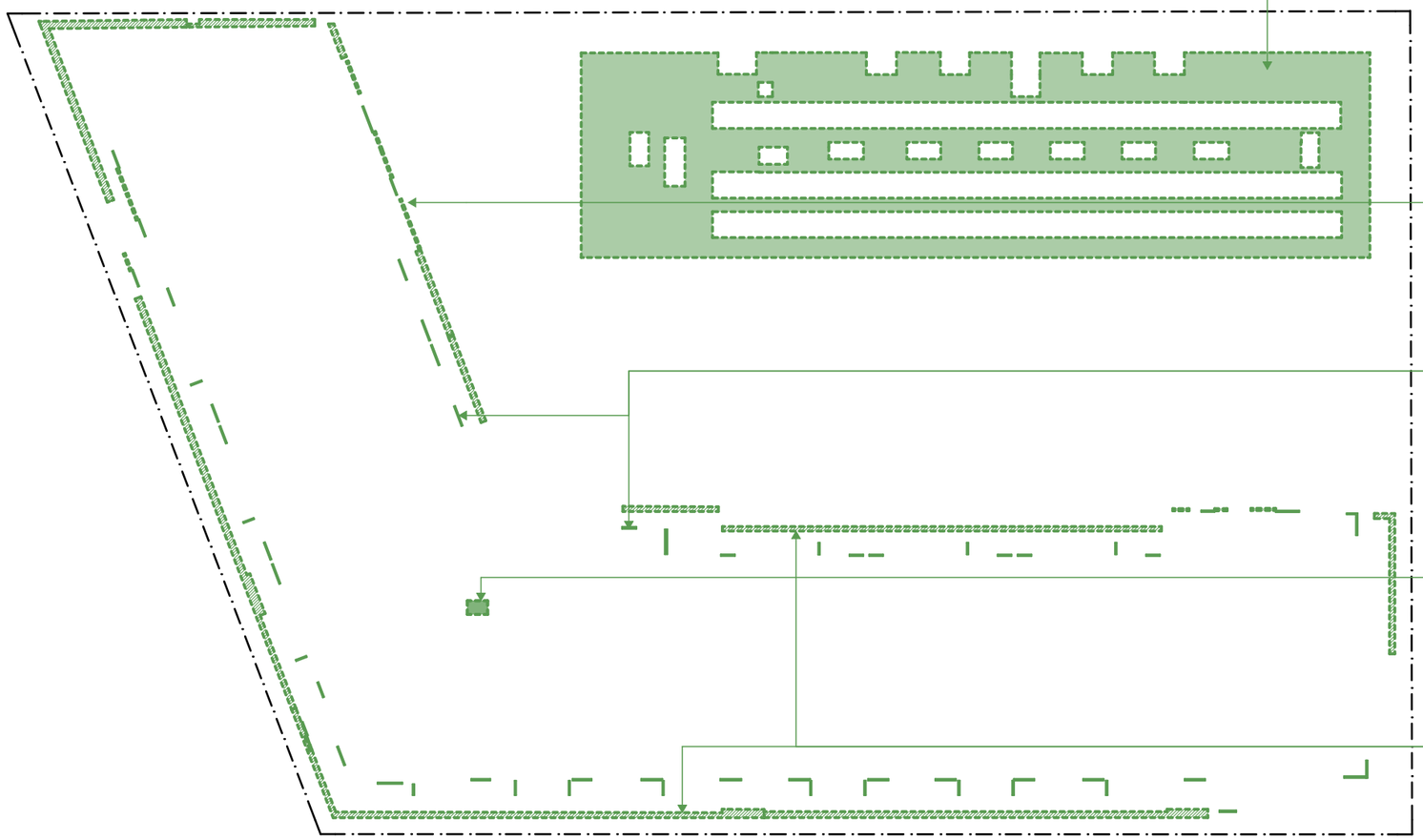
Scale — 1:400 at A3

North —

Date — 31/01/23

Level 4 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 11.4

04 75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof

- (B) —
- (M) + 474m² HR Roof
- (P) + 474m² HR Roof

Change 13.4

01 02 Operable external blinds

- (B) No shading
- (M) + 12 lin. m shading
- (P) + 16 lin. m shading

Change 14.4

01 02 Reduce/remove glazing to extent shown

- (B) —
- (M) 1500W x 2700H glazing
- (P) to bedroom windows

Change 10.4

06 Remove waste chutes

- (B) —
- (M) + 1m² BOH
- (P) + 1m² BOH

Change 15.4

05 New planter box on balcony and/or to be fixed on facade Nom. 500mm deep

- (B) —
- (M) + 63m² planting
- (P) + 63m² planting

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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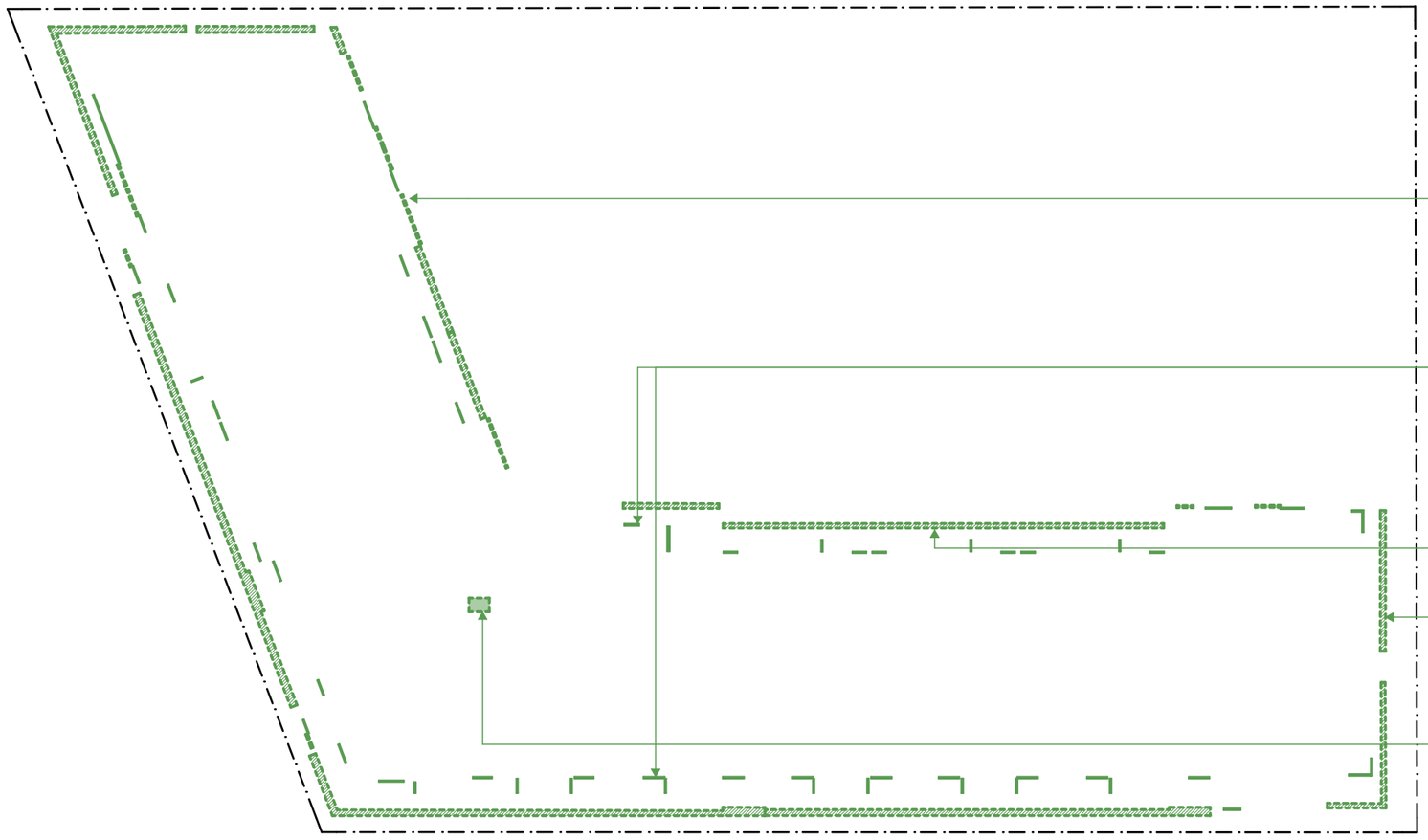
Level 5 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 13.5

01 02	Operable external blinds	(B) No shading (M) + 15 lin. m shading (P) + 20 lin. m shading

Change 14.5

01 02	Reduce/remove glazing to extent shown	(B) — (M) 1500W x 2700H glazing (P) to bedroom windows

Change 15.5

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	(B) — (M) + 49m² planting (P) + 49m² planting

Change 10.5

06	Remove waste chutes	(B) — (M) + 1m² BOH (P) + 1m² BOH

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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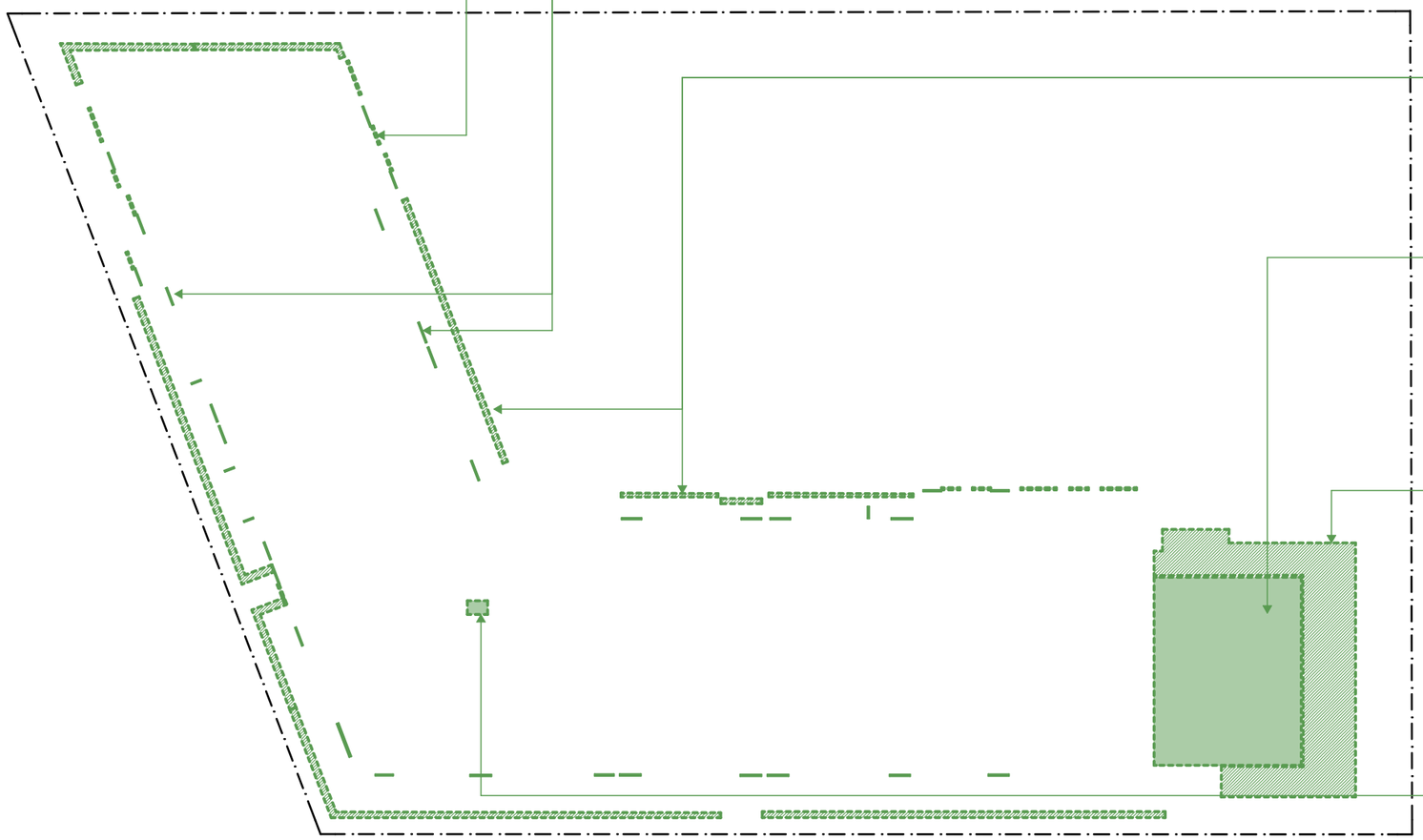
Level 6 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 13.6

01 02	Operable external blinds	B	No shading
		M	+ 21 lin. m shading
		P	+ 28 lin. m shading

Change 14.6

01 02	Reduce/remove glazing to extent shown	B	—
		M	1500W x 2700H glazing
		P	to bedroom windows

Change 15.6

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	B	—
		M	+ 59m² planting
		P	+ 59m² planting

Change 8.6

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Paving	B	—
		M	+ 129m² HR Paving
		P	+ 129m² HR Paving

Change 11.6

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 100m² Green Roof
		P	+ 100m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	—
		M	+ 100m² Green Roof
		P	+ 100m² Green Roof

Change 10.6

06	Remove waste chutes	B	—
		M	+ 1m² BOH
		P	+ 1m² BOH

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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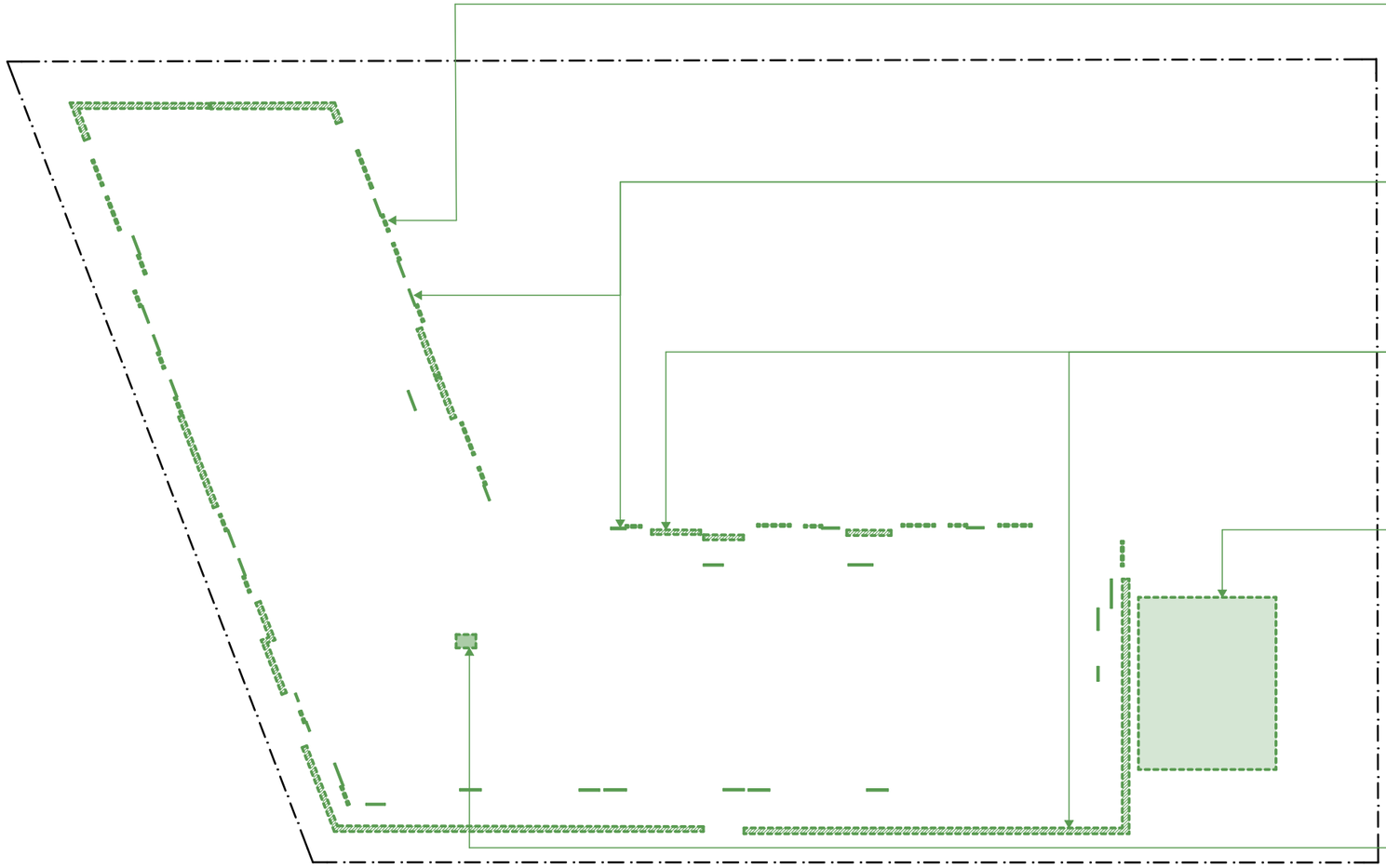
Level 7 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 13.7

01 02	Operable external blinds	B	No shading
		M	+ 24 lin. m shading
		P	+ 32 lin. m shading

Change 14.7

01 02	Reduce/remove glazing to extent shown	B	—
		M	1500W x 2700H glazed
		P	1500W x 2700H glazed

Change 15.7

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	B	—
		M	+ 49m² planting
		P	+ 49m² planting

Change 18.7

01 01	On-site renewable energy generation	B	—
		M	+ 116m² PV Array Area
		P	+ 116m² PV Array Area
04	75% Target coverage with elements to reduce impact of UHIE: Solar PV Array	B	—
		M	+ 116m² PV Array Area
		P	+ 116m² PV Array Area

Change 10.7

06	Remove waste chutes	B	—
		M	+ 1m² BOH
		P	+ 1m² BOH

BREATHE ARCHITECTURE

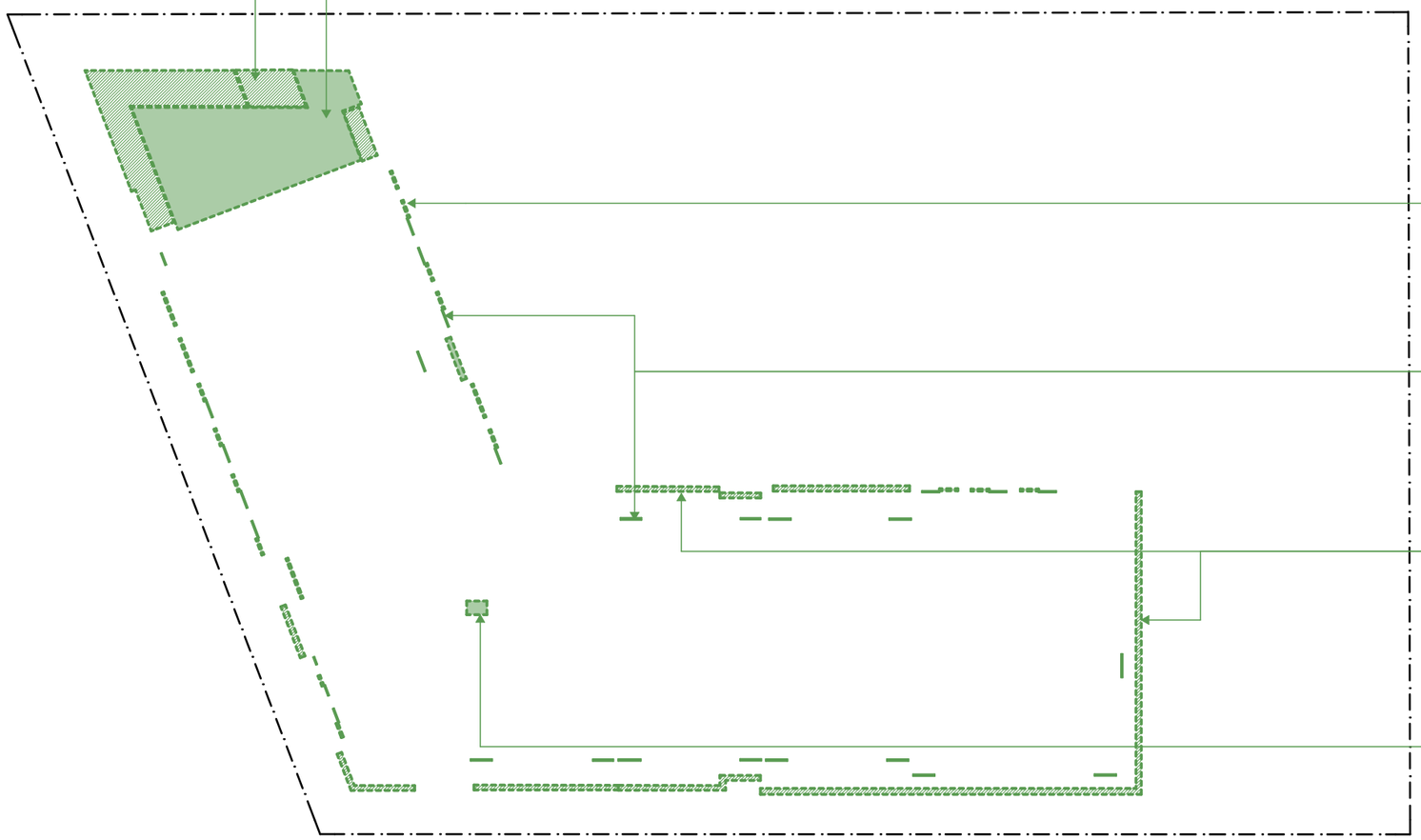
Scale — 1:400 at A3

North —

Date — 31/01/23

Level 8 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 11.8

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 56m² Green Roof
		P	+ 56m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	—
		M	+ 56m² Green Roof
		P	+ 56m² Green Roof

Change 8.8

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Paving	B	—
		M	+ 95m² HR Paving
		P	+ 95m² HR Paving

Change 13.8

01 02	Operable external blinds	B	No shading
		M	+ 21 lin. m shading
		P	+ 28 lin. m shading

Change 14.8

01 02	Reduce/remove glazing to extent shown	B	—
		M	1500W x 2700H glazing
		P	to bedroom windows

Change 15.8

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	B	—
		M	+ 90m² planting
		P	+ 90m² planting

Change 10.8

06	Remove waste chutes	B	—
		M	+ 1m² BOH
		P	+ 1m² BOH

BREATHE ARCHITECTURE

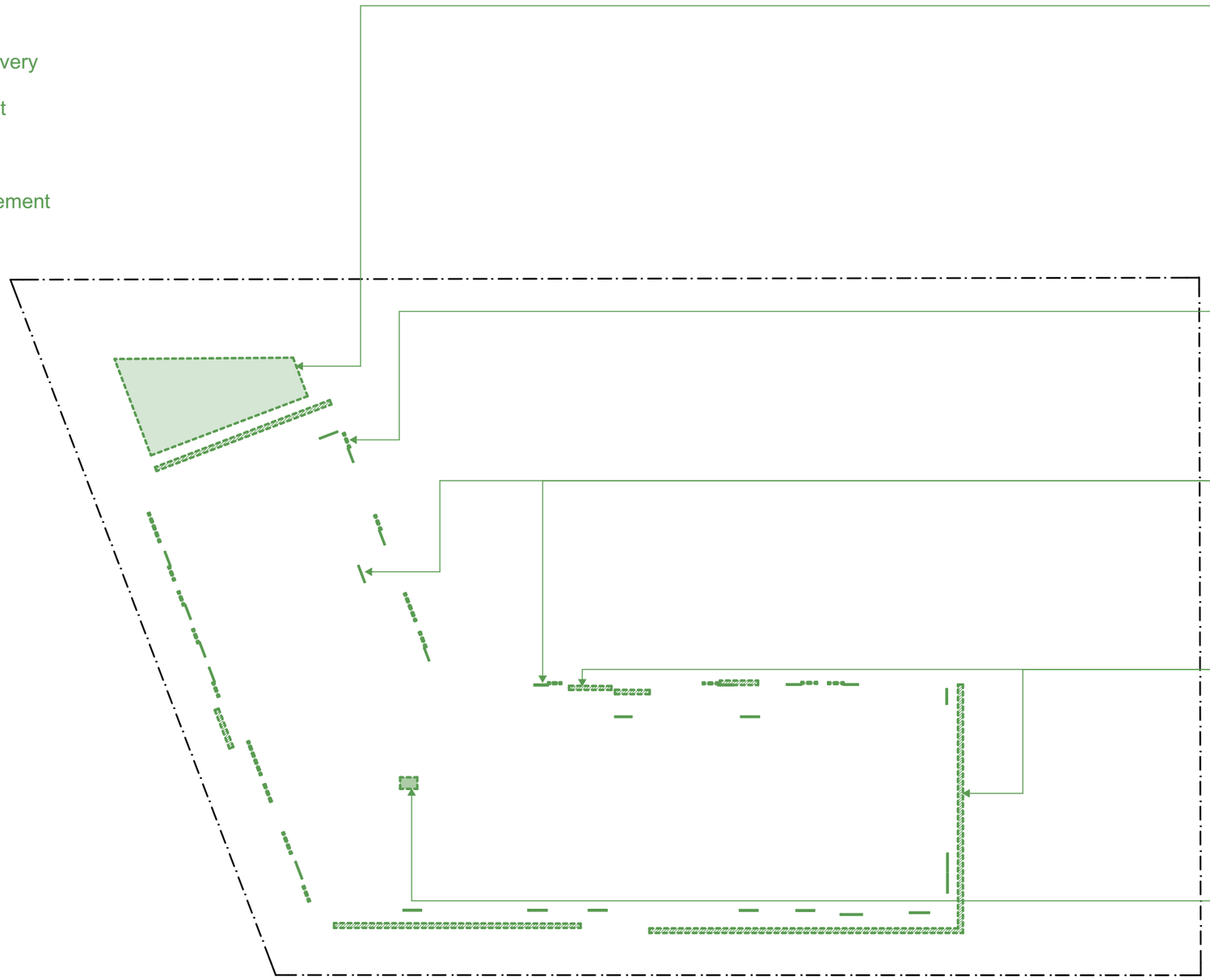
Scale — 1:400 at A3

North —

Date — 31/01/23

Level 9 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 18.9

01 01	On-site renewable energy generation	B	—
		M	+ 78m² PV Array Area
		P	+ 78m² PV Array Area
04	75% Target coverage with elements to reduce impact of UHIE: Solar PV Array	B	—
		M	+ 78m² PV Array Area
		P	+ 78m² PV Array Area

Change 13.9

01 02	Operable external blinds	B	No shading
		M	+ 21 lin. m shading
		P	+ 28 lin. m shading

Change 14.9

01 02	Reduce/remove glazing to extent shown	B	—
		M	1500W x 2700H glazing
		P	to bedroom windows

Change 15.9

05	New planter box on balcony and/ or to be fixed on facade Nom. 500mm deep	B	—
		M	+ 33m² planting
		P	+ 33m² planting

Change 10.9

06	Remove waste chutes	B	—
		M	+ 1m² BOH
		P	+ 1m² BOH

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

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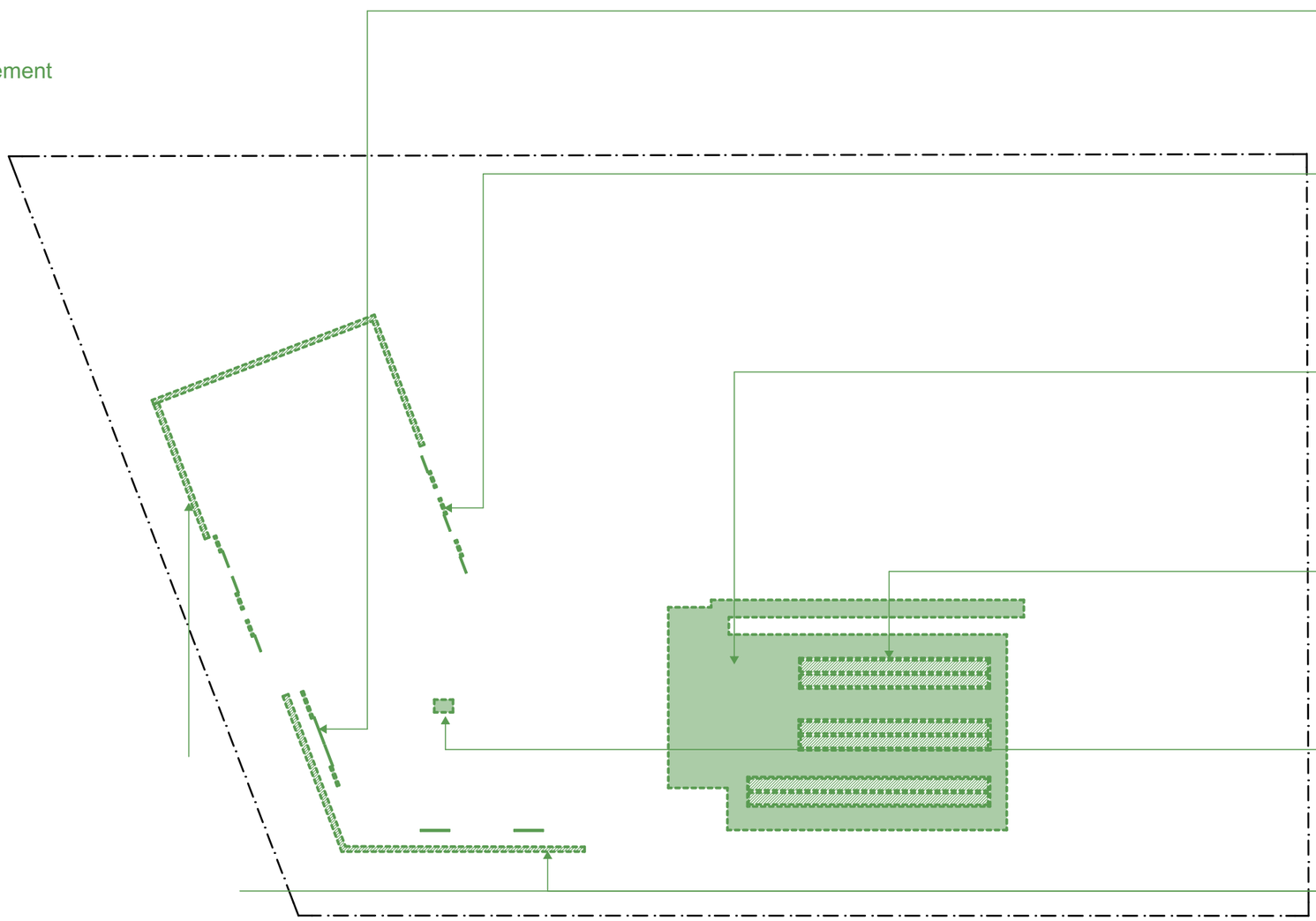
Level 10 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 14.10

01 02 Reduce/remove glazing to extent shown

B —
M 1500W x 2700H glazing
P to bedroom windows

Change 13.10

01 02 Operable external blinds

B No shading
M + 8.3 lin. m shading
P + 11 lin. m shading

Change 8.10

04 75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Paving

B —
M + 282m² HR Paving
P + 282m² HR Paving

Change 16.10

05 Vege Produce Garden. Planters nom. 750mm deep

B --
M + 78m² Garden
P + 78m² Garden

Change 10.10

06 Remove waste chutes

B Waste Chutes
M + 1m² BOH
P + 1m² BOH

Change 15.10

05 New planter box on balcony and/ or to be fixed on exterior facade Nom. 500mm deep

B —
M + 26m² planting
P + 26m² planting

BREATHE ARCHITECTURE

Scale — 1:400 at A3
North —

Date — 31/01/23
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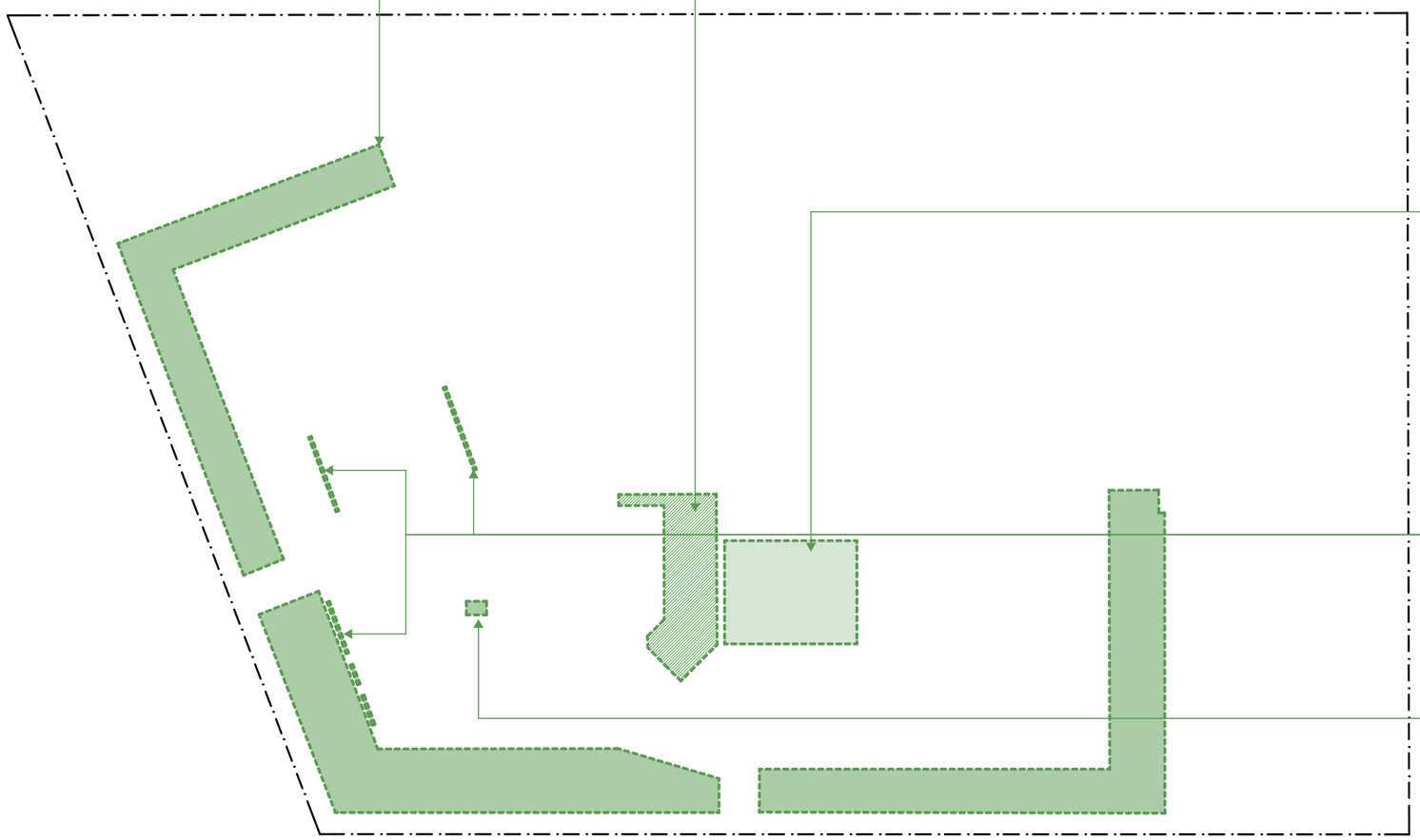
Level 11 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 17.11

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof	B	—
		M	+ 522m² HR Roof
		P	+ 522m² HR Roof

Change 11.11

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 47m² Green Roof
		P	+ 47m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	—
		M	+ 128m² Green Roof
		P	+ 128m² Green Roof

Change 18.11

01 01	On-site renewable energy generation	B	—
		M	+ 64m² PV Array Area
		P	+ 64m² PV Array Area
04	75% Target coverage with elements to reduce impact of UHIE: Solar PV Array	B	—
		M	+ 64m² PV Array Area
		P	+ 64m² PV Array Area

Change 13.11

01 02	Operable external blinds	B	No shading
		M	+ 14.25 lin. m shading
		P	+ 19 lin. m shading

Change 10.11

06	Remove waste chutes	B	Waste Chutes
		M	+ 1m² BOH
		P	+ 1m² BOH

BREATHE ARCHITECTURE

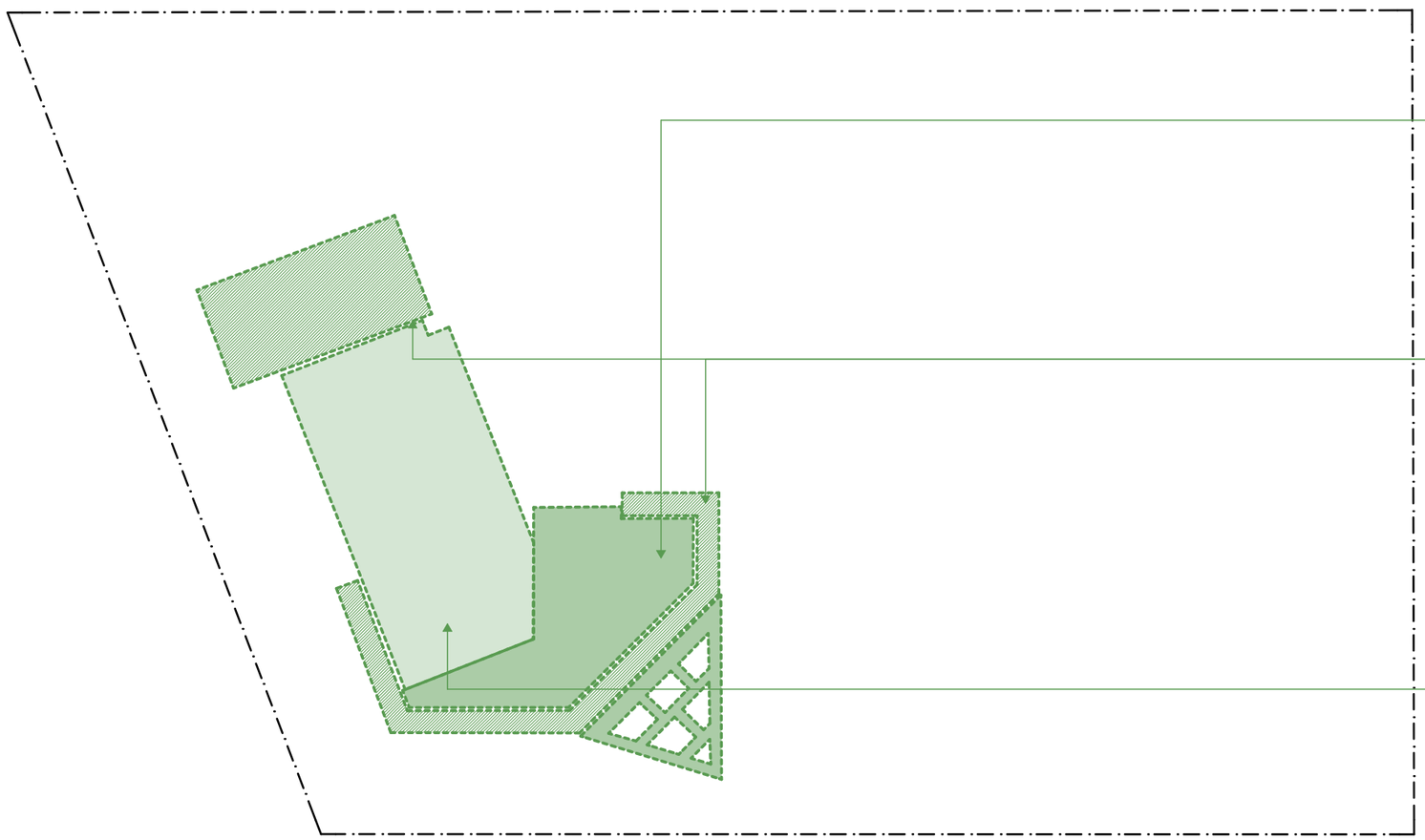
Scale — 1:400 at A3

North —

Date — 31/01/23

Rooftop Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 17.R

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof	B	—
		M	+ 175m² HR Roof
		P	+ 175m² HR Roof

Change 11.R

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 200m² Green Roof
		P	+ 200m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	—
		M	+ 200m² Green Roof
		P	+ 200m² Green Roof

Change 18.R

01 02	On-site renewable energy generation	B	—
		M	+ 264m² PV Array Area
		P	+ 264m² PV Array Area
04	75% Target coverage with elements to reduce impact of UHIE: Solar PV Array	B	—
		M	+ 264m² PV Array Area
		P	+ 264m² PV Array Area

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
01	Overarching ESD	1.1	Greenstar or BESS Certification	>50 dwellings: 5 star green star rating >5000sqm GFA: 5 star green star rating <5000sqm GFA or non res >1000sqm GFA: 50% BESS	>50 dwellings: 6 star green star rating >5000sqm GFA: 6 star green star rating <5000sqm GFA or non res >1000sqm GFA: 70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Reduce embodied carbon emissions by 20% Pay for certification		Changes 12, 13 and 14		Upgrade material, window, door, etc. specs to indicative minimum specs. Reduce embodied carbon emissions by 40% Pay for certification		Changes 12, 13 and 14	
02	Energy Efficiency and Renewables	2.1	NatHERS Rating	>50 dwellings: 7.5 star NatHERs rating >5000sqm GFA: 5.5 star NABERS rating <5000sqm GFA or non res >1000sqm GFA: 60% BESS & ave. 7.5 NatHERs, min. 6.5 NatHERs for each dwelling	>50 dwellings or >5000sqm: >6 star NABERS rating <5000sqm GFA: >70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Pay for certification		Changes 12, 13 and 14		Upgrade material, window, door, etc. specs to indicative minimum specs. Commit to procure 100% renewable energy Pay for certification		Changes 12, 13 and 14	
		2.2	On-site Renewable Energy Generation	Yes	Yes		No				Change 18				Change 18	
		2.3	No Gas	Yes	Yes		No				Change 9				Change 9	
03	Sustainable Transport	3.1	Car parking titled as common property	Yes			No		Building Management Policy				Building Management Policy			
		3.2	Car parking designed to be adaptable	Yes			No				Change 6				Change 6	
		3.3	Car parking includes features that support more sustainable forms of private car ownership	Yes			No				Change 1				Change 1	
		3.4	Compliance with car parking design standards	Yes			No				Changes 1 and 7				Changes 1 and 7	
		3.5	EV ready spaces	5% of car parking spaces			No				Change 2				Change 2	
		3.6	EV infrastructure provision	20% of car parking spaces			No				Change 2				Change 2	
		3.7	Bicycle spaces	1 per dwelling			No				Change 5				Change 5	

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
04	Urban Heat Island Response	4.1	% of site area comprised of elements that reduce UHIE	75%			No				Changes 8, 11, and 17				Changes 8, 11, and 17	
		4.2	Non-glazed facade materials exposed to sun should have high solar reflectivity	Yes			Unknown		Change material specs as required				Change material specs as required			
		4.3	Passive cooling techniques	Yes			Unknown				Changes 8 and 11				Changes 8 and 11	
		4.4	Paving treatments that assist in cooling	Yes			No				Change 8				Change 8	
05	Urban Ecology	5.1	Minimum CoM Green Factor Tool Score	0.55 Note: score of exactly 0.55 achieved in minimum and preferred cases to determine potential changes noted. Location of additional landscaping is indicative only.			No (0.23)		Change planting species to indigenous		Changes 11, 15 and 16		Change planting species to indigenous		Changes 11, 15 and 16	
		5.2	Green cover supports habitat	Yes			No		See 5.1				See 5.1			
		5.3	Green cover is layered	Yes			No		See 5.1				See 5.1			
		5.4	Green cover is native, indigenous, or climate change resistant	Yes			Unknown		See 5.1				See 5.1			
		5.5	Green cover supports vegetation links between areas of high biodiversity	Yes			No		See 5.1				See 5.1			
		5.6	Species selected are drawn from CoM preferred species list	Yes			Unknown		See 5.1				See 5.1			
		5.7	Existing mature trees retained	Yes			N/A									
		5.8	Impact on canopy trees on adjoining lots minimised	Yes			N/A									
06	Waste & Resource Recovery	6.1	Waste Management Plan in accordance with CoM guidelines	Yes			Unknown		Prepare WMP		Changes 4 and 10		Prepare WMP		Changes 4 and 10	
		6.2	Meet requirements of Precinct Waste Management Plan	Yes			Unknown		See 6.1				See 6.1			

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
07	Stormwater Management	7.1	Water Quality Performance Objectives (CSIRO)	Best Practice	Exceeding Best Practice		Unknown									
		7.2	Stormwater treatment measures	Improve quality, reduce flow of water discharged			Unknown				Change 3				Change 3	
		7.3	Greenstar Certification		Category B Water Credit		Unknown						Pay for certification			
08	Water Efficiency	8.1	Provide precinct scale recycled water source	Yes			Yes				Change 3				Change 3	
		8.2	Rainwater tank	Sized to supply minimum 10% internal water demand			Yes									
		8.3	Use alternative water for non-potable uses				Unknown		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 3		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 3	
		8.4	BESS Water category score	Min. 50%			Unknown		Pay for certification				Pay for certification			
09	Integrated Flood Management	9.1	Essential services located above flood levels	Yes			Unknown									
		9.2	Design includes elements/ materials resilient to flood events	Yes			Unknown									
		9.3	Land use at ground can recover from flooding	Yes			Unknown									
		9.4	Level differences maintain connection to street	Yes			Yes									
		9.5	Raising internal ground level avoided/used as last resort	Yes			Yes									

3

Site 3

Large commercial project

Basement 1 Floor Plan

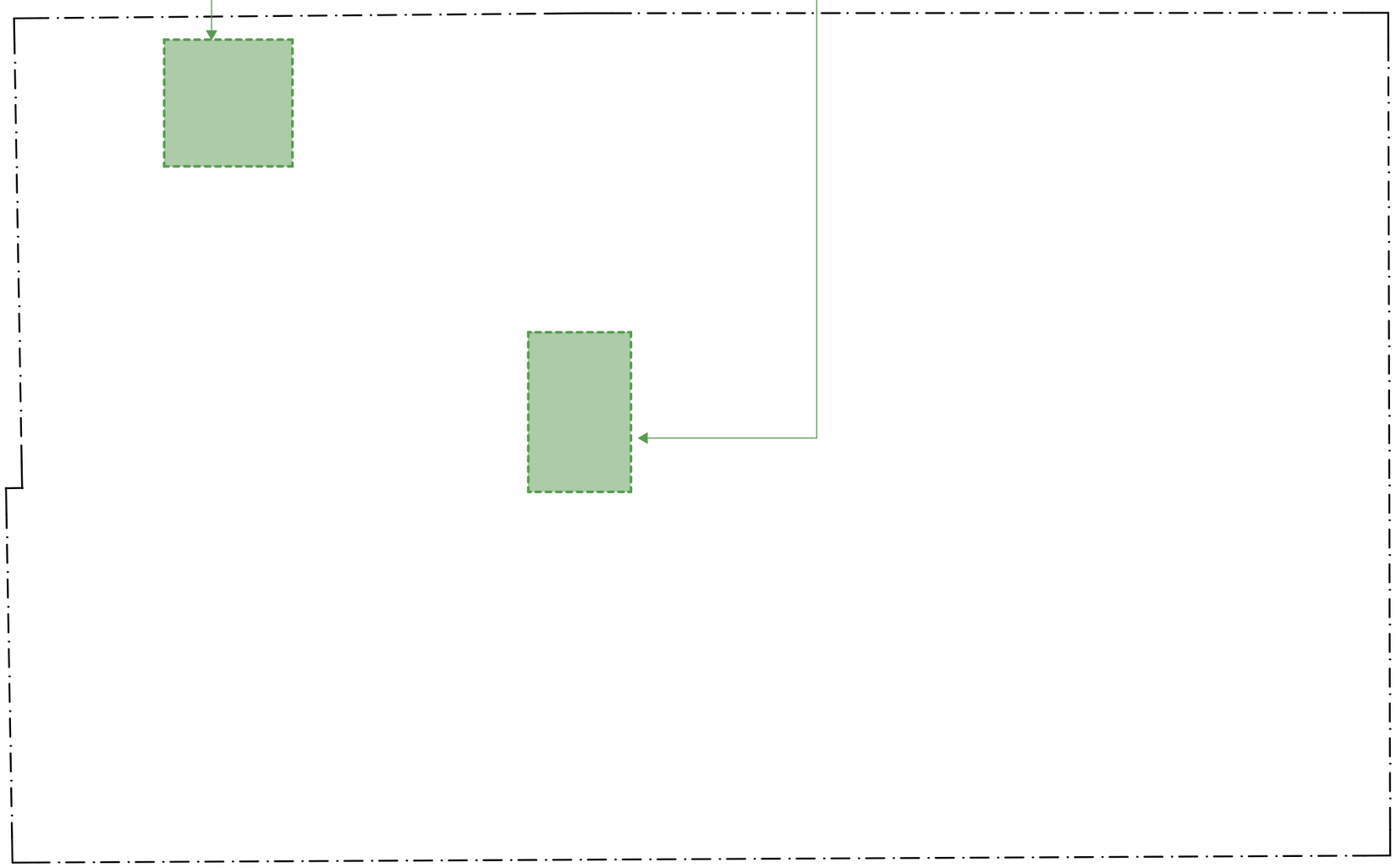
01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management

Change 1.B

02	TBC Tank removed if not required for emergency back up	B	—
		M	+ 24m² BOH
		P	+ 24m² BOH

Change 2.B

08	Grey water treatment and storage tank	B	—
		M	- 24m² BOH
		P	- 24m² BOH



BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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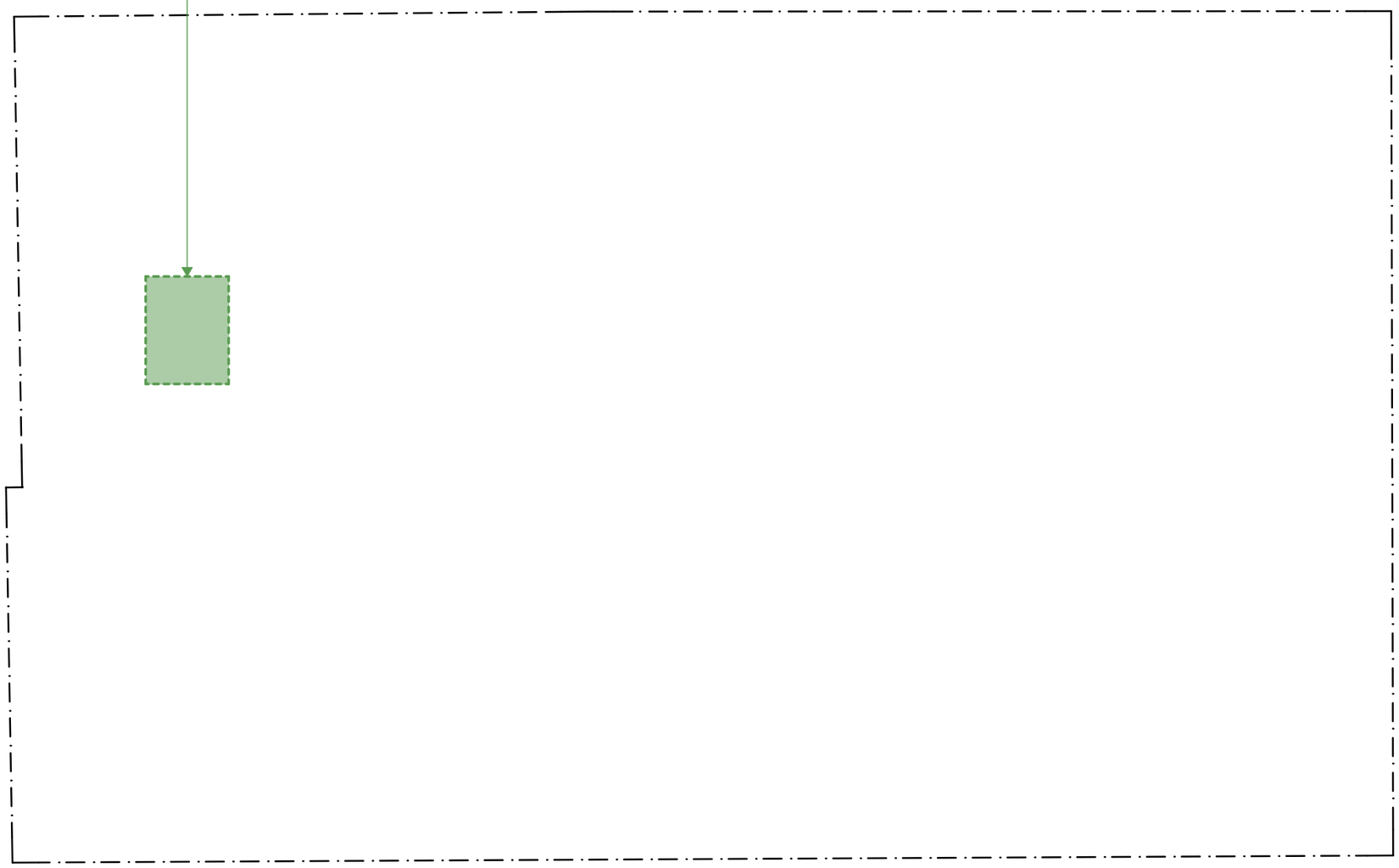
Lower Ground Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management

Change 1.LG

02 Remove gas connection. Allocate additional BOH space to battery sized to suit Solar PV Array

B —
M + Battery for PV Array
P + Battery for PV Array



BREATHE ARCHITECTURE

Scale — 1:200 at A3
North —

Date — 31/01/23
P45

Ground Floor Plan

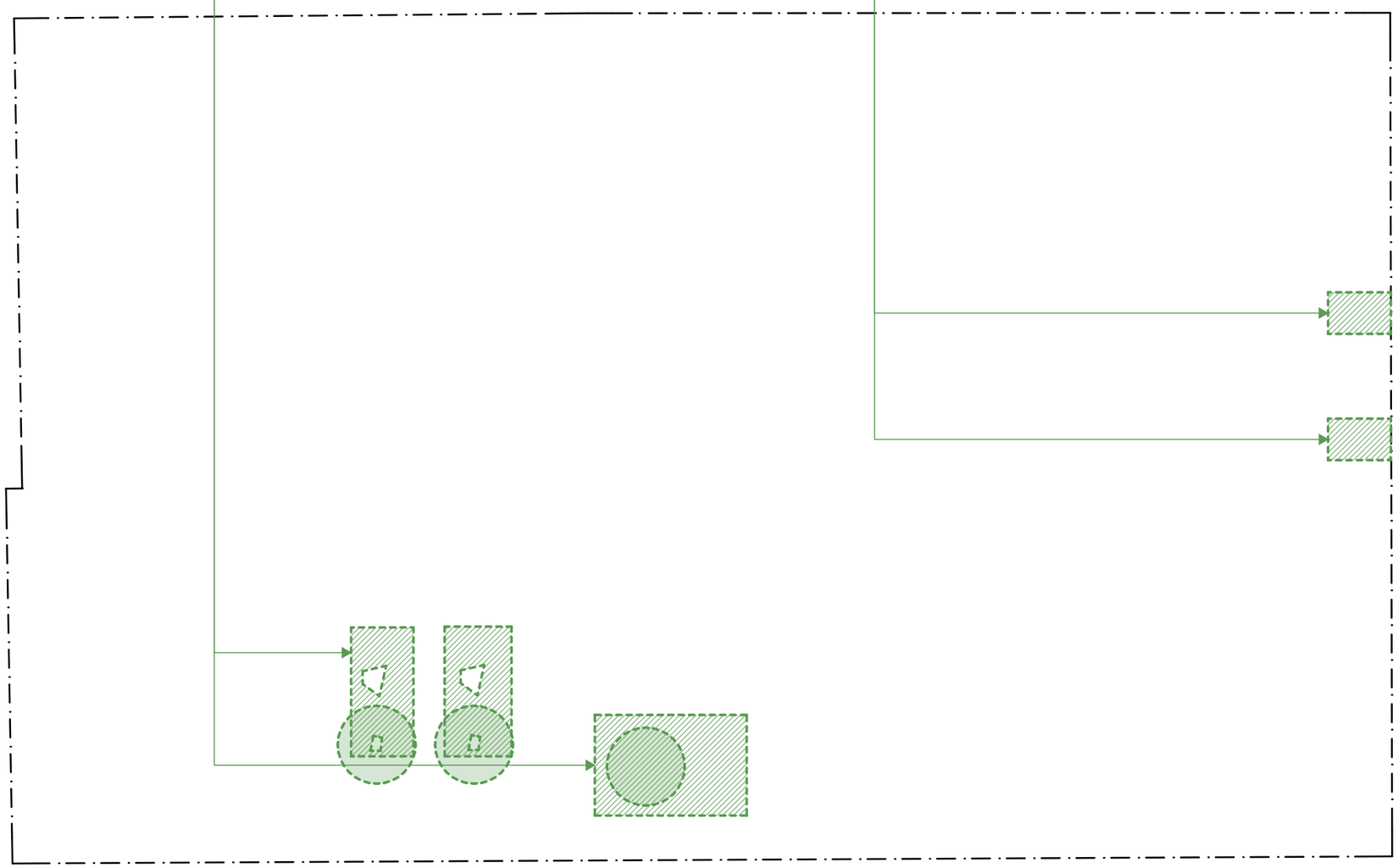
01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management

Change 3.G

05	Increase planters to support canopy trees	B	—
		M	+ 46m² planting
		P	+ 46m² planting

Change 4.G

05	Add above ground planters nom. 500mm deep	B	—
		M	+ 7.5m² planting
		P	+ 7.5m² planting



BREATHE ARCHITECTURE

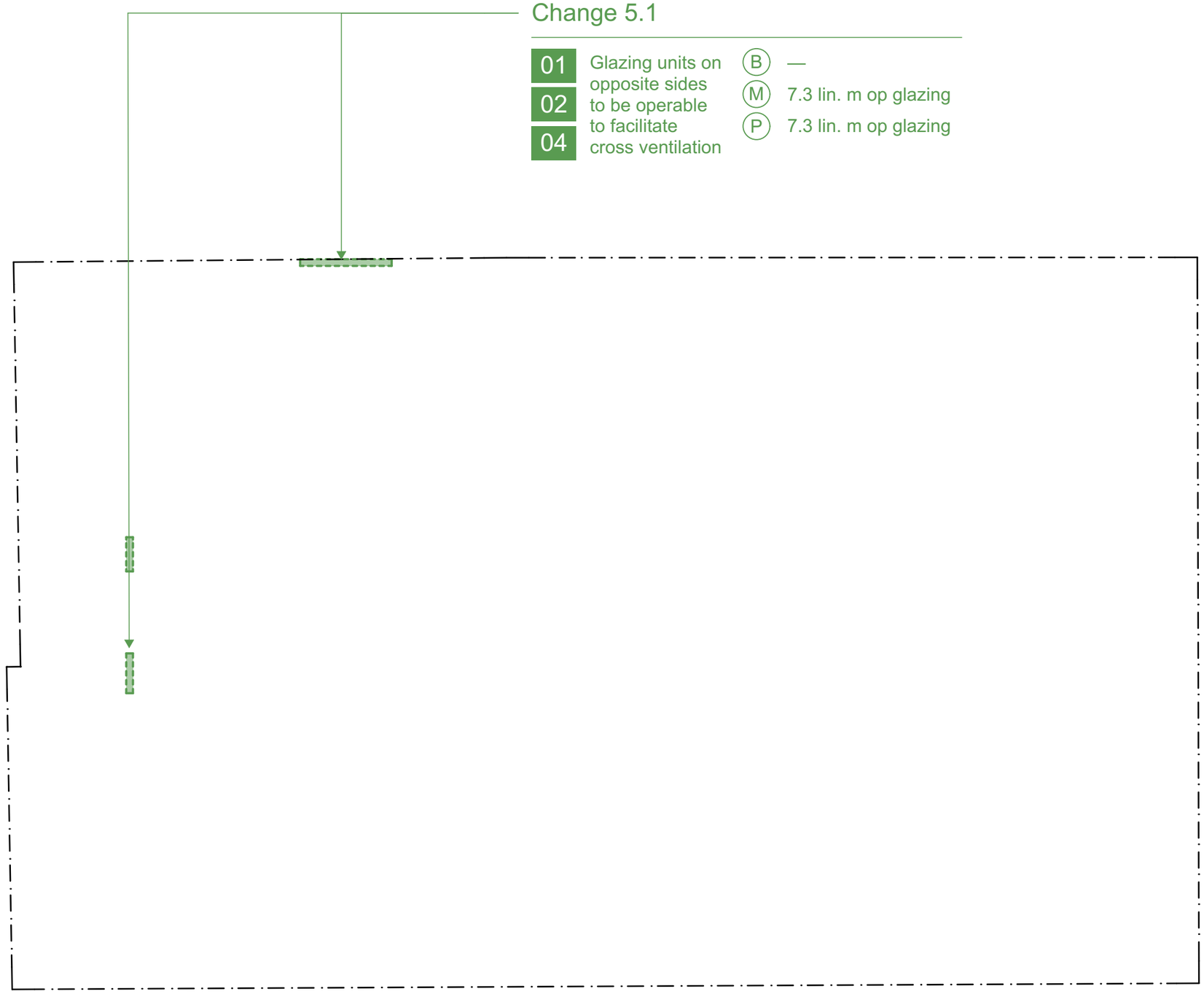
Scale — 1:200 at A3

North —

Date — 31/01/23

Level 1 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 5.1

01	Glazing units on opposite sides to be operable to facilitate cross ventilation	B	—
02		M	7.3 lin. m op glazing
04		P	7.3 lin. m op glazing

BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

Level 2 Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management

Change 6.2

05	Planter for climbing plants	B	—
		M	+ 17m² Planting
		P	+ 17m² Planting

Change 5.2

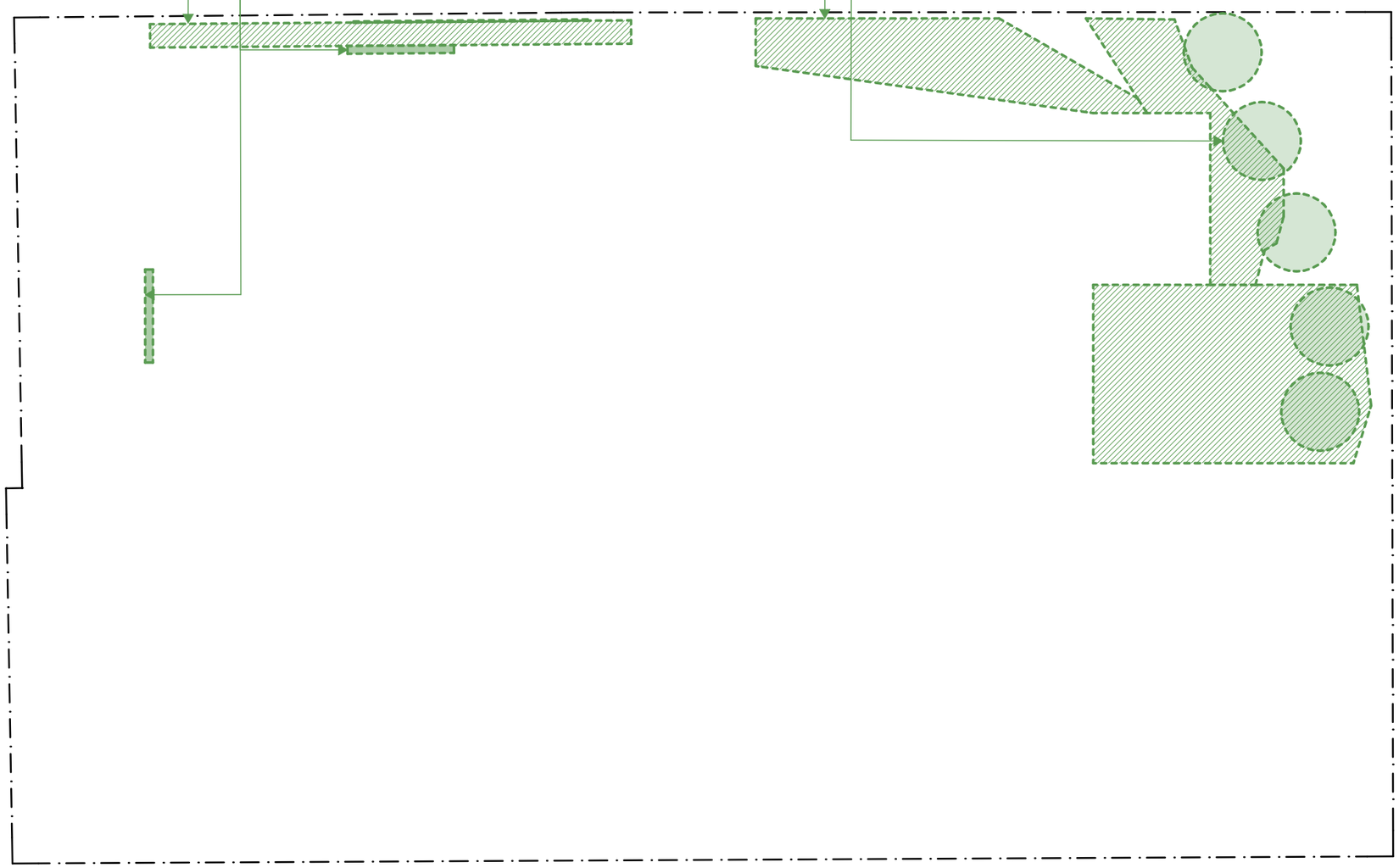
01, 02, 04	Glazing units on opposite sides to be operable to facilitate cross ventilation	B	—
		M	7.5 lin. m op glazing
		P	7.5 lin. m op glazing

Change 7.2

05	Additional Planter Boxes nom. 750mm deep	B	26m² Planting
		M	+ 131m² Planting
		P	+ 131m² Planting

Change 8.2

05	Add canopy trees to planters	B	—
		M	+ 5 small trees
		P	+ 5 small trees



Level 3 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management

Change 6.3

01, 02, 05 — Climbing plants on trellis wire to shade glazing. Extents: L3-L17 (planter boxes at each level)

- B — —
- M + 433m² Total on Facade
- P + 433m² Total on Facade

Change 5.3

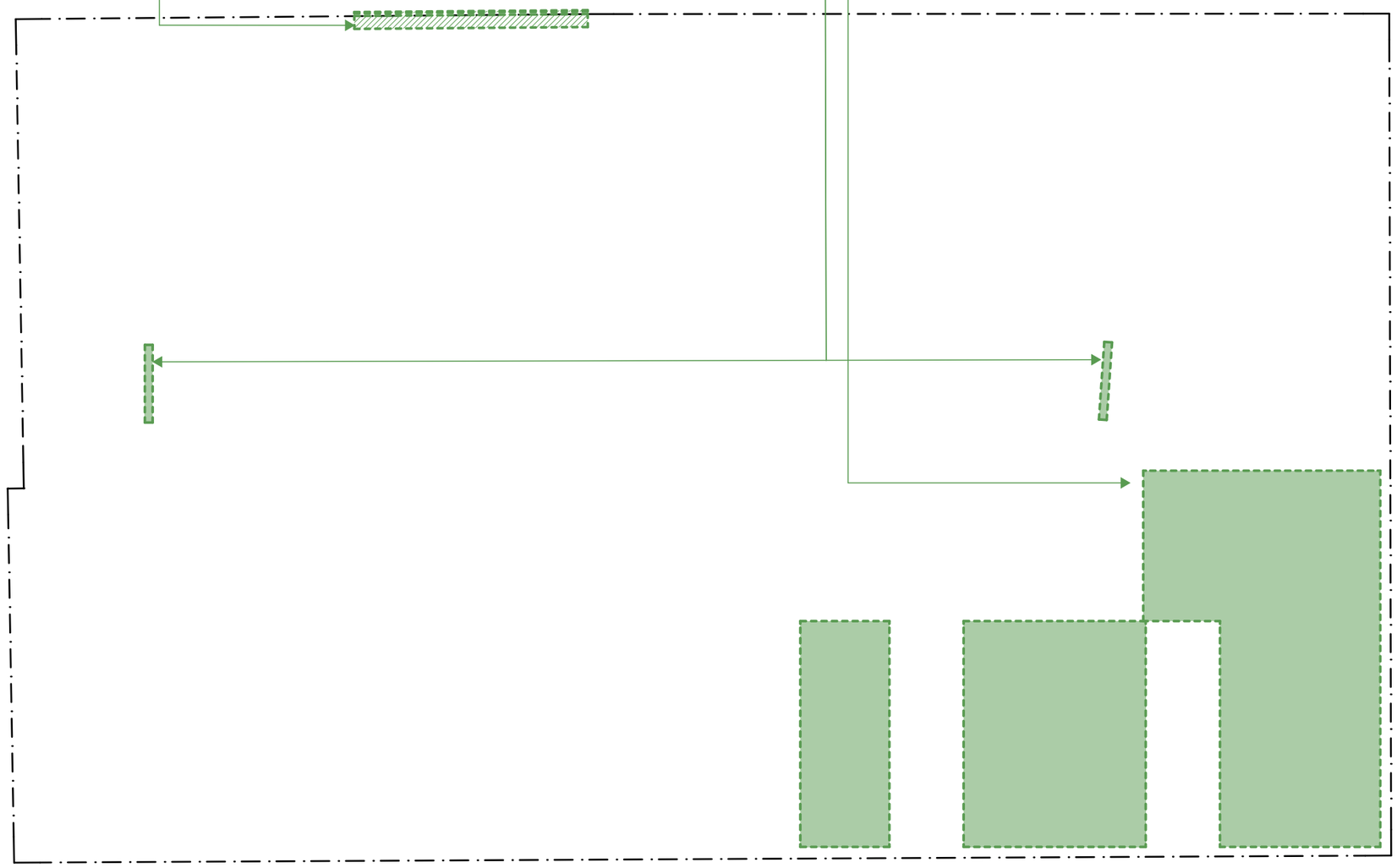
01, 02, 04 — 2 glazing units at each end to be operable to facilitate cross ventilation

- B —
- M 6 lin. m op glazing
- P 6 lin. m op glazing

Change 10.3

04 — 75% Target coverage with elements to reduce impact of UHIE: High solar reflectivity roof

- B —
- M + 198m² HR Roof
- P + 198m² HR Roof



BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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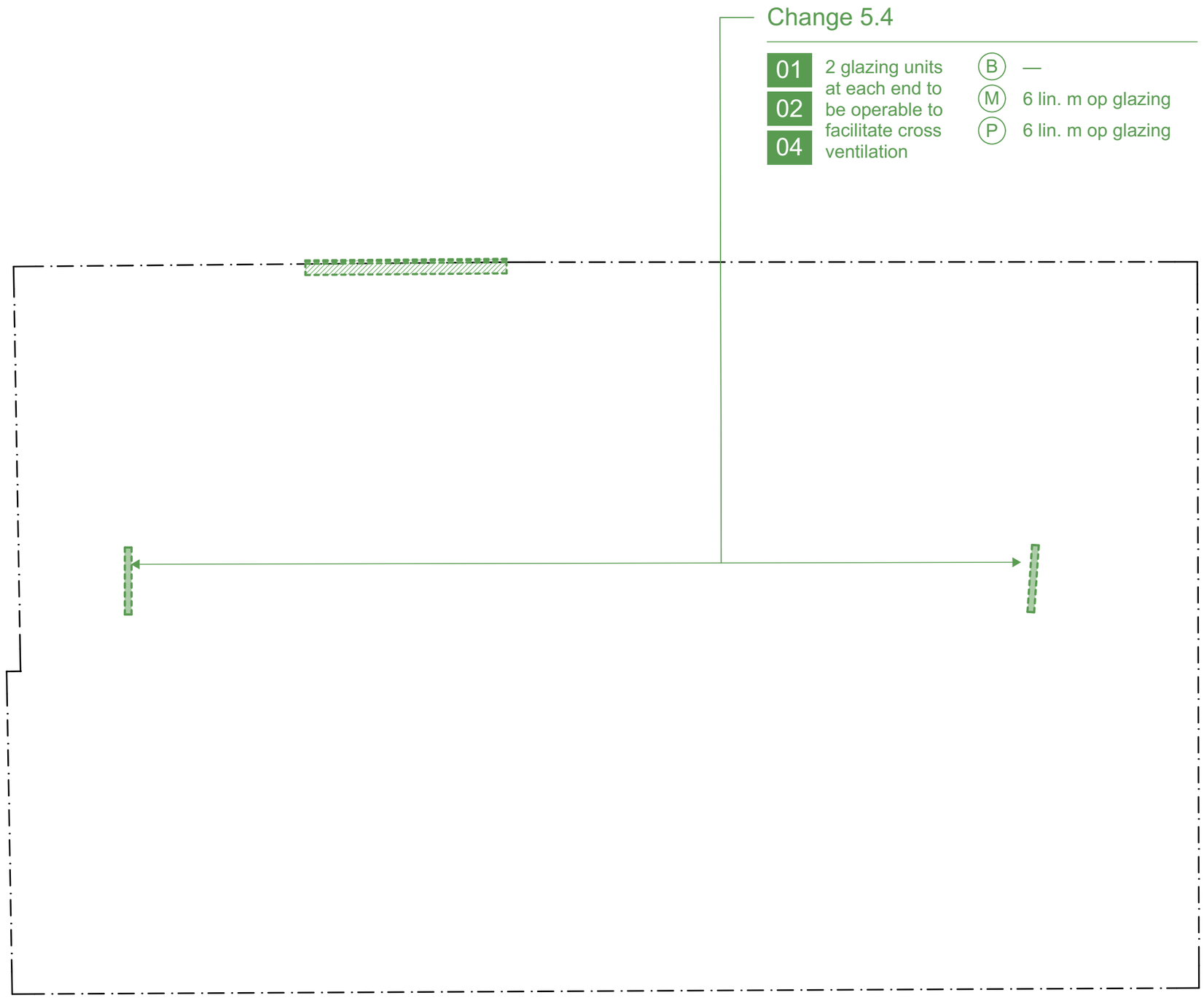
Level 4 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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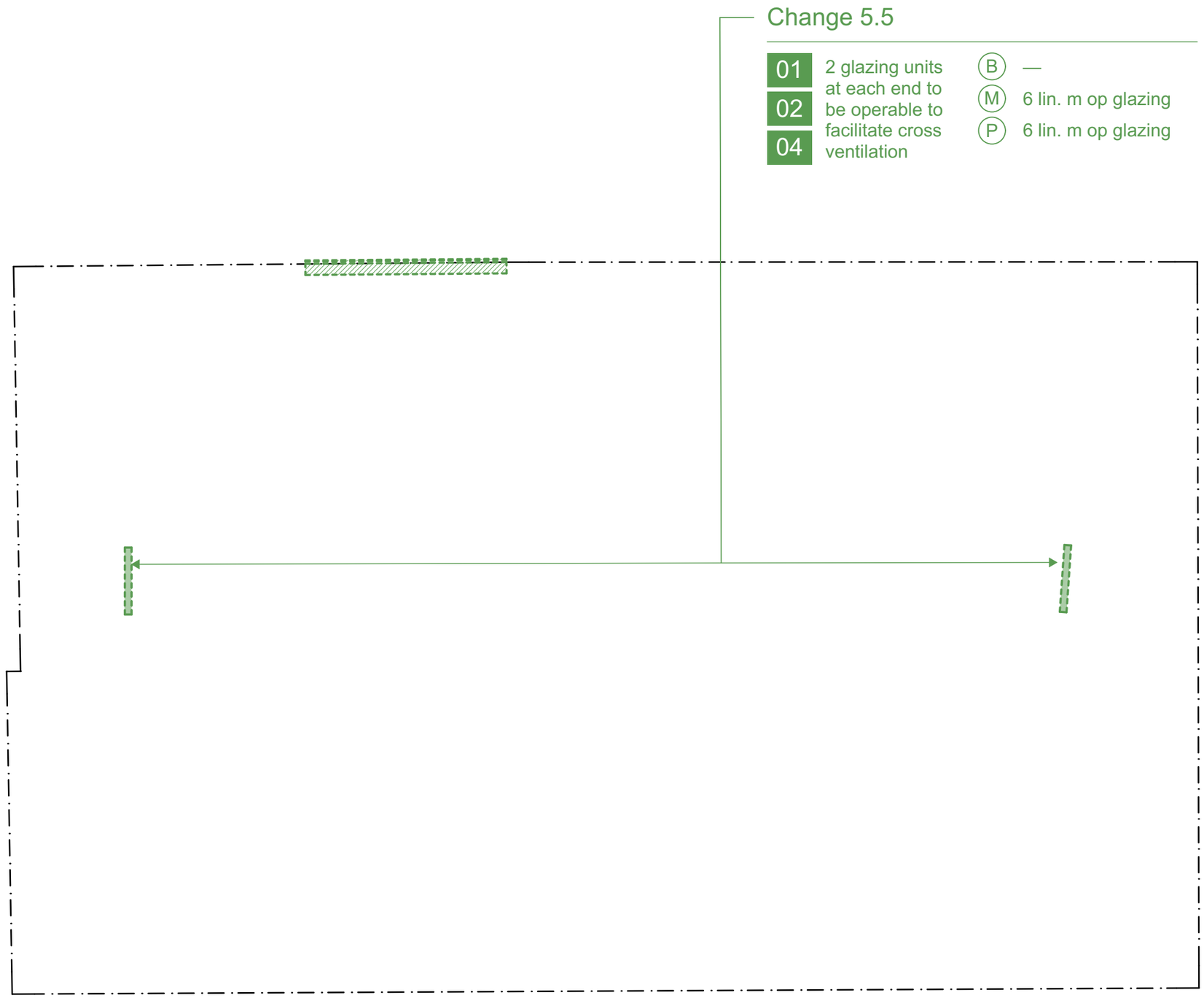
Level 5 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

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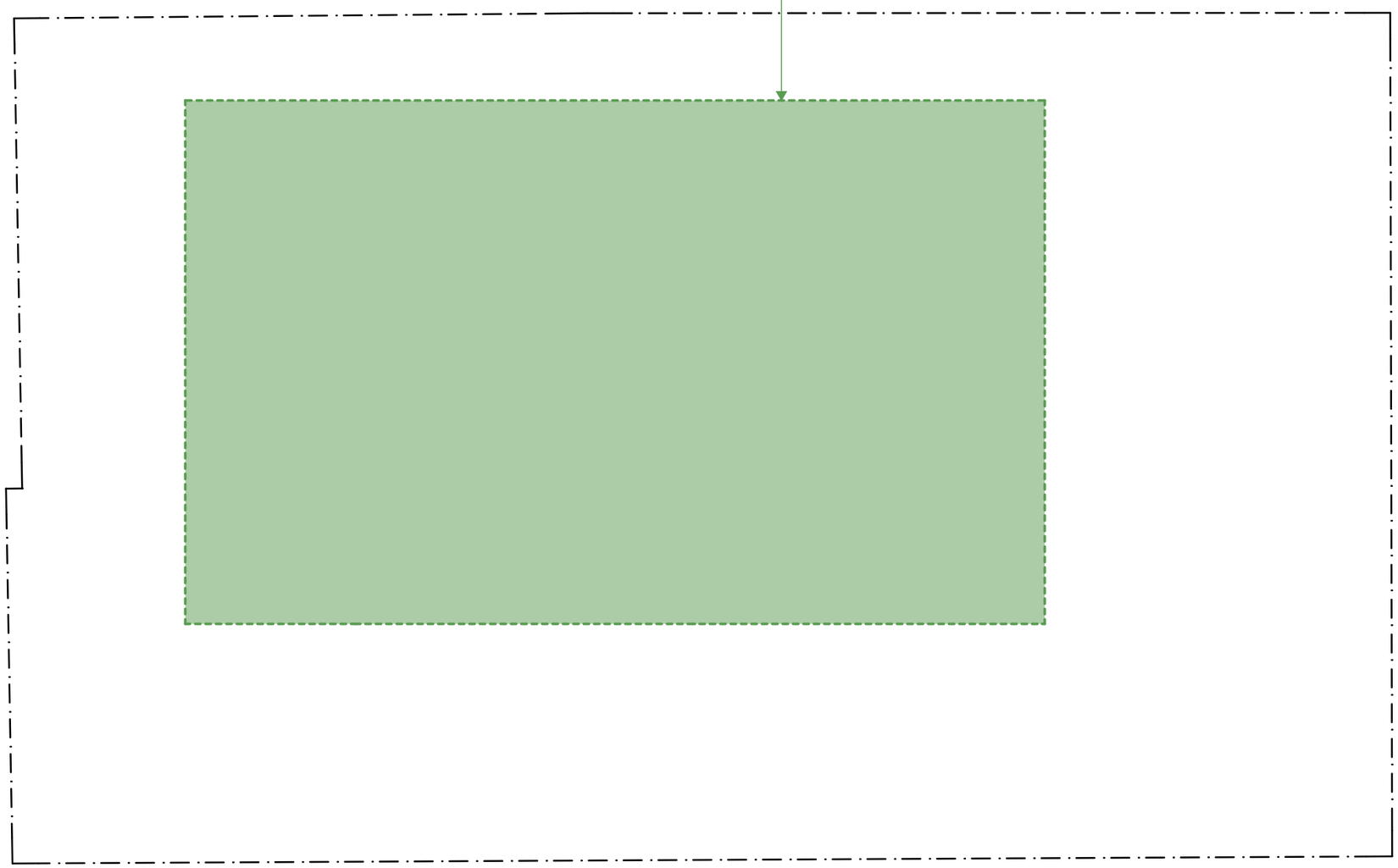
Rooftop Floor Plan 1

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management

Change 11.R

01 02	On-Site renewable energy generation	B	0m² PV Array
		M	+ 667m² PV Array Area
		P	+ 667m² PV Array Area
04	75% Target coverage with elements to reduce impact of UHIE: Solar Panels	B	—
		M	+ 667m² PV Array Area
		P	+ 667m² PV Array Area



BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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Rooftop Floor Plan 2

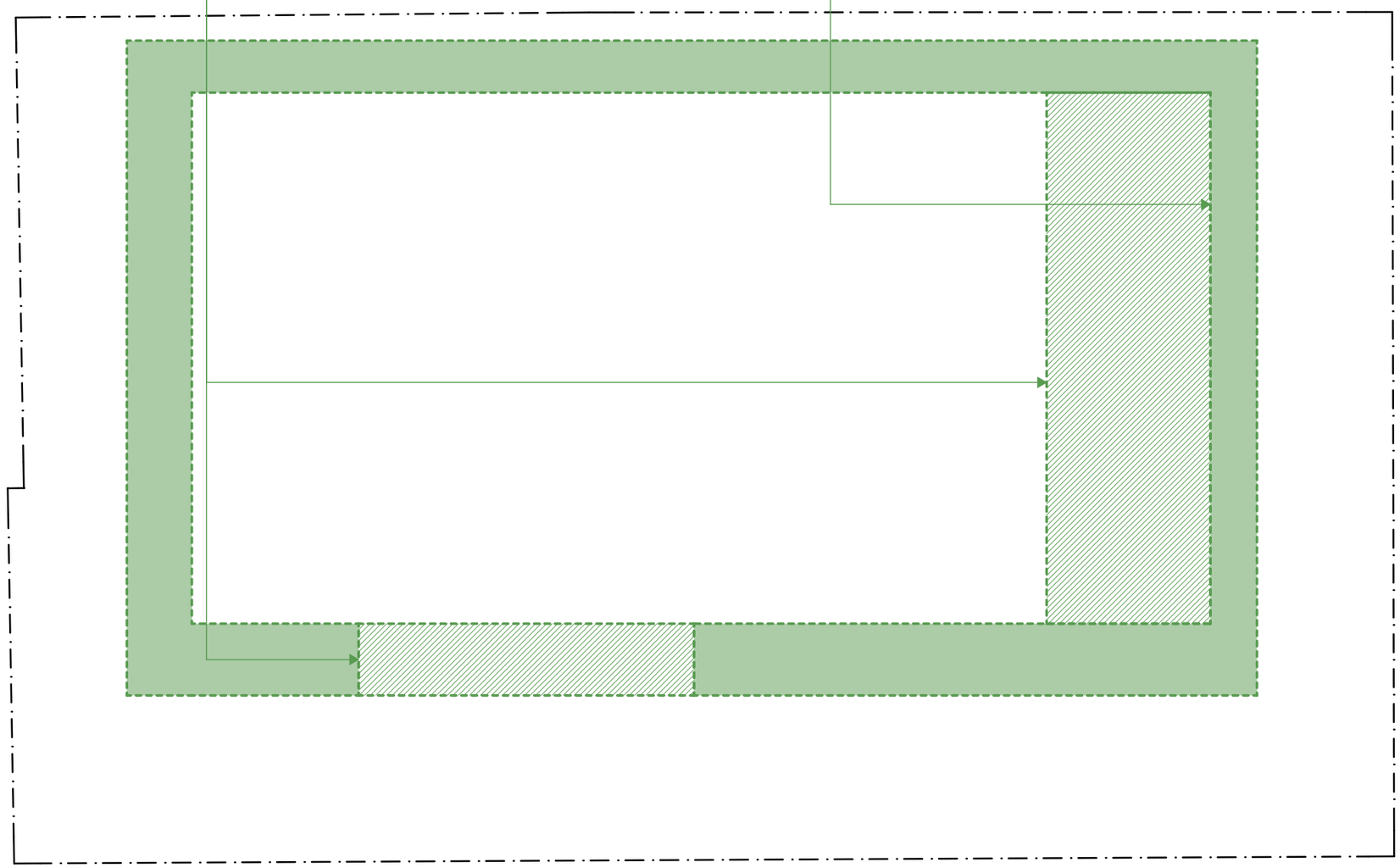
- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management

Change 9.R

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 167m² Green Roof
		P	+ 167m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	—
		M	+ 167m² Green Roof
		P	+ 167m² Green Roof

Change 10.R

04	75% Target coverage with elements to reduce impact of UHIE: High solar reflectivity roof	B	—
		M	+ 259m² HR Roof
		P	+ 259m² HR Roof



BREATHE ARCHITECTURE

Scale — 1:200 at A3

North —

Date — 31/01/23

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Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
01	Overarching ESD	1.1	Greenstar or BESS Certification	>50 dwellings: 5 star green star rating >5000sqm GFA: 5 star green star rating <5000sqm GFA or non res >1000sqm GFA: 50% BESS	>50 dwellings: 6 star green star rating >5000sqm GFA: 6 star green star rating <5000sqm GFA or non res >1000sqm GFA: 70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Reduce embodied carbon emissions by 20% Pay for certification		Changes 1, 5, 6 and 11		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Reduce embodied carbon emissions by 40% Pay for certification		Changes 1, 5, 6 and 11	
02	Energy Efficiency and Renewables	2.1	NatHERS Rating	>50 dwellings: 7.5 star NatHERs rating >5000sqm GFA: 5.5 star NABERS rating <5000sqm GFA or non res >1000sqm GFA: 60% BESS & ave. 7.5 NatHERs, min. 6.5 NatHERs for each dwelling	>50 dwellings or >5000sqm: >6 star NABERS rating <5000sqm GFA: >70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Pay for certification		Changes 1, 5, 6 and 11		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Commit to procure 100% renewable energy Pay for certification		Changes 1, 5, 6 and 11	
		2.2	On-site Renewable Energy Generation	Yes	Yes		No				Changes 1 and 11				Changes 1 and 11	
		2.3	No Gas	Yes	Yes		No				Change 1				Change 1	
03	Sustainable Transport	3.1	Car parking titled as common property	Yes			N/A									
		3.2	Car parking designed to be adaptable	Yes			N/A									
		3.3	Car parking includes features that support more sustainable forms of private car ownership	Yes			N/A									
		3.4	Compliance with car parking design standards	Yes			N/A									
		3.5	EV ready spaces	5% of car parking spaces			N/A									
		3.6	EV infrastructure provision	20% of car parking spaces			N/A									
		3.7	Bicycle spaces	1 per 20% reg. occupants			No, See Note									

Testing Disclaimer:
The above results do not account a shortfall of 98 bicycle spaces, 11 showers and 110 lockers from the Sustainable Transport category.
Potential implications may include the relocation of bicycle spaces to ground floor, increasing EOT on lower ground and an NSA decrease of 220sqm.

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
04	Urban Heat Island Response	4.1	% of site area comprised of elements that reduce UHIE	75%			No				Changes 9, 10 and 11				Changes 9, 10 and 11	
		4.2	Non-glazed facade materials exposed to sun should have high solar reflectivity	Yes			Unknown		Change material specs as required				Change material specs as required			
		4.3	Passive cooling techniques	Yes			Unknown				Changes 5 and 6				Changes 5 and 6	
		4.4	Paving treatments that assist in cooling	Yes			No									
05	Urban Ecology	5.1	Minimum CoM Green Factor Tool Score	0.55 Note: score of exactly 0.55 achieved in minimum and preferred cases to determine potential changes noted. Location of additional landscaping is indicative only.			No (0.01)		Change planting species to indigenous		Changes 6, 11, 13, 14 and 15		Change planting species to indigenous		Changes 6, 11, 13, 14 and 15	
		5.2	Green cover supports habitat	Yes			No		See 5.1				See 5.1			
		5.3	Green cover is layered	Yes			No		See 5.1				See 5.1			
		5.4	Green cover is native, indigenous, or climate change resistant	Yes			Unknown		See 5.1				See 5.1			
		5.5	Green cover supports vegetation links between areas of high biodiversity	Yes			No		See 5.1				See 5.1			
		5.6	Species selected are drawn from CoM preferred species list	Yes			Unknown		See 5.1				See 5.1			
		5.7	Existing mature trees retained	Yes			N/A									
		5.8	Impact on canopy trees on adjoining lots minimised	Yes			N/A									
06	Waste & Resource Recovery	6.1	Waste Management Plan in accordance with CoM guidelines	Yes			Unknown		Prepare WMP		Changes 4 and 7		Prepare WMP		Changes 4 and 7	
		6.2	Meet requirements of Precinct Waste Management Plan	Yes			Unknown		See 6.1				See 6.1			

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
07	Stormwater Management	7.1	Water Quality Performance Objectives (CSIRO)	Best Practice	Exceeding Best Practice		Unknown									
		7.2	Stormwater treatment measures	Improve quality, reduce flow of water discharged			Unknown									
		7.3	Greenstar Certification		Category B Water Credit		Unknown						Pay for certification			
08	Water Efficiency	8.1	Provide precinct scale recycled water source	Yes			Yes				Change 10				Change 10	
		8.2	Rainwater tank	Sized to supply minimum 10% internal water demand			Yes									
		8.3	Use alternative water for non-potable uses				Unknown		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 10		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 10	
		8.4	BESS Water category score	Min. 50%			Unknown		Pay for certification				Pay for certification			
09	Integrated Flood Management	9.1	Essential services located above flood levels	Yes			Unknown									
		9.2	Design includes elements/ materials resilient to flood events	Yes			Unknown									
		9.3	Land use at ground can recover from flooding	Yes			Unknown									
		9.4	Level differences maintain connection to street	Yes			Yes									
		9.5	Raising internal ground level avoided/used as last resort	Yes			Yes									

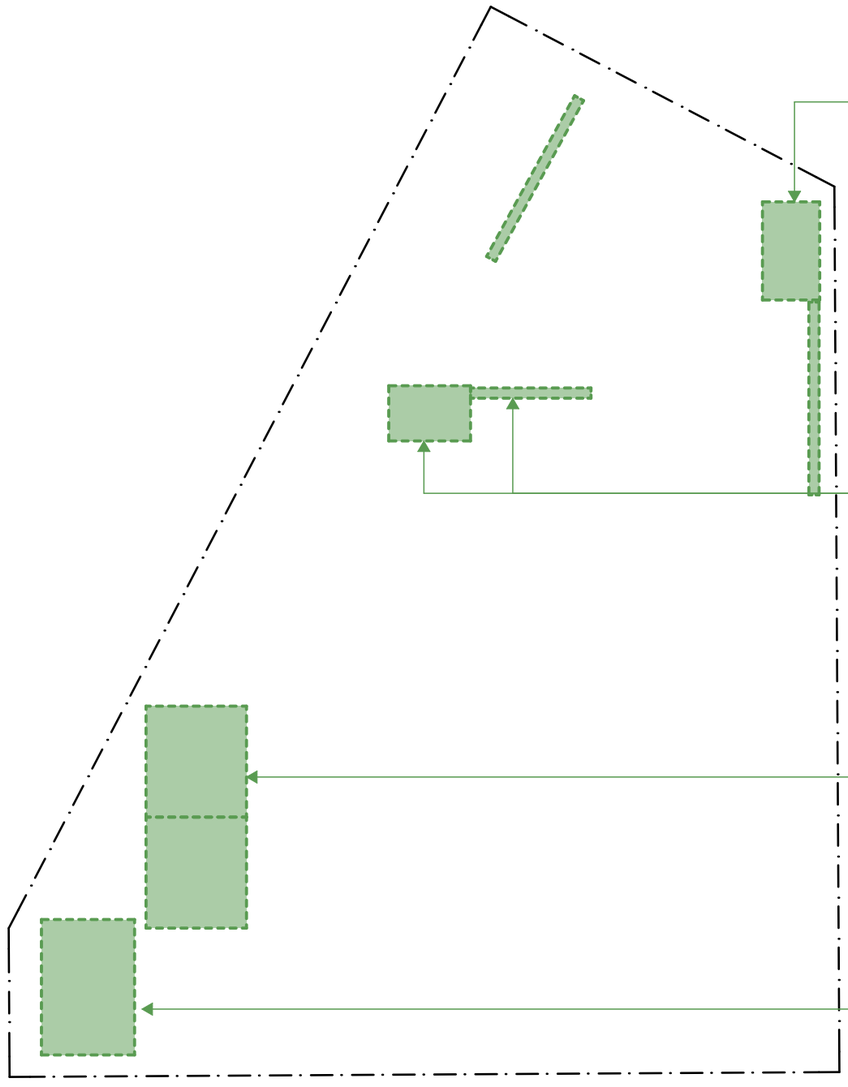
4

Site 4

High rise office building

Basement 2 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 1.B2

02 Allocate additional BOH space to battery sized to suit Solar PV Array

B —
M + Battery for PV Array
P + Battery for PV Array

Change 2.B2

03 2 x EV Space 6x Infrastructure provision for EV

B —
M + 2 EV, + 6 Provisional
P + 2 EV, + 6 Provisional

Change 3.B2

03 Allocate 2 x car share and 2 x visitor car parks

B —
M Lose 4 car spaces
P Lose 4 car spaces

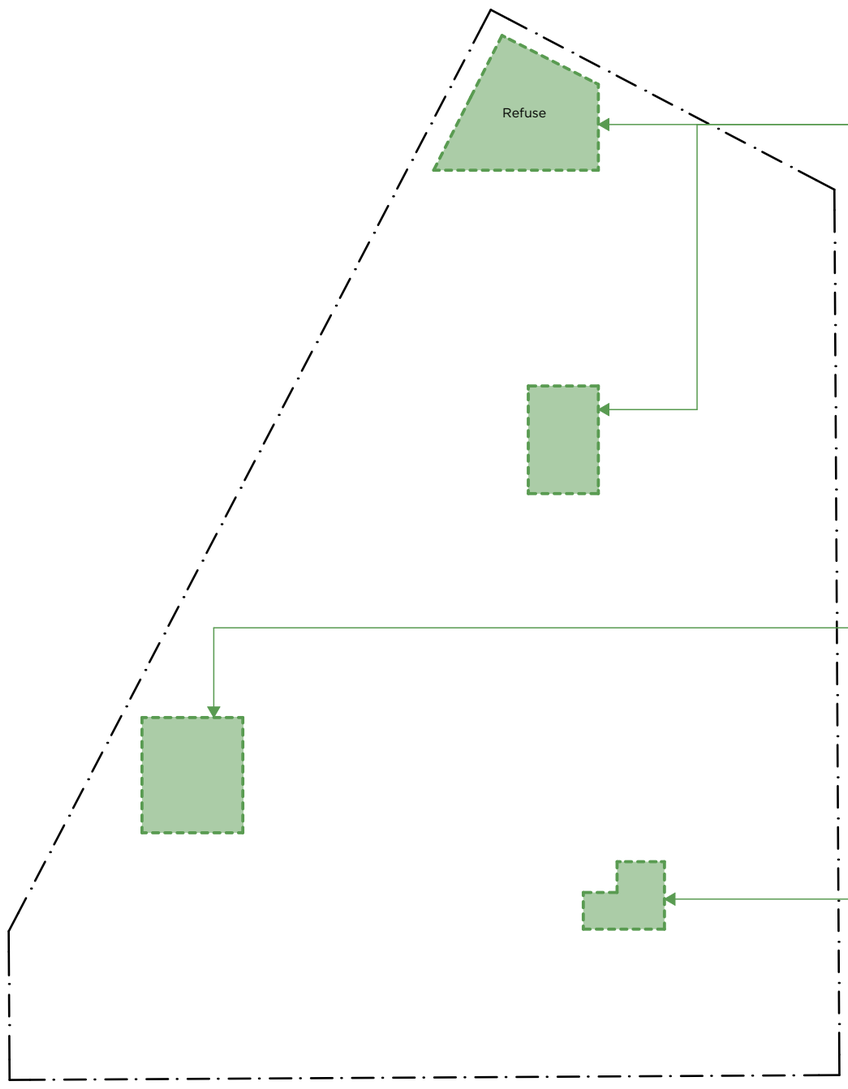
Change 10.B

08 Grey water treatment system

B —
M - 30m^2 BOH
P - 30m^2 BOH

Basement 1 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 4.B1

06 Consolidate refuse rooms

(B) —
(M) Rearrange bike parking
(P) Rearrange bike parking

Change 5.B1

03 Additional DDA Car Park

(B) —
(M) Lose 1 car space
(P) Lose 1 car space

Change 4.B1

06 Consolidate refuse rooms

(B) —
(M) + 10m^2 BOH
(P) + 10m^2 BOH

BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
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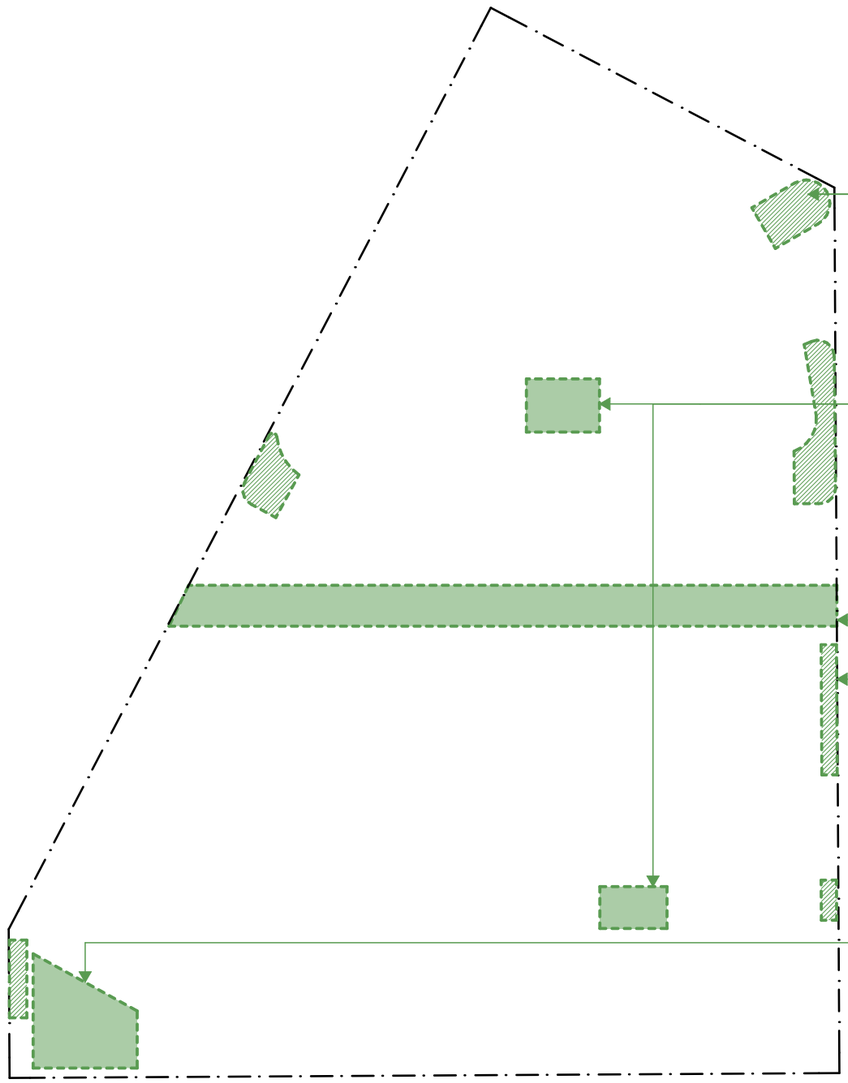
Ground Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 6.G

05 Add above ground planters nom. 500mm deep (hatched)

B —
M + 35m² planting
P + 35m² planting

Change 7.G

06 Remove waste chutes

B —
M + 16m² Commercial
P + 16m² Commercial

Change 8.G

03 Provide light and vent to basement (provision to make adaptable)

B —
M + Windows & Vents
P + Windows & Vents

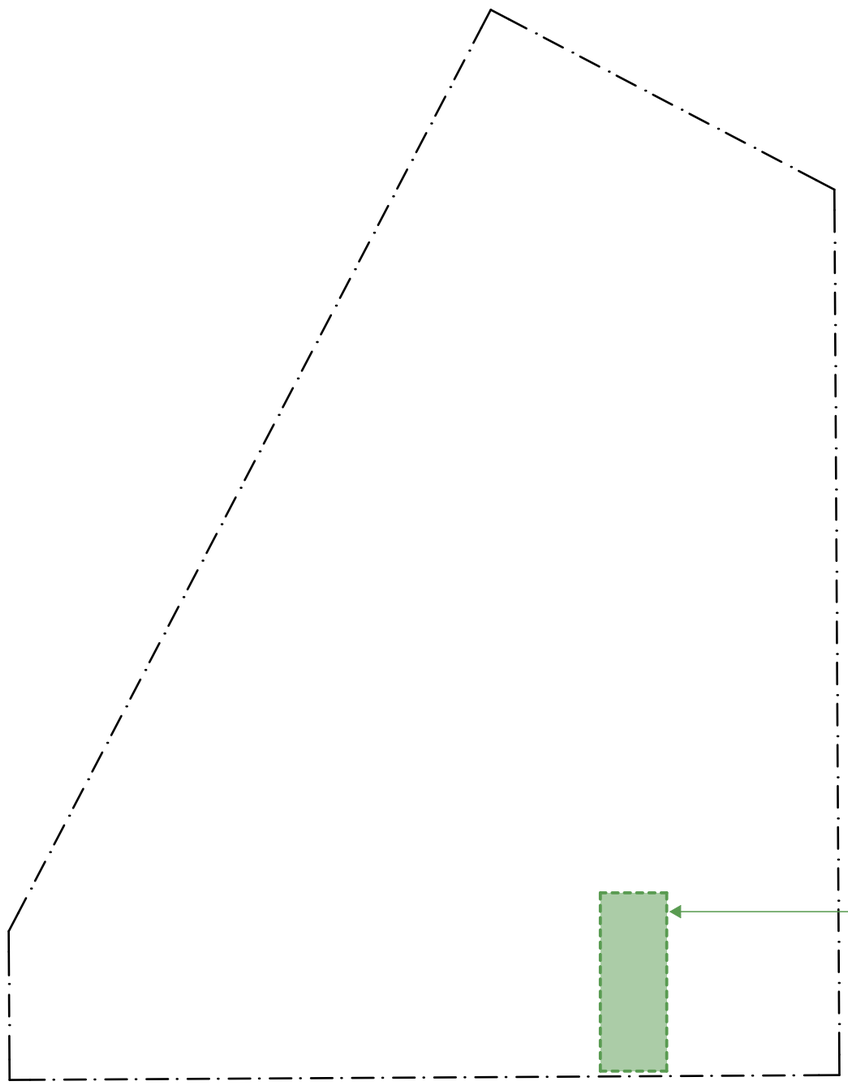
Change 9.G

02 Remove gas connection

B —
M + 21m² BOH
P + 21m² BOH

Mezzanine Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 10.M

08 Grey water storage tank

B —
M + 28m^2 Mezzanine
P + 28m^2 Mezzanine

BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
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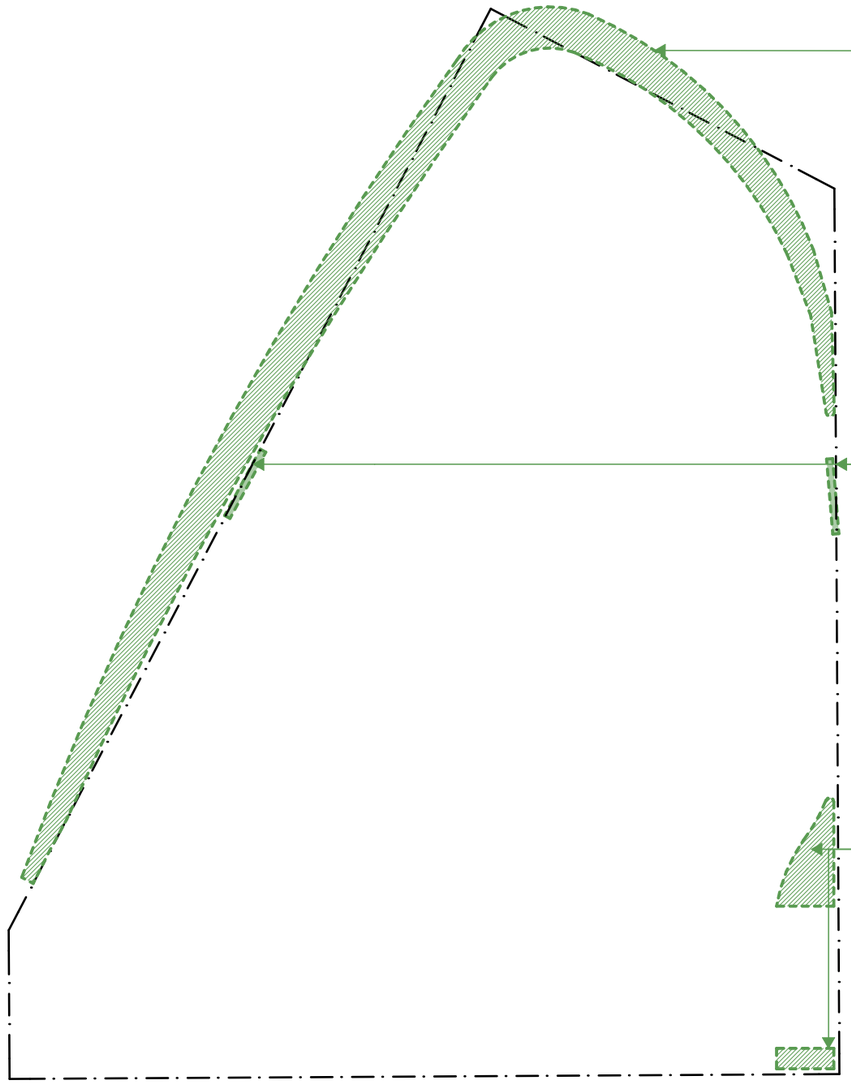
Level 1 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 11.1

05	Grass/meadow landscape to provide green roof	B	—
		M	+ 117m² Green Roof
		P	+ 117m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B	560m2 PV Array
		M	+ 117m² Green Roof
		P	+ 117m² Green Roof

Change 12.4

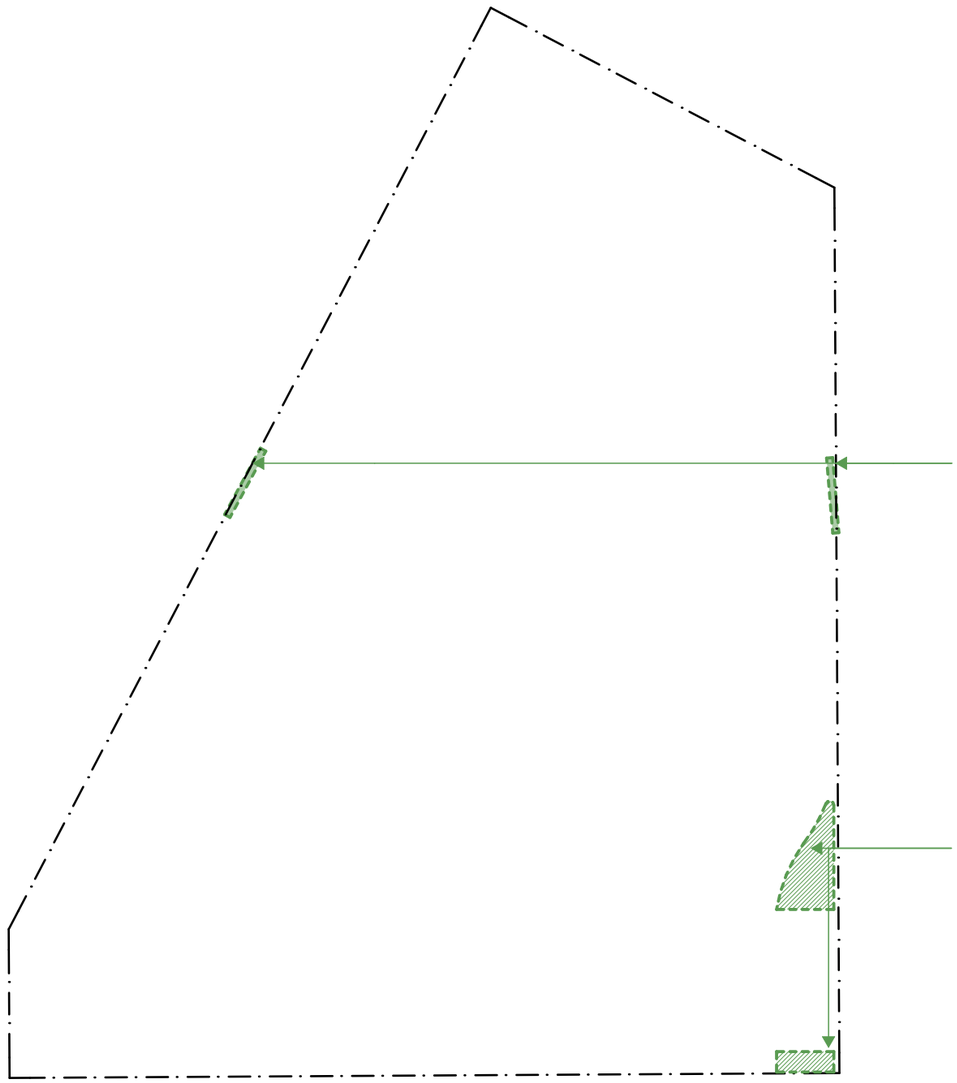
01 02 04	3 glazing units at each end to be operable to facilitate cross ventilation	B	—
		M	7.2 lin. m op glazing
		P	7.2 lin. m op glazing

Change 13.1

05	New planter boxes nom. 500mm deep	B	—
		M	+ 12m² Planting
		P	+ 12m² Planting

Level 2 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 12.2

01 02 04 3 glazing units at each end to be operable to facilitate cross ventilation

B —
M 7.2 lin. m op glazing
P 7.2 lin. m op glazing

Change 13.2

05 New planter boxes nom. 500mm deep

B —
M + 12m^2 Planting
P + 12m^2 Planting

BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
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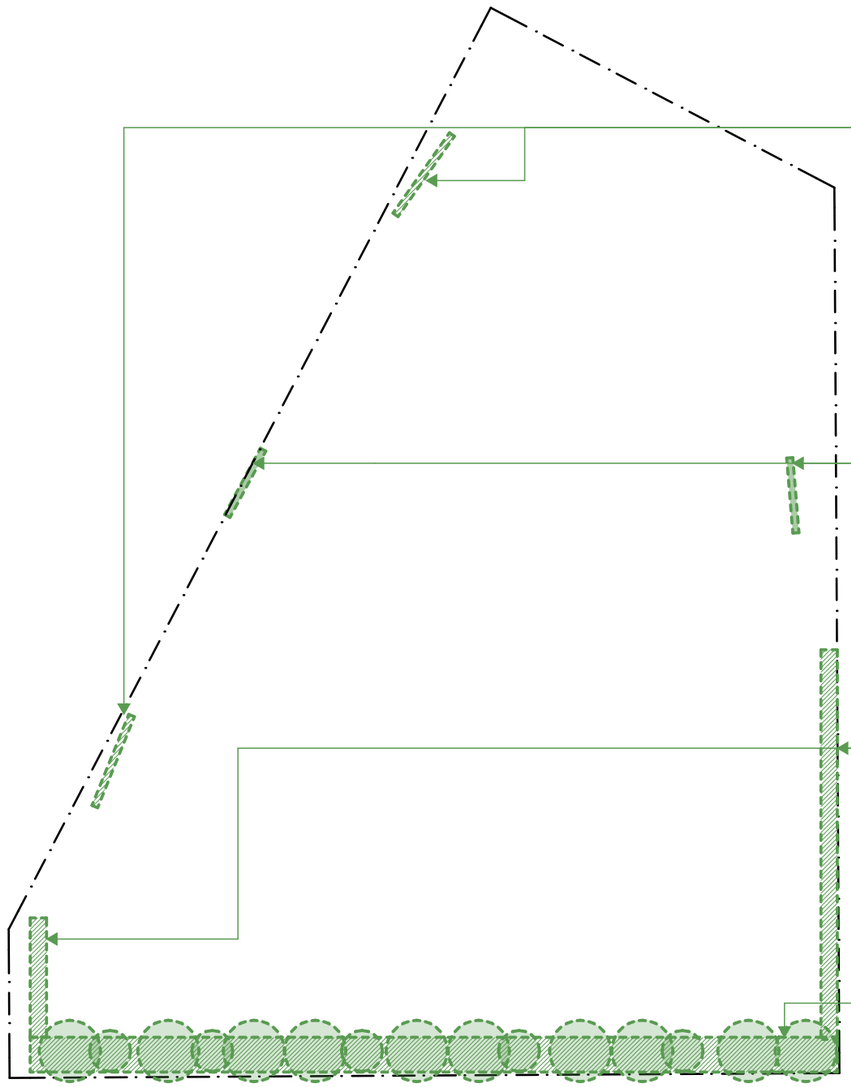
Level 3 Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management



Change 14.5

01 02 05 Climbing plants from L3-L18 (planter boxes at each level)

- B —
- M + 540m² total on facade
- P + 540m² total on facade

Change 12.3

01 02 04 3 glazing units operable to facilitate cross ventilation

- B —
- M 7.2 lin. m op glazing
- P 7.2 lin. m op glazing

Change 15.3

05 Additional Planter Boxes nom. 500mm deep

- B 6m² planting
- M + 20m² planting
- P + 20m² planting

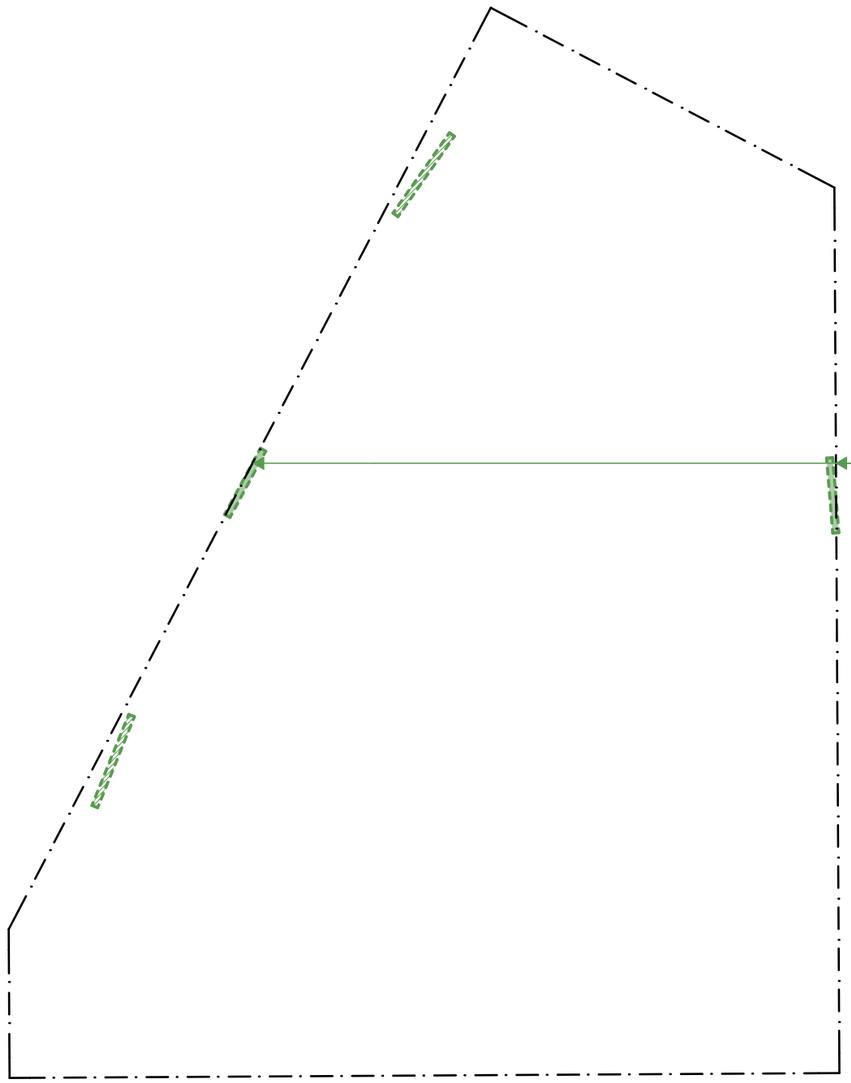
Change 15.3

05 New 67m² planter box nom. 1000mm deep with canopy trees

- B —
- M + 15 small trees
- P + 15 small trees

Level 4 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 12.4

01
02
04

3 glazing units at each end to be operable to facilitate cross ventilation

(B) —
(M) 7.2 lin. m op glazing
(P) 7.2 lin. m op glazing

BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
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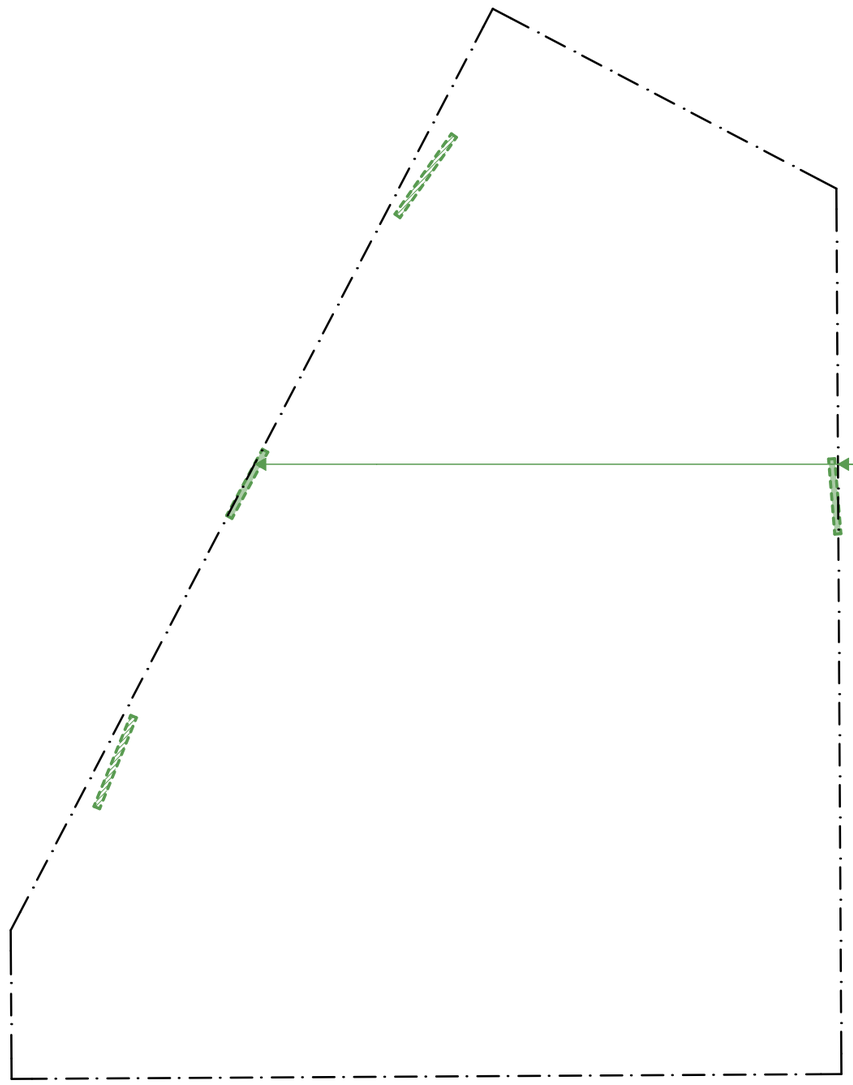
Level 5 - 18 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 12.5

01 02 04 3 glazing units at each end to be operable to facilitate cross ventilation (L5-L10 only)

B —
M 7.2 lin. m op glazing
P 7.2 lin. m op glazing

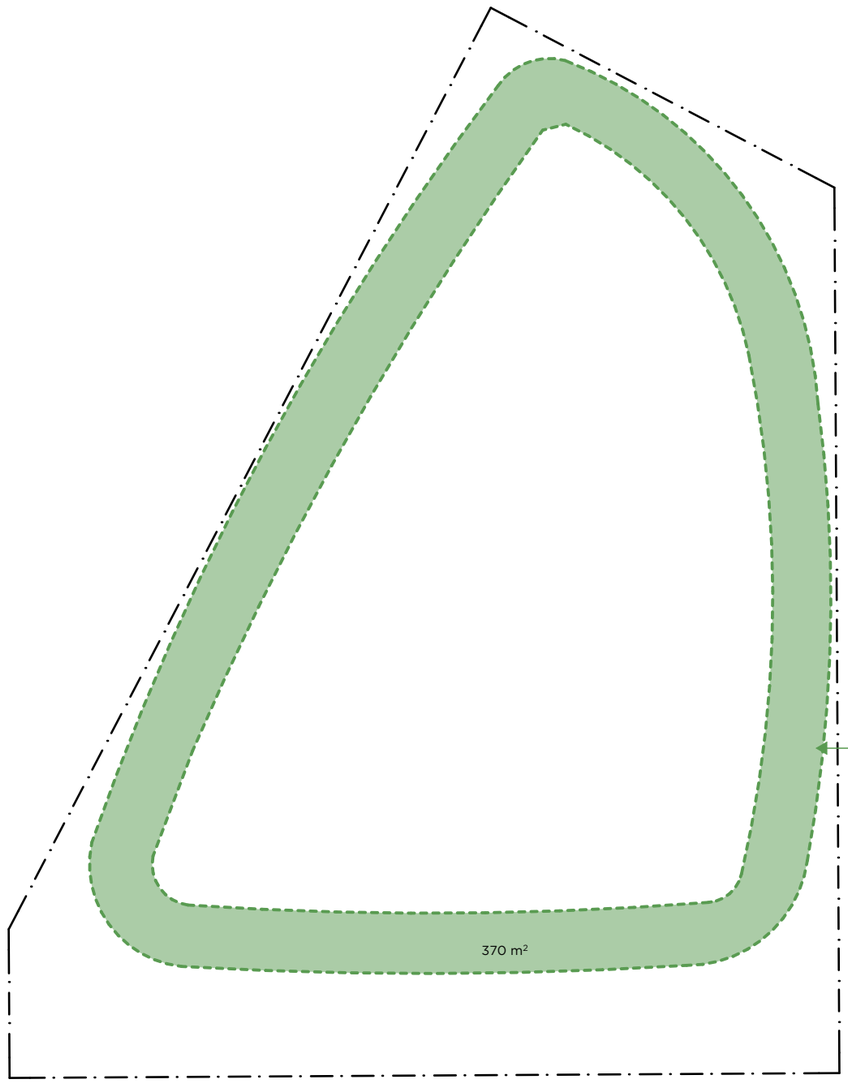
BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
P66

Rooftop 1 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 16.R1

04 75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof

B 560m2 PV Array
M + 370m² HR Roof
P + 370m² HR Roof

BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
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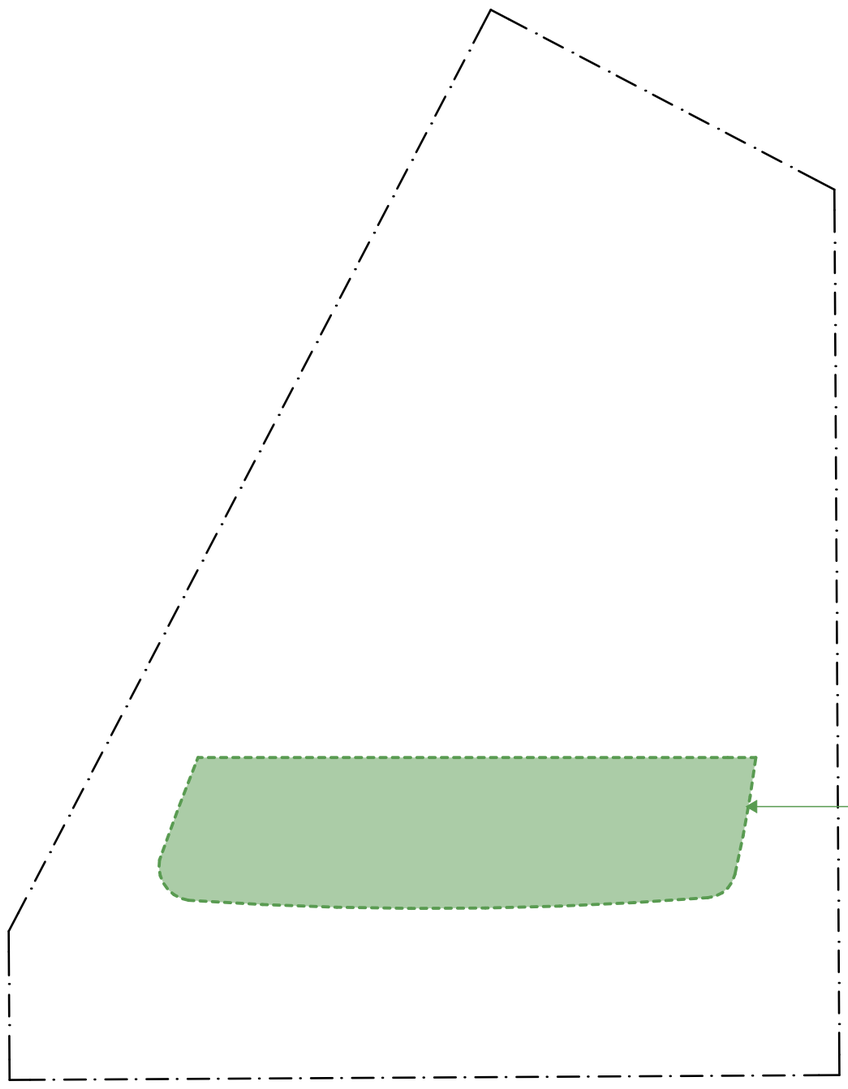
Rooftop 2 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 16.R2

04 75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof

(B) 560m2 PV Array
(M) + 200m^2 HR Roof
(P) + 200m^2 HR Roof

BREATHE ARCHITECTURE

Scale — 1:300 at A3
North —

Date — 31/01/23
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Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
01	Overarching ESD	1.1	Greenstar or BESS Certification	>50 dwellings: 5 star green star rating >5000sqm GFA: 5 star green star rating <5000sqm GFA or non res >1000sqm GFA: 50% BESS	>50 dwellings: 6 star green star rating >5000sqm GFA: 6 star green star rating <5000sqm GFA or non res >1000sqm GFA: 70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Reduce embodied carbon emissions by 20% Pay for certification		Change 12		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Reduce embodied carbon emissions by 40% Pay for certification		Change 12	
02	Energy Efficiency and Renewables	2.1	NatHERS Rating	>50 dwellings: 7.5 star NatHERs rating >5000sqm GFA: 5.5 star NABERS rating <5000sqm GFA or non res >1000sqm GFA: 60% BESS & ave. 7.5 NatHERs, min. 6.5 NatHERs for each dwelling	>50 dwellings or >5000sqm: >6 star NABERS rating <5000sqm GFA: >70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Pay for certification		Change 12		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Commit to procure 100% renewable energy Pay for certification		Change 12	
		2.2	On-site Renewable Energy Generation	Yes	Yes		Yes				Change 1				Change 1	
		2.3	No Gas	Yes	Yes		No				Change 9				Change 9	
03	Sustainable Transport	3.1	Car parking titled as common property	Yes			Yes									
		3.2	Car parking designed to be adaptable	Yes			No				Change 8				Change 8	
		3.3	Car parking includes features that support more sustainable forms of private car ownership	Yes			No				Change 3				Change 3	
		3.4	Compliance with car parking design standards	Yes			No				Changes 2, 3 and 5				Changes 2, 3 and 5	
		3.5	EV ready spaces	5% of car parking spaces			No				Change 2				Change 2	
		3.6	EV infrastructure provision	20% of car parking spaces			No				Change 2				Change 2	
		3.7	Bicycle spaces	1 per 20% reg. occupants			No, See Note									

Testing Disclaimer:
The above results do not account a shortfall of 85 bicycle spaces, 6 showers and 80 lockers from the Sustainable Transport category.
Potential implications may include a reduction of 5 car parking spaces and a reconfiguration of EOT spaces.

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
04	Urban Heat Island Response	4.1	% of site area comprised of elements that reduce UHIE	75%			No				Changes 11 and 16				Changes 11 and 16	
		4.2	Non-glazed facade materials exposed to sun should have high solar reflectivity	Yes			Unknown		Change material specs as required				Change material specs as required			
		4.3	Passive cooling techniques	Yes			Unknown				Changes 12 and 14				Changes 12 and 14	
		4.4	Paving treatments that assist in cooling	Yes			No									
05	Urban Ecology	5.1	Minimum CoM Green Factor Tool Score	0.55 Note: score of exactly 0.55 achieved in minimum and preferred cases to determine potential changes noted. Location of additional landscaping is indicative only.			No (0.01)		Change planting species to indigenous		Changes 6, 11, 13, 14 and 15		Change planting species to indigenous		Changes 6, 11, 13, 14 and 15	
		5.2	Green cover supports habitat	Yes			No		See 5.1				See 5.1			
		5.3	Green cover is layered	Yes			No		See 5.1				See 5.1			
		5.4	Green cover is native, indigenous, or climate change resistant	Yes			Unknown		See 5.1				See 5.1			
		5.5	Green cover supports vegetation links between areas of high biodiversity	Yes			No		See 5.1				See 5.1			
		5.6	Species selected are drawn from CoM preferred species list	Yes			Unknown		See 5.1				See 5.1			
		5.7	Existing mature trees retained	Yes			N/A									
		5.8	Impact on canopy trees on adjoining lots minimised	Yes			N/A									
06	Waste & Resource Recovery	6.1	Waste Management Plan in accordance with CoM guidelines	Yes			Unknown		Prepare WMP		Changes 4 and 7		Prepare WMP		Changes 4 and 7	
		6.2	Meet requirements of Precinct Waste Management Plan	Yes			Unknown		See 6.1				See 6.1			

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
07	Stormwater Management	7.1	Water Quality Performance Objectives (CSIRO)	Best Practice	Exceeding Best Practice		Unknown									
		7.2	Stormwater treatment measures	Improve quality, reduce flow of water discharged			Unknown									
		7.3	Greenstar Certification		Category B Water Credit		Unknown						Pay for certification			
08	Water Efficiency	8.1	Provide precinct scale recycled water source	Yes			Yes				Change 10				Change 10	
		8.2	Rainwater tank	Sized to supply minimum 10% internal water demand			Yes									
		8.3	Use alternative water for non-potable uses				Unknown		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 10		Provision for grey water and rainwater to be used for landscape irrigation, toilet flushing and fire system water		Change 10	
		8.4	BESS Water category score	Min. 50%			Unknown		Pay for certification				Pay for certification			
09	Integrated Flood Management	9.1	Essential services located above flood levels	Yes			Unknown									
		9.2	Design includes elements/ materials resilient to flood events	Yes			Unknown									
		9.3	Land use at ground can recover from flooding	Yes			Unknown									
		9.4	Level differences maintain connection to street	Yes			Yes									
		9.5	Raising internal ground level avoided/used as last resort	Yes			Yes									

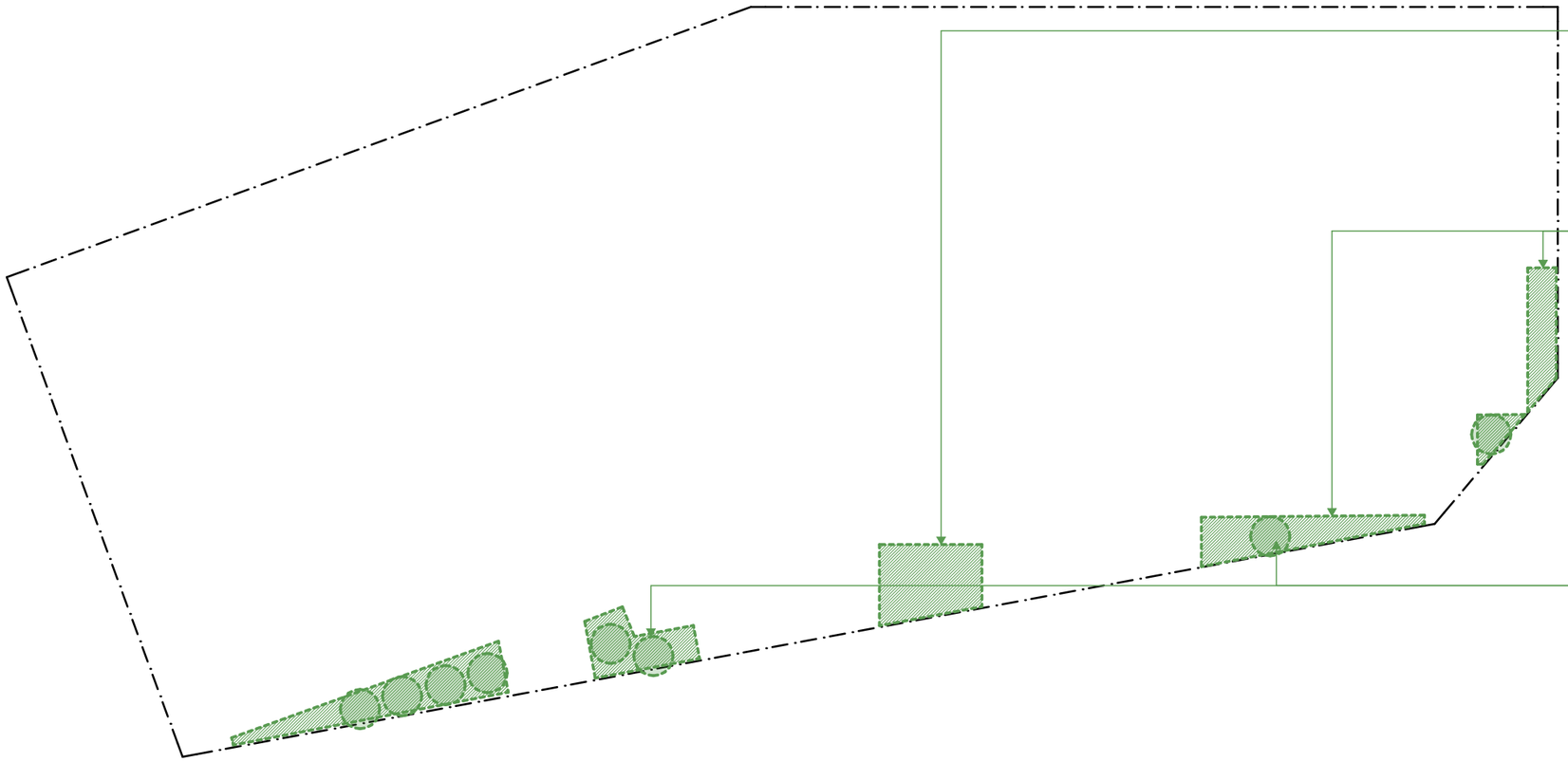
5

Site 5

Small commercial building

Ground Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 1.G

05 Add above ground planters nom. 500mm deep

(B) —
(M) + 35m² planting
(P) + 35m² planting

Change 2.G

05 07 Add in ground deep soil planting

(B) —
(M) + 115m² planting
(P) + 115m² planting

04 75% Target coverage with elements to reduce impact of UHIE: Landscaping

(B) 160m² PV Array
(M) + 115m² planting
(P) + 115m² planting

Change 3.G

05 Add small trees to planters

(B) —
(M) + 8 small trees
(M) + 8 small trees

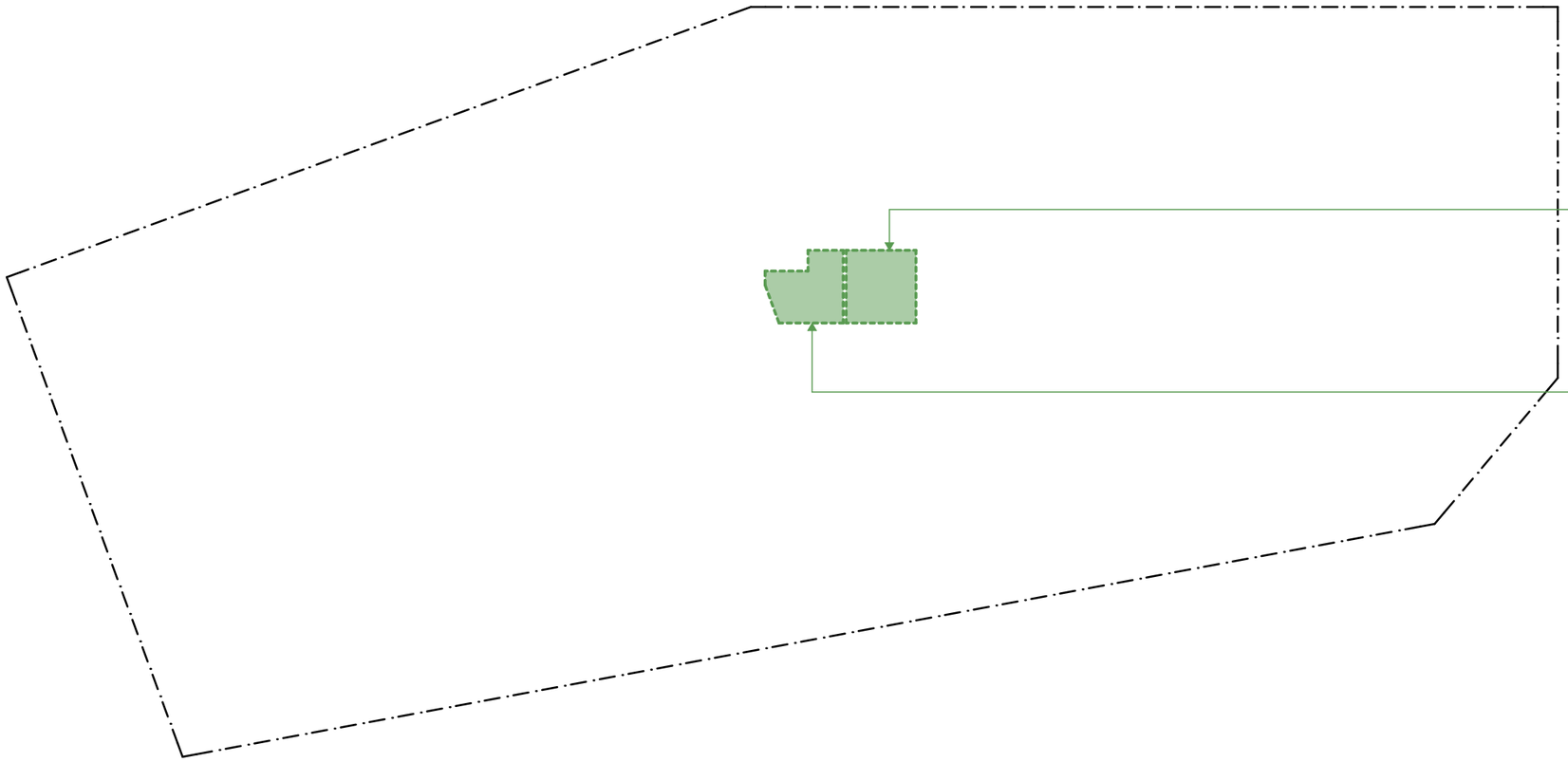
BREATHE ARCHITECTURE

Scale — 1:400 at A3
North —

Date — 31/01/23
P73

Level 8 Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 4.8

07	Add rainwater tank and pumps	(B) —
		(M) + 30kL rainwater tank
08		(M) + 30kL rainwater tank

Change 5.8

06	Increase refuse room size	(B) —
		(M) + 13m² refuse room
		(M) + 13m² refuse room

BREATHE ARCHITECTURE

Scale — 1:400 at A3

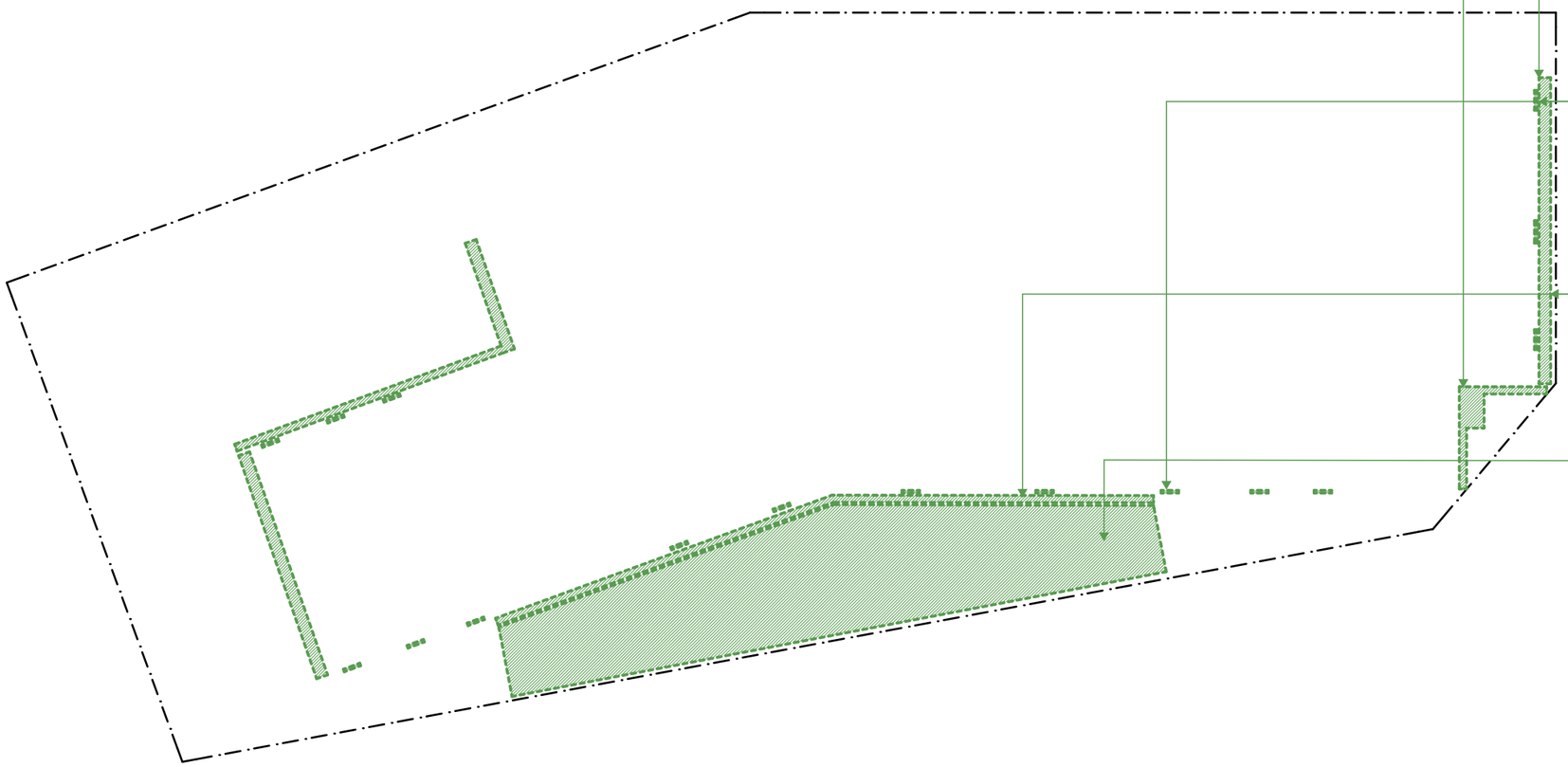
North —

Date — 31/01/23

P74

Level 9 Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management



Change 6.9

05	Climbing plants on trellis wires fixed to facade	B — M + 498m² on facade P + 498m² on facade

Change 7.9

01 02 04	Nominally 12 glazing units to be operable to facilitate natural ventilation	B — M 18 lin. m op glazing P 24 lin. m op glazing

Change 8.9

05	New planter boxes nom. 500mm deep	B — M + 78m² Planting P + 78m² Planting

Change 9.9

05 07	Grass/meadow landscape to provide green roof	B — M + 310m² Green Roof P + 310m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B 160m² PV Array M + 310m² Green Roof P + 310m² Green Roof

BREATHE ARCHITECTURE

Scale — 1:400 at A3

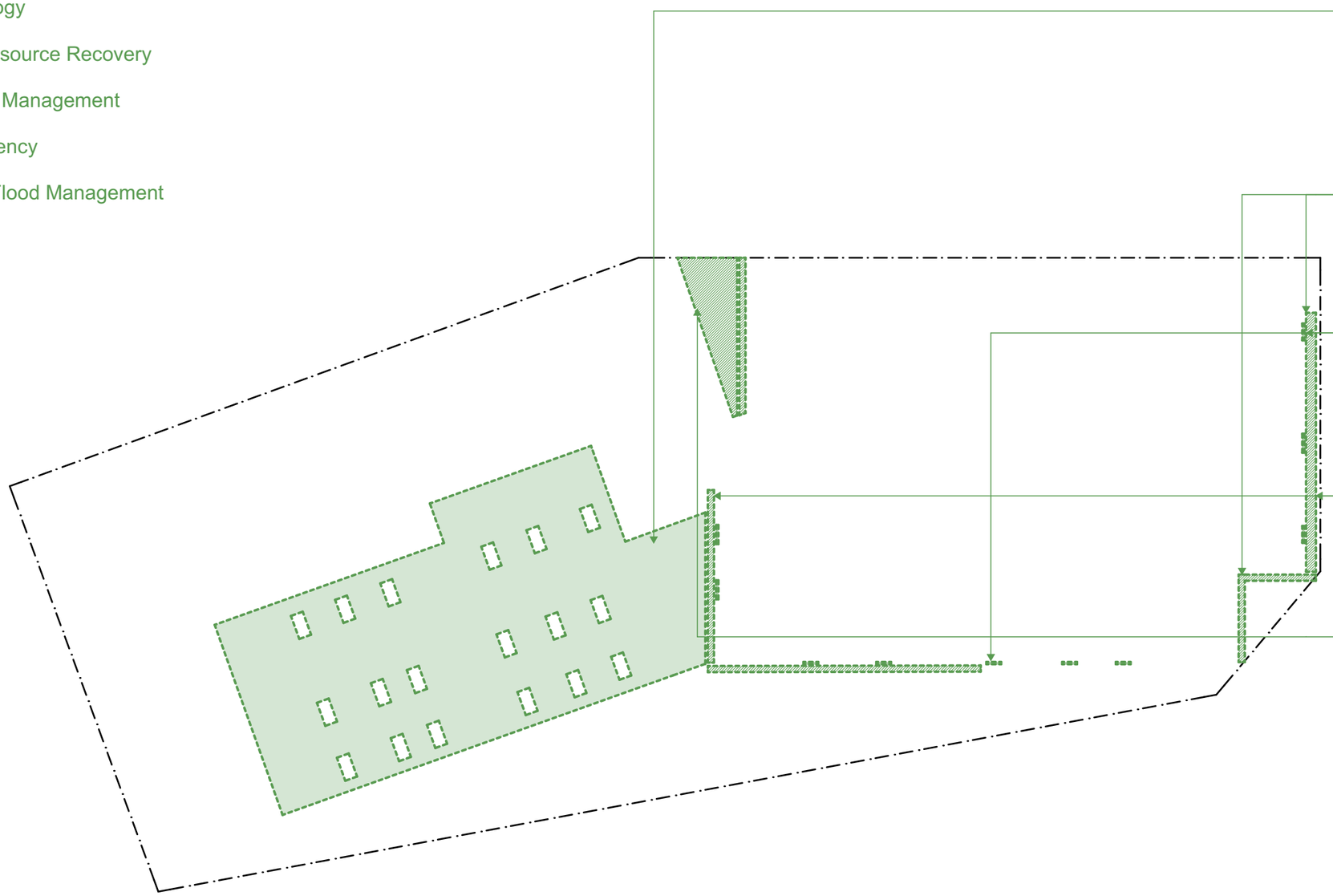
North —

Date — 31/01/23

P75

Level 10 Floor Plan

- 01 Overarching ESD
- 02 Energy Efficiency & Renewables
- 03 Sustainable Transport
- 04 Urban Heat Island Response
- 05 Urban Ecology
- 06 Waste & Resource Recovery
- 07 Stormwater Management
- 08 Water Efficiency
- 09 Integrated Flood Management



Change 10.R

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof	B 160m² PV Array M + 620m² HR Roof P + 620m² HR Roof

Change 6.10

05	Climbing plants on trellis wires fixed to facade	B — M + 328m² on facade P + 328m² on facade

Change 7.10

01 02 04	Nominally 12 glazing units to be operable to facilitate natural ventilation	B — M 10 lin. m op glazing P 10 lin. m op glazing

Change 8.10

05	New planter boxes nom. 500mm deep	B — M + 47m² Planting P + 47m² Planting

Change 9.10

05 07	Grass/meadow landscape to provide green roof	B — M + 34m² Green Roof P + 34m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	B 160m² PV Array M + 34m² Green Roof P + 34m² Green Roof

BREATHE ARCHITECTURE

Scale — 1:400 at A3

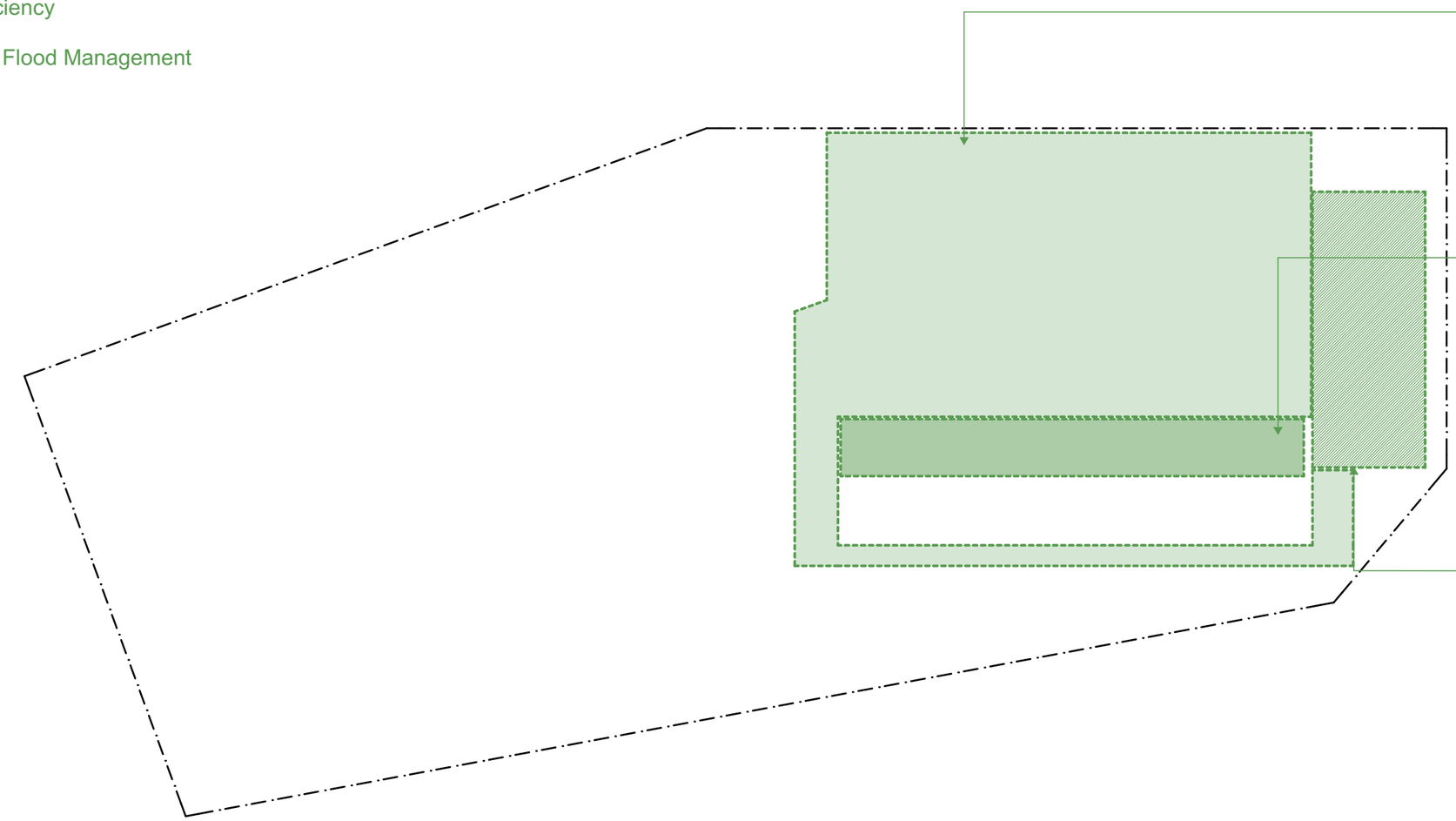
North —

Date — 31/01/23

P76

Rooftop Floor Plan

01 Overarching ESD
02 Energy Efficiency & Renewables
03 Sustainable Transport
04 Urban Heat Island Response
05 Urban Ecology
06 Waste & Resource Recovery
07 Stormwater Management
08 Water Efficiency
09 Integrated Flood Management



Change 10.R

04	75% Target coverage with elements to reduce impact of UHIE: High Solar Reflectivity Roof	(B) 160m² PV Array (M) + 905m² HR Roof (P) + 905m² HR Roof

Change 11.R

01 01	On-site renewable energy generation	(B) 160m² PV Array (M) + 148m² PV Array Area (P) + 148m² PV Array Area
04	75% Target coverage with elements to reduce impact of UHIE: Solar PV Array	(B) 160m² PV Array (M) + 148m² PV Array Area (P) + 148m² PV Array Area

Change 9.R

05 07	Grass/meadow landscape to provide green roof	(B) — (M) + 174m² Green Roof (P) + 174m² Green Roof
04	75% Target coverage with elements to reduce impact of UHIE: Green Roof	(B) 160m² PV Array (M) + 174m² Green Roof (P) + 174m² Green Roof

BREATHE ARCHITECTURE

Scale — 1:400 at A3

North —

Date — 31/01/23

P77

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
01	Overarching ESD	1.1	Greenstar or BESS Certification	>50 dwellings: 5 star green star rating >5000sqm GFA: 5 star green star rating <5000sqm GFA or non res >1000sqm GFA: 50% BESS	>50 dwellings: 6 star green star rating >5000sqm GFA: 6 star green star rating <5000sqm GFA or non res >1000sqm GFA: 70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Pay for certification		Changes 6 and 7		Upgrade material, window, door, etc. specs to indicative minimum specs. Extend spandrel panel and insulate to 700mm AFFL with insulation on all glazed facades. Pay for certification		Changes 6 and 7	
02	Energy Efficiency and Renewables	2.1	NatHERS Rating	>50 dwellings: 7.5 star NatHERs rating >5000sqm GFA: 5.5 star NABERS rating <5000sqm GFA or non res 1000sqm GFA: 60% BESS & ave. 7.5 NatHERs, min. 6.5 NatHERs for each dwelling	>50 dwellings or >5000sqm: >6 star NABERS rating <5000sqm GFA: >70% BESS		Unknown		Upgrade material, window, door, etc. specs to indicative minimum specs.		Changes 6 and 7		Upgrade material, window, door, etc. specs to indicative preferred specs. Commit to procure 100% renewable energy		Changes 6 and 7	
		2.2	On-site Renewable Energy Generation	Yes	Yes		Yes				Change 11				Change 11	
		2.3	No Gas	Yes	Yes		Unknown									
03	Sustainable Transport	3.1	Car parking titled as common property	Yes			N/A									
		3.2	Car parking designed to be adaptable	Yes			N/A									
		3.3	Car parking includes features that support more sustainable forms of private car ownership	Yes			N/A									
		3.4	Compliance with car parking design standards	Yes			N/A									
		3.5	EV ready spaces	5% of car parking spaces			N/A									
		3.6	EV infrastructure provision	20% of car parking spaces			N/A									
		3.7	Bicycle spaces	1 per 20% regular occupants			No, See Note									

Testing Disclaimer:
The above results do not account a shortfall of 40 bicycle spaces, 8 showers and 57 lockers from the Sustainable Transport category.
Potential implications may include a reduction of 10 car parking spaces to accommodate additional bicycle storage and EOT facilities.

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
04	Urban Heat Island Response	4.1	% of site area comprised of elements that reduce UHIE	75%			No				Changes 9, 10 and 11				Changes 9, 10 and 11	
		4.2	Non-glazed facade materials exposed to sun should have high solar reflectivity	Yes			Unknown		Change material specs as required				Change material specs as required			
		4.3	Passive cooling techniques	Yes			No				Change 7				Change 7	
		4.4	Paving treatments that assist in cooling	Yes			N/A									
05	Urban Ecology	5.1	Minimum CoM Green Factor Tool Score	0.55 Note: score of exactly 0.55 achieved in minimum and preferred cases to determine potential changes noted. Location of additional landscaping is indicative only.			No (0.00)		All planting species to be indigenous		Changes 1, 2, 3, 6, 8 and 9		All planting species to be indigenous		Changes 1, 2, 3, 6, 8 and 9	
		5.2	Green cover supports habitat	Yes			No		See 5.1				See 5.1			
		5.3	Green cover is layered	Yes			No		See 5.1				See 5.1			
		5.4	Green cover is native, indigenous, or climate change resistant	Yes			Unknown		See 5.1				See 5.1			
		5.5	Green cover supports vegetation links between areas of high biodiversity	Yes			No		See 5.1				See 5.1			
		5.6	Species selected are drawn from CoM preferred species list	Yes			Unknown		See 5.1				See 5.1			
		5.7	Existing mature trees retained	Yes			N/A									
		5.8	Impact on canopy trees on adjoining lots minimised	Yes			N/A									
06	Waste & Resource Recovery	6.1	Waste Management Plan in accordance with CoM guidelines	Yes			Yes		Prepare WMP		Change 5		Prepare WMP		Change 5	
		6.2	Meet requirements of Precinct Waste Management Plan	Yes			Unknown									

Summary

	Category		Standard	Minimum	Preferred	Environmental Upgrade Agreement	B Baseline Compliance to Minimum Standard	Cost	M Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change	P Non-Spatial Design Change	Cost Change	Spatial Design Change	Cost Change
07	Stormwater Management	7.1	Water Quality Performance Objectives (CSIRO)	Best Practice	Exceeding Best Practice		No									
		7.2	Stormwater treatment measures	Improve quality, reduce flow of water discharged			No				Changes 2, 4 and 9				Changes 2, 4 and 9	
		7.3	Greenstar Certification		Category B Water Credit		Unknown						Pay for certification			
08	Water Efficiency	8.1	Provide precinct scale recycled water source	Yes			Yes				Change 4				Change 4	
		8.2	Rainwater tank	Sized to supply minimum 10% internal water demand			Yes				Change 4				Change 4	
		8.3	Use alternative water for non-potable uses				Unknown		Provision for rainwater to be used for landscape irrigation, toilet flushing and fire systems water		Change 4		Provision for rainwater to be used for landscape irrigation, toilet flushing and fire systems water		Change 4	
		8.4	BESS Water category score	Min. 50%			No		Pay for certification		Change 4		Pay for certification		Change 4	
09	Integrated Flood Management	9.1	Essential services located above flood levels	Yes			Yes									
		9.2	Design includes elements/ materials resilient to flood events	Yes			Yes									
		9.3	Land use at ground can recover from flooding	Yes			Unknown									
		9.4	Level differences maintain connection to street	Yes			Yes									
		9.5	Raising internal ground level avoided/used as last resort	Yes			Yes									

GOCAP - Cost Summary (Issued 19.01.2022)

	Base Line	Base Line Cost*	Minimum Option	% Uplift from Base Line	Preferred Option	% Uplift from Base Line
Site 1	Small scale residential. 3 storey apartment building comprising 4 No. apartments, including basement parking spaces.	$8,776,250	$9,156,054	4.3%	$9,246,054	5.4%
SIte 2	Large scale residential 11 storey high rise residential building.	$98,402,700	$101,070,766	2.7%	$102,013,360	3.7%
Site 3	Large Commercial project 17 storey commercial office building with a basement level and lower ground level.	$77,906,730	$80,114,886	2.8%	$80,809,384	3.7%
Site 4	High rise Office Building (Warm Shell, Fitout Excluded) 18 storey commercial / R&D building with 2 level basement	$86,101,550	$88,856,415	3.2%	$89,690,965	4.2%
Site 5	Small Commercial Building on top of existing car park	$21,452,190	$23,352,975	8.9%	$23,502,129	9.6%

NOTES :

** The Baseline cost is an average rate RLB has applied on GFA area to assist with indicating the anticipated premiums for the Minimum & Preferred options.*

Scope of works for both the minimum & preferred uplift options have been based on the scope of works nominated by Breathe Architecture within the GoCAP Standards Testing.

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 1. SMALL SCALE RESIDENTIAL (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - RESIDENTIAL APARTMENT BLD (4 NO. APTS)**			
A1	**Demolition / SIte Preparation**			**Excl.**
A2	**Carpark / Storage**			
A2A	Basement Level	701	1,600	1,121,600
A2B	Turntable			50,000
	Carpark / Storage	**701**	**1,671**	**1,171,600**
A3	**Proposed Apartment Building**			
A3A	Substructure			126,400
A3B	Ground Level	676	4,133	2,793,600
A3C	Level 1	686	3,613	2,478,200
A3D	Level 2	397	3,438	1,364,900
A3H	Roof Over Run			7,200
A3E	Roof Plant			20,000
A3F	Roof			394,350
A3G	Vertical Transportation			250,000
	Proposed Apartment Building	**1,759**	**4,227**	**7,434,650**
A4	**External Works & Services**			**170,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - RESIDENTIAL APARTMENT BLD (4 NO. APTS)	**2,460**	**3,568**	**8,776,250**
B	**MINIMUM OPTION**			
B1	**01 : Overarching ESD**			**85,470**
B2	**02 : Energy Efficiency & Renewables**			**34,779**
B3	**03 : Sustainable Transport**			**7,118**
B4	**04 : Urban Heat Island Response**			**70,491**
B5	**05 : Urban Ecology**			**117,653**
B6	**06 : Waste & Resource Recovery**			**2,164**
B7	**07 : Stormwater Management**			**6,213**
B8	**08 : Water Efficiency**			**55,916**
B9	**09 : Integrated Flood Management**			**Nil**
	MINIMUM OPTION			**379,804**
	ESTIMATED NET COST	**2,460**	**3,722**	**9,156,054**

MARGINS & ADJUSTMENTS			
Design Development Contingency			Incl.
Builder's Preliminaries			Incl.
Builder's Overheads and Margin			Incl.
Estimated Construction Cost as at January 2022	2,460	3,722	9,156,054
Escalation Post January 2022			Excl.

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
MARGINS & ADJUSTMENTS (continued)				
	Headworks and Authority Charges			Excl.
	Furniture, Fittings and Equipment			Excl.
	Design Consultants Fees			Excl.
	Project Contingency			Excl.
	GST			Excl.
	Scoping Document for Costings:			
	Breathe Architecture GOCAP Standards Testing, Rev 0 dated 02.06.21			
ESTIMATED TOTAL COST		**2,460**	**3,722**	**9,156,054**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
77	Non Spatial - Roof thermal performance uplift to average R3.5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	793	13	9,855
	Roof				**9,855**
EW	**External Walls**				
29	Change 7.G - OMIT 2,000 wide x 2,700 mm high external glazing units - (Assume 2 No. window changed to North facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	2	-4,530	-9,060
30	Change 7.G - ADD 1,500 wide x 2,700 mm high external glazing units - (Assume 2 No. window changed to North facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	2	4,237	8,473
31	Change 7.1 - ADD 1,500 wide x 2,700 mm high external glazing units plus 1,800 mm x 2,700 mm solid facade - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	6,417	19,250
32	Change 7.1 - OMIT 3,300 wide x 2,700 mm high external glazing units - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	-7,475	-22,423
33	Change 7.2 - ADD 1,500 wide x 2,700 mm high external glazing units - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	6,418	19,252
34	Change 7.2 - OMIT 3,300 wide x 2,700 mm high external glazing units - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	-7,474	-22,421
38	Change 9.G - ADD Operable external blinds (assume 2,850 mm high drop, 6,600 mm total length as per Breathe Architecture GOCAP Standards Testing Summary)	m	5	1,417	7,084
39	Change 9.1 - ADD Operable external blinds (assume 2,850 mm high drop, 16,800 mm total length as per Breathe Architecture GOCAP Standards Testing Summary)	m	13	1,417	18,416
40	Change 9.2 - ADD Operable external blinds (assume 2,850 mm high drop, 5,500 mm total length as per Breathe Architecture GOCAP Standards Testing Summary)	m	4	1,417	5,668
75	Non Spatial - External glazing specification uplift to double glazed clear (raised from Baseline single glazed Low E)	m²	293	81	23,664
	External Walls				**47,903**
VE	**Ventilation**				
79	Non Spatial - Air tightness testing and sealing throughout building (under Minimum option)	m²	2,346	6	12,428
	Ventilation				**12,428**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
AC	**Air Conditioning**				
81	Non Spatial - Air conditioning power rating set to 4kW per dwelling (reduced from Baseline 5kW) : Note this baseline and revised sizing does not appear to correctly reflect a development of this nature	No	4	-622	-2,486
	Air Conditioning				**-2,486**
XL	**Landscaping and Improvements**				
49	Change 6.G - OMIT 5m2 of planting/landscaping in lieu of skylight / ventilation at Ground Level	m²	5	-187	-933
	Landscaping and Improvements				**-933**
NA	**Not Allocated to Element**				
48	Change 6.G - ADD skylight (assume 5m2) including ventilation (to basement) provision at Ground Level	No	1	18,703	18,703
89	Change 8.G, 8.1 & 8.2 - Refer Category 5.1 for cost impact	Note			Included
91	Change 11.G & 11.R - Refer Category 2.3 for cost impact	Note			Included
94	Change 14.R - Refer Category 2.2 for cost impact	Note			Included
95	Change 10 and 13 - Referenced in summary document however no change shown on the drawings. Deemed not applicable.	Note			N/A
	Not Allocated to Element				**18,703**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**85,470**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
53	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			N/A
88	Change 7.G, 7.1 & 7.2 - Refer Category 1.1 for cost impact	Note			Included
89	Change 8.G, 8.1 & 8.2 - Refer Category 5.1 for cost impact	Note			Included
90	Change 9.G, 9.1 & 9.2 - Refer Category 1.1 for cost impact	Note			Included
95	Change 10 and 13 - Referenced in summary document however no change shown on the drawings. Deemed not applicable.	Note			N/A
	Not Allocated to Element				**0**
	2.1 : NATHERS RATING				**0**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
52	Change 14.R - ADD PV cells to (Total 84 m2 PV array area as per Breathe Architecture GOCAP Standards Testing Summary)	m²	84	378	31,733
	Roof				**31,733**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**31,733**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
46	Change 11.G & 11.R - OMIT gas enclosures	Item			-2,488
	Fitments				**-2,488**
SE	**Special Equipment**				
44	Change 11.R - ADD extra over apartment kitchen gas cooktop for induction cooktop - Allowance (Spec TBC - increased allowance given type of project / development)	No	4	1,866	7,462
	Special Equipment				**7,462**
PD	**Sanitary Plumbing**				
45	Change 11.R - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	4	2,487	9,948
	Sanitary Plumbing				**9,948**
GS	**Gas Service**				
43	Change 11.G & 11.R - OMIT gas reticulation to apartments	No	4	-3,110	-12,437
	Gas Service				**-12,437**
XL	**Landscaping and Improvements**				
47	Change 11.G - ADD 3m2 of planting/landscaping in lieu of gas enclosure	m²	3	187	561
	Landscaping and Improvements				**561**
	2.3 : NO GAS				**3,046**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
24	3.1 - Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
28	Change 6.B - 3.2 - Car parking designed to be adaptable - Assume nil cost impact. Given the open nature of the carpark and no major structural elements within, we assume the space can be easily adapted to the proposed communal area.	Item			N/A
	Not Allocated to Element				**N/A**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
54	Change 2.B - No build cost implication for carparking that supports sustainable forms of private ownership	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
55	Change 2.B - No impact to standard car parking dimensions	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
25	Change 3.B - Dedicated EV ready space and infrastructure provision. Allow 1 No. EV ready spaces.	No	1	1,617	1,617
	Electric Light and Power				**1,617**
	3.5 : EV READY SPACES				**1,617**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
85	Change 3.B - Allowance to upgrade main switchboard for to accomodate additional Vehicle Charging capacity	No	6	746	4,475
	Electric Light and Power				**4,475**
	3.6 : EV INFRASTRUCTURE PROVISION				**4,475**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
22	Change 1.B - ADD Additional bike parking (7 No. in total, parking (RLB nominated supply $250/ea)	No	7	591	4,137
23	Change 1.B - CREDIT Omit 1 No. storage space (allow 1 No. storage cage)	No	1	-3,111	-3,111
	Fitments				**1,026**
	3.7 : BICYCLE SPACES				**1,026**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
51	Change 12.R, 13.R & 14.R - ADD Additional highly reflective roofing (861 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	861	75	64,192
92	Change 12.1 - Refer to Change 14.R (Category 2.2) for cost impact	Note			Included
	Roof				**64,192**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**64,192**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
57	Non-spatial change - ADD External walls thermal performance uplift to achieve R2.5 (raised from Baseline R1.5)	m²	1,095	10	10,886
	External Walls				**10,886**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**10,886**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
59	No build cost implication for passive cooling techniques - Baseline compliant	Item			N/A
	Not Allocated to Element				**N/A**
	4.3 : PASSIVE COOLING TECHNIQUES				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
60	Non-spatial change - Alternative external paving material (allow permeable paving on min. 100mm soil applied to 50% of all courtyard areas)	m²	123	-38	-4,587
	Landscaping and Improvements				**-4,587**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**-4,587**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
50	Change 12.1 - ADD Extra over for grass/meadow to provide green roof - Level 1 flat roof (31 m2 as per Breathe Architecture document)	m²	31	725	22,459
	Roof				**22,459**
XL	**Landscaping and Improvements**				
35	Change 8.G - ADD climbing plants to facade (Assume 155m2 in total, to all levels - as per Breathe Architecture GOCAP Standards Testing Summary)	m²	155	326	50,461
36	Change 8.1 - ADD climbing plants to facade (Assume 155m2 as per Breathe Architecture GOCAP Standards Testing Summary) - Incl. in Change 8.G	Note			Included
37	Change 8.2 - ADD climbing plants to facade (Assume 155m2 as per Breathe Architecture GOCAP Standards Testing Summary) Incl. in Change 8.G	Note			Included
41	Change 10.G - ADD small trees to landscape (3 No as per Breathe Architecture GOCAP Standards Testing document)	No	3	1,243	3,729
42	Change 10.G - ADD Planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 700 mm high (assume block walls with render finish) (30 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Summary)	m²	30	1,367	41,004
	Landscaping and Improvements				**95,194**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**117,653**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
61	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
62	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
63	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
63	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
63	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
64	Existing mature trees to be retained - no cost impact	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
65	Minimise impact of trees on adjoining lots - no cost impact	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
26	Change 4.B - Provide 2 No additional organic waster bins as per Breathe Report 02.06.21	No	2	1,082	2,164
	Fitments				**2,164**
NA	**Not Allocated to Element**				
66	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**2,164**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
67	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
68	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
69	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
70	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			6,213
	Not Allocated to Element				**6,213**
	7.3 : GREENSTAR CERTIFICATION				**6,213**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
27	Change 5.B - ADD Greywater tank for proposed grey water system - size to fit into 18m2 reserved space as per Breathe Architecture GOCAP Standards Testing document dated 02.06.21	No	1	24,849	24,849
86	Change 5.B - Allow for reticulation from greywater tank to apartment WC's (cost per apartment - allowance)	No	4	3,107	12,426
87	Change 5.B - Allow for reticulation from greywater tank to apartment balcony planters and other sanitary fixtures (cost per apartment - allowance)	No	4	3,107	12,428
	Sanitary Plumbing				**49,703**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**49,703**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
71	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
71	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
72	BESS Water certification - Provisional Allowance (if deemed required) - Assume material selection is compliant with requirements	Item			6,213
	Not Allocated to Element				**6,213**
	8.4 : BESS WATER CATEGORY SCORE				**6,213**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
73	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 1. SMALL SCALE RESIDENTIAL (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - RESIDENTIAL APARTMENT BLD (4 NO. APTS)**			
A1	**Demolition / SIte Preparation**			**Excl.**
A2	**Carpark / Storage**	**701**	**1,671**	**1,171,600**
A3	**Proposed Apartment Building**			
A3A	Substructure			126,400
A3B	Ground Level	676	4,133	2,793,600
A3C	Level 1	686	3,613	2,478,200
A3D	Level 2	397	3,438	1,364,900
A3H	Roof Over Run			7,200
A3E	Roof Plant			20,000
A3F	Roof			394,350
A3G	Vertical Transportation			250,000
	Proposed Apartment Building	**1,759**	**4,227**	**7,434,650**
A4	**External Works & Services**			**170,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - RESIDENTIAL APARTMENT BLD (4 NO. APTS)	**2,460**	**3,568**	**8,776,250**
C	**PREFERRED OPTION**			
C1	**01 : Overarching ESD**			**168,665**
C2	**02 : Energy Efficiency & Renewables**			**34,779**
C3	**03 : Sustainable Transport**			**7,118**
C4	**04 : Urban Heat Island Response**			**77,296**
C5	**05 : Urban Ecology**			**117,653**
C6	**06 : Waste & Resource Recovery**			**2,164**
C7	**07 : Stormwater Management**			**6,213**
C8	**08 : Water Efficiency**			**55,916**
C9	**09 : Integrated Flood Management**			**Nil**
	PREFERRED OPTION			**469,804**
	ESTIMATED NET COST	**2,460**	**3,759**	**9,246,054**

MARGINS & ADJUSTMENTS			
Design Development Contingency			Incl.
Builder's Preliminaries			Incl.
Builder's Overheads and Margin			Incl.
Estimated Construction Cost as at January 2022	2,460	3,759	9,246,054
Escalation Post January 2022			Excl.
Headworks and Authority Charges			Excl.
Furniture, Fittings and Equipment			Excl.
Design Consultants Fees			Excl.

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
MARGINS & ADJUSTMENTS (continued)				
	Project Contingency			Excl.
	GST			Excl.
	Scoping Document for Costings:			
	Breathe Architecture GOCAP Standards Testing, Rev 0 dated 02.06.21			
ESTIMATED TOTAL COST		**2,460**	**3,759**	**9,246,054**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
78	Non Spatial - Roof thermal performance uplift to average R5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	793	18	13,797
	Roof				**13,797**
EW	**External Walls**				
29	Change 7.G - OMIT 2,000 wide x 2,700 mm high external glazing units - (Assume 2 No. window changed to North facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	2	-4,530	-9,060
30	Change 7.G - ADD 1,500 wide x 2,700 mm high external glazing units - (Assume 2 No. window changed to North facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	2	4,237	8,473
31	Change 7.1 - ADD 1,500 wide x 2,700 mm high external glazing units plus 1,800 mm x 2,700 mm solid facade - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	6,418	19,252
32	Change 7.1 - OMIT 3,300 wide x 2,700 mm high external glazing units - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	-7,474	-22,421
33	Change 7.2 - ADD 1,500 wide x 2,700 mm high external glazing units - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	6,418	19,252
34	Change 7.2 - OMIT 3,300 wide x 2,700 mm high external glazing units - (Assume 3 No. windows changed to West facade - As per Breathe Architecture GOCAP Standards Testing Summary)	No	3	-7,474	-22,421
38	Change 9.G - ADD Operable external blinds (assume 2,850 mm high drop, 6,600 mm total length as per Breathe Architecture GOCAP Standards Testing Summary)	m	7	1,417	9,918
39	Change 9.1 - ADD Operable external blinds (assume 2,850 mm high drop, 16,800 mm total length as per Breathe Architecture GOCAP Standards Testing Summary)	m	17	1,417	24,080
40	Change 9.2 - ADD Operable external blinds (assume 2,850 mm high drop, 5,500 mm total length as per Breathe Architecture GOCAP Standards Testing Summary)	m	6	1,417	8,502
76	Non Spatial - External glazing specification uplift to double glazed Low E (raised from Baseline single glazed Low E)	m²	293	106	30,946
	External Walls				**66,521**
VE	**Ventilation**				
80	Non Spatial - Air tightness testing and sealing throughout building with uplift for balanced mechanical ventilation / HRV's (under Preferred option)	m²	2,346	32	74,554
	Ventilation				**74,554**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
AC	**Air Conditioning**				
82	Non Spatial - Air conditioning power rating set to 3kW per dwelling (reduced from Baseline 5kW)	No	4	-995	-3,977
	Air Conditioning				**-3,977**
XL	**Landscaping and Improvements**				
49	Change 6.G - OMIT 5m2 of planting/landscaping in lieu of skylight / ventilation at Ground Level	m²	5	-187	-933
	Landscaping and Improvements				**-933**
NA	**Not Allocated to Element**				
48	Change 6.G - ADD skylight (assume 5m2) including ventilation (to basement) provision at Ground Level	No	1	18,703	18,703
89	Change 8.G, 8.1 & 8.2 - Refer Category 5.1 for cost impact	Note			Included
91	Change 11.G & 11.R - Refer Category 2.3 for cost impact	Note			Included
94	Change 14.R - Refer Category 2.2 for cost impact	Note			Included
95	Change 10 and 13 - Referenced in summary document however no change shown on the drawings. Deemed not applicable.	Note			N/A
	Not Allocated to Element				**18,703**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**168,665**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
53	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			N/A
88	Change 7.G, 7.1 & 7.2 - Refer Category 1.1 for cost impact	Note			Included
89	Change 8.G, 8.1 & 8.2 - Refer Category 5.1 for cost impact	Note			Included
90	Change 9.G, 9.1 & 9.2 - Refer Category 1.1 for cost impact	Note			Included
95	Change 10 and 13 - Referenced in summary document however no change shown on the drawings. Deemed not applicable.	Note			N/A
	Not Allocated to Element				**0**
	2.1 : NATHERS RATING				**0**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
52	Change 14.R - ADD PV cells to (Total 84 m2 PV array area as per Breathe Architecture GOCAP Standards Testing Summary)	m²	84	378	31,733
	Roof				**31,733**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**31,733**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
46	Change 11.G & 11.R - OMIT gas enclosures	Item			-2,488
	Fitments				**-2,488**
SE	**Special Equipment**				
44	Change 11.R - ADD extra over apartment kitchen gas cooktop for induction cooktop - Allowance (Spec TBC - increased allowance given type of project / development)	No	4	1,866	7,462
	Special Equipment				**7,462**
PD	**Sanitary Plumbing**				
45	Change 11.R - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	4	2,487	9,948
	Sanitary Plumbing				**9,948**
GS	**Gas Service**				
43	Change 11.G & 11.R - OMIT gas reticulation to apartments	No	4	-3,110	-12,437
	Gas Service				**-12,437**
XL	**Landscaping and Improvements**				
47	Change 11.G - ADD 3m2 of planting/landscaping in lieu of gas enclosure	m²	3	187	561
	Landscaping and Improvements				**561**
	2.3 : NO GAS				**3,046**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
24	3.1 - Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
28	Change 6.B - 3.2 - Car parking designed to be adaptable - Assume nil cost impact. Given the open nature of the carpark and no major structural elements within, we assume the space can be easily adapted to the proposed communal area.	Item			N/A
	Not Allocated to Element				**N/A**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
54	Change 2.B - No build cost implication for carparking that supports sustainable forms of private ownership	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
55	Change 2.B - No impact to standard car parking dimensions	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
25	Change 3.B - Dedicated EV ready space and infrastructure provision. Allow 1 No. EV ready spaces.	No	1	1,617	1,617
	Electric Light and Power				**1,617**
	3.5 : EV READY SPACES				**1,617**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
85	Change 3.B - Allowance to upgrade main switchboard for to accomodate additional Vehicle Charging capacity	No	6	746	4,475
	Electric Light and Power				**4,475**
	3.6 : EV INFRASTRUCTURE PROVISION				**4,475**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
22	Change 1.B - ADD Additional bike parking (7 No. in total, parking (RLB nominated supply $250/ea)	No	7	591	4,137
23	Change 1.B - CREDIT Omit 1 No. storage space (allow 1 No. storage cage)	No	1	-3,111	-3,111
	Fitments				**1,026**
	3.7 : BICYCLE SPACES				**1,026**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
51	Change 12.R, 13.R & 14.R - ADD Additional highly reflective roofing (861 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	861	75	64,192
92	Change 12.1 - Refer to Change 14.R (Category 2.2) for cost impact	Note			Included
	Roof				**64,192**
NA	**Not Allocated to Element**				
94	Change 14.R - Refer Category 2.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**64,192**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
58	Non-spatial change - ADD External walls thermal performance uplift to achieve R3.5 (raised from Baseline R1.5)	m²	1,095	17	17,691
	External Walls				**17,691**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**17,691**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
59	No build cost implication for passive cooling techniques - Baseline compliant	Item			N/A
	Not Allocated to Element				**N/A**
	4.3 : PASSIVE COOLING TECHNIQUES				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
60	Non-spatial change - Alternative external paving material (allow permeable paving on min. 100mm soil applied to 50% of all courtyard areas)	m²	123	-38	-4,587
	Landscaping and Improvements				**-4,587**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**-4,587**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
50	Change 12.1 - ADD Extra over for grass/meadow to provide green roof - Level 1 flat roof (31 m2 as per Breathe Architecture document)	m²	31	725	22,459
	Roof				**22,459**
XL	**Landscaping and Improvements**				
35	Change 8.G - ADD climbing plants to facade (Assume 155m2 in total, to all levels - as per Breathe Architecture GOCAP Standards Testing Summary)	m²	155	326	50,461
36	Change 8.1 - ADD climbing plants to facade (Assume 155m2 as per Breathe Architecture GOCAP Standards Testing Summary) - Incl. in Change 8.G	Note			Included
37	Change 8.2 - ADD climbing plants to facade (Assume 155m2 as per Breathe Architecture GOCAP Standards Testing Summary) Incl. in Change 8.G	Note			Included
41	Change 10.G - ADD small trees to landscape (3 No as per Breathe Architecture GOCAP Standards Testing document)	No	3	1,243	3,729
42	Change 10.G - ADD Planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 700 mm high (assume block walls with render finish) (30 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Summary)	m²	30	1,367	41,004
	Landscaping and Improvements				**95,194**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**117,653**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
61	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
62	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
63	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
63	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
63	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
64	Existing mature trees to be retained - no cost impact	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
65	Minimise impact of trees on adjoining lots - no cost impact	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
26	Change 4.B - Provide 2 No additional organic waster bins as per Breathe Report 02.06.21	No	2	1,082	2,164
	Fitments				**2,164**
NA	**Not Allocated to Element**				
66	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**2,164**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
67	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
68	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
69	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
70	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			6,213
	Not Allocated to Element				**6,213**
	7.3 : GREENSTAR CERTIFICATION				**6,213**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
27	Change 5.B - ADD Greywater tank for proposed grey water system - size to fit into 18m2 reserved space as per Breathe Architecture GOCAP Standards Testing document dated 02.06.21	No	1	24,849	24,849
86	Change 5.B - Allow for reticulation from greywater tank to apartment WC's (cost per apartment - allowance)	No	4	3,107	12,426
87	Change 5.B - Allow for reticulation from greywater tank to apartment balcony planters and other sanitary fixtures (cost per apartment - allowance)	No	4	3,107	12,428
	Sanitary Plumbing				**49,703**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**49,703**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
71	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
71	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
72	BESS Water certification - Provisional Allowance (if deemed required) - Assume material selection is compliant with requirements	Item			6,213
	Not Allocated to Element				**6,213**
	8.4 : BESS WATER CATEGORY SCORE				**6,213**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
73	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
74	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 2. LARGE SCALE RESIDENTIAL (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - HIGH-RISE -RESIDENTIAL - 11 LEVELS**			
A1	**Demolition / SIte Preparation**			**Excl.**
A2	**Basement Carpark**			
A2A	Basement 2 Level	4,342	1,500	6,513,000
A2B	Basement 1 Level	4,333	1,700	7,366,100
	Basement Carpark	**8,675**	**1,600**	**13,879,100**
A3	**Residential Building - Proposed**			
A3A	Substructure			2,104,200
A3B	Ground Floor	3,351	2,789	9,347,550
A3C	Level 1	2,909	3,205	9,323,550
A3D	Level 2	3,083	3,119	9,616,600
A3E	Level 3	2,990	3,193	9,548,400
A3F	Level 4	2,199	3,083	6,779,200
A3G	Level 5	2,163	3,098	6,702,000
A3H	Level 6	2,006	3,011	6,039,400
A3I	Level 7	1,800	3,105	5,589,800
A3J	Level 8	1,691	3,014	5,097,050
A3K	Level 9	1,408	3,185	4,484,300
A3L	Level 10	1,138	2,654	3,020,650
A3M	Level 11	699	3,008	2,102,500
A3N	Roof			1,968,400
A3O	Vertical Transportation			1,450,000
A3P	FF&E			Excl.
A3Q	BMU			Excl.
	Residential Building - Proposed	**25,437**	**3,270**	**83,173,600**
A4	**External Works & Services**			**1,350,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - HIGH-RISE -RESIDENTIAL - 11 LEVELS	**34,112**	**2,885**	**98,402,700**
B	**MINIMUM OPTION**			
B1	**01 : Overarching ESD**			**491,977**
B2	**02 : Energy Efficiency & Renewables**			**331,990**
B3	**03 : Sustainable Transport**			**292,425**
B4	**04 : Urban Heat Island Response**			**178,205**
B5	**05 : Urban Ecology**			**1,186,835**
B6	**06 : Waste & Resource Recovery**			**-53,392**
B7	**07 : Stormwater Management**			**0**
B8	**08 : Water Efficiency**			**240,026**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 2. LARGE SCALE RESIDENTIAL (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
B9	**09 : Integrated Flood Management**			**Nil**
	MINIMUM OPTION			**2,668,066**
	ESTIMATED NET COST	**34,112**	**2,963**	**101,070,766**
MARGINS & ADJUSTMENTS				
Design Development Contingency				Incl.
Builder's Preliminaries				Incl.
Builder's Overheads and Margin				Incl.
Estimated Construction Cost as at January 2022		34,112	2,963	101,070,766
Escalation Post January 2022				Excl.
Headworks and Authority Charges				Excl.
Furniture, Fittings and Equipment				Excl.
Design Consultants Fees				Excl.
Project Contingency				Excl.
GST				Excl.
Scoping Document for Costings:				
Breathe Architecture GOCAP Standards Testing, dated 11.06.21				
ESTIMATED TOTAL COST		**34,112**	**2,963**	**101,070,766**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
159	Non Spatial - Roof thermal performance uplift to average R3.5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	2,864	14	37,260
304	Change 11.4 - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material	m²	474	79	37,000
326	Change 18 - Refer category 4.4 for cost impact	Note			Included
	Roof				**74,260**
EW	**External Walls**				
155	Non Spatial - External glazing specification uplift to double glazed clear (raised from Baseline single glazed Low E)	m²	6,153	85	520,310
234	Change 14.G - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	24	-3,557	-85,365
235	Change 14.G - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	24	2,635	63,227
253	Change 14.1 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	56	-3,557	-199,186
254	Change 14.1 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	56	2,635	147,529
255	Change 14.2 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	63	-3,557	-224,079
256	Change 14.2 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	63	2,635	165,969
257	Change 14.3 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	65	-3,557	-231,196
258	Change 14.3 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	65	2,635	171,239
259	Change 14.4 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	57	-3,557	-202,741
260	Change 14.4 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	57	2,635	150,164
261	Change 14.5 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	53	-3,557	-188,512
262	Change 14.5 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	53	2,635	139,627
263	Change 14.6 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	32	-3,557	-113,820

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
264	Change 14.6 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	32	2,635	84,303
265	Change 14.7 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	28	-3,557	-99,592
266	Change 14.7 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	28	2,635	73,765
267	Change 14.8 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	28	-3,557	-99,592
268	Change 14.8 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	28	2,635	73,765
269	Change 14.9 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	26	-3,557	-92,479
270	Change 14.9 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	26	2,635	68,497
271	Change 14.10 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	10	-3,557	-35,569
272	Change 14.10 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	10	2,635	26,346
273	Change 12.3 - Remove existing glazed suite and add insulated panels to extent shown	m²	44	-228	-10,019
274	Change 12.1 - Remove existing glazed suite and add insulated panels to extent shown	m²	42	-228	-9,564
275	Change 13.1 - ADD Operable external blinds (assume 2,850 mm high drop)	m	30	1,484	44,493
276	Change 13.2 - ADD Operable external blinds (assume 2,850 mm high drop)	m	45	1,484	66,740
277	Change 13.3 - ADD Operable external blinds (assume 2,850 mm high drop)	m	32	1,484	47,460
278	Change 13.4 - ADD Operable external blinds (assume 2,850 mm high drop)	m	12	1,484	17,798
279	Change 13.5 - ADD Operable external blinds (assume 2,850 mm high drop)	m	15	1,484	22,247
280	Change 13.6 - ADD Operable external blinds (assume 2,850 mm high drop)	m	21	1,484	31,146
281	Change 13.7 - ADD Operable external blinds (assume 2,850 mm high drop)	m	24	1,484	35,596
282	Change 13.8 - ADD Operable external blinds (assume 2,850 mm high drop)	m	21	1,484	31,146

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
283	Change 13.9 - ADD Operable external blinds (assume 2,850 mm high drop)	m	21	1,484	31,146
284	Change 13.10 - ADD Operable external blinds (assume 2,850 mm high drop)	m	9	1,484	13,349
285	Change 13.11 - ADD Operable external blinds (assume 2,850 mm high drop)	m	15	1,484	22,247
335	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral - Following review of building renders, assume spandrels not applicable due to facade type shown on drawings	Note			N/A
	External Walls				**456,395**
GS	**Gas Service**				
321	Change 9.5 - Refer category 2.3 for cost impact	Note			Included
	Gas Service				**Included**
VE	**Ventilation**				
163	Non Spatial - Air tightness testing and sealing throughout building (under Minimum option)	m²	29,730	6	154,711
	Ventilation				**154,711**
AC	**Air Conditioning**				
161	Non Spatial - Air conditioning power rating set to 4kW per dwelling (reduced from Baseline 5kW)	m²	29,730	-7	-193,389
	Air Conditioning				**-193,389**
NA	**Not Allocated to Element**				
334	Non Spatial - Reduce embodied carbon emissions by 20% - No scope of works defined, assume excluded until further information is received	Note			To Be Confirmed
	Not Allocated to Element				**To Be Confirmed**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**491,977**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
322	Change 14 - Refer category 1.1 for cost impact	Note			Included
324	Change 12 - Refer category 1.1 for cost impact	Note			Included
325	Change 13 - Refer category 1.1 for cost impact	Note			Included
	External Walls				**Included**
NA	**Not Allocated to Element**				
165	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
	Not Allocated to Element				**Included**
	2.1 : NATHERS RATING				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
153	Change 18.R - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 264m2 PV array area as per email from Ali Galbraith of Breathe Architecture dated 21.06.21, sent at 15:21, to RLB)	m²	264	396	104,408
308	Change 18.11 - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 64m2 PV array area as per Breathe Architecture GOCAP Standards Testing document)	m²	64	396	25,313
326	Change 18 - Refer category 4.4 for cost impact	Note			Included
328	Change 18.7 - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 116 m2 PV array area as per email from Ali Galbraith of Breathe Architecture dated 21.06.21, sent at 15:21, to RLB)	m²	116	396	45,876
329	Change 18.9 - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 78 m2 PV array area as per email from Ali Galbraith of Breathe Architecture dated 21.06.21, sent at 15:21, to RLB)	m²	78	396	30,850
	Roof				**206,447**
LP	**Electric Light and Power**				
227	Change 18.B1 - Add battery within Basement 1 to suit Solar PV Array	No	1		Incl.
	Electric Light and Power				**Incl.**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**206,447**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
231	Change 9.5 - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	193	2,602	502,172
	Sanitary Plumbing				**502,172**
GS	**Gas Service**				
230	Change 9.5 - OMIT gas reticulation throughout building (Allow a total number of 193 No. connection points)	No	193	-1,952	-376,629
	Gas Service				**-376,629**
	2.3 : NO GAS				**125,543**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
167	Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
170	Change 6.B1 - Car parking designed to be adaptable - Assume nil cost impact. Given the open nature of the carpark and no major structural elements within, we assume the space can be easily adapted to the proposed communal area.	Item			N/A
229	Change 6.G - ADD skylight (assume 5m2) including ventilation (to basement) provision at Ground Level - provisional allowance	No	1	16,653	16,653
	Not Allocated to Element				**16,653**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**16,653**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
171	Change 1.B2 - Allocation of 12 x car share + 12 x visitor cars - no cost impact (only spatial reallocation - note no provision for additional cars included, given reduction due to spatial, assume reduction in carpark numbers are not to be built elsewhere)	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
173	Change 1.B2 - Allocation of 12 x car share + 12 x visitor cars - no cost impact (only spatial reallocation - note no provision for additional cars included, given reduction due to spatial, assume reduction in carpark numbers are not to be built elsewhere)	Item			N/A
337	Change 7.B1 - Allocation of DDA carparks - no cost impact (only spatial reallocation - note no provision for additional cars included, given reduction due to spatial, assume reduction in carpark numbers are not to be built elsewhere)	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
223	Change 2.B2 - Dedicated EV ready space and infrastructure provision. Allow 12 No. EV ready spaces.	No	12	13,010	156,114
	Electric Light and Power				**156,114**
	3.5 : EV READY SPACES				**156,114**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
224	Change 2.B2 - Provision for an additional future 36 No.EV ready spaces + 12 No. EV ready above noted	No	48	781	37,469
	Electric Light and Power				**37,469**
	3.6 : EV INFRASTRUCTURE PROVISION				**37,469**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
226	Change 5.B1 - ADD Additional bike parking (133 No. in total, parking (RLB nominated supply $250/ea). Note : No adjustment or cost impact included for reduction in carpark numbers (we have assumed that the reduction is satisfactory - if not then additional costs for new carpark area needs to be considered)	No	133	618	82,189
	Fitments				**82,189**
	3.7 : BICYCLE SPACES				**82,189**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
302	Change 17.11 - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material	m²	522	79	40,744
303	Change 17.R - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material	m²	175	79	13,662
323	Change 11 - Refer category 5.1 for cost impact	Note			Included
	Roof				**54,406**
XL	**Landscaping and Improvements**				
338	Change 8 - Refer category 4.4 for cost impact	Note			Included
	Landscaping and Improvements				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**54,406**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
157	Non-spatial change - ADD External walls thermal performance uplift to achieve R2.5 (raised from Baseline R1.5)	m²	5,251	11	54,652
	External Walls				**54,652**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**54,652**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
323	Change 11 - Refer category 5.1 for cost impact	Note			Included
	Roof				**Included**
XL	**Landscaping and Improvements**				
338	Change 8 - Refer category 4.4 for cost impact	Note			Included
	Landscaping and Improvements				**Included**
	4.3 : PASSIVE COOLING TECHNIQUES				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
232	Change 8.G - ADD Extra Over for highly reflective paving to Ground Level (557 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	557	66	36,230
305	Change 8.6 - ADD Extra Over for highly reflective paving to Ground Level (129 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	129	66	8,393
306	Change 8.6 - ADD Extra Over for highly reflective paving to Ground Level (129 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	95	66	6,181
307	Change 8.10 - ADD Extra Over for highly reflective paving to Ground Level (282 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	282	66	18,343
	Landscaping and Improvements				**69,147**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**69,147**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
286	Change 11.1 - ADD Extra over for grass/meadow to provide green roof - Level	m²	25	759	18,962
287	Change 11.6 - ADD Extra over for grass/meadow to provide green roof - Level	m²	100	759	75,844
288	Change 11.8 - ADD Extra over for grass/meadow to provide green roof - Level	m²	56	759	42,475
289	Change 11.11 - ADD Extra over for grass/meadow to provide green roof - Level	m²	47	759	35,649
290	Change 11.R - ADD Extra over for grass/meadow to provide green roof - Level	m²	200	759	151,689
	Roof				**324,619**
XL	**Landscaping and Improvements**				
309	Change 15.1 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	55	1,301	71,552
310	Change 15.2 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	64	1,301	83,260
311	Change 15.3 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	64	1,301	83,258
312	Change 15.4 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	63	1,301	81,960
313	Change 15.5 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	49	1,301	63,747
314	Change 15.6 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	59	1,301	76,756
315	Change 15.7 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	49	1,301	63,747
316	Change 15.8 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	90	1,301	117,083

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
317	Change 15.9 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	33	1,301	42,933
318	Change 15.10 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	26	1,301	33,826
319	Change 16.10 - ADD Vege produce garden, comprising of planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 750 mm high (assume block walls with render finish) - Assumes 6 No. planters as per the drawings supplied.	m²	78	1,848	144,094
336	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Incl.
	Landscaping and Improvements				**862,216**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**1,186,835**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
184	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
185	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
188	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
189	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
192	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
193	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
196	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
225	Change 4.B1 - Provide 6 No additional organic waster bins as per Breathe Report	No	6	1,133	6,794
228	Change 4.G - Provide 2 No additional organic waster bins as per Breathe Report	No	2	1,132	2,264
233	Change 10.G - Remove waste chutes	No	1	-5,204	-5,204
291	Change 10.1 - Remove waste chutes	No	1	-5,204	-5,204
292	Change 10.2 - Remove waste chutes	No	1	-5,204	-5,204
293	Change 10.3 - Remove waste chutes	No	1	-5,204	-5,204
294	Change 10.4 - Remove waste chutes	No	1	-5,204	-5,204
295	Change 10.5 - Remove waste chutes	No	1	-5,204	-5,204
296	Change 10.6 - Remove waste chutes	No	1	-5,204	-5,204
297	Change 10.7 - Remove waste chutes	No	1	-5,204	-5,204
298	Change 10.8 - Remove waste chutes	No	1	-5,204	-5,204
299	Change 10.9 - Remove waste chutes	No	1	-5,205	-5,205
300	Change 10.10 - Remove waste chutes	No	1	-5,204	-5,204
301	Change 10.11 - Remove waste chutes	No	1	-5,205	-5,205
	Fitments				**-53,392**
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**-53,392**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - Refer 6.1	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
330	Greenstar certification - not applicable to Minimum standard	Note			N/A
	Not Allocated to Element				**N/A**
	7.3 : GREENSTAR CERTIFICATION				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
131	Change 3.B1 - ADD Greywater tank for proposed grey water system - size to fit into 40m2 reserved space as per Breathe Architecture GOCAP Standards Testing document)	No	1	65,049	65,049
132	Change 3.B1 - ADD Allowance for reticulation from greywater tank to amenities/EOT and other sanitary fixtures (Allow for 189 conntection points)	No	189	651	122,939
	Sanitary Plumbing				**187,988**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**187,988**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
327	8.3 - Alternative water for non-potable uses - Refer to item 8.1 above	Note			Included
	Not Allocated to Element				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	8.4 : BESS WATER CATEGORY SCORE				**52,038**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 2. LARGE SCALE RESIDENTIAL (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - HIGH-RISE -RESIDENTIAL - 11 LEVELS**			
A1	**Demolition / SIte Preparation**			**Excl.**
A2	**Basement Carpark**			
A2A	Basement 2 Level	4,342	1,500	6,513,000
A2B	Basement 1 Level	4,333	1,700	7,366,100
	Basement Carpark	**8,675**	**1,600**	**13,879,100**
A3	**Residential Building - Proposed**			
A3A	Substructure			2,104,200
A3B	Ground Floor	3,351	2,789	9,347,550
A3C	Level 1	2,909	3,205	9,323,550
A3D	Level 2	3,083	3,119	9,616,600
A3E	Level 3	2,990	3,193	9,548,400
A3F	Level 4	2,199	3,083	6,779,200
A3G	Level 5	2,163	3,098	6,702,000
A3H	Level 6	2,006	3,011	6,039,400
A3I	Level 7	1,800	3,105	5,589,800
A3J	Level 8	1,691	3,014	5,097,050
A3K	Level 9	1,408	3,185	4,484,300
A3L	Level 10	1,138	2,654	3,020,650
A3M	Level 11	699	3,008	2,102,500
A3N	Roof			1,968,400
A3O	Vertical Transportation			1,450,000
A3P	FF&E			Excl.
A3Q	BMU			Excl.
	Residential Building - Proposed	**25,437**	**3,270**	**83,173,600**
A4	**External Works & Services**			**1,350,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - HIGH-RISE -RESIDENTIAL - 11 LEVELS	**34,112**	**2,885**	**98,402,700**
C	**PREFERRED OPTION**			
C1	**01 : Overarching ESD**			**1,286,941**
C2	**02 : Energy Efficiency & Renewables**			**331,990**
C3	**03 : Sustainable Transport**			**292,425**
C4	**04 : Urban Heat Island Response**			**212,361**
C5	**05 : Urban Ecology**			**1,248,271**
C6	**06 : Waste & Resource Recovery**			**-53,392**
C7	**07 : Stormwater Management**			**52,038**
C8	**08 : Water Efficiency**			**240,026**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 2. LARGE SCALE RESIDENTIAL (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
C9	**09 : Integrated Flood Management**			**Nil**
	PREFERRED OPTION			**3,610,660**
	ESTIMATED NET COST	**34,112**	**2,991**	**102,013,360**
MARGINS & ADJUSTMENTS				
Design Development Contingency				Incl.
Builder's Preliminaries				Incl.
Builder's Overheads and Margin				Incl.
Estimated Construction Cost as at January 2022		34,112	2,991	102,013,360
Escalation Post January 2022				Excl.
Headworks and Authority Charges				Excl.
Furniture, Fittings and Equipment				Excl.
Design Consultants Fees				Excl.
Project Contingency				Excl.
GST				Excl.
Scoping Document for Costings:				
Breathe Architecture GOCAP Standards Testing, dated 11.06.21				
ESTIMATED TOTAL COST		**34,112**	**2,991**	**102,013,360**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
160	Non Spatial - Roof thermal performance uplift to average R5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	2,864	19	52,165
304	Change 11.4 - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material	m²	474	79	37,000
326	Change 18 - Refer category 4.4 for cost impact	Note			Included
	Roof				**89,165**
EW	**External Walls**				
156	Non Spatial - External glazing specification uplift to double glazed Low E (raised from Baseline single glazed Low E)	m²	6,153	111	680,401
234	Change 14.G - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	24	-3,557	-85,364
235	Change 14.G - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	24	2,635	63,227
253	Change 14.1 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	56	-3,557	-199,181
254	Change 14.1 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	56	2,635	147,529
255	Change 14.2 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	63	-3,557	-224,081
256	Change 14.2 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	63	2,635	165,970
257	Change 14.3 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	65	-3,557	-231,194
258	Change 14.3 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	65	2,635	171,240
259	Change 14.4 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	57	-3,557	-202,740
260	Change 14.4 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	57	2,635	150,164
261	Change 14.5 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	53	-3,557	-188,511
262	Change 14.5 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	53	2,635	139,626
263	Change 14.6 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	32	-3,557	-113,819

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
264	Change 14.6 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	32	2,635	84,303
265	Change 14.7 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	28	-3,557	-99,592
266	Change 14.7 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	28	2,635	73,765
267	Change 14.8 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	28	-3,557	-99,592
268	Change 14.8 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	28	2,635	73,765
269	Change 14.9 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	26	-3,557	-92,479
270	Change 14.9 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	26	2,635	68,496
271	Change 14.10 - OMIT 1,500 wide x 2,700 mm high external glazing units - As per Breathe Architecture GOCAP Report	No	10	-3,557	-35,569
272	Change 14.10 - ADD 1,500 wide x 2,700 mm solid external wall in lieu of external glazing units - As per Breathe Architecture GOCAP Report	No	10	2,635	26,346
273	Change 12.3 - Remove existing glazed suite and add insulated panels to extent shown	m²	44	-228	-10,019
274	Change 12.1 - Remove existing glazed suite and add insulated panels to extent shown	m²	42	-228	-9,564
275	Change 13.1 - ADD Operable external blinds (assume 2,850 mm high drop)	m	40	1,484	59,324
276	Change 13.2 - ADD Operable external blinds (assume 2,850 mm high drop)	m	60	1,484	88,986
277	Change 13.3 - ADD Operable external blinds (assume 2,850 mm high drop)	m	42	1,484	62,291
278	Change 13.4 - ADD Operable external blinds (assume 2,850 mm high drop)	m	16	1,484	23,731
279	Change 13.5 - ADD Operable external blinds (assume 2,850 mm high drop)	m	20	1,484	29,663
280	Change 13.6 - ADD Operable external blinds (assume 2,850 mm high drop)	m	28	1,484	41,527
281	Change 13.7 - ADD Operable external blinds (assume 2,850 mm high drop)	m	32	1,484	47,459
282	Change 13.8 - ADD Operable external blinds (assume 2,850 mm high drop)	m	28	1,484	41,527

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
283	Change 13.9 - ADD Operable external blinds (assume 2,850 mm high drop)	m	28	1,484	41,527
284	Change 13.10 - ADD Operable external blinds (assume 2,850 mm high drop)	m	11	1,484	16,315
285	Change 13.11 - ADD Operable external blinds (assume 2,850 mm high drop)	m	19	1,484	28,179
335	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral - Following review of building renders, assume spandrels not applicable due to facade type shown on drawings	Note			N/A
	External Walls				**733,656**
GS	**Gas Service**				
321	Change 9.5 - Refer category 2.3 for cost impact	Note			Included
	Gas Service				**Included**
VE	**Ventilation**				
164	Non Spatial - Air tightness testing and sealing throughout building with uplift for balanced mechanical ventilation / HRV's (under Preferred option)	m²	29,730	27	773,541
	Ventilation				**773,541**
AC	**Air Conditioning**				
162	Non Spatial - Air conditioning power rating set to 3kW per dwelling (reduced from Baseline 5kW)	m²	29,730	-11	-309,421
	Air Conditioning				**-309,421**
NA	**Not Allocated to Element**				
333	Non Spatial - Reduce embodied carbon emissions by 40% - No scope of works defined, assume excluded until further information is received	Note			To Be Confirmed
	Not Allocated to Element				**To Be Confirmed**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**1,286,941**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
322	Change 14 - Refer category 1.1 for cost impact	Note			Included
324	Change 12 - Refer category 1.1 for cost impact	Note			Included
325	Change 13 - Refer category 1.1 for cost impact	Note			Included
	External Walls				**Included**
NA	**Not Allocated to Element**				
166	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
332	Non Spatial - Commit to procure energy with supplier that offers 100% renewable energy. Breathe have advised on 15.07.21 that potential cost implications of this change would occur post occupancy and is therefore excluded from this estimate.	Note			N/A
	Not Allocated to Element				**0**
	2.1 : NATHERS RATING				**0**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
153	Change 18.R - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 264m2 PV array area as per email from Ali Galbraith of Breathe Architecture dated 21.06.21, sent at 15:21, to RLB)	m²	264	396	104,408
308	Change 18.11 - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 64m2 PV array area as per Breathe Architecture GOCAP Standards Testing document)	m²	64	396	25,313
326	Change 18 - Refer category 4.4 for cost impact	Note			Included
328	Change 18.7 - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 116 m2 PV array area as per email from Ali Galbraith of Breathe Architecture dated 21.06.21, sent at 15:21, to RLB)	m²	116	396	45,876
329	Change 18.9 - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 78 m2 PV array area as per email from Ali Galbraith of Breathe Architecture dated 21.06.21, sent at 15:21, to RLB)	m²	78	396	30,850
	Roof				**206,447**
LP	**Electric Light and Power**				
227	Change 18.B1 - Add battery within Basement 1 to suit Solar PV Array	No	1		Incl.
	Electric Light and Power				**Incl.**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**206,447**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
231	Change 9.5 - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	193	2,602	502,172
	Sanitary Plumbing				**502,172**
GS	**Gas Service**				
230	Change 9.5 - OMIT gas reticulation throughout building (Allow a total number of 193 No. connection points)	No	193	-1,952	-376,629
	Gas Service				**-376,629**
	2.3 : NO GAS				**125,543**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
168	Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
169	Change 6.B1 (Category 3.2) - Car parking designed to be adaptable - N/A	Item			N/A
229	Change 6.G - ADD skylight (assume 5m2) including ventilation (to basement) provision at Ground Level - provisional allowance	No	1	16,653	16,653
	Not Allocated to Element				**16,653**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**16,653**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
172	Change 1.B2 - Allocation of 12 x car share + 12 x visitor cars - no cost impact (only spatial reallocation - note no provision for additional cars included, given reduction due to spatial, assume reduction in carpark numbers are not to be built elsewhere)	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
174	Change 1.B2 - Allocation of 12 x car share + 12 x visitor cars - no cost impact (only spatial reallocation - note no provision for additional cars included, given reduction due to spatial, assume reduction in carpark numbers are not to be built elsewhere)	Item			N/A
337	Change 7.B1 - Allocation of DDA carparks - no cost impact (only spatial reallocation - note no provision for additional cars included, given reduction due to spatial, assume reduction in carpark numbers are not to be built elsewhere)	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
223	Change 2.B2 - Dedicated EV ready space and infrastructure provision. Allow 12 No. EV ready spaces.	No	12	13,010	156,114
	Electric Light and Power				**156,114**
	3.5 : EV READY SPACES				**156,114**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
224	Change 2.B2 - Provision for an additional future 36 No.EV ready spaces + 12 No. EV ready above noted	No	48	781	37,469
	Electric Light and Power				**37,469**
	3.6 : EV INFRASTRUCTURE PROVISION				**37,469**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
226	Change 5.B1 - ADD Additional bike parking (133 No. in total, parking (RLB nominated supply $250/ea). Note : No adjustment or cost impact included for reduction in carpark numbers (we have assumed that the reduction is satisfactory - if not then additional costs for new carpark area needs to be considered)	No	133	618	82,189
	Fitments				**82,189**
	3.7 : BICYCLE SPACES				**82,189**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
302	Change 17.11 - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material	m²	522	79	40,744
303	Change 17.R - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material	m²	175	79	13,662
323	Change 11 - Refer category 5.1 for cost impact	Note			Included
	Roof				**54,406**
XL	**Landscaping and Improvements**				
338	Change 8 - Refer category 4.4 for cost impact	Note			Included
	Landscaping and Improvements				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**54,406**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
158	Non-spatial change - ADD External walls thermal performance uplift to achieve R3.5 (raised from Baseline R1.5)	m²	5,251	17	88,808
	External Walls				**88,808**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**88,808**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
323	Change 11 - Refer category 5.1 for cost impact	Note			Included
	Roof				**Included**
XL	**Landscaping and Improvements**				
338	Change 8 - Refer category 4.4 for cost impact	Note			Included
	Landscaping and Improvements				**Included**
	4.3 : PASSIVE COOLING TECHNIQUES				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
232	Change 8.G - ADD Extra Over for highly reflective paving to Ground Level (557 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	557	66	36,230
305	Change 8.6 - ADD Extra Over for highly reflective paving to Ground Level (129 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	129	66	8,393
306	Change 8.6 - ADD Extra Over for highly reflective paving to Ground Level (129 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	95	66	6,181
307	Change 8.10 - ADD Extra Over for highly reflective paving to Ground Level (282 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	282	66	18,343
	Landscaping and Improvements				**69,147**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**69,147**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
286	Change 11.1 - ADD Extra over for grass/meadow to provide green roof - Level	m²	25	759	18,962
287	Change 11.6 - ADD Extra over for grass/meadow to provide green roof - Level	m²	100	759	75,845
288	Change 11.8 - ADD Extra over for grass/meadow to provide green roof - Level	m²	56	759	42,475
289	Change 11.11 - ADD Extra over for grass/meadow to provide green roof - Level	m²	128	759	97,083
290	Change 11.R - ADD Extra over for grass/meadow to provide green roof - Level	m²	200	759	151,689
	Roof				**386,054**
XL	**Landscaping and Improvements**				
309	Change 15.1 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	55	1,301	71,552
310	Change 15.2 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	64	1,301	83,261
311	Change 15.3 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	64	1,301	83,260
312	Change 15.4 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	63	1,301	81,959
313	Change 15.5 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	49	1,301	63,747
314	Change 15.6 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	59	1,301	76,756
315	Change 15.7 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	49	1,301	63,747
316	Change 15.8 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	90	1,301	117,083

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
317	Change 15.9 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	33	1,301	42,933
318	Change 15.10 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to balconies/facade line, 500 mm high (assume block walls with render finish)	m²	26	1,301	33,826
319	Change 16.10 - ADD Vege produce garden, comprising of planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 750 mm high (assume block walls with render finish) - Assumes 6 No. planters as per the drawings supplied.	m²	78	1,848	144,093
336	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Incl.
	Landscaping and Improvements				**862,217**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**1,248,271**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
183	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
186	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
187	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
190	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
191	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
194	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
195	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
225	Change 4.B1 - Provide 6 No additional organic waster bins as per Breathe Report	No	6	1,133	6,794
228	Change 4.G - Provide 2 No additional organic waster bins as per Breathe Report	No	2	1,132	2,264
233	Change 10.G - Remove waste chutes	No	1	-5,204	-5,204
291	Change 10.1 - Remove waste chutes	No	1	-5,204	-5,204
292	Change 10.2 - Remove waste chutes	No	1	-5,204	-5,204
293	Change 10.3 - Remove waste chutes	No	1	-5,204	-5,204
294	Change 10.4 - Remove waste chutes	No	1	-5,204	-5,204
295	Change 10.5 - Remove waste chutes	No	1	-5,204	-5,204
296	Change 10.6 - Remove waste chutes	No	1	-5,204	-5,204
297	Change 10.7 - Remove waste chutes	No	1	-5,204	-5,204
298	Change 10.8 - Remove waste chutes	No	1	-5,204	-5,204
299	Change 10.9 - Remove waste chutes	No	1	-5,205	-5,205
300	Change 10.10 - Remove waste chutes	No	1	-5,204	-5,204
301	Change 10.11 - Remove waste chutes	No	1	-5,205	-5,205
	Fitments				**-53,392**
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**-53,392**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - Refer 6.1	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
201	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	7.3 : GREENSTAR CERTIFICATION				**52,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
131	Change 3.B1 - ADD Greywater tank for proposed grey water system - size to fit into 40m2 reserved space as per Breathe Architecture GOCAP Standards Testing document)	No	1	65,049	65,049
132	Change 3.B1 - ADD Allowance for reticulation from greywater tank to amenities/EOT and other sanitary fixtures (Allow for 189 conntection points)	No	189	651	122,939
	Sanitary Plumbing				**187,988**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**187,988**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
327	8.3 - Alternative water for non-potable uses - Refer to item 8.1 above	Note			Included
	Not Allocated to Element				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	8.4 : BESS WATER CATEGORY SCORE				**52,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 3. LARGE COMMERCIAL ALTERATIONS (JAN 2022)

Rider Levett Bucknall

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - LOW-RISE COMMERCIAL / ALTERATIONS**			
A1	**Demolition / SIte Preparation**			**Excl.**
A2	**Heritage Facade Works**			**2,900,000**
A3	**Commercial Building - Proposed Alteration works**			
A3A	Substructure			2,078,200
A3B	Basement 1 Level	408	2,750	1,122,000
A3C	Lower Ground	448	3,496	1,566,050
A3D	Ground Floor	1,449	3,458	5,010,075
A3E	Level 1	1,241	3,090	3,834,600
A3F	Level 2	1,211	4,328	5,240,950
A3G	Level 3	903	3,141	2,836,450
A3H	Level 4	1,443	3,100	4,473,950
A3I	Level 5	1,070	3,131	3,350,200
A3J	Level 6-15	11,471	3,135	35,957,950
A3K	Level 16 - Plant	657	2,500	1,642,500
A3L	Level 16 - Mezzanine	657	2,700	1,773,900
A3M	Roof (Level 17)	107	12,569	1,344,905
A3N	Vertical Transportation			2,775,000
A3O	BMU			750,000
A3P	Facade Signage | Lighting			500,000
	Commercial Building - Proposed Alteration works	**21,065**	**3,525**	**74,256,730**
A4	**External Works & Services**			
A4A	Hard & Soft Landscaping			450,000
A4B	External Services Connection			300,000
	External Works & Services			**750,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - LOW-RISE COMMERCIAL / ALTERATIONS	**21,065**	**3,698**	**77,906,730**
B	**MINIMUM OPTION**			
B1	**01 : Overarching ESD**			**906,301**
B2	**02 : Energy Efficiency & Renewables**			**4,903**
B3	**03 : Sustainable Transport**			**N/A**
B4	**04 : Urban Heat Island Response**			**291,432**
B5	**05 : Urban Ecology**			**616,535**
B6	**06 : Waste & Resource Recovery**			**Nil**
B7	**07 : Stormwater Management**			**0**
B8	**08 : Water Efficiency**			**388,985**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 3. LARGE COMMERCIAL ALTERATIONS (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
B9	**09 : Integrated Flood Management**			**Nil**
	MINIMUM OPTION			**2,208,156**
	ESTIMATED NET COST	**21,065**	**3,803**	**80,114,886**
MARGINS & ADJUSTMENTS				
Design Development Contingency				Incl.
Builder's Preliminaries				Incl.
Builder's Overheads and Margin				Incl.
Estimated Construction Cost as at January 2022		21,065	3,803	80,114,886
Escalation Post January 2022				Excl.
Headworks and Authority Charges				Excl.
Furniture, Fittings and Equipment				Excl.
Design Consultants Fees				Excl.
Project Contingency				Excl.
GST				Excl.
Scoping Document for Costings:				
Breathe Architecture GOCAP Standards Testing, Rev 0 dated 03.06.21				
ESTIMATED TOTAL COST		**21,065**	**3,803**	**80,114,886**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
159	Non Spatial - Roof thermal performance uplift to average R3.5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	1,491	14	19,399
	Roof				**19,399**
EW	**External Walls**				
155	Non Spatial - External glazing specification uplift to double glazed clear (raised from Baseline single glazed Low E) : Note this baseline and revised specification does not appear to correctly reflect a development of this nature	m²	4,439	85	375,370
227	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral (Assume Level 1 - 16 inclusive)	m²	1,242	326	403,942
	External Walls				**779,312**
VE	**Ventilation**				
163	Non Spatial - Air tightness testing and sealing throughout building (under Minimum option)	m²	20,675	6	107,590
	Ventilation				**107,590**
AC	**Air Conditioning**				
161	Non Spatial - Air conditioning power rating set to 4kW per dwelling (reduced from Baseline 5kW) : Note this change category relates more to dwellings | residential - specific A/C adjustments required for RLB to price. Breathe Architecture has advised that they are unable to provide a specific scope, specification or target for this change in relation to commercial building type testing sites. Therefore, we have excluded this item, subject to further testing / design development.	m²	20,675		To Be Confirmed
	Air Conditioning				**To Be Confirmed**
NA	**Not Allocated to Element**				
213	Change 5.1, 5.2, 5.3, 5.4, & 5.5 - Refer Category 4.3 for cost impact	Note			Included
214	Change 6.3 - Refer Category 5.1 for cost impact	Note			Included
215	Change 11.R - Refer Category 2.2 for cost impact	Note			Included
224	Change 1 - Referenced in summary document however no change shown on the drawings against Category 1.1. Deemed not applicable.	Note			N/A

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
229	Non Spatial - Reduce embodied carbon emissions by 20% - No scope of works defined, assume excluded until further information is received	Note			To Be Confirmed
	Not Allocated to Element				**0**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**906,301**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
228	Non Spatial - Category 2.1 - Extend spandrel penal and insulate to 700mm to glazed facades - Refer Category 1.1 for cost impact	Note			Included
	External Walls				**Included**
NA	**Not Allocated to Element**				
165	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
213	Change 5.1, 5.2, 5.3, 5.4, & 5.5 - Refer Category 4.3 for cost impact	Note			Included
214	Change 6.3 - Refer Category 5.1 for cost impact	Note			Included
226	Change 11 - Refer Category 4.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	2.1 : NATHERS RATING				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
153	Change 11.R - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 667m2 PV array area as per Breathe Architecture GOCAP Standards Testing document)	m²	667	396	263,793
225	Change 1.LG - ADD Battery for PV Array (Allowance only). Removal of gas enclosure to allow for space captured under Category 2.3	Item			Incl.
	Roof				**263,793**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**263,793**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
137	Change 1.LG - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	-56	2,602	-145,704
	Sanitary Plumbing				**-145,704**
GS	**Gas Service**				
135	Change 1.LG - Removal of gas connection and encloser to Lower Ground plant room location and add battery to suit Solar PV Array	No	1	-3,905	-3,905
136	Change 1.LG - OMIT gas reticulation throughout building (Allow a total number of 56 No. connection points)	No	56	-1,952	-109,281
	Gas Service				**-113,186**
NA	**Not Allocated to Element**				
134	Change 1.B - Remove diesel fuel tank if not required for emergency back up. TBC. Assume tank is to remain until advised further	Item			Excl.
	Not Allocated to Element				**Excl.**
	2.3 : NO GAS				**-258,890**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
167	3.1 - Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
170	3.2 - Car parking designed to be adaptable - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
171	3.3 - Car parking that support sustainable forms of private ownership - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
173	3.4 - Compliance with car parking design standards - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
176	3.5 - EV ready spaces - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.5 : EV READY SPACES				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
177	3.6 - EV infrastructure provision	Item			N/A
	Not Allocated to Element				**N/A**
	3.6 : EV INFRASTRUCTURE PROVISION				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
180	3.7 - Bicycle Spaces - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.7 : BICYCLE SPACES				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
150	Change 10.3 - ADD Additional highly reflective roofing to Level 3 roofing (198 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	198	79	15,458
212	Change 10.R - ADD Additional highly reflective roofing to Level 17 Roof roofing (259 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	259	79	20,215
	Roof				**35,673**
NA	**Not Allocated to Element**				
215	Change 11.R - Refer Category 2.2 for cost impact	Note			Included
216	Change 9.R - Refer Category 5.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**35,673**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
157	Non-spatial change - ADD External walls thermal performance uplift to achieve R2.5 (raised from Baseline R1.5)	m²	3,659	11	38,083
	External Walls				**38,083**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**38,083**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
142	Change 5.1 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (7.3 lin. m to Level 1 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	8	2,316	18,527
143	Change 5.2 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (7.5 lin. m to Level 2 as per Breathe Architecture GOCAP Standards Testing document).Assume ht. of unit to be 3400mm.	m	8	2,316	18,527
149	Change 5.3 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (6 lin. m to Level 3 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	6	2,316	13,895
151	Change 5.4 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (6 lin. m to Level 4 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	6	2,316	13,895
152	Change 5.5 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (6 lin. m - assume to Level 5-15 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	66	2,316	152,832
	External Walls				**217,676**
	4.3 : PASSIVE COOLING TECHNIQUES				**217,676**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
181	4.4 - Paving treatments that assist in cooling - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
154	Change 9.R - ADD Extra over for grass/meadow to provide green roof - Level 1 flat roof (167 m2 as per Breathe Architecture document)	m²	167	736	122,751
	Roof				**122,751**
EW	**External Walls**				
208	Change 5.1 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (7.3 lin. m to Level 1 as per Breathe Architecture GOCAP Standards Testing document) - Refer Category 4.3 for cost impact	Item			Incl.
	External Walls				**Incl.**
XL	**Landscaping and Improvements**				
138	Change 3.G - ADD Planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 700 mm high (assume block walls with render finish) (46 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report) Incl. omission of hard paving as per base case assumption.	m²	46	1,053	48,414
140	Change 3.G - ADD 3 No. medium sized trees.	No	3	5,205	15,613
141	Change 4.G - ADD Planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 500 mm high (assume block walls with render finish) (46 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report) Incl. omission of hard paving as per base case assumption.	m²	8	1,447	11,575
144	Change 6.2 - ADD Planter for climbing plants, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 500 mm high (assume block walls with render finish) (17 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report	m²	17	1,724	29,306
145	Change 6.3 - ADD climbing plants to facade (Assume 433m2 in total, to all levels - as per Breathe Architecture GOCAP Standards Testing Summary)	m²	433	244	105,338
146	Change 8.2 - ADD 5 No. small sized trees.	No	5	1,302	6,506
148	Change 7.2 - ADD Planters to Level 2 terrace, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 500 mm high (assume block walls with render finish) (131 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report) Incl. omission of hard paving as per base case assumption.	m²	131	1,236	161,900

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
211	Change 6.3 - ADD Planter box to each level (assume L3-15) for climbing plants, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 400 mm high (assume block walls with render finish) (4.5 m2 of planter box and assume applicable to 13 No. levels as per Breathe Architecture GOCAP Standards Testing Report)	m²	59	1,952	115,132
231	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Incl.
	Landscaping and Improvements				**493,784**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**616,535**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
184	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
185	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
188	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
189	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
192	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
193	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
196	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
232	Greenstar certification - not applicable to Minimum standard	Note			N/A
	Not Allocated to Element				**N/A**
	7.3 : GREENSTAR CERTIFICATION				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
131	Change 2.B - ADD Greywater tank for proposed grey water system - size to fit into 24m2 reserved space as per Breathe Architecture GOCAP Standards Testing document)	No	1	65,050	65,050
132	Change 2.B - ADD Allowance for reticulation from greywater tank to amenities/EOT and other sanitary fixtures (cost per level where applicable - allowance). Assume 17 No. levels requires the service, allow an avg. of 8 No. connection points per level. Unit: Per Level.	No	17	15,612	265,392
133	Change 2.B - ADD Allowance for reticulation from greywater tank to planters on Level 2 terrace and ground level planters	Item			6,505
	Sanitary Plumbing				**336,947**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**336,947**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
204	8.3 - Alternative water for non-potable uses - Refer to item 8.1 above	Item			Included
	Not Allocated to Element				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	8.4 : BESS WATER CATEGORY SCORE				**52,038**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 3. LARGE COMMERCIAL ALTERATIONS (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - LOW-RISE COMMERCIAL / ALTERATIONS**			
A1	**Demolition / SIte Preparation**			**Excl.**
A2	**Heritage Facade Works**			**2,900,000**
A3	**Commercial Building - Proposed Alteration works**			
A3A	Substructure			2,078,200
A3B	Basement 1 Level	408	2,750	1,122,000
A3C	Lower Ground	448	3,496	1,566,050
A3D	Ground Floor	1,449	3,458	5,010,075
A3E	Level 1	1,241	3,090	3,834,600
A3F	Level 2	1,211	4,328	5,240,950
A3G	Level 3	903	3,141	2,836,450
A3H	Level 4	1,443	3,100	4,473,950
A3I	Level 5	1,070	3,131	3,350,200
A3J	Level 6-15	11,471	3,135	35,957,950
A3K	Level 16 - Plant	657	2,500	1,642,500
A3L	Level 16 - Mezzanine	657	2,700	1,773,900
A3M	Roof (Level 17)	107	12,569	1,344,905
A3N	Vertical Transportation			2,775,000
A3O	BMU			750,000
A3P	Facade Signage | Lighting			500,000
	Commercial Building - Proposed Alteration works	**21,065**	**3,525**	**74,256,730**
A4	**External Works & Services**			**750,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - LOW-RISE COMMERCIAL / ALTERATIONS	**21,065**	**3,698**	**77,906,730**
C	**PREFERRED OPTION**			
C1	**01 : Overarching ESD**			**1,459,912**
C2	**02 : Energy Efficiency & Renewables**			**69,951**
C3	**03 : Sustainable Transport**			**N/A**
C4	**04 : Urban Heat Island Response**			**315,233**
C5	**05 : Urban Ecology**			**616,535**
C6	**06 : Waste & Resource Recovery**			**Nil**
C7	**07 : Stormwater Management**			**52,038**
C8	**08 : Water Efficiency**			**388,985**
C9	**09 : Integrated Flood Management**			**Nil**
	PREFERRED OPTION			**2,902,654**
	ESTIMATED NET COST	**21,065**	**3,836**	**80,809,384**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 3. LARGE COMMERCIAL ALTERATIONS (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
MARGINS & ADJUSTMENTS				
	Design Development Contingency			Incl.
	Builder's Preliminaries			Incl.
	Builder's Overheads and Margin			Incl.
	Estimated Construction Cost as at January 2022	21,065	3,836	80,809,384
	Escalation Post January 2022			Excl.
	Headworks and Authority Charges			Excl.
	Furniture, Fittings and Equipment			Excl.
	Design Consultants Fees			Excl.
	Project Contingency			Excl.
	GST			Excl.
	Scoping Document for Costings:			
	Breathe Architecture GOCAP Standards Testing, Rev 0 dated 03.06.21			
ESTIMATED TOTAL COST		**21,065**	**3,836**	**80,809,384**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
160	Non Spatial - Roof thermal performance uplift to average R5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	1,491	19	27,158
	Roof				**27,158**
EW	**External Walls**				
156	Non Spatial - External glazing specification uplift to double glazed Low E (raised from Baseline single glazed Low E) : Note this baseline and revised specification does not appear to correctly reflect a development of this nature	m²	4,439	111	490,869
227	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral (Assume Level 1 - 16 inclusive)	m²	1,242	326	403,944
	External Walls				**894,813**
VE	**Ventilation**				
164	Non Spatial - Air tightness testing and sealing throughout building with uplift for balanced mechanical ventilation / HRV's (under Preferred option)	m²	20,675	27	537,941
	Ventilation				**537,941**
AC	**Air Conditioning**				
162	Non Spatial - Air conditioning power rating set to 3kW per dwelling (reduced from Baseline 5kW) : Note this change category relates more to dwellings | residential - specific A/C adjustments required for RLB to price. Breathe Architecture has advised that they are unable to provide a specific scope, specification or target for this change in relation to commercial building type testing sites. Therefore, we have excluded this item, subject to further testing / design development.	m²	20,675		To Be Confirmed
	Air Conditioning				**To Be Confirmed**
NA	**Not Allocated to Element**				
213	Change 5.1, 5.2, 5.3, 5.4, & 5.5 - Refer Category 4.3 for cost impact	Note			Included
214	Change 6.3 - Refer Category 5.1 for cost impact	Note			Included
215	Change 11.R - Refer Category 2.2 for cost impact	Note			Included
224	Change 1 - Referenced in summary document however no change shown on the drawings against Category 1.1. Deemed not applicable.	Note			N/A

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
230	Non Spatial - Reduce embodied carbon emissions by 40% - No scope of works defined, assume excluded until further information is received	Note			To Be Confirmed
	Not Allocated to Element				**0**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**1,459,912**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
228	Non Spatial - Category 2.1 - Extend spandrel penal and insulate to 700mm to glazed facades - Refer Category 1.1 for cost impact	Note			Included
	External Walls				**Included**
NA	**Not Allocated to Element**				
166	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
213	Change 5.1, 5.2, 5.3, 5.4, & 5.5 - Refer Category 4.3 for cost impact	Note			Included
214	Change 6.3 - Refer Category 5.1 for cost impact	Note			Included
233	Non Spatial - Commit to procure energy with supplier that offers 100% renewable energy. Breathe have advised on 15.07.21 that potential cost implications of this change would occur post occupancy and is therefore excluded from this estimate.	Note			N/A
	Not Allocated to Element				**0**
	2.1 : NATHERS RATING				**0**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
153	Change 11.R - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total 667m2 PV array area as per Breathe Architecture GOCAP Standards Testing document)	m²	667	396	263,791
225	Change 1.LG - ADD Battery for PV Array (Allowance only). Removal of gas enclosure to allow for space captured under Category 2.3	Item			65,050
	Roof				**328,841**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**328,841**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
137	Change 1.LG - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	-56	2,602	-145,704
	Sanitary Plumbing				**-145,704**
GS	**Gas Service**				
135	Change 1.LG - Removal of gas connection and encloser to Lower Ground plant room location and add battery to suit Solar PV Array	No	1	-3,905	-3,905
136	Change 1.LG - OMIT gas reticulation throughout building (Allow a total number of 56 No. connection points)	No	56	-1,952	-109,281
	Gas Service				**-113,186**
NA	**Not Allocated to Element**				
134	Change 1.B - Remove diesel fuel tank if not required for emergency back up. TBC. Assume tank is to remain until advised further	Item			Excl.
	Not Allocated to Element				**Excl.**
	2.3 : NO GAS				**-258,890**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
168	3.1 - Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
169	3.2 - Car parking designed to be adaptable - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
172	3.3 - Car parking that support sustainable forms of private ownership	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
174	3.4 - Compliance with car parking design standards - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
175	3.5 - EV ready spaces - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.5 : EV READY SPACES				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
178	3.6 - EV infrastructure provision	Item			N/A
	Not Allocated to Element				**N/A**
	3.6 : EV INFRASTRUCTURE PROVISION				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
179	3.7 - Bicycle Spaces - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.7 : BICYCLE SPACES				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
150	Change 10.3 - ADD Additional highly reflective roofing to Level 3 roofing (198 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	198	79	15,458
212	Change 10.R - ADD Additional highly reflective roofing to Level 17 Roof roofing (259 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	259	79	20,215
	Roof				**35,673**
NA	**Not Allocated to Element**				
215	Change 11.R - Refer Category 2.2 for cost impact	Note			Included
216	Change 9.R - Refer Category 5.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**35,673**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
158	Non-spatial change - ADD External walls thermal performance uplift to achieve R3.5 (raised from Baseline R1.5)	m²	3,659	17	61,884
	External Walls				**61,884**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**61,884**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
142	Change 5.1 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (7.3 lin. m to Level 1 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	8	2,316	18,527
143	Change 5.2 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (7.5 lin. m to Level 2 as per Breathe Architecture GOCAP Standards Testing document).Assume ht. of unit to be 3400mm.	m	8	2,316	18,527
149	Change 5.3 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (6 lin. m to Level 3 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	6	2,316	13,895
151	Change 5.4 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (6 lin. m to Level 4 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	6	2,316	13,895
152	Change 5.5 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (6 lin. m - assume to Level 5-15 as per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3400mm.	m	66	2,316	152,832
	External Walls				**217,676**
	4.3 : PASSIVE COOLING TECHNIQUES				**217,676**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
182	4.4 - Paving treatments that assist in cooling - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
154	Change 9.R - ADD Extra over for grass/meadow to provide green roof - Level 1 flat roof (167 m2 as per Breathe Architecture document)	m²	167	736	122,751
	Roof				**122,751**
XL	**Landscaping and Improvements**				
138	Change 3.G - ADD Planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 700 mm high (assume block walls with render finish) (46 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report) Incl. omission of hard paving as per base case assumption.	m²	46	1,053	48,414
140	Change 3.G - ADD 3 No. medium sized trees.	No	3	5,205	15,613
141	Change 4.G - ADD Planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 500 mm high (assume block walls with render finish) (46 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report) Incl. omission of hard paving as per base case assumption.	m²	8	1,447	11,575
144	Change 6.2 - ADD Planter for climbing plants, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 500 mm high (assume block walls with render finish) (17 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report	m²	17	1,724	29,306
145	Change 6.3 - ADD climbing plants to facade (Assume 433m2 in total, to all levels - as per Breathe Architecture GOCAP Standards Testing Summary)	m²	433	244	105,338
146	Change 8.2 - ADD 5 No. small sized trees.	No	5	1,302	6,506
148	Change 7.2 - ADD Planters to Level 2 terrace, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 500 mm high (assume block walls with render finish) (131 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report) Incl. omission of hard paving as per base case assumption.	m²	131	1,236	161,900
211	Change 6.3 - ADD Planter box to each level (assume L3-15) for climbing plants, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 400 mm high (assume block walls with render finish) (4.5 m2 of planter box and assume applicable to 13 No. levels as per Breathe Architecture GOCAP Standards Testing Report)	m²	59	1,952	115,132

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score (continued)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
231	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Incl.
	Landscaping and Improvements				**493,784**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**616,535**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
183	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
186	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
187	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
190	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
191	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
194	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
195	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
201	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	7.3 : GREENSTAR CERTIFICATION				**52,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
131	Change 2.B - ADD Greywater tank for proposed grey water system - size to fit into 24m2 reserved space as per Breathe Architecture GOCAP Standards Testing document)	No	1	65,050	65,050
132	Change 2.B - ADD Allowance for reticulation from greywater tank to amenities/EOT and other sanitary fixtures (cost per level where applicable - allowance). Assume 17 No. levels requires the service, allow an avg. of 8 No. connection points per level. Unit: Per Level.	No	17	15,612	265,392
133	Change 2.B - ADD Allowance for reticulation from greywater tank to planters on Level 2 terrace and ground level planters	Item			6,505
	Sanitary Plumbing				**336,947**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**336,947**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
203	8.3 - Alternative water for non-potable uses - Refer to item 8.1 above	Item			Included
	Roof				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	8.4 : BESS WATER CATEGORY SCORE				**52,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 4. HIGH RISE R&D SITE (JAN 2022)

Rider Levett Bucknall

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - HIGH-RISE OFFICE DEVELOPMENT**			
A1	**Demolition | SIte Preparation**			**Excl.**
A2	**Basement Carpark | BoH**			
A2A	Basement 2 Level	1,364	1,600	2,182,400
A2B	Basement 1 Level	1,364	1,900	2,591,600
	Basement Carpark | BoH	**2,728**	**1,750**	**4,774,000**
A3	**Research & Development (Warm Shell Office - Fitout Excl.)**			
A3A	Substructure			1,329,100
A3B	Ground Floor	1,390	2,670	3,710,900
A3C	Mezzanine Level	492	3,195	1,572,000
A3D	Level 1	1,383	3,306	4,572,350
A3E	Level 2	1,383	3,162	4,372,800
A3F	Level 3	1,074	3,669	3,940,400
A3G	Level 4	1,176	3,128	3,678,150
A3H	Levels 5-18	16,454	3,128	51,461,350
A3I	Roof	71	21,768	1,545,500
A3J	Vertical Transportation			3,795,000
A3K	Facade Lighting | Signage			250,000
A3L	BMU			750,000
A3M	Fitout (Office Levels)			Excl.
	Research & Development (Warm Shell Office - Fitout Excl.)	**23,423**	**3,457**	**80,977,550**
A4	**External Works & Services**			**350,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - HIGH-RISE OFFICE DEVELOPMENT	**26,151**	**3,292**	**86,101,550**
B	**MINIMUM OPTION**			
B1	**01 : Overarching ESD**			**1,442,925**
B2	**02 : Energy Efficiency & Renewables**			**43,999**
B3	**03 : Sustainable Transport**			**51,846**
B4	**04 : Urban Heat Island Response**			**230,395**
B5	**05 : Urban Ecology**			**631,190**
B6	**06 : Waste & Resource Recovery**			**2,602**
B7	**07 : Stormwater Management**			**0**
B8	**08 : Water Efficiency**			**351,908**
B9	**09 : Integrated Flood Management**			**Nil**
	MINIMUM OPTION			**2,754,865**
	ESTIMATED NET COST	**26,151**	**3,398**	**88,856,415**

MARGINS & ADJUSTMENTS

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
MARGINS & ADJUSTMENTS (continued)				
	Design Development Contingency			Incl.
	Builder's Preliminaries			Incl.
	Builder's Overheads and Margin			Incl.
	Estimated Construction Cost as at January 2022	26,151	3,398	88,856,415
	Escalation Post January 2022			Excl.
	Headworks and Authority Charges			Excl.
	Furniture, Fittings and Equipment			Excl.
	Design Consultants Fees			Excl.
	Project Contingency			Excl.
	GST			Excl.
	Scoping Document for Costings:			
	Breathe Architecture GOCAP Standards Testing, dated 17.06.21			
ESTIMATED TOTAL COST		**26,151**	**3,398**	**88,856,415**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
159	Non Spatial - Roof thermal performance uplift to average R3.5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	1,291	14	16,797
	Roof				**16,797**
EW	**External Walls**				
155	Non Spatial - External glazing specification uplift to double glazed clear (raised from Baseline single glazed Low E) : Note this baseline and revised specification does not appear to correctly reflect a development of this nature	m²	8,868	85	749,891
384	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral (Assume Level 1 - Roof)	m²	1,665	326	541,519
	External Walls				**1,291,410**
VE	**Ventilation**				
163	Non Spatial - Air tightness testing and sealing throughout building (under Minimum option)	m²	25,888	6	134,718
	Ventilation				**134,718**
AC	**Air Conditioning**				
161	Non Spatial - Air conditioning power rating set to 4kW per dwelling (reduced from Baseline 5kW) : Note this change category relates more to dwellings | residential - specific A/C adjustments required for RLB to price. Breathe Architecture has advised that they are unable to provide a specific scope, specification or target for this change in relation to commercial building type testing sites. Therefore, we have excluded this item, subject to further testing / design development.	m²	25,888		To Be Confirmed
	Air Conditioning				**To Be Confirmed**
NA	**Not Allocated to Element**				
371	Change 12 - Refer Category 4.3 for cost impact	Note			Included
372	Change 14.5 - Refer Category 5.1 for cost impact	Note			Included
382	Non Spatial - Reduce embodied carbon emissions by 20% - No scope of works defined, assume excluded until further information is received	Note			To Be Confirmed
	Not Allocated to Element				**0**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**1,442,925**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
165	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
371	Change 12 - Refer Category 4.3 for cost impact	Note			Included
372	Change 14.5 - Refer Category 5.1 for cost impact	Note			Included
381	Non Spatial - Category 2.1 - Extend spandrel penal and insulate to 700mm to glazed facades - Refer Category 1.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	2.1 : NATHERS RATING				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
338	Change 1.B2 - Add battery within Basement 1 to suit Solar PV Array : Size of PV array unchanged under Change 16.R1, therefore deemed no change in battery size & costing required	No	1		N/A
	Electric Light and Power				**N/A**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
348	Change 9.G - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	81	2,602	210,761
	Sanitary Plumbing				**210,761**
GS	**Gas Service**				
349	Change 9.G - Removal of gas connection and encloser to Ground Floor location	No	1	-8,692	-8,692
350	Change 9.G - OMIT gas reticulation throughout building (Allow a total number of 81 No. connection points)	No	81	-1,952	-158,070
	Gas Service				**-166,762**
	2.3 : NO GAS				**43,999**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
167	Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
346	Change 8.G - ADD skylight (assume 5m2) including ventilation (to basement) provision at Ground Level - provisional allowance	No	1	19,581	19,581
	Not Allocated to Element				**19,581**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**19,581**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
373	Change 3 - No build cost implication for carparking categories	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
344	Change 5.B1 - Additional DDA car park in lieu of normal car park - assume no cost impact	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
339	Change 2.B2 - Dedicated EV ready space and infrastructure provision. Allow 2 No. EV ready spaces.	No	2	13,010	26,019
	Electric Light and Power				**26,019**
	3.5 : EV READY SPACES				**26,019**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
340	Change 2.B2 - Provision for an additional future 6 No.EV ready spaces (+ 2 No. EV ready spaces above)	No	8	781	6,246
	Electric Light and Power				**6,246**
	3.6 : EV INFRASTRUCTURE PROVISION				**6,246**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
374	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.7 : BICYCLE SPACES				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
361	Change 16.R1 - ADD Additional highly reflective roofing (370 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	370	79	28,879
362	Change 16.R2 - ADD Additional highly reflective roofing (200 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	200	79	15,614
	Roof				**44,493**
NA	**Not Allocated to Element**				
370	Change 11.1 - Refer Category 5.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**44,493**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
157	Non-spatial change - ADD External walls thermal performance uplift to achieve R2.5 (raised from Baseline R1.5)	m²	952	11	9,909
	External Walls				**9,909**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**9,909**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
356	Change 12.1 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,528
357	Change 12.2 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,528
358	Change 12.3 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,527
359	Change 12.4 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,528
360	Change 12.5 - ADD convert fixed glazed units to be operable to facilitate cross ventilation - Levels 5-10 only (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	44	2,316	101,882
	External Walls				**175,993**
	4.3 : PASSIVE COOLING TECHNIQUES				**175,993**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
376	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
353	Change 11.1 - ADD Extra over for grass/meadow to provide green roof (117 m2 as per Breathe Architecture document)	m²	117	736	85,998
	Roof				**85,998**
XL	**Landscaping and Improvements**				
347	Change 6.G- ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to various external locations, 500 mm high (assume block walls with render finish)	m²	35	1,562	54,640
351	Change 13.1 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to terrace, 500 mm high (assume block walls with render finish)	m²	12	1,562	18,736
363	Change 13.2 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to terrace, 500 mm high (assume block walls with render finish)	m²	12	1,562	18,736
365	Change 15.3 - ADD small trees to Level 3 Terrace planter box (15 No as per Breathe Architecture GOCAP Standards Testing document)	No	15	1,302	19,517
366	Change 15.3 - ADD 500mm high planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters (assume block walls with render finish) (20 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report)	m²	20	1,878	37,546
367	Change 15.3 - ADD 1000mm high planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters (assume block walls with render finish) (67 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report)	m²	67	1,627	108,953
368	Change 14.5 - ADD climbing plants to facade (Assume 540 m2 in total, to all levels - as per Breathe Architecture GOCAP Standards Testing Summary)	m²	540	244	131,368
369	Change 14.5 - ADD 2 No. Planter boxes to each level (L3-18) for climbing plants, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 400 mm high (assume block walls with render finish) (4 m2 of planter box per level and assume applicable to 16 No. levels as per Breathe Architecture GOCAP Standards Testing Report)	m²	64	2,433	155,696
385	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Incl.
	Landscaping and Improvements				**545,192**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**631,190**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
184	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
185	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
188	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
189	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
192	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
193	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
196	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
345	Change 7.G - Remove waste chutes | room - nominal allowance, give back to Cold Shell Retail space	No	1	-5,204	-5,204
	Fitments				**-5,204**
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
343	Change 4.B1 - Consolidate refuse rooms / rearrange bike parking (assumes nil bikes overall lost and extent of walls re-allocated to be generally unchanged. Cost only for additional door, wash down point and ventilation provision	Item			7,806
	Not Allocated to Element				**7,806**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**2,602**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost (included in 6.1)	Item			Incl.
	Not Allocated to Element				**Incl.**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Incl.**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
379	Greenstar certification - not applicable to Minimum standard	Note			N/A
	Not Allocated to Element				**N/A**
	7.3 : GREENSTAR CERTIFICATION				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
341	Change 10.B - ADD Allowance for reticulation from greywater tank to amenities/EOT and other sanitary fixtures (Allow for 311 conntection points)	No	311	651	202,297
342	Change 10.M - ADD Greywater tank for proposed grey water system - as per Breathe Architecture GOCAP Standards Testing document)	No	1	97,573	97,573
	Sanitary Plumbing				**299,870**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**299,870**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
375	Change 10 - Refer Category 8.1 for cost impact	Item			Included
	Not Allocated to Element				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	8.4 : BESS WATER CATEGORY SCORE				**52,038**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 4. HIGH RISE R&D SITE (JAN 2022)

Rider Levett Bucknall

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - HIGH-RISE OFFICE DEVELOPMENT**			
A1	**Demolition | SIte Preparation**			**Excl.**
A2	**Basement Carpark | BoH**			
A2A	Basement 2 Level	1,364	1,600	2,182,400
A2B	Basement 1 Level	1,364	1,900	2,591,600
	Basement Carpark | BoH	**2,728**	**1,750**	**4,774,000**
A3	**Research & Development (Warm Shell Office - Fitout Excl.)**			
A3A	Substructure			1,329,100
A3B	Ground Floor	1,390	2,670	3,710,900
A3C	Mezzanine Level	492	3,195	1,572,000
A3D	Level 1	1,383	3,306	4,572,350
A3E	Level 2	1,383	3,162	4,372,800
A3F	Level 3	1,074	3,669	3,940,400
A3G	Level 4	1,176	3,128	3,678,150
A3H	Levels 5-18	16,454	3,128	51,461,350
A3I	Roof	71	21,768	1,545,500
A3J	Vertical Transportation			3,795,000
A3K	Facade Lighting | Signage			250,000
A3L	BMU			750,000
A3M	Fitout (Office Levels)			Excl.
	Research & Development (Warm Shell Office - Fitout Excl.)	**23,423**	**3,457**	**80,977,550**
A4	**External Works & Services**			**350,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - HIGH-RISE OFFICE DEVELOPMENT	**26,151**	**3,292**	**86,101,550**
C	**PREFERRED OPTION**			
C1	**01 : Overarching ESD**			**2,219,244**
C2	**02 : Energy Efficiency & Renewables**			**43,999**
C3	**03 : Sustainable Transport**			**51,846**
C4	**04 : Urban Heat Island Response**			**236,588**
C5	**05 : Urban Ecology**			**631,190**
C6	**06 : Waste & Resource Recovery**			**2,602**
C7	**07 : Stormwater Management**			**52,038**
C8	**08 : Water Efficiency**			**351,908**
C9	**09 : Integrated Flood Management**			**Nil**
	PREFERRED OPTION			**3,589,415**
	ESTIMATED NET COST	**26,151**	**3,430**	**89,690,965**

MARGINS & ADJUSTMENTS

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
MARGINS & ADJUSTMENTS (continued)				
	Design Development Contingency			Incl.
	Builder's Preliminaries			Incl.
	Builder's Overheads and Margin			Incl.
	Estimated Construction Cost as at January 2022	26,151	3,430	89,690,965
	Escalation Post January 2022			Excl.
	Headworks and Authority Charges			Excl.
	Furniture, Fittings and Equipment			Excl.
	Design Consultants Fees			Excl.
	Project Contingency			Excl.
	GST			Excl.
	Scoping Document for Costings:			
	Breathe Architecture GOCAP Standards Testing, dated 17.06.21			
ESTIMATED TOTAL COST		**26,151**	**3,430**	**89,690,965**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
160	Non Spatial - Roof thermal performance uplift to average R5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	1,291	19	23,515
	Roof				**23,515**
EW	**External Walls**				
156	Non Spatial - External glazing specification uplift to double glazed Low E (raised from Baseline single glazed Low E) : Note this baseline and revised specification does not appear to correctly reflect a development of this nature	m²	8,868	111	980,628
384	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral (Assume Level 1 - Roof)	m²	1,665	326	541,522
	External Walls				**1,522,150**
VE	**Ventilation**				
164	Non Spatial - Air tightness testing and sealing throughout building with uplift for balanced mechanical ventilation / HRV's (under Preferred option)	m²	25,888	27	673,579
	Ventilation				**673,579**
AC	**Air Conditioning**				
162	Non Spatial - Air conditioning power rating set to 3kW per dwelling (reduced from Baseline 5kW) : Note this change category relates more to dwellings | residential - specific A/C adjustments required for RLB to price. Breathe Architecture has advised that they are unable to provide a specific scope, specification or target for this change in relation to commercial building type testing sites. Therefore, we have excluded this item, subject to further testing / design development.	m²	25,888		To Be Confirmed
	Air Conditioning				**To Be Confirmed**
NA	**Not Allocated to Element**				
371	Change 12 - Refer Category 4.3 for cost impact	Note			Included
372	Change 14.5 - Refer Category 5.1 for cost impact	Note			Included
383	Non Spatial - Reduce embodied carbon emissions by 40% - No scope of works defined, assume excluded until further information is received	Note			To Be Confirmed
	Not Allocated to Element				**0**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**2,219,244**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
166	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
371	Change 12 - Refer Category 4.3 for cost impact	Note			Included
372	Change 14.5 - Refer Category 5.1 for cost impact	Note			Included
380	Non Spatial - Commit to procure energy with supplier that offers 100% renewable energy. Breathe have advised on 15.07.21 that potential cost implications of this change would occur post occupancy and is therefore excluded from this estimate.	Note			N/A
381	Non Spatial - Category 2.1 - Extend spandrel penal and insulate to 700mm to glazed facades - Refer Category 1.1 for cost impact	Note			Included
	Not Allocated to Element				**0**
	2.1 : NATHERS RATING				**0**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
338	Change 1.B2 - Add battery within Basement 1 to suit Solar PV Array : Size of PV array unchanged under Change 16.R1, therefore deemed no change in battery size & costing required	No	1		N/A
	Electric Light and Power				**N/A**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
348	Change 9.G - ADD alternative HWU strategy - allow for packaged heat pumps in-lieu of gas fired HWU	No	81	2,602	210,761
	Sanitary Plumbing				**210,761**
GS	**Gas Service**				
349	Change 9.G - Removal of gas connection and encloser to Ground Floor location	No	1	-8,692	-8,692
350	Change 9.G - OMIT gas reticulation throughout building (Allow a total number of 81 No. connection points)	No	81	-1,952	-158,070
	Gas Service				**-166,762**
	2.3 : NO GAS				**43,999**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
168	Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
346	Change 8.G - ADD skylight (assume 5m2) including ventilation (to basement) provision at Ground Level - provisional allowance	No	1	19,581	19,581
	Not Allocated to Element				**19,581**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**19,581**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
373	Change 3 - No build cost implication for carparking categories	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
344	Change 5.B1 - Additional DDA car park in lieu of normal car park - assume no cost impact	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
339	Change 2.B2 - Dedicated EV ready space and infrastructure provision. Allow 2 No. EV ready spaces.	No	2	13,010	26,019
	Electric Light and Power				**26,019**
	3.5 : EV READY SPACES				**26,019**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
LP	**Electric Light and Power**				
340	Change 2.B2 - Provision for an additional future 6 No.EV ready spaces (+ 2 No. EV ready spaces above)	No	8	781	6,246
	Electric Light and Power				**6,246**
	3.6 : EV INFRASTRUCTURE PROVISION				**6,246**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
374	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.7 : BICYCLE SPACES				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
361	Change 16.R1 - ADD Additional highly reflective roofing (370 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	370	79	28,879
362	Change 16.R2 - ADD Additional highly reflective roofing (200 m2 as per Breathe Architecture report) - Provisional Allowance subject to selection of proposed material	m²	200	79	15,614
	Roof				**44,493**
NA	**Not Allocated to Element**				
370	Change 11.1 - Refer Category 5.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**44,493**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
158	Non-spatial change - ADD External walls thermal performance uplift to achieve R3.5 (raised from Baseline R1.5)	m²	952	17	16,102
	External Walls				**16,102**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**16,102**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
356	Change 12.1 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,528
357	Change 12.2 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,528
358	Change 12.3 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,527
359	Change 12.4 - ADD convert fixed glazed units to be operable to facilitate cross ventilation (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	8	2,316	18,528
360	Change 12.5 - ADD convert fixed glazed units to be operable to facilitate cross ventilation - Levels 5-10 only (As per Breathe Architecture GOCAP Standards Testing document). Assume ht. of unit to be 3000mm.	m	44	2,316	101,882
	External Walls				**175,993**
	4.3 : PASSIVE COOLING TECHNIQUES				**175,993**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
376	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
353	Change 11.1 - ADD Extra over for grass/meadow to provide green roof (117 m2 as per Breathe Architecture document)	m²	117	736	85,998
	Roof				**85,998**
XL	**Landscaping and Improvements**				
347	Change 6.G- ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to various external locations, 500 mm high (assume block walls with render finish)	m²	35	1,562	54,640
351	Change 13.1 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to terrace, 500 mm high (assume block walls with render finish)	m²	12	1,562	18,736
363	Change 13.2 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to terrace, 500 mm high (assume block walls with render finish)	m²	12	1,562	18,736
365	Change 15.3 - ADD small trees to Level 3 Terrace planter box (15 No as per Breathe Architecture GOCAP Standards Testing document)	No	15	1,302	19,517
366	Change 15.3 - ADD 500mm high planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters (assume block walls with render finish) (20 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report)	m²	20	1,878	37,546
367	Change 15.3 - ADD 1000mm high planters comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters (assume block walls with render finish) (67 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report)	m²	67	1,627	108,953
368	Change 14.5 - ADD climbing plants to facade (Assume 540 m2 in total, to all levels - as per Breathe Architecture GOCAP Standards Testing Summary)	m²	540	244	131,368
369	Change 14.5 - ADD 2 No. Planter boxes to each level (L3-18) for climbing plants, comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to proposed new planters, 400 mm high (assume block walls with render finish) (4 m2 of planter box per level and assume applicable to 16 No. levels as per Breathe Architecture GOCAP Standards Testing Report)	m²	64	2,433	155,696
385	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Incl.
	Landscaping and Improvements				**545,192**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**631,190**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
183	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
186	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
187	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
190	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
191	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
194	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
195	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
FT	**Fitments**				
345	Change 7.G - Remove waste chutes | room - nominal allowance, give back to Cold Shell Retail space	No	1	-5,204	-5,204
	Fitments				**-5,204**
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
343	Change 4.B1 - Consolidate refuse rooms / rearrange bike parking (assumes nil bikes overall lost and extent of walls re-allocated to be generally unchanged. Cost only for additional door, wash down point and ventilation provision	Item			7,806
	Not Allocated to Element				**7,806**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**2,602**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost (included in 6.1)	Item			Incl.
	Not Allocated to Element				**Incl.**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Incl.**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
	Not Allocated to Element				**Nil**
	7.2 : STORMWATER TREATMENT MEASURES				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
201	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	7.3 : GREENSTAR CERTIFICATION				**52,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
341	Change 10.B - ADD Allowance for reticulation from greywater tank to amenities/EOT and other sanitary fixtures (Allow for 311 conntection points)	No	311	651	202,297
342	Change 10.M - ADD Greywater tank for proposed grey water system - as per Breathe Architecture GOCAP Standards Testing document)	No	1	97,573	97,573
	Sanitary Plumbing				**299,870**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**299,870**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
	8.2 : RAINWATER TANK				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
375	Change 10 - Refer Category 8.1 for cost impact	Item			Incl.
	Not Allocated to Element				**Incl.**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**Incl.**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			52,038
	Not Allocated to Element				**52,038**
	8.4 : BESS WATER CATEGORY SCORE				**52,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 5. SMALL COMMERCIAL DEVELOPMENT (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - SMALL COMMERCIAL DEVELOPMENT SITE**			
A1	**Demolition / Site Preparation**			**Excl.**
A2	**Basement Levels (No Works)**			**Excl.**
A3	**Small Commercial Development - Proposed**			
A3A	Substructure (No Works Advised)			Excl.
A3B	Ground Floor (Minor Aesthetic Upgrade Allowance)			500,000
A3C	Level 1 - 7 (No Works Advised)			Excl.
A3D	Level 8			
A3D1	Structure			1,931,250
A3D2	Bike Storage	25	2,000	50,000
A3D3	Refuse	6	4,500	27,000
	Level 8	31	64,782	2,008,250
A3E	Level 9			
A3E1	Offices	2,345	3,950	9,262,750
A3E2	Plant, Amenities and Circulation	230	4,500	1,035,000
A3E3	New Stairs			88,600
	Level 9	2,575	4,034	10,386,350
A3F	Level 10			
A3F1	Offices	1,421	3,950	5,612,950
A3F2	Plant, Amenities and Circulation	35	4,500	157,500
	Level 10	1,456	3,963	5,770,450
A3G	Roof			
A3G1	Roof Areas			1,388,500
	Roof			1,388,500
A3H	Roof Plant | PV Cells			348,640
A3I	Vertical Transportation			500,000
A3J	FF&E | Fitout			Excl.
A3K	Facade Access | Maintenance			300,000
A3L	Facade Lighting			Excl.
A3M	External Signage			Excl.
	Small Commercial Development - Proposed	**4,062**	**5,220**	**21,202,190**
A4	**External Works & Services**			
A4A	Hard & Soft Landscaping			Excl.
A4B	External Services Connection			250,000
	External Works & Services			**250,000**
A5	**Works outside the Site Boundary**			**Excl.**
	BASELINE - SMALL COMMERCIAL DEVELOPMENT SITE	**4,062**	**5,281**	**21,452,190**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 5. SMALL COMMERCIAL DEVELOPMENT (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
B	**MINIMUM OPTION**			
B1	**01 : Overarching ESD**			**237,151**
B2	**02 : Energy Efficiency & Renewables**			**121,812**
B3	**03 : Sustainable Transport**			**N/A**
B4	**04 : Urban Heat Island Response**			**227,040**
B5	**05 : Urban Ecology**			**1,162,144**
B6	**06 : Waste & Resource Recovery**			**10,182**
B7	**07 : Stormwater Management**			**26,019**
B8	**08 : Water Efficiency**			**116,437**
B9	**09 : Integrated Flood Management**			**Nil**
	MINIMUM OPTION			**1,900,785**
	ESTIMATED NET COST	**4,062**	**5,749**	**23,352,975**

MARGINS & ADJUSTMENTS			
Design Development Contingency			Incl.
Builder's Preliminaries			Incl.
Builder's Overheads and Margin			Incl.
Estimated Construction Cost as at January 2022	4,062	5,749	23,352,975
Escalation Post January 2022			Excl.
Headworks and Authority Charges			Excl.
Furniture, Fittings and Equipment			Excl.
Design Consultants Fees			Excl.
Project Contingency			Excl.
GST			Excl.
Scoping Document for Costings:			
Breathe Architecture GOCAP Standards Testing, dated 01.07.21			
ESTIMATED TOTAL COST	**4,062**	**5,749**	**23,352,975**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B1 01 : Overarching ESD

B1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
159	Non Spatial - Roof thermal performance uplift to average R3.5 (raised from Baseline R2.0)	m²	2,245	14	29,208
	Roof				**29,208**
EW	**External Walls**				
155	Non Spatial - External glazing specification uplift to double glazed clear (raised from Baseline single glazed Low E): Note this baseline and revised specification does not appear to correctly reflect a development of this nature	m²	1,312	85	110,944
424	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral (Assume Level 9-10 only)	m²	217	326	70,575
	External Walls				**181,519**
VE	**Ventilation**				
163	Non Spatial - Air tightness testing and sealing throughout building (under Minimum option)	m²	4,062	7	26,424
	Ventilation				**26,424**
AC	**Air Conditioning**				
161	Non Spatial - Air conditioning power rating set to 4kW per dwelling (reduced from Baseline 5kW) : Note this change category relates more to dwellings | residential - specific A/C adjustments required for RLB to price. Breathe Architecture has advised that they are unable to provide a specific scope, specification or target for this change in relation to commercial building type testing sites. Therefore, we have excluded this item, subject to further testing / design development.	m²	4,062		To Be Confirmed
	Air Conditioning				**To Be Confirmed**
NA	**Not Allocated to Element**				
417	Change 7.9 - Refer Category 4.3 for cost impact	Note			Included
419	Change 7.10 - Refer Category 4.3 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**237,151**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
165	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
417	Change 7.9 - Refer Category 4.3 for cost impact	Note			Included
419	Change 7.10 - Refer Category 4.3 for cost impact	Note			Included
423	Non Spatial - Upgrade material specifications (eg.glazing, roof type etc) - Refer Catagory 1.1 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	2.1 : NATHERS RATING				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
395	Change 11.R - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total of 308m2 PV array area as per Breathe Architecture GOCAP Standards Testing document, calculated as 160m2 baseline plus 148m2 additional PV area)	m²	308	396	121,812
	Roof				**121,812**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**121,812**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B2 02 : Energy Efficiency & Renewables

B2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
426	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	2.3 : NO GAS				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
167	3.1 - Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
379	No build cost implication for carparking categories	Item			N/A
	Not Allocated to Element				**N/A**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
373	No build cost implication for carparking categories	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
427	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
428	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.5 : EV READY SPACES				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
429	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.6 : EV INFRASTRUCTURE PROVISION				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B3 03 : Sustainable Transport

B3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
374	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.7 : BICYCLE SPACES				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
390	Change 10.R - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material (1,525 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	1,525	79	119,038
	Roof				**119,038**
NA	**Not Allocated to Element**				
418	Change 9.9 - Refer Category 5.1 for cost impact	Note			Included
420	Change 9.10 - Refer Category 5.1 for cost impact	Note			Included
421	Change 9.R - Refer Category 5.1 for cost impact	Note			Included
422	Change 11.R - Refer Category 2.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**119,038**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
157	Non-spatial change - ADD External walls thermal performance uplift to achieve R2.5 (raised from Baseline R1.5)	m²	412	11	4,289
	External Walls				**4,289**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**4,289**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
397	Change 7.9 - ADD convert fixed glazed units to be operable to facilitate cross ventilation. Assume ht. of unit to be 4000mm.	m	18	3,565	64,161
398	Change 7.10 - ADD convert fixed glazed units to be operable to facilitate cross ventilation. Assume ht. of unit to be 4500mm.	m	10	3,956	39,552
	External Walls				**103,713**
	4.3 : PASSIVE COOLING TECHNIQUES				**103,713**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B4 04 : Urban Heat Island Response

B4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
376	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
389	Change 9.9 - ADD Extra over for grass/meadow to provide green roof (310 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	310	1,084	335,943
393	Change 9.10 - ADD Extra over for grass/meadow to provide green roof (34 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	34	1,084	36,848
394	Change 9.R - ADD Extra over for grass/meadow to provide green roof (174 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	174	1,084	188,560
	Roof				**561,351**
XL	**Landscaping and Improvements**				
381	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Included
382	Change 1.G- ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to various external locations, 500 mm high (assume block walls with render finish)) (35 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report)	m²	35	989	34,606
383	Change 2.G- ADD in ground deep soil planting, assuming 900mm deep soil, 75mm mulch, base, drainage and all required excavation (115 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	115	326	37,404
384	Change 3.G - ADD small trees to landscape 8 No as per Breathe Architecture GOCAP Standards Testing document)	No	8	1,302	10,409
387	Change 6.9 - ADD Climbing plants on & including cables / trellis to facade (Assume 498 m2 in total for this change, as per Breathe Architecture GOCAP Standards Testing Summary)	m²	498	274	136,052
388	Change 8.9 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, 500 mm high (assume block walls with render finish) (78 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	78	2,342	182,651
391	Change 6.10 - ADD Climbing plants on & including cables / trellis to facade (Assume 328 m2 in total for this change, as per Breathe Architecture GOCAP Standards Testing Summary)	m²	328	274	89,611
392	Change 8.10 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, 500 mm high (assume block walls with render finish) (47 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	47	2,342	110,060
	Landscaping and Improvements				**600,793**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**1,162,144**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
184	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
185	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
188	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
189	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
192	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
193	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B5 05 : Urban Ecology

B5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
196	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
386	Change 5.8 - Increase refuse room size (Additional 13 m2 total area as per Breathe Architecture GOCAP Standards Testing document)	No	1	10,182	10,182
	Not Allocated to Element				**10,182**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**10,182**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B6 06 : Waste & Resource Recovery

B6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
415	Change 2.G - Refer Category 5.1 for cost impact	Note			Included
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
418	Change 9.9 - Refer Category 5.1 for cost impact	Note			Included
420	Change 9.10 - Refer Category 5.1 for cost impact	Note			Included
421	Change 9.R - Refer Category 5.1 for cost impact	Note			Included
	Not Allocated to Element				**0**
	7.2 : STORMWATER TREATMENT MEASURES				**0**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B7 07 : Stormwater Management

B7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
201	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			26,019
	Not Allocated to Element				**26,019**
	7.3 : GREENSTAR CERTIFICATION				**26,019**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**Included**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
385	Change 4.8 - ADD Rainwater tank (30kL) incl. structural allowances	No	1	65,048	65,048
	Landscaping and Improvements				**65,048**
	8.2 : RAINWATER TANK				**65,048**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
425	Non Spatial - Provision for rainwater to be used for landscape irrigation, toilet flushing and fir water systems	No	1	25,370	25,370
	Sanitary Plumbing				**25,370**
NA	**Not Allocated to Element**				
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**25,370**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B8 08 : Water Efficiency

B8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			26,019
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
	Not Allocated to Element				**26,019**
	8.4 : BESS WATER CATEGORY SCORE				**26,019**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

B MINIMUM OPTION

B9 09 : Integrated Flood Management

B9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 5. SMALL COMMERCIAL DEVELOPMENT (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
A	**BASELINE - SMALL COMMERCIAL DEVELOPMENT SITE**	**4,062**	**5,281**	**21,452,190**
C	**PREFERRED OPTION**			
C1	**01 : Overarching ESD**			
C1A	1.1 : Greenstar or BESS Certification			362,236
	01 : Overarching ESD			**362,236**
C2	**02 : Energy Efficiency & Renewables**			
C2A	2.1 : NatHERS Rating			0
C2B	2.2 : On-site Renewable Energy Generation			121,812
C2C	2.3 : No Gas			N/A
	02 : Energy Efficiency & Renewables			**121,812**
C3	**03 : Sustainable Transport**			
C3A	3.1 : Car parking titled as common property			N/A
C3B	3.2 : Car parking designed to be adaptable			N/A
C3C	3.3 : Car parking that support sustainable forms of private ownership			N/A
C3D	3.4 : Compliance with car parking design standards			N/A
C3E	3.5 : EV ready spaces			N/A
C3F	3.6 : EV infrastructure provision			N/A
C3G	3.7 : Bicycle Spaces			N/A
	03 : Sustainable Transport			**N/A**
C4	**04 : Urban Heat Island Response**			
C4A	4.1 : Percent of site area comprising elements that reduce UHIE			119,038
C4B	4.2 : Non-glazed facade materials with high solar reflectivity			6,969
C4C	4.3 : Passive cooling techniques			125,101
C4D	4.4 : Paving treatments that assist in cooling			N/A
	04 : Urban Heat Island Response			**251,108**
C5	**05 : Urban Ecology**			
C5A	5.1 : Minimum CoM Green Factor Tool Score			1,162,145
C5B	5.2 : Green cover support habitat			Included
C5C	5.3 : Green cover is layered			Included
C5D	5.4 : Green cover is native, indigenous or climate change resistant			Included
C5E	5.5 : Green cover supports vegetation links			Included
C5F	5.6 : Species selected from CoM preferred list			Included
C5G	5.7 : Existing mature trees retained			N/A
C5H	5.8 : Impact on canopy trees on adjoining lots minimised			N/A
	05 : Urban Ecology			**1,162,145**
C6	**06 : Waste & Resource Recovery**			
C6A	6.1 : Waste Management Plan in accordance with CoM			10,182

GOCAP: ECONOMIC FEASIBILITY TESTING

SITE 5. SMALL COMMERCIAL DEVELOPMENT (JAN 2022)

LOCATION SUMMARY

GFA: Gross Floor Area
Rates Current At January 2022

Ref	Location	GFA m²	GFA AUD/m²	Total Cost AUD
C6B	6.2 : Meet requirements of Precinct Management Plan			Nil
	06 : Waste & Resource Recovery			**10,182**
C7	**07 : Stormwater Management**			
C7A	7.1 : Water Quality Performance Objectives (CSIRO)			Included
C7B	7.2 : Stormwater treatment measures			0
C7C	7.3 : Greenstar Certification			26,019
	07 : Stormwater Management			**26,019**
C8	**08 : Water Efficiency**			
C8A	8.1 : Precinct Scale recycled water source			Included
C8B	8.2 : Rainwater Tank			65,048
C8C	8.3 : Alternative water for non-potable uses			25,370
C8D	8.4 : BESS Water category score			26,019
	08 : Water Efficiency			**116,437**
C9	**09 : Integrated Flood Management**			
C9A	9.1 : Essential services located above flood levels			Nil
C9B	9.2 : Design includes elements / materials resilent to flood events			Nil
C9C	9.3 : Land Use at ground can recover from flooding			Nil
C9D	9.4 : Level differences maintain connection to street			Nil
C9E	9.5 : Raising internal ground level avoided / used as last resort			Nil
	09 : Integrated Flood Management			**Nil**
	PREFERRED OPTION			**2,049,939**
	ESTIMATED NET COST	**4,062**	**5,786**	**23,502,129**

MARGINS & ADJUSTMENTS			
Design Development Contingency			Incl.
Builder's Preliminaries			Incl.
Builder's Overheads and Margin			Incl.
Estimated Construction Cost as at January 2022	4,062	5,786	23,502,129
Escalation Post January 2022			Excl.
Headworks and Authority Charges			Excl.
Furniture, Fittings and Equipment			Excl.
Design Consultants Fees			Excl.
Project Contingency			Excl.
GST			Excl.
Scoping Document for Costings:			
Breathe Architecture GOCAP Standards Testing, dated 01.07.21			
ESTIMATED TOTAL COST	**4,062**	**5,786**	**23,502,129**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C1 01 : Overarching ESD

C1A 1.1 : Greenstar or BESS Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
160	Non Spatial - Roof thermal performance uplift to average R5 (raised from Baseline R2.0) Assume to pitched and flat roof areas	m²	2,245	19	40,891
	Roof				**40,891**
EW	**External Walls**				
156	Non Spatial - External glazing specification uplift to double glazed Low E (raised from Baseline single glazed Low E): Note this baseline and revised specification does not appear to correctly reflect a development of this nature	m²	1,312	111	145,080
424	Non Spatial - Extend spandrel panel and insulate to 700mm to glazed facades incl. allowance for internal lining to rear of spandral (Assume Level 9-10 only)	m²	217	326	70,577
	External Walls				**215,657**
VE	**Ventilation**				
164	Non Spatial - Air tightness testing and sealing throughout building with uplift for balanced mechanical ventilation / HRV's (under Preferred option)	m²	4,062	27	105,688
	Ventilation				**105,688**
AC	**Air Conditioning**				
162	Non Spatial - Air conditioning power rating set to 3kW per dwelling (reduced from Baseline 5kW) : Note this change category relates more to dwellings | residential - specific A/C adjustments required for RLB to price. Breathe Architecture has advised that they are unable to provide a specific scope, specification or target for this change in relation to commercial building type testing sites. Therefore, we have excluded this item, subject to further testing / design development.	m²	4,062		To Be Confirmed
	Air Conditioning				**To Be Confirmed**
NA	**Not Allocated to Element**				
417	Change 7.9 - Refer Category 4.3 for cost impact	Note			Included
419	Change 7.10 - Refer Category 4.3 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	1.1 : GREENSTAR OR BESS CERTIFICATION				**362,236**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2A 2.1 : NatHERS Rating

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
166	Refer to section 1.1 Greenstar/BESS Certification for relevant allowances (as advised by Breathe)	Note			Included
380	Non Spatial - Commit to procure energy with supplier that offers 100% renewable energy. Breathe have advised on 15.07.21 that potential cost implications of this change would occur post occupancy and is therefore excluded from this estimate.	Note			N/A
417	Change 7.9 - Refer Category 4.3 for cost impact	Note			Included
419	Change 7.10 - Refer Category 4.3 for cost impact	Note			Included
423	Non Spatial - Upgrade material specifications (eg.glazing, roof type etc) - Refer Catagory 1.1 for cost impact	Note			Included
	Not Allocated to Element				**0**
	2.1 : NATHERS RATING				**0**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2B 2.2 : On-site Renewable Energy Generation

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
395	Change 11.R - ADD PV cells to Roof including angled support framing (1kW per 7m2 based on 325W per panel,1.60m2 per panel & 45% additional area required for service space - equates to approx. total 61kW) (Total of 308m2 PV array area as per Breathe Architecture GOCAP Standards Testing document, calculated as 160m2 baseline plus 148m2 additional PV area)	m²	308	396	121,812
	Roof				**121,812**
	2.2 : ON-SITE RENEWABLE ENERGY GENERATION				**121,812**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C2 02 : Energy Efficiency & Renewables

C2C 2.3 : No Gas

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
426	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	2.3 : NO GAS				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3A 3.1 : Car parking titled as common property

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
168	3.1 - Car parking titled as common property - N/A	Item			N/A
	Not Allocated to Element				**N/A**
	3.1 : CAR PARKING TITLED AS COMMON PROPERTY				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3B 3.2 : Car parking designed to be adaptable

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
379	No build cost implication for carparking categories	Item			N/A
	Not Allocated to Element				**N/A**
	3.2 : CAR PARKING DESIGNED TO BE ADAPTABLE				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3C 3.3 : Car parking that support sustainable forms of private ownership

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
373	No build cost implication for carparking categories	Item			N/A
	Not Allocated to Element				**N/A**
	3.3 : CAR PARKING THAT SUPPORT SUSTAINABLE FORMS OF PRIVATE OWNERSHIP				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3D 3.4 : Compliance with car parking design standards

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
427	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.4 : COMPLIANCE WITH CAR PARKING DESIGN STANDARDS				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3E 3.5 : EV ready spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
428	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.5 : EV READY SPACES				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3F 3.6 : EV infrastructure provision

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
429	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.6 : EV INFRASTRUCTURE PROVISION				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C3 03 : Sustainable Transport

C3G 3.7 : Bicycle Spaces

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
374	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	3.7 : BICYCLE SPACES				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4A 4.1 : Percent of site area comprising elements that reduce UHIE

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
390	Change 10.R - ADD Additional highly reflective roofing - Provisional Allowance subject to selection of proposed material (1,525 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	1,525	79	119,038
	Roof				**119,038**
NA	**Not Allocated to Element**				
418	Change 9.9 - Refer Category 5.1 for cost impact	Note			Included
420	Change 9.10 - Refer Category 5.1 for cost impact	Note			Included
421	Change 9.R - Refer Category 5.1 for cost impact	Note			Included
422	Change 11.R - Refer Category 2.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	4.1 : PERCENT OF SITE AREA COMPRISING ELEMENTS THAT REDUCE UHIE				**119,038**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4B 4.2 : Non-glazed facade materials with high solar reflectivity

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
158	Non-spatial change - ADD External walls thermal performance uplift to achieve R3.5 (raised from Baseline R1.5)	m²	412	17	6,969
	External Walls				**6,969**
	4.2 : NON-GLAZED FACADE MATERIALS WITH HIGH SOLAR REFLECTIVITY				**6,969**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4C 4.3 : Passive cooling techniques

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
EW	**External Walls**				
397	Change 7.9 - ADD convert fixed glazed units to be operable to facilitate cross ventilation. Assume ht. of unit to be 4000mm.	m	24	3,565	85,549
398	Change 7.10 - ADD convert fixed glazed units to be operable to facilitate cross ventilation. Assume ht. of unit to be 4500mm.	m	10	3,956	39,552
	External Walls				**125,101**
	4.3 : PASSIVE COOLING TECHNIQUES				**125,101**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C4 04 : Urban Heat Island Response

C4D 4.4 : Paving treatments that assist in cooling

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
376	No scope adjustment & associated cost for Site	Item			N/A
	Not Allocated to Element				**N/A**
	4.4 : PAVING TREATMENTS THAT ASSIST IN COOLING				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5A 5.1 : Minimum CoM Green Factor Tool Score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
389	Change 9.9 - ADD Extra over for grass/meadow to provide green roof (310 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	310	1,084	335,943
393	Change 9.10 - ADD Extra over for grass/meadow to provide green roof (34 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	34	1,084	36,848
394	Change 9.R - ADD Extra over for grass/meadow to provide green roof (174 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	174	1,084	188,562
	Roof				**561,353**
XL	**Landscaping and Improvements**				
381	Non Spatial Change - Change plants species to indigenous (assume that an alternative selection can be met within the cost parameters of the base planting species)	Note			Included
382	Change 1.G- ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, to various external locations, 500 mm high (assume block walls with render finish)) (35 m2 of planter box as per Breathe Architecture GOCAP Standards Testing Report)	m²	35	989	34,606
383	Change 2.G- ADD in ground deep soil planting, assuming 900mm deep soil, 75mm mulch, base, drainage and all required excavation (115 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	115	326	37,404
384	Change 3.G - ADD small trees to landscape 8 No as per Breathe Architecture GOCAP Standards Testing document)	No	8	1,302	10,409
387	Change 6.9 - ADD Climbing plants on & including cables / trellis to facade (Assume 498 m2 in total for this change, as per Breathe Architecture GOCAP Standards Testing Summary)	m²	498	274	136,052
388	Change 8.9 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, 500 mm high (assume block walls with render finish) (78 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	78	2,342	182,651
391	Change 6.10 - ADD Climbing plants on & including cables / trellis to facade (Assume 328 m2 in total for this change, as per Breathe Architecture GOCAP Standards Testing Summary)	m²	328	274	89,610
392	Change 8.10 - ADD Planter boxes comprising planter walls, soil, mulch, planting, waterproofing drainage and irrigation, 500 mm high (assume block walls with render finish) (47 m2 of planting as per Breathe Architecture GOCAP Standards Testing Report)	m²	47	2,342	110,060
	Landscaping and Improvements				**600,792**
	5.1 : MINIMUM COM GREEN FACTOR TOOL SCORE				**1,162,145**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5B 5.2 : Green cover support habitat

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
183	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.2 : GREEN COVER SUPPORT HABITAT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5C 5.3 : Green cover is layered

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
186	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.3 : GREEN COVER IS LAYERED				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5D 5.4 : Green cover is native, indigenous or climate change resistant

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
187	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.4 : GREEN COVER IS NATIVE, INDIGENOUS OR CLIMATE CHANGE RESISTANT				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5E 5.5 : Green cover supports vegetation links

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
190	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.5 : GREEN COVER SUPPORTS VEGETATION LINKS				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5F 5.6 : Species selected from CoM preferred list

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
191	Green cover requirements to meet Urban Ecology standards - Refer Category 5.1)	Item			Included
	Landscaping and Improvements				**Included**
	5.6 : SPECIES SELECTED FROM COM PREFERRED LIST				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5G 5.7 : Existing mature trees retained

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
194	Existing mature trees to be retained - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.7 : EXISTING MATURE TREES RETAINED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C5 05 : Urban Ecology

C5H 5.8 : Impact on canopy trees on adjoining lots minimised

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
XL	**Landscaping and Improvements**				
195	Minimise impact of trees on adjoining lots - N/A	Item			N/A
	Landscaping and Improvements				**N/A**
	5.8 : IMPACT ON CANOPY TREES ON ADJOINING LOTS MINIMISED				**N/A**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6A 6.1 : Waste Management Plan in accordance with CoM

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
197	Preparation of Waste Management Plan - nil cost impact to build cost	Item			Nil
386	Change 5.8 - Increase refuse room size (Additional 13 m2 total area as per Breathe Architecture GOCAP Standards Testing document)	No	1	10,182	10,182
	Not Allocated to Element				**10,182**
	6.1 : WASTE MANAGEMENT PLAN IN ACCORDANCE WITH COM				**10,182**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C6 06 : Waste & Resource Recovery

C6B 6.2 : Meet requirements of Precinct Management Plan

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
198	Meet requirements of Precinct Waste Management Plan - nil cost impact to build cost	Item			Nil
	Not Allocated to Element				**Nil**
	6.2 : MEET REQUIREMENTS OF PRECINCT MANAGEMENT PLAN				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7A 7.1 : Water Quality Performance Objectives (CSIRO)

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
199	Water Quality Performance Objectives - addressed through standard 5, Urban Ecology by maximising pervious landscape and using landscape as a filtration mechanism (highlighted in the CSIRO objective as the key approach addressing to water quality performance)	Item			Included
	Not Allocated to Element				**Included**
	7.1 : WATER QUALITY PERFORMANCE OBJECTIVES (CSIRO)				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7B 7.2 : Stormwater treatment measures

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
200	Stormwater treatment measures - no additional requirements, paved areas grade to garden beds (Scope would normally be required under the planning permit)	Item			Nil
415	Change 2.G - Refer Category 5.1 for cost impact	Note			Included
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
418	Change 9.9 - Refer Category 5.1 for cost impact	Note			Included
420	Change 9.10 - Refer Category 5.1 for cost impact	Note			Included
421	Change 9.R - Refer Category 5.1 for cost impact	Note			Included
	Not Allocated to Element				**0**
	7.2 : STORMWATER TREATMENT MEASURES				**0**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C7 07 : Stormwater Management

C7C 7.3 : Greenstar Certification

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
201	Greenstar certification (stormwater management) - Provisional Allowance (if deemed required)	Item			26,019
	Not Allocated to Element				**26,019**
	7.3 : GREENSTAR CERTIFICATION				**26,019**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8A 8.1 : Precinct Scale recycled water source

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	8.1 : PRECINCT SCALE RECYCLED WATER SOURCE				**Included**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8B 8.2 : Rainwater Tank

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
RF	**Roof**				
202	No changes suggested - Rain water tank already assumed in Baseline design - no cost impacts	Item			Nil
	Roof				**Nil**
XL	**Landscaping and Improvements**				
385	Change 4.8 - ADD Rainwater tank (30kL) incl. structural allowances	No	1	65,048	65,048
	Landscaping and Improvements				**65,048**
	8.2 : RAINWATER TANK				**65,048**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8C 8.3 : Alternative water for non-potable uses

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
PD	**Sanitary Plumbing**				
425	Non Spatial - Provision for rainwater to be used for landscape irrigation, toilet flushing and fir water systems	No	1	25,370	25,370
	Sanitary Plumbing				**25,370**
NA	**Not Allocated to Element**				
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
	Not Allocated to Element				**Included**
	8.3 : ALTERNATIVE WATER FOR NON-POTABLE USES				**25,370**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C8 08 : Water Efficiency

C8D 8.4 : BESS Water category score

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
205	BESS Water certification - Provisional Allowance (if deemed required)	Item			26,019
416	Change 4.8 - Refer Category 8.2 for cost impact	Note			Included
	Not Allocated to Element				**26,019**
	8.4 : BESS WATER CATEGORY SCORE				**26,019**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9A 9.1 : Essential services located above flood levels

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
206	Baseline Compliance achieved - No cost adjustment for Essential services located above flood levels	Item			Nil
	Not Allocated to Element				**Nil**
	9.1 : ESSENTIAL SERVICES LOCATED ABOVE FLOOD LEVELS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9B 9.2 : Design includes elements / materials resilent to flood events

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.2 : DESIGN INCLUDES ELEMENTS / MATERIALS RESILENT TO FLOOD EVENTS				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9C 9.3 : Land Use at ground can recover from flooding

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.3 : LAND USE AT GROUND CAN RECOVER FROM FLOODING				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9D 9.4 : Level differences maintain connection to street

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.4 : LEVEL DIFFERENCES MAINTAIN CONNECTION TO STREET				**Nil**

LOCATION ELEMENT ITEM

C PREFERRED OPTION

C9 09 : Integrated Flood Management

C9E 9.5 : Raising internal ground level avoided / used as last resort

Rates Current At January 2022

Ref	Description	Unit	Qty	Rate AUD	Total Cost AUD
NA	**Not Allocated to Element**				
207	No scope adjustment & associated cost for Site - assume not relevant or addressed in Baseline design or no cost impacts	Item			Nil
	Not Allocated to Element				**Nil**
	9.5 : RAISING INTERNAL GROUND LEVEL AVOIDED / USED AS LAST RESORT				**Nil**