# APPENDIX 11: ECONOMIC ANALYSIS





MacroPlan Holdings Pty Ltd ABN: 21 603 148 545 Info@macroplan.com.au

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Peter MacLeod Project Manager Walker Corporation Unit 2, 1 Hawkins Crescent Bundamba QLD 4304

BY EMAIL: Peter.MacLeod@walkercorp.com.au

Dear Peter

## RE CITISWICH BUSINESS PARK BENEFIT COST ASSESSMENT AND ECONOMIC IMPACT ANALYSIS UPDATE V2

Walker Corporation commissioned Macroplan to prepare a benefit cost assessment (BCA) and economic impact analysis (EIA) in relation to the proposed Citiswich Business Park Stage 7 be developed in Bundamba.

This letter report provides the key findings of this economic research, based on a revised masterplan which now includes 531,054sq.m of net lettable area (NLA) and a DA approved developable land area of 57.4Ha.

#### Background

Walker Corporation's Citiswich is Queensland's largest industrial development, providing affordable, wellconnected industrial land for broad range of businesses. Notably, five billion dollars of transport and service upgrades to the region have brought Citiswich to life facilitating reduced travel times to key hubs and centres including airport, Brisbane port and CBD.

#### Figure 1 Location of Citiswich



## Source: Walker Corporation; Macroplan

Walker Corporation's intention is to develop Citiswich Business Park Stage 7. This will include approximately 38.5 Ha of industrial land which could accommodate up to 239,000 sq.m of GFA of state-of-the art industrial facilities.

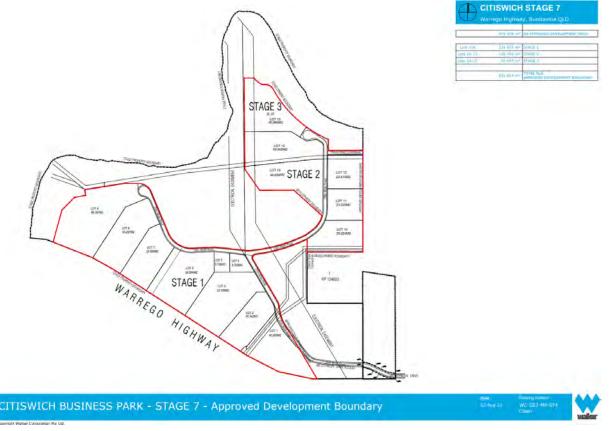


Figure 2 Walker Corporations Citiswich Business Park Stage 7 Lot Plan

Source: Walker Corporation; Macroplan

The vision for the site is to accommodate a range of clients including firms associated with a range of industry and business uses including but not limited to logistics, technology, transport, manufacturing, distribution and construction.

## BCA and EIA Results

## **Quantitative Benefits**

The following provides the quantifiable benefits estimated in terms of local employment generation, benefit cost ratios and net present values. These benefits are estimated to be generated for the local economy or in other words the Ipswich Local Government Area (LGA).

## **Construction Phase**

## Employment outcomes (Full Time Equivalents or FTE's)

Over an assumed five-year construction phase period, the project will create local employment opportunity for local construction workers and builders, concreters, electricians, plumbers and many other skilled trades and labouring positions.

Macroplans input-output model is used to estimate economic multipliers for job creation during the construction and operational phases of the project. Macroplan adopted a 60% capture rate by the local economy of the \$326 million construction cost.

As a result of the construction of the project which is estimated to cost \$326 million or \$39.2 million average per annum (60% x \$326m divided by 5, for the 5-year construction phase) there will be direct local employment generation of 89 FTEs in each of the five years of the construction phase. Indirect local employment generation will result in 221 FTEs created so total local employment, including all direct, and indirect effects is estimated to increase by 310 FTE jobs in each of the five years of construction.

## Income, Value-add and Output

From the construction expenditure of \$39.1 million per annum it is estimated that direct wages and salaries would increase by \$6.0 million. Indirect impacts would result in a further increase in wages and salaries of \$10.9 million in each year of construction. Total wages and salaries, including all direct, and indirect effects are estimated to increase by up to \$16.9 million per annum during each of the five years of construction.

From the construction expenditure of \$39.1 an increase in direct output estimated at \$23.7 million will be generated. From this direct expansion in the economy, indirect flow-on production and the consumption effects are estimated at \$71.1 million. Total output including all direct, and indirect effects is estimated to increase by up to \$94.8 million per annum during each of the five years of the construction phase.

The construction expenditure of \$39.1 million will increase direct value-add at an estimated \$11.7 million. Indirect flow-on effects through the production and the consumption effects are estimated at \$21.4 million. Total value-added, including all direct, and indirect effects is estimated to increase by up to \$33.1 million per annum during the construction phase.

## **Operation Phase**

When fully operational, Citiswich Business Park will generate significant lease expenditure benefits. The total per annum leasing figure is estimated to be \$31.5 million. These benefits will be ongoing in each year of the operation of the facility and are estimated as follows:

## Employment (FTE's)

In every year of operation phase of Citiswich Business Park local employment opportunities will be generated for property industry businesses and workers including real estate, finance and legal positions.

Macroplans input-output model is used again to estimate economic multipliers for job creation during the operational phase of the project and once again we adopted a 60% capture rate by the local economy of the \$31.5 million annual leasing expenditure.

As a direct result of the lease expenditure of \$18.9 million per annum (60% of \$31.5 million), there will be 33 local direct and 51 local indirect jobs generated by production and consumption flow on effects. Total employment, including all direct, and indirect effects are estimated to increase by 84 FTE jobs in each year.

## Income, Value-add and Output

From the lease expenditure of \$18.9 million per annum it is estimated that direct wages and salaries would increase by \$2.2 million. Indirect impacts would result in a further increase in wages and salaries of \$1.8 million in each year of operation. Total wages and salaries, including all direct, and indirect effects is estimated to increase by up to \$4.0 million per annum on an ongoing basis.

From the lease expenditure of \$18.9 million the corresponding increase in direct output is estimated at \$5.8 million. From this direct expansion in the economy, indirect flow-on effects through local purchases of goods and services can be expected to result in a further increase to output of \$16.0 million. Total output including all direct, and indirect effects is estimated to increase by up to \$21.8 million per annum.

The lease expenditure of \$18.9 million will generate direct value-add of \$9.5 million. Indirect flow-on effects can be expected to result in a further increase to output of \$8.1 million. Total value-added, including all direct, and indirect effects is estimated to increase by up to \$17.6 million per annum.

The following presents these findings in table form for the Ipswich LGA, for areas outside the Ipswich LGA and within Queensland, and the region outside of Queensland and in Australia.

## Table 1 Economic Impact for Ipswich LGA

Ipswich LGA							
		Direct	In	direct	Indirect	Total	Multiplier
Income			Production	Consumption			
Construction Phase							
Construction Cost (\$m)	\$39.1	\$6.0	\$7.6	\$3.3	\$10.9	\$16.9	2.8
(Assume 60%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$18.9	\$2.2	\$1.5	\$0.3	\$1.8	\$4.0	1.8
Employment							
Construction Phase							
Construction Cost (\$m)	\$39.1	89.1	112.4	108.7	221.1	310.1	3.5
(Assume 60%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$18.9	32.9	21.6	29.2	50.8	83.7	2.5
Value add							
Construction Phase							
Construction Cost (\$m)	\$39.1	\$11.7	\$17.5	\$3.9	\$21.4	\$33.1	2.8
(Assume 60%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$18.9	\$9.5	\$4.4	\$3.7	\$8.1	\$17.6	1.8
Output							
Construction Phase							
Construction Cost (\$m)	\$39.1	\$23.7	\$44.1	\$27.0	\$71.1	\$94.8	4.0
(Assume 60%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$18.9	\$5.8	\$8.7	\$7.3	\$16.0	\$21.8	3.8

## Source: Macroplan

## Table 2 Economic Impact for Outside Ipswich and within Queensland

Outside Ipswich LGA and in Queensland								
		Direct	Ind	irect	Indirect	Total	Multiplier	
Income			Production	Consumption				
Construction Phase								
Construction Cost (\$m)	\$19.6	\$0.2	\$0.2	\$0.0	0.1	\$0.3	1.2	
(Assume 30%)								
Operational Phase								
Rental, Hiring and Real Estate Services (\$m)	\$9.4	\$1.7	\$0.8	\$0.9	1.6	\$3	2.0	
Employment								
Construction Phase								
Construction Cost (\$m)	\$19.6	6.4	7.7	5.1	12.8	19.2	3.0	
(Assume 30%)								
Operational Phase								
Rental, Hiring and Real Estate Services (\$m)	\$9.4	16.4	14.3	14.5	28.8	45.2	2.8	
Value add								
Construction Phase								
Construction Cost (\$m)	\$19.6	\$0.9	\$1.2	\$0.1	\$1.3	\$2.2	2.4	
(Assume 30%)								
Operational Phase								
Rental, Hiring and Real Estate Services (\$m)	\$9.4	\$4.8	\$3.0	\$1.7	\$4.7	\$9.4	2.0	
Output								
Construction Phase								
Construction Cost (\$m)	\$19.6	\$2.5	\$3.0	\$1.2	\$4.2	\$6.7	2.7	
(Assume 30%)								
Operational Phase								
Rental, Hiring and Real Estate Services (\$m)	\$9.4	\$4.5	\$5.9	\$3.4	\$9.3	\$13.8	3.1	

Source: Macroplan

## Table 3 Economic Impact for balance of Australia

Outside Queensland and in Australia							
Income		Direct	li	ndirect	Indirect	Total	Multiplier
Construction Phase			Production	Consumption			
Construction Cost (\$m)	\$6.5	\$0.8	\$1.5	\$0.6	2.1	\$2.8	3.8
(Assume 10%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$3.1	\$0.5	\$0.5	\$0.3	\$0.8	\$1.3	2.4
Employment							
Construction Phase							
Construction Cost (\$m)	\$6.5	10.3	20.2	21.4	41.6	51.9	5.0
(Assume 10%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$3.1	5.5	5.8	8.5	14.3	19.8	2.7
Value add							
Construction Phase							
Construction Cost (\$m)	\$6.5	\$1.5	\$3.2	\$0.8	\$4.0	5,.5	3.6
(Assume 10%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$3.1	\$1.6	\$0.6	\$1.2	\$2.2	\$3.8	2.4
Output							
Construction Phase							
Construction Cost (\$m)	\$6.5	\$4.1	\$7.9	\$5.3	\$13.2	\$17.3	4.3
(Assume 10%)							
Operational Phase							
Rental, Hiring and Real Estate Services (\$m)	\$3.1	\$1.4	\$2.3	\$2.1	\$4.4	\$7.6	4.1

Source: Macroplan

## Additional Employment and Income

In addition to the employment generated by the leasing expenditure, there will also be income benefits generated by the employees working in the industrial facilities. On the basis of 239,000sq.m of floorspace developed at Walkers Corporations Citiswich Business Park Stage 7, and a benchmark rate of employment of 1 FTE per 90sq.m for industrial facility floorspace, then once fully occupied and operational, in each year of operation there will be 2,656 FTE jobs sustained in the Business Park Stage 7 on an ongoing basis.

The annual award wage under the Storage Services and Wholesale Award 2020, specifies a weekly rate of pay for a worker classified as Storeworker Grade 4 Full-time 19 years and older of \$946.10 per week, which gives an annual wage of \$49,197 per annum. When this annual income is multiplied by the 2,656 workers generated as mentioned above, then the total annual income generated is calculated as \$130.6 million. It is notable that some percentage of this will be spent beyond Ipswich, however it is considered that some significant portion will most likely be spent within the Ipswich LGA.

## Project Benefit Cost Ratio (BCR) and Net Present Values (NPV's)

Our model, at the 4% discount rate provided an NPV of \$39.5 million with a BCR of 1.1 for the project case. Total costs at the 4% discount rate over a twenty-year study timeframe were found to be \$301.2 million, while the total for all benefits is \$341.2 million. Please note the BCA model output is presented in the appendix.

Key assumptions, data sources and calculations in the BCA model include those relating to costings and benefits as follows:

## <u>Costs</u>

- Capital costs of \$326 million over five years. These were provided by Walker Corporation and assessed as being reasonable estimates when assessed against Macroplan benchmarks and research.
- Leasing and agent fees. A market rate of 10% commission for of the initial long-term lease, say 10 +10 year for the total 239,000sqm of industrial floorspace when fully occupied, less an allowance for an ongoing vacancy rate of 5%.
- Repairs and maintenance. A rate of 0.75% of the total leasing revenue was adopted by Macroplan.
- Energy. Macroplans assessed this at the rate 2.0% of the total leasing revenue.
- Water which was assessed by Macroplan at the rate of 0.25% of the total leasing revenue.

## Benefits (or revenue)

• Lease income. This was assessed at the market rate of \$124 per sq.m which is a reasonable rate to adopt for the current Brisbane market average and agreed to by Walker Corporation. This rate was applied to the total lettable floorspace.

Macroplan considers that the base case results are nil, as the subject land is not being put to any material use in its current state.

## **Qualitative Benefits**

Several qualitative economic, social and environment benefits will also be created as result of the Citiswich Business Park Stage 7 during the construction and operational phases of the development. These, however, are problematic to measure and estimate owing to their unique non-monetary nature and to their scale. Nonetheless, they will contribute to the improved quality of employment lands for both local residents, business owners and employees to the new facilities. We consider that each of the following represents a notable economic, social and/or environmental benefit for the Region.

## Economic Benefits

• The facility will further promote Ipswich's economic base, assist in employment growth and help to reduce unemployment. This in turn will grow a more diverse economy and grow employment in other sectors within a range of industries.

## Social Benefits

- Following from the previous point, Citiswich Business Park Stage 7 in both construction and operation phases will assist in addressing social issues associated with unemployment.
- Improved training and education outcomes and knowledge acquisition will benefit employees as they develop their trade, skills and careers.
- Increased interest and knowledge in the Ipswich region. This may work to help to build the "Ipswich brand" as place that accommodates business opportunities and welcomes investment.
- Improved ability for the local business to elevate their profile and to form business opportunities with tenants occupying the Business Park Stage 7.

## Environmental Benefits

- Reduction of facilities carbon footprint through the incorporation of state-of-the-art environmentally sensitive design features and potential energy saving technologies e.g., solar and other renewable energy sources.
- Use of greywater within the new facilities to reduce overall complex water usage.
- Citiswich Business Park Stage 7's location means reduced travel times to key hubs and centres including airport, Brisbane port and CBD. This should translate into reduced GHG emissions from B-Doubles and other freight vehicles.

## Summary

Macroplans economic analysis regarding the proposed Citiswich Business Park Stage 7 finds significant economic benefits will accrue as a result of the facility. Quantifiable benefits including notable local job creation in both the construction and operational phases; a sound BCR of 1.1 with a significant and strongly positive NPV of \$39.5 million at the 4% discount rate over the twenty-year study period. The projects BCR and NPV are supportive of the project.

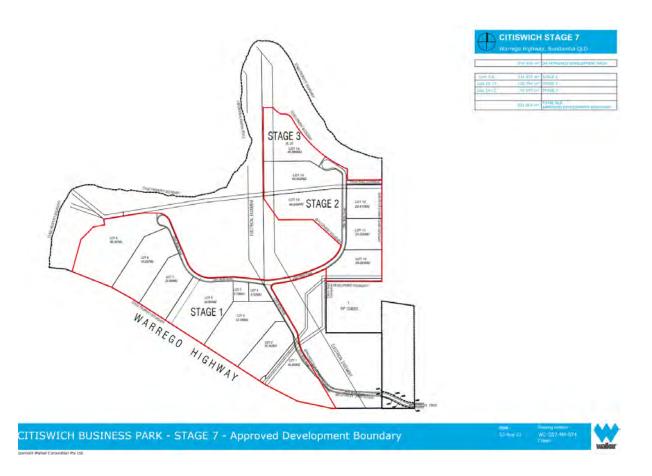
Significant employment, income, output and value add benefits will be generated by the Business Park. For example, one notable result is the creation of 2,656 FTE new jobs sustained in the Business Park Stage 7 on an ongoing basis as a consequence of the delivery of approximately 239,000sqm of industrial facility floorspace.

A diverse range of qualitative economic, social and environmental benefits can also be expected to be generated as a direct and indirect consequence of the proposed Citiswich Business Park Stage 7. These include a more diverse economic base, a larger, better trained and more knowledgeable workforce, and promotion of the overall business profile of the Ipswich region, Queensland and Australia.

Yours sincerely

Mark Courtney General Manager Queensland – Principal Business Case Economist

## Apendix A - Citiswich Masterplan



# macroplan

MacroPlan Holdings Pty Ltd ABN: 21 603 148 545

Info@macroplan.com.au

Appendix B – BCA output

		2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	
		Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	Year 19	
Costs																						
	Capital costs		\$65,174,809	\$65,174,809	\$65,174,809	\$65,174,809	\$65,174,809															
	leasing agent and marketing fees 10%			\$563,023	\$563,023	\$563,023	\$563,023	\$563,023														
	Repairs and Maintenance			\$42,227	\$84,454	\$126,680	\$168,907	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	\$211,134	$\sim$
	Energy			\$112,605	\$225,209	\$337,814	\$450,419	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	\$563,023	ſ
	Water			\$14,076	\$28,151	\$42,227	\$56,302	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	\$70,378	Γ
	Fotal	\$0	\$65,174,809	\$65,906,740	\$66,075,647	\$66,244,554	\$66,413,461	\$1,407,559	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	
PROIFC	COSTS Discount Rates																					
	Undiscounted sub total	\$343,046,261	\$65,174,809	\$65,906,740	\$66,075,647	\$66,244,554	\$66,413,461	\$1,407,559	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	\$844,535	Ē
Base		\$276,162,901				<b>+</b>  , <b></b> .			<i></i>													
Low		\$301,719,480																				
	PV (10%)	\$254,151,636																				
Benefits																						
	Leasing revenue			\$5,630,235	\$11,260,469	\$16,890,704	\$22,520,938	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	\$28,151,173	
	ncome			\$660,000	\$1,320,000	\$1,980,000	\$2,640,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	\$3,300,000	
	Fotal			\$6,290,235	\$12,580,469	\$18,870,704	\$25,160,938	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	
PROJECT	BENEFITS Discount Rates																					
	Undiscounted sub total	\$534,669,933	\$0	\$6,290,235	\$12,580,469	\$18,870,704	\$25,160,938	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	\$31,451,173	
Base	PV (7%)	\$252,337,468																				
Low	PV (4%)	\$341,227,547																				
High	PV (10%)	\$191,699,214																				
Project (	Case Decision Criteria	Discount Rate	NPV	BCR																		
		Undiscounted	\$191,623,672	1.6																		
		4%	\$39,508,067	1.1																		

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