385 Rokeby Road, Subiaco Mixed Use Development

Economic Benefits Study

Prepared by **macroplan**

For **Celsius Developments**

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Important Notice

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Executive Summary

This report was prepared by Macroplan (the author) for Celsius Developments (the client). This report presents a high-level economic benefits study in relation to the proposed mixed use development located at 385 Rokeby Road, Subiaco (the site).

The suburb of Subiaco is an established and relatively affluent residential area located in the inner city of Metropolitan Perth. The area is generally well serviced with various facilities, amenities and public transportation networks, with notable landmarks including Subiaco Oval, St John of God Hospital. The Regal Theatre, the Western Australian Medical Museum and the Subiaco Arts Centre.

The site fronts Rokeby Road to the east and Duke Street to the north and features laneway access to the west. The site is located within walking distance of a range of public amenities including retail facilities, public parks, community centres and schools. The current scheme indicates a multi-storey mixed use development totalling **37** apartments **of 4,368** sqm GFA plus **23** public and **76** private car parking spaces, retail facilities totalling **532** sqm GFA including a supermarket / grocery and Food & Beverage retail. The total construction cost is estimated at around **$21 million** with a **18** month construction programme.

Key economic benefits that are assessed to arise from the proposed development are summarised as follows.

- The initial construction investment of **$21 million** at the site is likely to create another **$26.5 million** indirect construction output elsewhere in the wider economy, totalling **$47.5 million** construction output (including direct and indirect) to the economy during the construction phase.
- The proposed development is expected to generate approximately **34** direct construction FTE jobs per annum on site and an additional **53** indirect FTE jobs per annum elsewhere in the economy, totalling **87** construction related FTE jobs per annum during the construction phase.
- The proposed development may accommodate approximately **78** residents upon completion, who may generate up to **$3.4 million** consumption expenditure per annum, representing a strong source of consistent economic stimulus.
- The proposed development will generate approximately **$109,989** in residential and retail rates revenue per annum for Council upon completion.
- The proposed development is expected to generate approximately **19** direct operational phase FTE jobs and an additional **4** indirect operational phase FTE jobs, totalling **23** operational phase FTE jobs.
- The proposed development will also deliver a range of community benefits to the local area and wider regions, including improved housing diversity, increased density and land utilisation, maintaining housing affordability, encouraging the use of public transport and improving the overall liveability of Subiaco.

A summary of key economic benefits is presented in the infographics overleaf. Further details of the assessment including methodology and assumptions are contained in this report.

CONSTRUCTION PHASE BENEFITS

$21 M
Initial capital investment

$47.5 M
Total construction output
(including both direct and indirect)

1.1%
Of Subiaco's GRP

34 FTE P.A.
Direct on-site construction employment

87 FTE P.A.
Total construction related employment
(including both direct on-site and indirect off-site)

COMPLETION BENEFITS

37
New apartments

78
Estimated residents to be accommodated

$3.4 M P.A.
Estimated residents consumption expenditure

19 FTE
Direct operational FTE jobs

23 FTE
Total operational FTE jobs

$109,989 P.A.
Estimated rates revenue

COMMUNITY BENEFITS

Support continuous population growth in Perth's inner city suburbs

Deliver more housing diversity and meet the demand of changing demographics

Increase dwelling density and improve land utilisation with provisions of communal amenities

Achieve progressive value uplift whilst maintaining the overall level of affordability

Encourage the use of public transport

Improved sense of community and overall liveability

1_Introduction

1.1_About this Report

This report was prepared by Macroplan (the author) for Celsius Developments (the client). This report presents a high-level economic benefits study in relation to the proposed mixed use development located at 385 Rokeby Road, Subiaco (the site).

An economic benefit study involves both quantitative and qualitative impacts and interprets the positive impacts (where they can be addressed) on the local, regional and State economy.

In order to quantify potential economic benefits from the construction of the project, ABS Input-Output (I-O) tables are used as a basis for calculating the impacts of initial capital expenditure upon local and wider economy in the construction sector both directly and indirectly.

To quantify post-construction / operational phase economic benefits upon project completion, a number of assumptions regarding expenditure and revenue are applied.

There are also a range impacts which cannot be quantified. In this case, a qualitative approach is conducted to assess the impacts potentially generated by the project on the wider economy.

1.2_Project Overview

The proposed development is located at 385 Rokeby Road, Subiaco.

The site fronts Rokeby Road to the east and Duke Street to the north and features laneway access to the west. The site is located within walking distance of a range of public amenities including retail facilities, public parks, community centres and schools.

The site also possesses access to public transportation networks that run along Rokeby Road to the east and Nicholson Road to the South. The site is currently zoned as R80.

The current scheme indicates a multi-storey mixed use development totalling **37** apartments of **4,368** sqm GFA plus **23** public and **76** private car parking spaces, retail facilities totalling **532** sqm GFA including a supermarket / grocery and Food & Beverage retail.

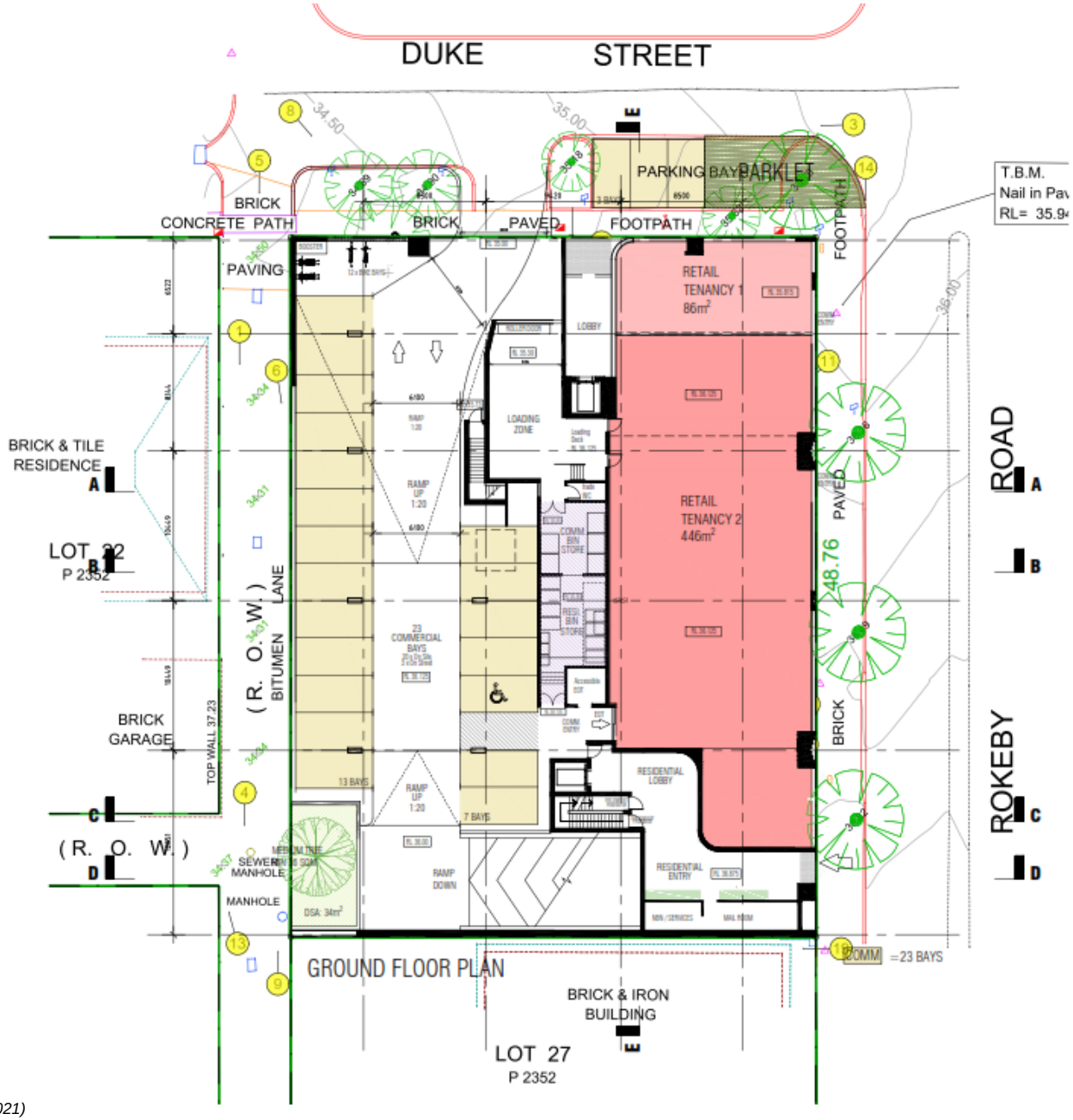
The development also includes a 203 sqm landscaped communal rooftop located on the fifth floor.

The proposed development comprises:

- 17 2-bedroom / 2-bathroom apartments;
- 18 3-bedroom / 2-bathroom apartments;
- 2 4-bedroom / 2-bathroom apartments;
- A supermarket / grocer totalling 446 sqm GFA;
- F&B Retail totalling 86 sqm GFA;
- 76 private basement car parking spaces;
- 23 public undercroft car parking spaces;
- 203 sqm GFA landscaped communal rooftop;

The total construction cost is estimated at around **$21 million** with a 18 month construction programme.

Ground Plan



Source: Celsius Developments (2021)

2_Economic Benefits Study

2.1_Overview

This section provides a high-level economic benefits study in relation to the proposed development, with the following key economic indicators assessed:

- Construction output;
- Construction employment;
- Ongoing employment growth;
- Resident population and expenditure;
- Rates revenue; and
- Wider economic benefits.

2.2_Construction Output

Initial construction investment will translate into a first round of benefits, realised as increased construction output and employment during the construction phase.

Output multipliers derived from the ABS Input-Output tables are used for estimating potential economic output of the proposed development within the construction sector. Output multipliers indicate every $1 million of construction investment is likely to generate another approximately $1.3 million indirect economic output (production induced) during the construction phase.

The production induced impacts include the amount of output required within other industries throughout the economy to support the initial construction investment. This may include the follows:

- Manufacturing (e.g. building material manufacturing),
- Professional, scientific and technical services (e.g. professional / technical services in planning, design and other services),
- Financial and insurance services (e.g. project financing services),
- Transport, postal and warehousing (e.g. storing and transporting building materials),
- Wholesale trade (e.g. building materials trade),
- Rental, hiring and real estate services,
- Administrative and support services (e.g. government / Council's support services, development assessment and approvals), and
- Other industries.

Based on output multipliers, the initial construction investment of **$21** million at the site is likely to generate a further **$26.5** million indirect construction output elsewhere in the wider economy, totalling **$47.5 million** construction output (including direct and indirect) to the economy during the construction phase (presented in Table 2.1). This is equivalent to approximately **1.1%** of the Gross Regional Product (GRP) in the City of Subiaco.

Whilst the I-O multipliers measure potential economic benefits on a national level assuming a closed economy system within Australia, it is expected that a large share of this anticipated economic growth can be captured locally in metropolitan Perth and WA if building materials and services are sourced locally.

Table 2.1_Estimated Construction Output

Direct Output ($M)	Indirect Output ($M)	Total Output ($M)	*% GRP*
$21 M	$26.5 M	**$47.5 M**	*1.1%*

Source: ABS, City of Subiaco (2020), Celsius Developments (2020), Macroplan (2020)

2.3_Construction Employment

Employment multipliers from the ABS Input-Output tables are used for estimating potential employment effects of the proposed development during construction phase. Employment multipliers for the construction sector indicate an initial impact at approximately 2.4 construction jobs created per $1 million of investment; plus another 3.8 indirect jobs (production induced) elsewhere in the economy during the construction phase. All jobs reported in the ABS I O tables are measured as full time equivalent (FTE).

Based on employment multipliers, the proposed development is expected generate approximately **34** direct construction FTE jobs per annum on site and another **53** indirect FTE jobs per annum elsewhere in the economy, totalling **87** construction related FTE jobs per annum during the construction phase (presented in Table 2.2).

Similarly, the indirect production induced employment involves the additional jobs generated in other industries throughout the economy in order to support the initial construction investment and all the subsequent induced economic growth, such as manufacturing, professional, scientific and technical services, financial and insurance services, transport, postal and warehousing, wholesale trade, rental, hiring and real estate services, administrative and support services, and others.

Again, whilst the I-O multipliers measure potential economic benefits on a national level, it is expected that a large share of this anticipated employment growth can be captured in the metropolitan Perth and WA if building materials and services are sourced locally.

Table 2.2_Estimated Construction Employment

CAPEX ($M)	Direct FTE (p.a.)	Indirect FTE (p.a.)	Total FTE (p.a.)
$21 M	34	53	**87**

Source: ABS, Celsius Developments (2020), Macroplan (2020)

2.4_Ongoing Employment Growth

As the development moves into the operational phase, more employment growth will potentially be generated from the operation of proposed uses.

The following average employment densities are assumed for each of the uses:

- Supermarket: 1 FTE job per 25 sqm NLA;
- Retail: 1 FTE job per 20 sqm NLA;
- Celsius Office: 1 FTE job per 11.1 sqm NLA;
- Community Business Centre: 1 FTE job per 11.1 sqm NLA;
- Health Centre: 1 FTE job per 50 sqm NLA;

Using these assumptions, the total direct on site employment generated during the operational phase is estimated at approximately **19 FTE jobs**.

Based on ABS employment multipliers, these direct operational employment on site will also flow through the economy and translate into indirect employment growth off site which supports on-site employment.

Simple employment multipliers are used to estimate production induced impacts on indirect employment growth off site during operation.

Simple multipliers indicate the following:

- Every 1 direct office FTE job, which is largely categorised as the professional, scientific and technical services, will generate another 0.6 indirect supporting FTE jobs elsewhere in the economy, including administrative and support services, accommodation and food services, transport, postal and warehousing, financial and insurance services, and other industries.
- Every 1 direct retail FTE job, which is categorised as retail trade industry, will generate another 0.2 indirect supporting FTE jobs elsewhere in the economy, including professional, scientific and technical services, administrative and support services, manufacturing, transport, postal and warehousing, and other industries.

Based on simple multipliers, the total full-time employment generated during operational phase is estimated at approximately **23 FTE jobs**.

A summary of total employment growth during operational phase is presented in the Table 2.3.

Table 2.3_Operational Phase Employment Growth

Proposed Use Mix	Direct FTE	Indirect FTE	Total FTE
Supermarket / Grocery	15	3	18
F&B Retail	4	1	5
Total	**19**	**4**	**23**

Source: ABS, Employment Density Guide (2015), Macroplan

2.5_Resident Population & Expenditure

According to the ABS census 2016, the Subiaco-Shenton Park SA2 possesses an average household size of 2.2 persons per household, and it is assumed that this will remain constant into 2021 across all private dwellings according to forecasts undertaken by Forecast.ID. However, household sizes are generally smaller in apartments, averaging around 1.6 persons per apartment in the Subiaco – Shenton Park SA2 as at Census 2016.

In order to estimate the number of residents accommodated in the proposed development upon completion, the following assumptions on average household sizes by apartment type have been made:

- 2-bedroom: 1.5 persons per apartment;
- 3-bedroom: 2.5 persons per apartment;
- 4-bedroom: 3.5 persons per apartment.

This indicates an overall average household size of approximately 2.1 persons per apartment which is consistent with the historic data.

Based on the average household sizes assumed and 100% occupancy rate, it is estimated that the proposed development may accommodate approximately **78** residents upon completion.

The MarketInfo database (2020) indicates an average consumption expenditure of $43,391 per capita per annum across metropolitan Perth. Using this as a benchmark, it is expected that the future residents at the proposed development may generate up to **$3.4 million** consumption expenditure per annum at full occupancy.

Based on average consumption expenditure per capita in metropolitan Perth, the amount of total consumption expenditure generated by the future residents at the proposed development can be also estimated and used as an indicator for the benefits to the local and wider economy, which is presented in Table 2.4.

Table 2.4_Resident Consumption Expenditure

Total Dwellings	37
Avg Household size	*2.3*
Total Residents	78
Consumption expenditure per capita (p.a)	$43,391
Total consumption expenditure (p.a.)	**$3.4M**

Source: ABS, MarketInfo (2020), Macroplan

2.6_Rates Revenue

Upon completion, the various uses developed by the project will also generate rates revenue for Council.

The Subiaco City Council operates rate a system that uses the operating requirements of the local government to calculate a rate in dollar value that is applied to the Gross Rental Value (GRV) of the property,

Average rents of the proposed uses have been assumed based on the most recent market data for comparable offerings. It is estimated that the proposed development will generate approximately **$109,989** rates revenue per annum for Council upon completion (Table 2.5).

Table 2.5_Rates Revenue

Proposed Use	Est Rental Value	Rate per $	Rates Generated
Residential	$1,180,400	0.076043	$89,761
Retail	$223,000	0.076043	$16,598
F&B Retail	$43,000	0.076043	$3,270
Total Rates Revenue			**$109,989**

Source: ABS, Macroplan, Knight Frank West Office Market Report, Domain, City of Subiaco

2.7_Wider Economic Benefits

In addition to the quantified economic benefits outlined above, the proposed development is expected to deliver a number of economic and community benefits to the local area and wider regions.

Some key benefits are summarised as follows.

- Support continuous population growth in Perth's inner city suburbs. The current resident population in the Subiaco – Shenton Park SA2 is reported at 16,463 persons as at 2019 (ABS) and is projected to increase to 22,515 persons by 2026 (Western Australia Tomorrow 2018). The proposed development is well positioned to accommodate a portion of this immediate housing demand.
- Deliver more housing diversity and meet the demand of a changing demographic profile in Subiaco. The suburb has experienced growing household sizes, resulting from a large increase in the proportion of couples with children living in the area and a reduction in the proportion of lone person households. This trend is expected to continue in the short to medium term future. In response to the demographic change, there has been significant increase of multi-dwelling residential products in Subiaco where supporting the trend towards medium to high density residential offerings in the area. The proposed development is well positioned to add housing diversity to the area and provide various housing options to potential residents.
- Increase dwelling density and improve land utilisation with provisions of communal amenities. This development supports Subiaco's transition away from a traditional neighbourhood into a high density inner city suburb, which will allow residents to take advantage of the suburbs close proximity to Perth's CBD, strong public transportation links and a high provision of retail, entertainment and leisure facilities.
- Achieve progressive value uplift to the site, the asset and the wider area through improved utilisation of land, provision of mixed uses, increased visitation and activities.
- Encourage the use of public transport with the site being located within walking distance of tram services. The 2016 Census Journey to Work (JTW) data indicates around 17.8% of employed persons in the Subiaco – Shenton Park SA2 used public transport to commute between home and work. This is anticipated to be further improved with more people living closer and having better access to public transport services.
- Increase economic activity through close access to the Subiaco Town Centre and various amenities in the wider Subiaco Activity Centre including education, health, public open spaces and other services.
- Encourage street-level activities with the proposed F&B retail offerings located on the ground floor, connecting to the existing retail spaces in the area.

Annexure

A1_References

A2_Glossary

A3_Limitations

A1_References

The following data has been referred to in preparing this report.

- Australian Bureau of Statistics (ABS), Cat. 5209 Australian National Accounts: Input-Output Tables, 2014-15
- ABS, Cat. 5220 Australian National Accounts: State Accounts, 2018
- ABS, Cat. 5246 Information Paper: Australian National Accounts: Introduction to Input-Output Multipliers
- ABS Census 2016
- Celsius Developments, 2020
- Knight Frank Perth Office Market Report, 2019
- Domain, 2020
- Subiaco City Council, 2019
- MarketInfo, 2020
- PlanWA, 2020
- Western Australia Tomorrow, 2018

A2_Glossary

The following lists a number of glossary of terms relating to an economic benefits study as indicated by ABS.

Input-output tables provide a detailed dissection of intermediate transactions in an economy, and are thereby a means of describing the supply and use of the products of an entire economic system.

Input-output multipliers are summary measures used for predicting the total impact on all industries in an economy of changes in the demand for the output of any one industry.

Output multiplier for an industry (e.g. Construction) is defined as the total value of production by all industries of the economy required to satisfy one extra dollar's worth of final demand for that industry's output.

Initial output effect / direct output is initial requirement for an extra dollar's worth of output of a given industry.

First round effects is the amount of output required from all industries of the economy to produce the initial one dollar of extra output from an industry.

Production induced effects / indirect output is the amount of output required from all industries of the economy to produce the initial one dollar of extra output and all the subsequent induced output.

Employment multiplier corresponds to the additional employment (number of persons employed) generated by producing the extra output induced by each of the output effects.

Initial employment effect / direct employment is the additional employment (number of persons employed) generated by producing one extra dollar initial output.

Production induced employment effects / indirect employment is the additional employment (number of persons employed) generated in all industries of the economy to produce the initial one dollar of extra output and all the subsequent induced output.

A3_Limitations

The following provides a summary of the limitations of I-O multipliers approach for an economic benefits study as indicated by the ABS.

I–O multipliers are most commonly used to quantify the economic benefits (both direct and indirect) relating to policies and projects. While their ease of use makes I–O multipliers a popular tool for economic benefits analysis, they are based on limiting assumptions that results in multipliers being a biased estimator of the benefits or costs of a project.

Inherent shortcomings and limitations of multipliers for economic benefits analysis include:

- **Lack of supply–side constraints:** The most significant limitation of economic benefits analysis using multipliers is the implicit assumption that the economy has no supply–side constraints. That is, it is assumed that extra output can be produced in one area without taking resources away from other activities, thus overstating economic benefits. The actual impact is likely to be dependent on the extent to which the economy is operating at or near capacity.
- **Fixed prices**: Constraints on the availability of inputs, such as skilled labour, require prices to act as a rationing device. In assessments using multipliers, where factors of production are assumed to be limitless, this rationing response is assumed not to occur. Prices are assumed to be unaffected by policy and any crowding out effects are not captured.
- **Fixed ratios for intermediate inputs and production**: Economic benefits study using multipliers implicitly assumes that there is a fixed input structure in each industry and fixed ratios for production. As such, impact analysis using multipliers can be seen to describe average effects, not marginal effects. For example, increased demand for a product is assumed to imply an equal increase in production for that product. In reality, however, it may be more efficient to increase imports or divert some exports to local consumption rather than increasing local production by the full amount;
- **Absence of budget constraints**: Assessments of economic benefits using multipliers that consider consumption induced effects (type two multipliers) implicitly assume that household and government consumption is not subject to budget constraints.
- **No allowance for purchasers' marginal responses to change**: Economic benefits analysis using multipliers assumes that households consume goods and services in exact proportions to their initial budget shares. For example, the household budget share of some goods might increase as household income increases. This equally applies to industrial consumption of intermediate inputs and factors of production.
- **Not applicable for small regions**: Multipliers that have been calculated from the national I–O table are not appropriate for use in economic benefits analysis of projects in small regions. For small regions multipliers tend to be smaller than national multipliers since their inter–industry linkages are normally relatively shallow. Inter–industry linkages tend to be shallow in small regions since they usually don't have the capacity to produce the wide range of goods used for inputs and consumption, instead importing a large proportion of these goods from other regions.

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