2023-27
POWERLINK QUEENSLAND REVENUE PROPOSAL

Supporting Document – PUBLIC

Powerlink Future Workplace Options Analysis

Powerlink Future Workplace
OPTIONS ANALYSIS

September 2020

Contents

1. EXECUTIVE SUMMARY

Powerlink Queensland has undertaken a detailed investigation of the options available with respect to confirming the appropriate workplace accommodation strategy.

The current workspaces and facilities at the Powerlink Virginia site are reaching end of life. The current office accommodation in the Edison, Tesla and Brian Sharp buildings was constructed in 1997, 2002 and 2006, and the current ages of these fitouts is 22, 17 and 13 years, respectively. From a workplace strategy perspective, the collective age of the Powerlink office work environments is significant, and environments are dated and hamper the ability of Powerlink to meet legislative compliance requirements, Powerlink's Strategic Initiatives, and the efficient delivery of transmission services.

The age and current condition of the current facilities has been assessed and deemed to be likely to result in significant capital and operational expenditure over the next 15 years. Undertaking ad-hoc capital repairs in an operating facility is inefficient and does not deliver improvement in Powerlink's delivery of services to the customer.

There is an opportunity to align the required refurbishment of the workspace with modern workplace design to enable and support the cultural change that Powerlink are currently undergoing. Powerlink is well positioned to leverage new workplace accommodation that can enable and support their business well into the future.

A total of 10 options were assessed for both cost and non-cost criteria as follows:

1. Do Nothing Different
2. Full Workplace Refurbishment – no sharing ratio (fully assigned desks)
3. Full Workplace Refurbishment – low sharing ratio (85%)
4. Full Workplace Refurbishment – high sharing ratio (75%)
5. Light Touch Workplace Refurbishment – no sharing ratio (fully assigned desks)
6. Light Touch Workplace Refurbishment – low sharing ratio (85%)
7. Light Touch Workplace Refurbishment – high sharing ratio (75%)
8. Demolish and rebuild new office building at Virginia
9. Relocate – single leased site including office and warehouse
10. Relocate – split site leased office and new build warehouse at Narangba

Please refer to Annex A for a detailed summary of each option assessed.

The cost of each option was assessed via the preparation of a Net Present Value (NPV) by White & Partners. Please refer to Annex B for a copy of the financial analysis report.

The options were assessed against non-cost criteria which can be broadly categorised into:

- Enhancement of Safety or Legislative Compliance

- Improved Staff Wellbeing
- Improved Culture and Engagement
- Improved Productivity
- Efficient Sustainable Design and Improved Building Management Systems

Refer to Annex C for full details of the non-cost criteria assessment for each of the option.

Option 7 - light touch refit with high sharing ratio, was ranked first based upon the NPV financial assessment.

Option 8 - demolish and rebuild, Option 9 - relocate to single leased premises, and Option 10 - relocate to split premises were all equally ranked first from a non-cost assessment.

The cost assessments, whilst providing a ranked outcome, demonstrated that several options were very similar NPV, therefore a combined weighted assessment of cost (60%) and non-cost (40%) was undertaken which resulted in the following ranking:

1. Single Leased Location
2. Full Refurbishment – Low Sharing Ratio
3. Full Refurbishment – No Sharing Ratio

Powerlink have advised that without a strong financial motivation to transition to a leased facility, their preference is to retain ownership of their existing premises. Therefore, the Full Refurbishment Option is preferred with either a low sharing ratio, or no sharing ratio. As the no sharing ratio is only circa $185,000 difference in NPV it is recommended that this option be selected for the purpose of seeking funding, with the sharing ratio to be determined following further development of the workplace strategy.

2. STRATEGIC DEFINITION

2.1. Problem / Opportunity

The current workspaces and facilities at the Powerlink Virginia site are reaching end of life. The current office accommodation in the Edison, Tesla and Brian Sharp buildings was constructed in 1997, 2002 and 2006, and the current ages of these fitouts is 22, 17 and 13 years, respectively. From a workplace strategy perspective, the collective age of the Powerlink office work environments is significant, and environments are dated and hamper the ability of Powerlink to meet legislative compliance requirements, Powerlink's Strategic Initiatives, and the efficient delivery of transmission services.

The age of the current facilities has been assessed and deemed to be highly likely to result in significant capital and operational expenditure that is inefficient and does not deliver and improvement in Powerlink's delivery of services to the customer.

There is an opportunity to align the required refurbishment of the workspace accommodation with modern workplace design to enable and support the cultural change that Powerlink are currently undergoing. Powerlink is well positioned to leverage a new workplace environment that can enable and support their business well into the future.

2.2. Objective / Purpose

The purpose of this report is to document the options that were assessed with respect to the Powerlink Workplace Accommodation and provide a recommended outcome for presentation to the AER.

The assessment process assessed 10 different options for cost and non-cost criteria with the objective of determining a recommended outcome that demonstrates responsible financial management, whilst achieving a positive workplace outcome for Powerlink.

3. EVALUATION OF OPTIONS

A total of 10 options were assessed for both cost and non-cost criteria as follows:

1. Do Nothing Different
2. Full Workplace Refurbishment – no sharing ratio (fully assigned desks)
3. Full Workplace Refurbishment – low sharing ratio (85%)
4. Full Workplace Refurbishment – high sharing ratio (75%)
5. Light Touch Workplace Refurbishment – no sharing ratio (fully assigned desks)
6. Light Touch Workplace Refurbishment – low sharing ratio (85%)
7. Light Touch Workplace Refurbishment – high sharing ratio (75%)
8. Demolish and rebuild new office building at Virginia
9. Relocate – single leased site including office and warehouse
10. Relocate – split site leased office and new build warehouse at Narangba

Please refer to Annex A for a detailed summary of each option assessed.

In order to undertake a comprehensive analysis of each option, the following activities were undertaken:

- Workplace test fit planning was undertaken for options 2 to 7 to determine spatial requirements and likely open plan arrangements. Refer to Annex D for copies of the interior design planning report.
- Building Certifier undertook a review of the existing facilities, proposed full refurbishment, and proposed light touch refurbishment test fits and provided a report on the likely compliance considerations for each of these options. Refer Annex E.
- Powerlink had already engaged KPMG to undertake a detailed assessment of the existing facilities at Virginia and prepare a capex expenditure plan. This capex expenditure plan was utilised for the assessment of the Do Nothing Different option. Please refer to annexure F for the KPMG capex assessment.
- KPMG were also engaged to prepare a prediction of the anticipated Opex expenditure for each of the remain at Virginia options under consideration. Refer to Annex G for KPMG's Opex expenditure estimates.
- A Building Services Engineer was engaged to prepare an assessment of the building services upgrades required under the full refurbishment and light touch refurbishment options. Please refer to Annex H for a copy of their assessment.
- A cost planner prepared cost planning advice for each of the options under consideration, taking into account the above listed advice prepared by other consultants. Refer to Annex I for copies of each of the cost plans prepared.
- White & Partners prepared a detailed financial model for each of the options considered taking into account the information prepared by the other consultants, which determined an NPV for each option. Refer to Annex B for a copy of the financial model.
- Generate Property Group prepared a detailed assessment of each of the options against a pre-agreed non-cost criterion that are linked back to the NER capital expenditure objectives and Powerlink's Strategic Initiatives. Refer to Annex C for a copy of the non-cost assessment.

The below table details the ranking that has been the outcome of the above activities for both non-cost and cost criteria for each option under consideration.

OPTION	COST RANKING (NPV)	NON-COST RANKING
1. Do Nothing Different	6th (-$64.8 mil)	10th (last)
2. Full Workplace Refurbishment – no sharing ratio	8th (-$65.5 mil)	4th (equal)
3. Full Workplace Refurbishment – low sharing ratio	7th (-$65.3 mil)	4th (equal)
4. Full Workplace Refurbishment – high sharing ratio	4th (-$63.3 mil)	6th
5. Light Touch Refurbishment – no sharing ratio	3rd (-$60.1 mil)	7th (equal)
6. Light Touch Refurbishment – low sharing ratio	2nd (-$59.6 mil)	7th (equal)
7. Light Touch Refurbishment – high sharing ratio	1st (-$57.5 mil)	9th
8. Demolish and rebuild new office building at Virginia	10th (-$91.6 mil)	1st (equal)
9. Relocate – single leased site including office and warehouse	5th (-$64.8 mil)	1st (equal)
10. Relocate – split site leased office and new build warehouse at Narangba	9th (-$67.3 mil)	1st (equal)

The cost assessments, whilst providing a ranked outcome, demonstrated that several options were very similar NPV, therefore a combined weighted assessment of cost and non-cost was undertaken which resulted in the following rankings:

		FULL REFURBISHMENT			LIGHT TOUCH REFIT				RELOCATE TO NEW PREMISES	
	DO NOTHING DIFFERENT	No Sharing Ratio	Low Sharing Ratio	High Sharing Ratio	No Sharing Ratio	Low Sharing Ratio	High Sharing Ratio	DEMOLISH & REBUILD VIRGINIA	Single leased location	Split location
70% cost / 30% Non-Cost	10	4	3	2	8	7	6	9	1	5
60% cost / 40% Non-Cost	10	3	2	4	8	6	7	9	1	5

This combined assessment demonstrates that generally relocate to a leased premises is ranked first, whilst a full refurbishment option is ranked second.

4. RECOMMENDATION

4.1. Recommended Solution

Based upon the above options analysis, the options considered in more detail are leasing new premises and full refurbishment.

Powerlink have advised that without a strong financial motivation to transition to a leased facility, their preference is to retain ownership of their existing premises. Therefore, a Full Refurbishment Option is recommended with either a low sharing ratio, or no sharing ratio. As the no sharing ratio is only circa $185,000 difference in NPV it is recommended that this option be selected for the purpose of seeking funding, with the sharing ratio to be determined following further development of the workplace strategy.

The Full Refurbishment (no sharing ratio) provides the following critical benefits:

- Provides significant future growth flexibility via increase of sharing ratios in the future
- Very high achievement of non-cost project outcomes
- Full compliance upgrades including:
    - Sprinkler installation
    - New fire stairs
    - New lift
    - Full upgrades of building services and finishes to meet current code requirements
    - Disabled and ambulant bathrooms
- Reduced ongoing operational costs
- Lower risk of safety incidents

4.2. Recommended Delivery Approach

Once the funding for the final solution is agreed. It is recommended that the project be procured and delivered in three stages:

- Phase 1 – Project Establishment
- Phase 2 – Design team appointment and concept design
- Phase 3 – Design Development and Construction

Whilst it is understood that Powerlink is seeking to obtain funding for the next reset period, commencing in July 2022, it is recommended that Phase 1 and Phase 2 are commenced earlier if possible. There are additional capital expenditure and operational costs until such time as the refurbishment is completed, therefore commencing the design prior to July 2022 will enable Powerlink to commence the construction works immediately upon commencement of the reset period in July 2022, and therefore obtain the financial and operational benefits of the works earlier.

Annex A: Options Descriptions

OPTION SUMMARY 1: DO NOTHING DIFFERENT

OPTION DESCRIPTION

Remain at Virginia in existing facilities and existing fitout, with repairs only made as necessary to maintain the current facilities.

COST SUMMARY

Ranked 6th based upon NPV.

Financial model based upon:

- KPMG's assessment of Capex requirements to maintain the current facilities.
- KPMG's assessment of operational costs based upon current expenses and planned schedule of Capex works.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the financial model period.

NON-COST SUMMARY

Ranked last in achievement of non-cost outcome assessment.

BENEFITS	Low upfront capex cost solution. Low disruption to the workforce in the short term.
SAFETY CONSIDERATIONS	The current buildings do not meet current building codes and have a number of areas of concern with respect to safety risks. The works do not achieve any significant improvement in safety or legislative compliance.
DISADVANTAGES	This option does not achieve any of the improvements targeted for the non-cost assessment, ie. Nil improvement in staff wellbeing, productivity, culture & engagement, or sustainable building practices. The building services and fitout are generally end of life and repairs would be required to be completed out of hours, or emergency response to failures.
RISKS	Significant risk of un-scheduled emergency repairs being required that would be high cost and disruptive to the workforce. The built form, whist generally compliant with building codes, does not provide the highest level of safety and there is a risk of a significant incident. The current workplace does not facilitate achievement of Powerlink's Strategy Themes and it is likely that as the workplace continues to age, this will continue to deteriorate.
STAKEHOLDER IMPACTS	Immediate construction impacts are low, however the above identified disadvantages and risks are likely to have a negative impact on stakeholders in the long term.

TEST FIT: Not Applicable – fitout remains as currently installed.

OPTION SUMMARY 2: FULL REFURBISHMENT, NO SHARING

OPTION DESCRIPTION

Remain at Virginia in existing buildings with works as follows:

- Full refurbishment of full workplace in Brian Sharp and Edison.
- Assigned desks with nil sharing ratio.
- Upgrade of building services in Edison and Brian Sharp as detailed in BSE's report.
- Northlink Place able to be sold, as workspace no longer required in this building.
- Tesla warehouse workplace no longer required in this building, and capex upgrades completed in accordance with KPMG capex programme.

COST SUMMARY

Ranked 8th based upon NPV.

Summary of Financial model basis:

- CCM's cost plan for fitout works and building services upgrades.
- KPMG's assessment of Capex requirements for the Tesla warehouse and lifecycle replacements that are not undertaken in the initial building upgrade.
- KPMG's assessment of operational costs based upon works intended to be completed in the project.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the financial model period.
- Northlink Place sale at market valuation.

NON-COST SUMMARY

Ranked equal 4th in achievement of non-cost outcome assessment.

BENEFITS	Full refurbishment of workplace ensures that all non-cost criteria are achieved with a significant impact. Staff remain at a location that they are familiar with and lesser impact than a move scenario.
SAFETY CONSIDERATIONS	A full refurbishment will result in a significant upgrade to compliance for legislation and building code. Achieving a high quality safety outcome for the office. The Tesla warehouse would remain a risk with respect to known safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	As the model requires Powerlink to remain operating out of the premises whilst works are undertaken, there will be a significant impact whilst construction works are undertaken. As the building fabric and services that are not end of life are retained, there is a risk that unexpected costs may be incurred to address latent conditions, unforeseen failures, etc. However significantly less risk than a light refit. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff whilst works are undertaken. Expected improvement in customer outcomes as a result of significant achievement on non-cost objectives.

OPTION SUMMARY 3: FULL REFURBISHMENT, LOW SHARING

OPTION DESCRIPTION

Remain at Virginia in existing buildings with works as follows:

- Full refurbishment of full workplace in Brian Sharp and Edison.
- Non-assigned desks with a low sharing ratio of 85%.
- Edison and Brian Sharp level 1 fully occupied, [redacted]
- Upgrade of building services in Edison and Brian Sharp as detailed in BSE's report.
- Northlink Place able to be sold, as workspace no longer required in this building.
- Tesla warehouse workplace no longer required in this building, and capex upgrades completed in accordance with KPMG capex programme.

COST SUMMARY

Ranked 7th based upon NPV.

Summary of Financial model basis:

- CCM's cost plan for fitout works and building services upgrades.
- KPMG's assessment of Capex requirements for the Tesla warehouse and lifecycle replacements that are not undertaken in the initial building upgrade.
- KPMG's assessment of operational costs based upon works intended to be completed in the project.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the financial model period.
- Northlink Place sale at market valuation.

NON-COST SUMMARY

Ranked equal 4th in achievement of non-cost outcome assessment.

BENEFITS	Full refurbishment of workplace ensures that all non-cost criteria are achieved with a significant impact. Staff remain at a location that they are familiar with and lesser impact than a move scenario. Implementing a low sharing ratio facilitates flexibility and provision for future growth, without imposing more change than the staff are able to adjust to.
SAFETY CONSIDERATIONS	A full refurbishment will result in a significant upgrade to compliance for legislation and building code. Achieving a high quality safety outcome for the office. The Tesla warehouse would remain a risk with respect to known safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	As the model requires Powerlink to remain operating out of the premises whilst works are undertaken, there will be a significant impact whilst construction works are undertaken. As the building fabric and services that are not end of life are retained, there is a risk that unexpected costs may be incurred to address latent conditions, unforeseen failures, etc. However significantly less risk than a light refit. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff whilst works are undertaken. Expected improvement in customer outcomes as a result of significant achievement on non-cost objectives.

OPTION SUMMARY 4: FULL REFURBISHMENT, HIGH SHARING

OPTION DESCRIPTION

Remain at Virginia in existing buildings with works as follows:

- Full refurbishment of full workplace in Edison.
- Non-assigned desks with a high sharing ratio of 75%.
- Edison fully occupied, [redacted]
- Upgrade of building services in Edison and Brian Sharp as detailed in BSE's report.
- Northlink Place able to be sold, as workspace no longer required in this building.
- Tesla warehouse workplace no longer required in this building, and capex upgrades completed in accordance with KPMG capex programme.

COST SUMMARY

Ranked 4th based upon NPV.

Summary of Financial model basis:

- CCM's cost plan for fitout works and building services upgrades.
- KPMG's assessment of Capex requirements for the Tesla warehouse and lifecycle replacements that are not undertaken in the initial building upgrade.
- KPMG's assessment of operational costs based upon works intended to be completed in the project.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the model period.
- Northlink Place sale at market valuation.

NON-COST SUMMARY

Ranked 6th in achievement of non-cost outcome assessment.

BENEFITS	Full refurbishment of workplace ensures that the majority of non-cost criteria are achieved with a significant impact. Staff remain at a location that they are familiar with and lesser impact than moving. [redacted]
SAFETY CONSIDERATIONS	A full refurbishment will result in a significant upgrade to compliance for legislation and building code to the Edison Building. The Brian Sharp building has less work in this option, therefore some compliance concerns are likely to remain. The Tesla warehouse would remain a risk with respect to safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	Powerlink is to remain operating out of the premises whilst works are undertaken, there will be a significant impact whilst construction works are undertaken. A higher sharing ratio may cause stress and dissatisfaction for some staff. The growth capacity via an increase in sharing ratios is limited. As the building fabric and services that are not end of life are retained, there is a risk that unexpected costs may be incurred to address latent conditions, unforeseen failures, etc. However significantly less risk than a light refit. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff whilst works are undertaken. Expected improvement in customer outcomes as a result of significant achievement on non-cost objectives.

OPTION SUMMARY 5: LIGHT TOUCH REFURBISHMENT, NO SHARING

OPTION DESCRIPTION

Remain at Virginia in existing buildings with works as follows:

- Light touch refurbishment of workplace in Brian Sharp and Edison – retain the majority of walls, amenities, all stairs, and structural elements in current position.
- Assigned desks with nil sharing ratio.
- Upgrade of building services in Edison and Brian Sharp as detailed in BSE's report.
- Northlink Place able to be sold, as workspace no longer required in this building.
- Tesla warehouse workplace no longer required in this building, and capex upgrades completed in accordance with KPMG capex programme.

COST SUMMARY

Ranked 3rd based upon NPV.

Summary of Financial model basis:

- CCM's cost plan for fitout works and building services upgrades.
- KPMG's assessment of Capex requirements for the Tesla warehouse and lifecycle replacements that are not undertaken in the initial building upgrade.
- KPMG's assessment of operational costs based upon works intended to be completed in the project.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the model period.
- Northlink Place sale at market valuation.

NON-COST SUMMARY

Ranked equal 7th in achievement of non-cost outcome assessment.

BENEFITS	Light touch refurbishment of workplace provides a medium level of improvement in non-cost criteria. Staff remain at a location that they are familiar with and lesser impact than moving. Lower cost solution.
SAFETY CONSIDERATIONS	This option will achieve some improvement in safety outcomes for the site, however will not achieve a full upgrade of all safety considerations or a full compliance upgrade. The Tesla warehouse would remain a risk with respect to safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	As the model requires Powerlink to remain operating out of the premises whilst works are undertaken, there will be a significant impact whilst construction works are undertaken. The light touch solution does not replace a large portion of the existing workplace, therefore higher risk of higher ongoing maintenance costs and lower staff satisfaction. As the building fabric and services that are not end of life are retained, there is a risk that unexpected costs may be incurred to address latent conditions, unforeseen failures, etc. A number of safety risks remain as full compliance upgrades are not undertaken. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff whilst works are undertaken. Expected improvement in customer outcomes as a result of improvement in achievement of non-cost objectives.

OPTION SUMMARY 6: LIGHT TOUCH REFURBISHMENT, LOW SHARING

OPTION DESCRIPTION

Remain at Virginia in existing buildings with works as follows:

- Light touch refurbishment of workplace in Brian Sharp and Edison – retain the majority of walls, amenities, all stairs, and structural elements in current position.
- Non-assigned desks with a low sharing ratio of 85%.
- Edison and Brian Sharp level 1 fully occupied, [redacted]
- Upgrade of building services in Edison and Brian Sharp as detailed in BSE's report.
- Northlink Place able to be sold, as workspace no longer required in this building.
- Tesla warehouse workplace no longer required in this building, and capex upgrades completed in accordance with KPMG capex programme.

COST SUMMARY

Ranked 2nd based upon NPV.

Summary of Financial model basis:

- CCM's cost plan for fitout works and building services upgrades.
- KPMG's assessment of Capex requirements for the Tesla warehouse and lifecycle replacements that are not undertaken in the initial building upgrade.
- KPMG's assessment of operational costs based upon works intended to be completed in the project.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the model period.
- Northlink Place sale at market valuation.

NON-COST SUMMARY

Ranked equal 7th in achievement of non-cost outcome assessment.

BENEFITS	Light touch refurbishment of workplace provides a medium level of improvement in non-cost criteria. Staff remain at a location that they are familiar with and lesser impact than moving. Implementing a low sharing ratio facilitates flexibility and provision for future growth, without imposing more change than the staff are able to adjust to.
SAFETY CONSIDERATIONS	This option will achieve some improvement in safety outcomes for the site, however will not achieve a full upgrade of all safety considerations or a full compliance upgrade. The Tesla warehouse would remain a risk with respect to known safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	Powerlink is to remain operating out of the premises whilst works are undertaken, there will be a significant impact whilst construction works are undertaken. The light touch solution does not replace a large portion of the existing workplace, therefore higher risk of higher ongoing maintenance costs and lower staff satisfaction. A number of safety risks remain as full compliance upgrades are not undertaken. As the building fabric and services that are not end of life are retained, there is a risk that unexpected costs may be incurred to address latent conditions, unforeseen failures, etc. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff whilst works are undertaken. Expected improvement in customer outcomes as a result of improvement in achievement of non-cost objectives.

OPTION SUMMARY 7: LIGHT TOUCH REFURBISHMENT, HIGH SHARING

OPTION DESCRIPTION

Remain at Virginia in existing buildings with works as follows:

- Light touch refurbishment of workplace in Edison – retain the majority of walls, amenities, all stairs, and structural elements in current position.
- Non-assigned desks with a high sharing ratio of 75%.
- Edison fully occupied, [redacted]
- Upgrade of building services in Edison and Brian Sharp as detailed in BSE's report.
- Northlink Place able to be sold, as workspace no longer required in this building.
- Tesla warehouse workplace no longer required in this building, and capex upgrades completed in accordance with KPMG capex programme.

COST SUMMARY

Ranked 1st based upon NPV.

Summary of Financial model basis:

- CCM's cost plan for fitout works and building services upgrades.
- KPMG's assessment of Capex requirements for the Tesla warehouse and lifecycle replacements that are not undertaken in the initial building upgrade.
- KPMG's assessment of operational costs based upon works intended to be completed in the project.
- Nil Terminal value as all buildings and fitout will be at end of life at the end of the model period.
- Northlink Place sale at market valuation.

NON-COST SUMMARY

Ranked 9th in achievement of non-cost outcome assessment.

BENEFITS	Light touch refurbishment of workplace provides a low to medium level of improvement in non-cost criteria. Staff remain at a location that they are familiar with and lesser impact than moving.
SAFETY CONSIDERATIONS	This option will achieve some improvement in safety outcomes for the site, however will not achieve a full upgrade of all safety considerations or a full compliance upgrade. The Tesla warehouse would remain a risk with respect to safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	Powerlink is to remain operating out of the premises whilst works are undertaken, there will be a significant impact whilst construction works are undertaken. The light touch solution does not replace a large portion of the existing workplace, therefore higher risk of higher ongoing maintenance costs and lower staff satisfaction. A higher sharing ratio may cause stress and dissatisfaction for some staff. The growth capacity via an increase in sharing ratios is limited. A number of safety risks remain as full compliance upgrades are not undertaken. As the building fabric and services that are not end of life are retained, there is a risk that unexpected costs may be incurred to address latent conditions, unforeseen failures, etc. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff whilst works are undertaken. Expect some improvement in customer outcomes as a result of improvement in achievement of non-cost objectives.

OPTION SUMMARY 8: DEMOLISH AND REBUILD AT VIRGINIA

OPTION DESCRIPTION

Remain at the Virginia site, however demolish the current office buildings and build new office facilities. Tesla warehouse remains as constructed with capex repairs only.

COST SUMMARY

Ranked 10th based upon NPV.

Summary of Financial model basis:

- CCM cost plan for new building and fitout for the office facilities and control room.
- KPMG's assessment of Capex requirements for the Tesla warehouse.
- Operational costs based upon KPMG's assessment.
- New office building terminal value as per CCM cost plan, as new build will have a value at the end of the financial model period.
- Northlink Place sale at market valuation.
- Leased offsite location for churn space whilst the new building is built with Northlink Place and Brian Sharp fully occupied during the works.

NON-COST SUMMARY

Ranked equal 1st in achievement of non-cost outcome assessment.

BENEFITS	Significant achievement of goals for all non-cost criteria. A new building will achieve full compliance for legislation and building code. Low ongoing operational and maintenance requirements.
SAFETY CONSIDERATIONS	A new office building will achieve full compliance for legislation and building code. Achieving the highest possible safety outcome for the office. The Tesla warehouse would remain a risk with respect to safety concerns that exist in this warehouse.
DISADVANTAGES / RISKS	The requirement to lease churn space and move staff multiple times will be disruptive and costly. Higher cost risk that other scenarios due to the significantly larger scope of works. Tesla warehouse is not replaced in this scenario, there is a risk of failures or incidents in this building until full capex programme is undertaken.
STAKEHOLDER IMPACTS	Significant impact on staff with the requirement to move a large portion of the workforce offsite during construction. Anticipated improvement in customer outcomes as a result of the high achievement of non-cost objectives.

TEST FIT: Not Applicable.

OPTION SUMMARY 9: RELOCATE TO NEW PREMISES, SINGLE LOCATION

OPTION DESCRIPTION

Relocate to new premises under a leased arrangement. With assumptions as follows:

- Single location housing all existing Virginia Site office and warehouse facilities.
- Airport or similar location that has ease of road access, however limited public transport.
- Total of 750 carparks provided.
- Low sharing ratio implemented (therefore 790 desks provided to new office).
- Warehouse provided with a total of 7,150m^2 including lab and associated offices.

COST SUMMARY

Ranked 5th based upon NPV.

Financial model based upon:

- Sale of Northlink Place and Harold Street Premises at market valuation.
- Fitout costs based on government benchmark rates.
- Rent costs and incentive amount based upon market rates at airport or similar.
- Nil Terminal value as all fitout will be at end of life at the end of the financial model period.

NON-COST SUMMARY

Ranked equal 1st in achievement of non-cost outcome assessment.

BENEFITS	Significant achievement of goals for all non-cost criteria. Moving buildings facilitates the opportunity for significant cultural change. Leased option moves the burden of a large portion of the building operation and maintenance to a third party.
SAFETY CONSIDERATIONS	A new building will achieve full compliance for legislation and building code. Achieving the highest possible safety outcome.
DISADVANTAGES / RISKS	Moving facilities will force a significant change on the workforce. Due diligence and decision on location for move may prove difficult for Powerlink. A leased solution may reduce the ability for Powerlink to respond to changed requirements for facilities over the term of the lease. Staff dissatisfaction due to the move.
STAKEHOLDER IMPACTS	No construction impacts for staff. Potential significant change impact for staff to relocate to a new way of working and a new location. Anticipated improvement in customer outcomes as a result of high achievement of non-cost objectives.

TEST FIT: Not Applicable – assumed 12m^2 per workstation to determine area required.

OPTION SUMMARY 10: RELOCATE TO NEW PREMISES, SPLIT LOCATIONS

OPTION DESCRIPTION

Relocate to new premises, splitting the office facilities and the warehouse. With assumptions as follows:

- Leased solution for the office, on city fringe with good public transport.
- Construction of a new warehouse facility on property already owned by Powerlink at Narangba.
- Low sharing ratio implemented (therefore 790 desks provided to new office).
- Office provided with 30 carparks, as public transport to be available for the majority of staff.
- Warehouse constructed with a total of 7,150m^2 including lab and associated offices.

COST SUMMARY

Ranked 9th based upon NPV.

Financial model based upon:

- Sale of Northlink Place and Harold Street Premises at market valuation.
- Fitout costs based on government benchmark rates.
- Rent costs and incentive amount based upon market rates for city fringe.
- Warehouse terminal value as per CCM cost plan, as new build will have a value at the end of the financial model period.

NON-COST SUMMARY

Ranked equal 1st in achievement of non-cost outcome assessment.

BENEFITS	Significant achievement of goals for all non-cost criteria. Moving buildings facilitates the opportunity for significant cultural change. Leased option moves the burden of a large portion of the building operation and maintenance to a third party.
SAFETY CONSIDERATIONS	All new buildings will achieve full compliance for legislation and building code. Achieving the highest possible safety outcome for Powerlink's facilities.
DISADVANTAGES / RISKS	Moving facilities will force a significant change on the workforce. Due diligence and decision on location for move may prove difficult for Powerlink. Narangba is a more remote location for the warehouse facility. A leased solution may reduce the ability for Powerlink to respond to changed requirements for facilities over the term of the lease. Staff dissatisfaction due to the move.
STAKEHOLDER IMPACTS	No construction impacts for staff. Potential significant change impact for staff to relocate to a new way of working and a new location. Anticipated improvement in customer outcomes as a result of high achievement of non-cost objectives.

TEST FIT: Not Applicable – assumed 12m^2 per workstation to determine area required.

Annex B: White & Partners Financial Modelling

9 September 2020

Workplace Options Analysis

Tenant Advisory Report

Powerlink Queensland

White & Partners

Contents

Introduction

White & Partners were engaged by Powerlink as a member of the consultant team undertaking the updated **Our Future Workplace** Options Analysis.

Cost and Non-Cost criteria were employed to assess the future accommodation options available to Powerlink. The cost assessment criteria that Powerlink determined the most relevant to their requirements was Net Present Value (NPV).

Accordingly, we were directed to prepare a financial analysis that calculated the NPV of the cashflows of the following options:

1. Do Nothing
2. Full Workplace Refurbishment - nil sharing ratio
3. Full Workplace Refurbishment - low sharing ratio (85-90%)
4. Full Workplace Refurbishment - high sharing ratio (70-75%)
5. Light Touch Updates - nil sharing ratio
6. Light Touch Updates - low sharing ratio (85-90%)
7. Light Touch Updates - high sharing ratio (70-75%)
8. Demolish and Rebuild
9. Relocate to New Premises – single location (Airport)
10. Relocate to New Premises - split location (Airport Office and Narangba Warehouse extension)
11. Relocate to New Premises - split location (Fringe Office and Narangba Warehouse extension)

The cashflow models for each option commence 1 July 2022 and have a 15 year horizon. The model inputs were derived in collaboration with Powerlink and the agreed assumptions are outlined on pages 5 & 6. Cost and valuation data for the modelling was provided by the following:

- Powerlink
- KPMG
- Collaborative Cost Management (Quantity Surveyors)
- Generate
- Market evidence
- 2016 JLL Valuation Report

The summary table of the Workplace Options Analysis is provided on page 4 of this report and the associated workbook '20200909 Workplace Options Analysis_NPV' is attached.

02 Workplace Options Analysis – Summary Table

Workplace Options	STAY PUT								RELOCATE		
	Do Nothing	Full Refurb (no sharing)	Full Refurb (low sharing)	Full Refurb (high sharing)	LT Refit (no sharing)	LT Refit (low sharing)	LT Refit (high sharing)	Demolish & Rebuild	Relocate Single Location (Aiport)	Relocate Split Location (Airport Office)	Relocate Split Location (Fringe Office)
Horizon[1]	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years
Rent[2]	-		-	-	-	-	-	-	-$112.05m	-$95.47m	-$114.82m
Opex[3]	-$62.26m	-$51.40m	-$51.40m	-$49.01m	-$51.95m	-$51.95m	-$49.54m	-$54.61m	-$39.00m	-$40.39m	-$24.28m
Capex[4]	-$29.64m	-$47.34m	-$47.13m	-$46.54m	-$40.80m	-$40.29m	-$39.69m	-$72.80m	-$0.46m	-$16.02m	-$16.02m
Sale Revenue[5]	-	$11.00m	$11.00m	$11.00m	$11.00m	$11.00m	$11.00m	$11.00m	$34.30m	$34.30m	$34.30m
Terminal Value[6]	-	-	-	-	-	-	-	$17.11m	-	$8.86m	$8 86m
Total[7]	**-$91.90m**	**-$87.74m**	**-$87.53m**	**-$84.56m**	**-$81.75m**	**-$81.23m**	**-$78.23m**	**-$99.30m**	**-$117.21m**	**-$108.72m**	**-$111.96m**
NPV @ 5.9%	**-$64.89m**	**-$65.49m**	**-$65.31m**	**-$63.33m**	**-$60.06m**	**-$59.60m**	**-$57.56m**	**-$91.62m**	**-$64.84m**	**-$65.56m**	**-$67.32m**

Notes:

1. The 15 year horizon is Powerlink's chosen cashflow timeframe commencing 1 July 2022.
2. Rent expenditure is the gross market rent and net market rent for office and warehouse areas respectively, in the relocate options.
3. Stay Put OPEX consists of KPMG figures for the Stay Put Options. Relocation OPEX includes car parking costs, warehouse outgoings and KPMG identified historic specialised tenancy costs expected to be incurred in addition to Landlord outgoings.
4. CAPEX expenditure includes base building refurbishment and fitout costs.
5. Sale revenue represents the notional vacant possession values derived from the 2016 JLL Valuation Report for Northlink Place ($11m) and the whole site ($34.3m).
6. Terminal value is the depreciated value of the new construction under the Demolish & Rebuild option and the Relocate to Split Location that involves a warehouse extension at the Narangba site.
7. The total row is the total of the cashflows for each option in todays dollars. No cost escalation has been applied to any of the model inputs as per instruction by Powerlink.
8. The NPV is the Net Present Value of each cashflow over the 15 year term discounted by the rate of 5.9% as advised by Powerlink.
9. The model has not applied a cost of capital to the CAPEX expenditure or considered the tax effect of depreciation.

03 Model Assumptions

Input/Option	Assumption	Notes
NPV	Discount Rate 5.90%	Confirmed by Powerlink 20/08/2020
Discounted Cash flows	DCF's for all options commence at 1 July 2022 with a 15 year horizon in annual intervals	Agreed in meeting with Powerlink, Generate & W&P 06/08/2020
Terminal Value	• Applied when effective life of capital improvement extends beyond the 15 year horizon • Depreciated value in year 15 provided by QS	Agreed in meeting with Powerlink, Generate & W&P 06/08/2020
Notional Site Values	Vacant Possession Market Values in 2016 JLL Valuation Report	Confirmed by Powerlink 20/08/2020
Cost escalation on OPEX	Not applicable as Powerlink requires the data in today's dollars for reporting purposes	Agreed in meeting with Powerlink, Generate & W&P 06/08/2020
Stay Put Option – ' Do Nothing'	Annual OPEX and CAPEX provided by KPMG	Confirmed by Powerlink 20/08/2020
Stay Put Options (except 'Do Nothing and Rebuild')	• Annual OPEX and Warehouse CAPEX per KPMG • Office CAPEX & Fitout cost provided by QS • Annual provision for ongoing CAPEX per KPMG • Recognise sale of Northlink Place in 2025 (completion of refurbishment) • No terminal value on refurbishment options as effective life is nil at year 15	Confirmed by Powerlink 20/08/2020
Rebuild Option	• Northlink Place and Brian Sharp to be utilized to capacity as workspace with the balance office requirement located offsite in churn space • Churn space costs per sqm as per fringe office inputs • Full replacement of the Edison and Brian Sharp buildings including Fitout costs are supplied by QS • In this scenario Tesla is not rebuilt but refurbished according to the KPMG CAPEX allowance • Occupation of the new buildings is 2026 • Annual provision for ongoing CAPEX per KPMG • Annual OPEX is per KPMG (Full Refurb LSR) • Recognise sale of Northlink Place in 2026 (completion of new build) • Terminal value of the Rebuild provided by QS	Conf rmed by Power nk 20/08/2020

03 Model Assumptions (continued)

Input/Option	Assumption	Notes
Relocate Option (Single Location)	• Office and Warehouse located at the Airport • Car parking requirement of 750 due to limited access to public transport • NLA requirement provided by Generate & fitout provisions provided by QS • Lease commencement in 2025 to allow for completion of fitout works • Sale of the existing Virginia site in 2025 • Market rent and carparking costs provided by White & Partners • Additional annual tenant specialized occupancy costs provided by KPMG (Full Refurb LSR – adjusted by W&P)	Confirmed by Powerlink 20/08/2020
Relocation Option (Split Location – Airport Office)	• Office located at the airport and 7,150 sqm warehouse extension at Narangba • Due to the limited availability of public transport at the airport the model allows for 710 car parking spaces. This number is derived from Powerlink's total parking requirement of 750 (when location has poor access to public transport) less an allocation of 40 cars to the warehouse at Narangba • NLA requirement provided by Generate & fitout provisions provided by QS • Lease commencement in 2025 to allow for completion of fitout works and warehouse construction • Sale of the existing Virginia site in 2025 • Market rent and carparking costs provided by White & Partners • Additional annual tenant specialized occupancy costs provided by KPMG (Full Refurb LSR-adjusted by W&P) • Warehouse construction estimate provided by QS • Terminal value of Warehouse extension provided by QS	Confirmed by Powerlink 20/08/2020
Relocation Option (Split Location – Fringe Office)	• Office located in the city fringe and 7,150 sqm warehouse extension at Narangba • Car parking requirement of 30 for the office with access to public transport • NLA requirement provided by Generate & Fitout provisions provided by QS • Lease commencement in 2025 to allow for completion of fitout works and warehouse construction • Sale of the existing Virginia site in 2025 • Market rent and carparking costs provided by White & Partners • Additional annual tenant specialized occupancy costs provided by KPMG (Full Refurb LSR – adjusted by W&P) • Warehouse construction estimate provided by QS • Terminal value of Warehouse extension provided by QS	Conf rmed by Power nk 20/08/2020

20200909 Workplace Options Analysis_NPV

05 Disclaimer

General disclaimer:

The information forming the basis for this project assessment has been prepared using information from a variety of sources. White & Partners Advisory QLD Pty Ltd does not warrant the accuracy of any of the information and does not accept legal liability or responsibility for any injury, loss or damage incurred by the use of, reliance on, or interpretation of the information.

Qualifications

1. Any cost provisional sums remain subject to a detailed design scope and subsequent cost assessment by a suitably qualified cost planner or engineer.
2. This is not a valuation and we are not qualified valuers. Should an expert formal valuation be required we would direct you to engage the services of registered valuation firm. Our assessment is guidance only based on a number of market based inputs relevant in the current market, which will vary over time. If relying on this advice for long term decision making, an annual or periodic review is strongly recommended.

Confidentiality:

This report has been prepared and issued for distribution to select recipients and provided in accordance with strict confidentiality for the sole use of the addressed recipient.

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Workplace Options	STAY PUT								RELOCATE		
	Do Nothing	Full Refurb (no sharing)	Full Refurb (low sharing)	Full Refurb (high sharing)	LT Refit (no sharing)	LT Refit (low sharing)	LT Refit (high sharing)	Demolish & Rebuild	Relocate Single Location (Aiport)	Relocate Split Location (Airport Office)	Relocate Split Location (Fringe Office)
Horizon[1]	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years	15 years
Rent[2]											
Opex[3]											
Capex[4]											
Sale Revenue[5]											
Terminal Value[6]											
Total[7]	-$91.90m	-$87.74m	-$87.53m	-$84.56m	-$81.75m	-$81.23m	-$78.23m	-$99.30m	-$117.21m	-$108.72m	-$111.96m
NPV @ 5.9%	-$64.89m	-$65.49m	-$65.31m	-$63.33m	-$60.06m	-$59.60m	-$57.56m	-$91.62m	-$64.84m	-$65.56m	-$67.32m

Notes

1. The 15 year horizon is Powerlink's chosen cashflow timeframe commencing 1 July 2022.
2. Rent expenditure is the gross market rent and net market rent for office and warehouse areas respectively, in the relocate options.
3. Stay Put OPEX consists of KPMG figures for the Stay Put Options. Relocation OPEX includes car parking costs, warehouse outgoings and KPMG identified historic specialised tenancy costs expected to be incurred in addition to landlord outgoings.
4. CAPEX expenditure includes base building refurbishment and fitout costs.
5. Sale revenue represents the notional vacant possession values derived from the 2016 JLL Valuation Report for Northlink Place ($11m) and the whole site ($34 3m).
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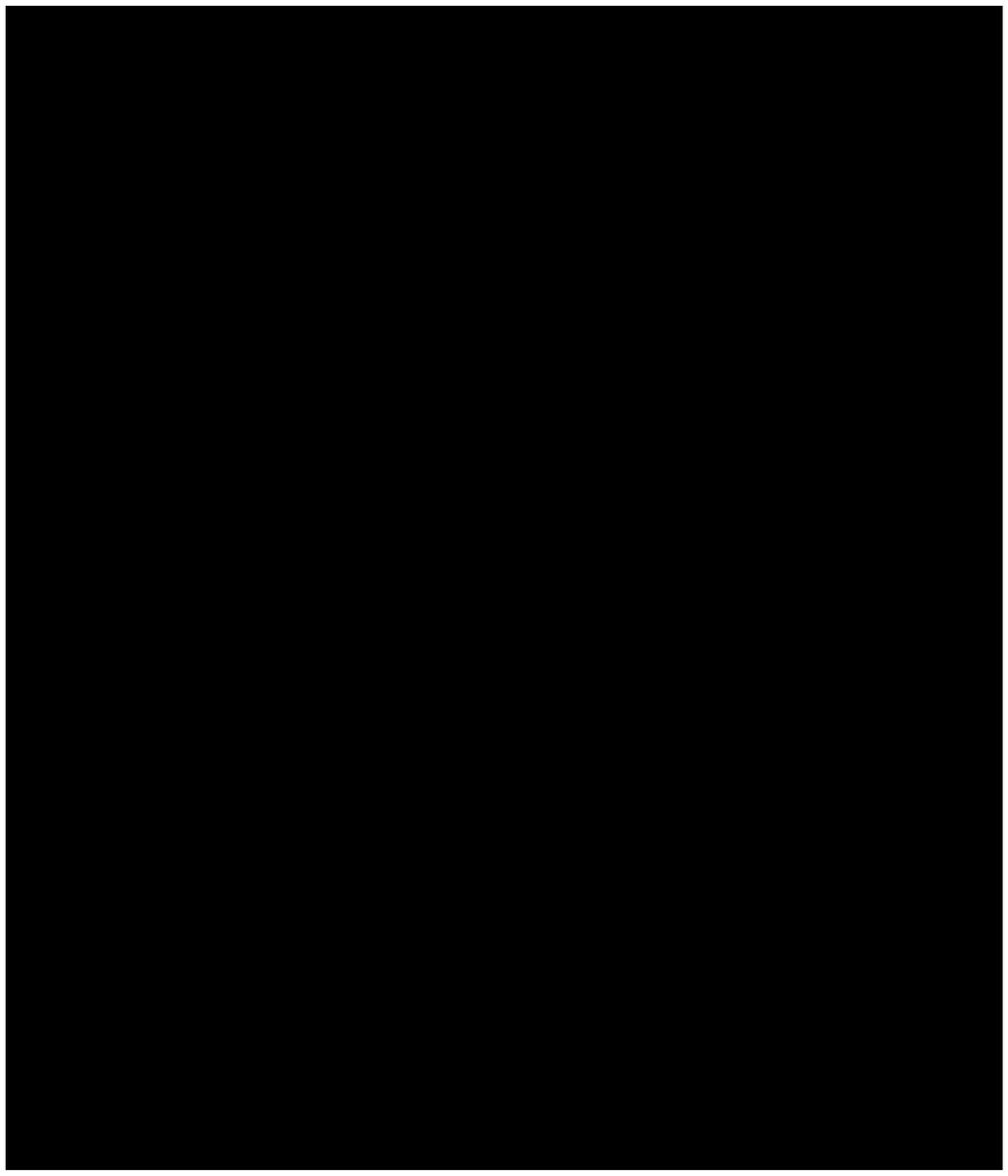
7. The Total Row is the total of the cashflows for each option in todays dollars. No cost escalation has been applied to any of the model inputs as per instruction by Powerlink.
8. The NPV is the Net Present Value of each cashflow over the 15 year term discounted by the rate of 5 9% as advised by Powerlink.
9. The model has not applied a cost of capital to the CAPEX expenditure or considered the tax effect of depreciation.



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Annex C: Non-Cost Analysis

POWERLINK FUTURE WORKPLACE - OPTIONS ANALYSIS | RANKING SUMMARY TABLES

SUMMARY & COST ASSESSMENT

COST ASSESSMENT

		DO NOTHING DIFFERENT			FULL REFURBISHMENT						LIGHT TOUCH REFIT						DEMOLISH & REBUILD AT VIRGINIA		RELOCATE TO NEW PREMISES					
					No Sharing Ratio (931 desks)		Low Sharing Ratio (85/90%)		Higher Sharing Ratio (70/75%)		No Sharing Ratio		Low Sharing Ratio (85/90%)		Higher Sharing Ratio (70/75%)				Single leased location		Split location	
ASSESSMENT CRITERIA	WEIGHT	Value	Ratio (value / lowest NPV)		Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)	Value	Ratio (value / lowest NPV)		
NPV	100%	-$ 64,887,584	0.89		-$ 65,493,249	0.88	-$ 65,307,725	0.88	-$ 63,333,095	0.91	-$ 60,059,521	0.96	-$ 59,598,937	0.97	-$ 57,559,431	1	-$ 91,623,677	0.63	-$ 64,837,633	0.89	-$ 67,317,718	0.86		
RANK				6		8		7		4		3		2		1		10		5		9		

NON-COST ASSESSMENT

		DO NOTHING DIFFERENT			FULL WORKPLACE REFIT						LIGHT TOUCH REFIT								RELOCATE TO NEW PREMISES					
					No Sharing Ratio			Low Sharing Ratio (85/90%)			Higher Sharing Ratio (70/75%)			No Sharing Ratio			Low Sharing Ratio (85/90%)			Higher Sharing Ratio (70/75%)			DEMOLISH & REBUILD AT VIRGINIA			Single leased location			Split location		
ASSESSMENT CRITERIA	WEIGHT	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value	Comment	Rating	Weighted Value
Enhance Safety / Legislative Compliance	40%	Some improvement, however less than targeted	2	0.8	Significant achievement of goals	5	2	Significant achievement of goals	5	2	Significant achievement of goals	5	2	Medium improvement	3	1.2	Medium improvement	3	1.2	Medium improvement	3	1.2	Significant achievement of goals	5	2	Significant achievement of goals	5	2	Significant achievement of goals	5	2
Improved Staff Wellbeing	15%	Nil improvement	0	0	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75	Medium improvement	3	0.45	Medium improvement	3	0.45	Medium improvement	3	0.45	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75
Improved Culture & Engagement	10%	Nil improvement	0	0	Significant achievement of goals	5	0.5	Significant achievement of goals	5	0.5	Strong positive impact	4.5	0.45	Medium improvement	3	0.45	Medium improvement	3	0.45	Medium improvement	2.5	0.25	Significant achievement of goals	5	0.5	Significant achievement of goals	5	0.5	Significant achievement of goals	5	0.5
Improved Productivity	15%	Nil improvement	0	0	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75	Significant achievement of goals	4.5	0.675	Significant achievement of goals	4	0.6	Significant achievement of goals	4	0.6	Significant achievement of goals	4	0.6	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75	Significant achievement of goals	5	0.75
Efficient Sustainable Design & Improved Building Management Systems	20%	Nil improvement	0	0	Significant achievement of goals	4.5	0.9	Significant achievement of goals	4.5	0.9	Strong positive impact	4	0.8	Some positive improvement	2.5	0.5	Some positive improvement	2.5	0.5	Some positive improvement	2	0.4	Significant achievement of goals	5	1	Significant achievement of goals	5	1	Significant achievement of goals	5	1
TOTAL	100%			0.8			4.9			4.9			4.675			3.2			3.2			2.9		5			5			5
RANK				10			4			4			6			7			7			9		1			1	#N/A	#N/A	1

SCORING MATRIX	
Nil Improvement / Strong negative impact	0
Limited improvement	1
Some improvement or positive impact, however significantly less than targeted.	2
Medium achievement of goals / average positive impact, however further improvement could be achieved	3
Strong positive impact, however further improvement could be achieved	4
Significant achievement of goals / Strong positive impact	5

POWERLINK FUTURE WORKPLACE - OPTIONS ANALYSIS

NON-COST CRITERIA

ITEM	DESCRIPTION	AER CAPITAL EXPENDITURE OBJECTIVES				POWERLINK STRATEGIC THEME						DO NOTHING DIFFERENT	FULL REFURBISHMENT			LIGHT TOUCH REFIT			RELOCATE TO NEW PREMISES	DEMOLISH & REBUILD AT VIRGINIA
		Meet or manage the demand for prescr bed transmission services	Comply with applicable regulatory obligations or requirements associated with the provision of proscribed transmission services	Maintain the quality reliability or security of supply of prescribed transmission services	Maintain the safety of the transmission system through the supply of prescribed transmission services	SAFE FOR LIFE	FUTURE REGULATED NETWORK	A GREAT PLACE TO WORK	CUSTOMER FOCUS & INFLUENCE	INNOVATE FOR THE FUTURE	NON-REGULATED BUSINESS		No Sharing Ratio (1:1 desk allocation)	Low Sharing Ratio (85/90%)	Higher Sharing Ratio (70/75%)	No Sharing Ratio (1:1 desk allocation)	Low Sharing Ratio (85/90%)	Higher Sharing Ratio (70/75%)		
ENHANCED SAFETY & LEGISLATIVE COMPLIANCE																				
Address Disabled Bathroom Compliance	Current disabled bathrooms are non-compliant with the Disability Discrimination Act, Disability (Access to Premises - Buildings) Standards and Design of Access and Mobility AS1428.1.		X			X						Not achieved	Achieved	Achieved	Achieved	Not achieved	Not achieved	Not achieved	Achieved	Achieved
Workplace Health & Safety Legislative Compliance	Compliance with responsibilities under Queensland Work Health & Safety Act 2011 and Work Health & safety Regulation 2011 - duty of care so far as reasonably practicable to ensure health & safety of staff, visitors and contractors. This includes provision and maintenance of work environments, premises, plant and structures, such that workers are not exposed to risks to health and safety.		X			X						Planned works to address is delayed	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Fire Stair Installation	Current fire stairs are non-compliant with current Building Code of Australia (BCA) and do not provide the highest level of safety for the workplace.		X			X						Not achieved	Achieved	Achieved	Achieved	Not achieved	Not achieved	Not achieved	Achieved	Achieved
Sprinkler Installation (Fire Safety)	Sprinklers are not currently installed in the office areas. National Construction Code (NCC) and Building Code of Australia (BCA) compliance upgrades may be triggered when certain works are undertaken. The lack of sprinklers does not provide the highest level of safety for the workplace.		X			X						Not achieved	Achieved	Achieved	Achieved	Not achieved	Not achieved	Not achieved	Achieved	Achieved
Passenger lift replacement	The current lift is end of life and replacement parts are difficult to source and time constrained. During this time there is no compliant disabled access to the upper levels of the buildings. Therefore the facility is non compliant with the Disability Discrimination Act and Disability (Access to Premises - Buildings) Standards.		X			X		X				Planned works to address is delayed	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Compliance with Safe Work Australia - Managing the Work Environment and Facilities Code of Practice	This code of practice defines specific safe work obligations with respect to: - access & egress - work areas and workstations - flooring, lighting and housekeeping - ventilation, heating & cooling - provision of facilities for workers - emergency planning.		X			X		X				Meets minimum requirements, however does not achieve good practice	Achieved	Achieved	Achieved	Meets minimum requirements, however does not achieve best practice	Meets minimum requirements, however does not achieve best practice	Meets minimum requirements, however does not achieve best practice	Achieved	Achieved
Policy for the maintenance of Queensland Government Buildings	Assets must be properly maintained such that they continue to support the delivery of a wide range of government services, which fulfil the social, economic and environmental needs of the community. When assessing the risk associated with failure of an asset, departments should take into consideration the perception of the community.		X			X						Not achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Address slip rating to floors	Reception, kitchen, bathrooms are non compliant with Building Code of Australia (BCA) requirements.		X			X						Planned works to address, pending	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
IMPROVED STAFF WELLBEING																				
High quality breakout space, gym and end of trip facilities	Staff are more likely to pursue a healthy lifestyle (if option proceeds) and can assist Powerlink reduce costs associated with absenteeism.			X		X						Not achieved	Partially achieved, pending final budget for EOT and Gym	Partially achieved, pending final budget for EOT and Gym	Partially achieved, pending final budget for EOT and Gym	Not achieved	Not achieved	Not achieved	Likely to be achieved, pending new building selection	Likely to be achieved
Provision of modern environment	Open, new furniture, collaboration spaces, accommodating a variety of work styles, etc. Leading to an improvement in quality and volume of work produced.			X				X	X	X		Not achieved	Achieved	Achieved	Achieved	Partially achieved - however full upgrade to collaboration spaces not achieved	Partially achieved, however collaboration spaces of concern	Partially achieved, however collaboration spaces of concern	Achieved	Achieved
Variety of workstations & spaces	Accommodates variety of working styles and promotes physical movement. Leading to a likely reduction in staff absenteeism and improved productivity.					X		X				Not achieved	Achieved	Achieved	Achieved	Generally achieved, with variety of workspaces	Generally achieved	Generally achieved	Achieved	Achieved
Atrium revitalisation	Provides a high visual amenity and quality environment for staff. Leading to a likely reduction in staff absenteeism and improved productivity.							X		X		Not achieved	Achieved	Achieved	Achieved	Not achieved	Not achieved	Not achieved	N/A pending building selection	N/A pending new building design
Fostered sense of community and connection	A focus on staff wellbeing demonstrates community pride, satisfaction and can provide a competitive advantage through collaboration and sharing of ideas.							X	X			Not achieved	Achieved	Achieved	Achieved	Improvement, however exclusion of ancillary & meeting spaces limit impact	Improvement, however exclusion of ancillary & meeting spaces limit impact	Improvement, however exclusion of ancillary & meeting spaces limit impact	Achieved	Achieved
Improved attraction and retention of younger staff	Addresses demand for modern facilities (offered by other firms) that align with current education and workplace environments globally. Improved technology integration into the workplace. Attraction and retention of high quality workforce to deliver a better customer outcome.							X	X			Not achieved	Achieved	Achieved	Achieved	Lesser impact due to limited non-work setting upgrades	Lesser impact due to limited non-work setting upgrades	Lesser impact due to limited non-work setting upgrades	Achieved	Achieved
Improved workforce mental health	Design will focus on wellness, staff movement and physical / mental opportunities. Leading to a likely reduction in staff absenteeism.			X		X		X				Not achieved	Achieved	Achieved	Achieved	Lesser impact, however will still have a positive outcome	Lesser impact, however will still have a positive outcome	Lesser impact, however will still have a positive outcome	Achieved	Achieved
Construction Impacts	Extent of impact / disruption on the operational environment during works.											Nil	High	High	High	Moderate - moves required within the workplace, however less than full refurb	Moderate	Moderate	Limited - relocation requirement only	High - full temporary location would be required to be sourced & 2 relocations required
IMPROVE CULTURE AND ENGAGEMENT																				
Accommodating diverse workforce	Variety of work settings accommodates generational and diverse differences in work styles. Technology supports flexible working to allow diversity of working hours and styles. Attraction and retention of high quality workforce to deliver a better customer outcome.			X				X		X		Not achieved	Achieved	Achieved	Achieved	Variety of work settings accommodates work styles however less opportunity for fully diverse options	Variety of work settings accommodates work styles however less opportunity for fully diverse options	Variety of work settings accommodates work styles however less opportunity for fully diverse options	Achieved	Achieved
Meeting staff expectations	Provision of a future proofed, disease resilient work place that meets the needs of staff and customers.			X				X				Not achieved	Achieved	Achieved	The higher sharing ratio may be of concern to staff and lead to some dissatisfaction	May be viewed as an incomplete result & not fully achieving expectations	May be viewed as an incomplete result & not fully achieving expectations	May be viewed as an incomplete result & not fully achieving expectations / The higher sharing ratio may be of concern to staff and lead to some dissatisfaction	Achieved	Achieved
Improved Collaboration and connection	Design will encourage movement between buildings and casual meeting points. Flexibility of workspace will allow broader use of the full facility. Reduction of personal office / zones. Increase business knowledge and build broader networks. Leading to an improvement in quality and volume of work produced.	X		X				X	X	X		Not achieved	Achieved	Achieved	Achieved	Improvement achieved, however full impact lesser than other options under consideration	Improvement achieved, however full impact lesser than other options under consideration	Improvement achieved, however full impact lesser than other options under consideration	Achieved	Achieved

ITEM	DESCRIPTION	AER CAPITAL EXPENDITURE OBJECTIVES				POWERLINK STRATEGIC THEME						DO NOTHING DIFFERENT	FULL REFURBISHMENT			LIGHT TOUCH REFIT			RELOCATE TO NEW PREMISES	DEMOLISH & REBUILD AT VIRGINIA
		Meet or manage the demand for prescr bed transmission services	Comp y with appl cab e regulatory obligations or requirements associated with the provision of proscribed transmission services	Maintain the quality reliability or security of supply of prescribed transmission services	Maintain the safety of the transmission system through the supply of prescribed transmission services	SAFE FOR LIFE	FUTURE REGULATED NETWORK	A GREAT PLACE TO WORK	CUSTOMER FOCUS & INFLUENCE	INNOVATE FOR THE FUTURE	NON-REGULATED BUSINESS		No Sharing Ratio (1:1 desk allocation)	Low Sharing Ratio (85/90%)	Higher Sharing Ratio (70/75%)	No Sharing Ratio (1:1 desk allocation)	Low Sharing Ratio (85/90%)	Higher Sharing Ratio (70/75%)		
Aligns with Cultural Transformation Project	Design that functionally and symbolically reflects Powerlink and its aspirations. Workplace project offers a tool for the Leadership team to implement cultural change and workplace efficiencies.			X				X	X	X		Not achieved	Achieved	Achieved	Achieved	Unlikely to achieve the full outcomes to align	Unlikely to achieve the full outcomes to align	Unlikely to achieve the full outcomes to align	Achieved	Achieved
Market Perception	Future proofed tenancy that allows the best staff to deliver their "best work" in an efficient and sustainable manner.			X				X				Not achieved	Achieved	Achieved	Some staff may experience stress / anxiety with the higher sharing ratio.	Environment is still likely to appear dated & likely to have lesser impact	Environment is still likely to appear dated & likely to have lesser impact	Environment is still likely to appear dated & likely to have lesser impact	Achieved	Re-build may be viewed as extravagant
Improved brand	Improvement in brand perception and reputation as likely to be seen as a place that people want to work and fosters alignment with Powerlink s future objectives. Leading to recruitment of high quality candidates.							X				Not achieved	Achieved	Achieved	Achieved	As the full environment will not be upgraded, the impact on brand will likely be less than other options	As the full environment will not be upgraded, the impact on brand will likely be less than other options	As the full environment will not be upgraded, the impact on brand will likely be less than other options	Achieved	Achieved
Workplace symbolically reflects the organisation and its aspirations	Alignment with Powerlink strategic initiatives and a focus on the customer.							X	X	X	X	Not achieved	Achieved	Achieved	Achieved	The limitations on scope may limit the ability to achieve this criteria	The limitations on scope may limit the ability to achieve this criteria	The limitations on scope may limit the ability to achieve this criteria	Achieved	Achieved
Improved customer satisfaction and retention, longer term cost savings	The improvement in staff satisfaction, cultural alignment and efficiencies from the refurbishment will lead to improved customer service and provision of prescribed transmission services.	X		X					X	X		Not achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Improved staff retention	The variety of work settings will accommodate the different work styles and likely lead to higher engagement. Technology improvement to allow "work anywhere" is likely to lead to better retention of a diverse workforce.			X				X				Not achieved	Achieved	Achieved	The higher sharing ratio may be of concern to staff and lead to some dissatisfaction	The limitations on scope may limit the ability to achieve this criteria	The limitations on scope may limit the ability to achieve this criteria	The limitations on scope may limit the ability to achieve this criteria / The higher sharing ratio may be of concern to staff and lead to some dissatisfaction	Achieved	Achieved
Integration of Field within the Corporate Environment	Allow specific requirements for field staff to be incorporated into the project scope and design, ensuring focus on prescribed transmission services.	X		X	X		X	X	X	X	X	Not achieved	Achieved	Achieved	Achieved	The budget limitation may impact the full achievement of this item	The budget limitation may impact the full achievement of this item	The budget limitation may impact the full achievement of this item	Achieved	Achieved
IMPROVED PRODUCTIVITY																				
Improved meeting rooms and visitor management	Improved integration with visitors, ease of obtaining rooms, etc. Improved efficiency of operations.			X				X				Not achieved	Achieved	Achieved	Achieved	Low impact - a number of the meeting rooms will remain unchanged	Moderate impact - a number of the meeting rooms will remain unchanged	Moderate impact - a number of the meeting rooms will remain unchanged	Achieved	Achieved
Improved technology facilitating mobility within the workspace	Improved meeting room technology to assist productivity and effectiveness of meetings. Improved flexibility (eg touch-down points). Increased laptops and ability to "work anywhere".	X		X			X	X		X		Not achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Improved staff efficiency	(*Recent research by Libby Sander of Bond University Business School shows that cluttered spaces can have negative effects on our stress levels and our ability to focus*) Works will support a clean desk policy and provide a clean and open environment.			X				X	X			Not achieved	Achieved	Achieved	Some staff may experience stress / anxiety with the higher sharing ratio	Achieved	Achieved	Some staff may experience stress / anxiety with the higher sharing ratio	Achieved	Achieved
Fit for Purpose workspace	Variety of work settings allow for the full variety of required work environment (eg quiet space, collaboration space, phone space). Improved productivity by more closely aligning the type of work to its setting.	X		X				X		X		Not achieved	Achieved	Achieved	Achieved	Improvement achieved, however full impact lesser than other options under consideration	Improvement achieved, however full impact lesser than other options under consideration	Improvement achieved, however full impact lesser than other options under consideration	Achieved	Achieved
Attraction and retention of talent (reduced recruitment cost)	Provide a modern and highly functional work environment, likely to attract quality staff. Provide workplace that supports diversity, leading to increased retention. Tangible evidence to existing staff that they are valued and likely to lead to increased retention.	X		X				X	X			Not achieved	Achieved	Achieved	Some staff may experience stress / anxiety with the higher sharing ratio	Improvement achieved, however impact likely to be limited by exclusion of ancillary spaces	Improvement achieved, however impact likely to be limited by exclusion of ancillary spaces	Improvement achieved, however impact likely to be limited by exclusion of ancillary spaces / Some staff may experience stress / anxiety with the higher sharing ratio	Achieved	Achieved
Flexibility	Space provides flexibility for teams to come together quickly for a project or a problem and disperse once an objective is achieved Space provides for flexible work environment and accommodated different working styles. Leading to an improvement in quality and volume of work produced.			X				X	X	X		Not achieved	Achieved	Achieved	Achieved	Improvement achieved, however impact likely to be limited by exclusion of ancillary spaces	Improvement achieved, however impact likely to be limited by exclusion of ancillary spaces	Improvement achieved, however impact likely to be limited by exclusion of ancillary spaces	Achieved	Achieved
EFFICIENT SUSTAINABLE DESIGN AND IMPROVED BUILDING MANAGEMENT SYSTEMS																				
Achievement of Greenstar and/or Well best practice endeavours (nil rating)	Meets recommended standards for fresh air, natural light, and demonstrates Powerlink's commitment to sustainability across environmental benchmarks.											Not achieved	Possible to achieve, pending budget	Possible to achieve, pending budget	Possible to achieve, pending budget	Not achieved	Not achieved	Not achieved	Possible to achieve, pending budget	Possible to achieve, pending budget
Reduction in electricity use	Operational cost saving.								X			Not achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Space utilisation technology room utilisation monitoring	Efficient BMS, operational cost savings, effective & efficient use of space.							X		X		Not achieved	Achieved	Achieved	Achieved	Not achieved	Not achieved	Not achieved	Achieved	Achieved
Efficient processes	Reduced paper usage and storage reduction.							X				Not achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Improved recycling	Design will accommodate opportunities for improved waste management.							X				Not achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved	Achieved
Future Proofing: Flexible workspace	Provides flexibility to reconfigure the workspace quickly and low cost in response to small and large changes to the organisation. Costs associated with changing seating allocations ("churn") are reduced.	X		X			X	X		X		Not achieved	Achieved	Achieved	Growth capacity via increase in sharing ratios is less than other options	Unlikely to achieve full outcome due to exclusion of meeting areas	Unlikely to achieve full outcome due to exclusion of meeting areas	Unlikely to achieve full outcome & growth capacity via increase in sharing ratios is less than other options / Growth capacity via increase in sharing ratios is less than other options	Achieved	Achieved
Future Proofing: New meeting rooms and collaboration spaces	Future proofing workplace to ensure that the design implemented is sustainable.			X			X	X		X		Not achieved	Achieved	Achieved	Achieved	Not achieved	Not achieved	Not achieved	Achieved	Achieved
Improved meeting room management	Implementation of technology to improve meeting room management, monitoring of use and staff time allocation.							X		X		Not achieved	Achieved	Achieved	Achieved	Meeting rooms not included, therefore not achieved	Meeting rooms not included, therefore not achieved	Meeting rooms not included, therefore not achieved	Achieved	Achieved

SCORING KEY	
Not achieved	
Achieved	
Partial achievement, however impact my be limited	

Annex D: Interior Design Workplace Planning

Due to size document not incorporated into this report, please refer to separate document issued via web-link

Annex E: Certifier Compliance Assessment

Building Certification | Building Code Consultancy

BUILDING CODE ASSESSMENT REPORT

PROJECT INFORMATION:	
Knisco Project Reference:	**206603**
Project Name:	Powerlink Workplace Review
Project Address:	33 Harold St, Virginia QLD 4014 (Lot 8 on SP241022)
Local Government:	Brisbane City Council
Client:	Generate Property Group
Applicable BCA Edition:	BCA 2019

REVISION HISTORY:

Revision:	Issue Date:	Purpose:	Prepared By:
1	13 August 2020	BCA Assessment Report (Test Fit Review)	[redacted]
2	20 August 2020	BCA Assessment Report (Options Feasibility)	[redacted]

1. PURPOSE OF REPORT

This Building Code Assessment Report has been developed to detail the assessment of the proposed works for the Full Refurbishment, minor refurbishment and do nothing option against the Deemed-to-Satisfy Provisions of the Building Code of Australia and detail any triggers for compliance with relevant building legislation.

2. BCA SUMMARY

The proposed work has been understood to be a review of proposed test fit options relating to the refurbishment/fitout of the existing office buildings, specifically the Edison and Brian Sharp Buildings.

For the purpose of the BCA, the building works have been assessed as follows:

Building	**Edison**	**Brian Sharp**
Proposed/Intended use	**Office**	**Office**
Building Classification	Class 5	Class 5
Type of Construction	Type B	Type C
Effective Height	<12m	<25m
Rise in Storeys	2	3
Number of Storeys	2	3
Floor Area *(Approx.)*	Ground - 4,475m^2 Level 1 - 4,475m^2	Level 1 - 2,495m^2 Level 2 – 2,490m^2

3. TECHNICAL ASSESSMENT NOTES

The following Assessment Notes document Knisco's assessment of the design documentation against Queensland Building Legislation, including the Building Code of Australia and AS1428.1.

5.1 Building Act 1975

Ref.	Issue/s	Action/s
Application of Work to Existing Buildings		
BA-1	*Section 68 of QLD Building Act 1975* All new work / alterations to an existing building must not unduly reduce the following— • The existing level of fire protection for persons accommodated in, or using, the building or structure • The existing level of resistance to fire of the building or structure • The existing safeguards against the spread of fire to adjoining buildings or structures • The existing level of emergency egress from the building or structure	Note only. When considering work to an existing building, it is important to ensure any new works do not reduce the existing level of compliance. This report has taken this Section into consideration when determining required scope.
BA-2	*Section 81 of QLD Building Act 1975* If the proposed alterations or any alterations approved/completed in the last three years represent more than half of the total volume of the existing building (measured over its roof and external walls), the whole building is required to be upgraded to comply with current requirements (This requirement is often referred to as the "50% rule") An assessment of the proposed works has considered the following in relation to the existing building. • The alterations do not impact more than half the total volume of the existing building or structure measured over its roof and external walls; and • If work is undertaken in accordance with this BCA requirements listed in this assessment report, the alterations do not pose a risk: – to the safety of persons accommodated in or using the building or structure; or – of spreading fire to adjoining buildings or structures.	Note only. When assessing the requirements of Section 81, we can confirm that all options DO NOT trigger the application of the 50% rule, as no option represents more than 50% of the buildings total building volume. HOWEVER, when determining Section 81, Knisco (through this report) has factored in parts of the building which must be upgraded beyond the minimum scope in order to ensure the alterations do not pose a risk to the safety of persons accommodated, or spread of fire to adjoining buildings.

5.2 Building Code of Australia

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
Part B – Structure				
B-1	*Part B1* Any work to structural elements must be designed to comply with Part B1 of the BCA and AS1170. It is noted that works proposed under both the full refurbishment and light touch proposals that will require structural design by a BPEQ engineer include: • New lift shaft and associated structure; and • New internal circulation stairs and associated works (ie: slab cut outs and bracing etc). Other structural works to consider during design development may include — • Operable walls • Penetrations through slabs • Structural loads for heavy plant or equipment • New/modified elements, e.g. balustrades	N/A	For consideration by structural designer during design development.	For consideration by structural designer during design development.
B-2	*Part B1* In addition to the above, non-structural parts of the building & services must be designed & constructed to comply with AS1170.4 for earthquake loads. For the purpose of this project, these parts & services may include: • Walls & partitions • Ceilings • Floors • Fixings for services, e.g. mechanical ducts, hydrant risers, sprinkler mains, cable trays, etc.	N/A	For consideration by structural designer during design development.	For consideration by structural designer during design development.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
Part C – Fire Resistance				
C-1	*Part C1.1* The following work must ensure the required Fire Resistance Level is being maintained and/or achieved: • New lift shaft – No FRL required • New floors (if required for stair/lift cut-outs) – No FRL required. Note – Edison building is fire separated from the Brian Sharp building by a sliding fire door.	N/A	N/A	N/A
C-2	*Part C1.9 – Non-Combustible External Walls & Claddings* For Type A or B construction, the following building elements and their components must be non-combustible as determined by testing to AS1530.1— • External walls and common walls, including all components incorporated in them such as any façade covering, framing, insulation and *any lining to the internal side of the wall*. • The floor and floor framing of lift pits • Any non-loadbearing internal walls where they are required to be fire-resisting.	It is understood a separate scope of works are considering the non-compliant cladding removal.	It is understood a separate scope of works are considering the non-compliant cladding removal.	It is understood a separate scope of works are considering the non-compliant cladding removal.
C-3	*Part C1.10* Fire hazard properties of any material or assembly within the building must comply with Spec C1.10 for floor, wall, ceiling linings or any other material.	N/A	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.
C-4	*Part C3.12 & C3.15* All services penetrating a building element required to have a fire resistance level must be protected in accordance with Part C3.15. All tested system and details must be provided.	N/A	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
Part D – Access & Egress				
D-1	*Part D1.2* For the purpose of this project, egress must be via— • At least 2x exits • Access to an exit must be direct (without passing through another sole occupancy unit or tenancy).	Note only. Compliance is achieved.	Note only. Compliance is achieved.	Note only. Compliance is achieved.
D-2	*Part D1.4* Travel distances to an exit must not exceed 20m to an exit or a point of choice to two exits with total travel to one of those exits not being more than 40m.	N/A	A review of the existing egress appears to be on the limit of the 40m maximum travel to an exit. A detailed assessment will be required once detailed drawings are made available. If travel exceeds 40m, this can be addressed via a performance solution through fire engineering.	A review of the existing egress appears to be on the limit of the 40m maximum travel to an exit. A detailed assessment will be required once detailed drawings are made available. If travel exceeds 40m, this can be addressed via a performance solution through fire engineering.
D-3	*Part D1.6* A minimum of 1000mm must be provided to all paths of travel to an exit.	Some main corridors are obstructed by printers and equipment – these should be removed/relocated.	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
D-4	*Part D2.10, D2.13, & D2.14* All stairs, and landings must have a slip resistance classification not less than listed under Table D2.14 when tested in accordance with AS4586.	Existing stairs and ramps should be upgraded with slip resistant nosings for save movement.	Existing stairs and ramps should be upgraded with slip resistant nosings for save movement. All new stairs and ramps must comply.	Existing stairs and ramps should be upgraded with slip resistant nosings for save movement. All new stairs and ramps must comply.
D-5	*Part D2.16* Balustrades are required to serve all areas where a fall greater than 1m is possible. It is noted for the "***full refurbishment***" that balustrades may be required for the new stairs. If this is the case, consider the following: • Balustrades to be a minimum height of 1000mm above FFL; • If the fall below is greater than 4m no climbable horizontal elements to be provided. • Engineer to design the balustrade to cater for loading requirements.	All balustrade throughout to be upgraded to a minimum 1m height and any areas capable of allowing a 'step' to be relocated more than 900mm away – this includes all balustrade surrounding the open void.	All balustrade throughout to be upgraded to a minimum 1m height and any areas capable of allowing a 'step' to be relocated more than 900mm away – this includes all balustrade surrounding the open void.	All balustrade throughout to be upgraded to a minimum 1m height and any areas capable of allowing a 'step' to be relocated more than 900mm away – this includes all balustrade surrounding the open void.
D-6	*Part D3.2* Access for a person with a disability must be provided to and within all areas normally used by occupants. Note that in accordance with the Disability (Access to Premises – Buildings) Standards 2010, the following areas are required to comply for disability access: • New areas are to comply with AS1428.1; • Paths of travel to those new areas known as "affected areas" are required to comply.	N/A	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.
D-7	*Part D3.6, Part D3.7, Part D3.8 and Part*	N/A	All new works to	All new works to

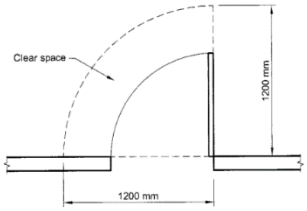
		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
	D3.12 For the "***full refurbishment***" option, the following items are required to be upgraded to comply — • Braille & tactile signage — All toilets (male / female / disabled / ambulant) and exits must be provided with Braille & tactile signage The signage must be located with tactile lettering between 1250mm and 1350mm above the FFL. The location of the sign must be provided on the latch side of the wall between 50-300mm away from the architrave. If this is not possible, this sign may be provided to the door. For exit signs, these signs must state "EXIT" and which level the door is located (e.g. Level 1). • Hearing augmentation – A hearing augmentation system must be provided wherever an inbuilt amplification system is provided. An inbuilt hearing augmentation system or hand-held system can be provided. • Tactiles – All stairways, ramps, and any overhead obstructions less than 2000mm in height must be provided with tactile indicators in accordance with AS1428.4.1 (2009) • Glazing decals / motifs – A 75mm glazing motif/decal must be provided to all glazed panels that are capable of being mistaken for a doorway. The decal must be located between 900mm and 1000mm above the FFL and extend for the full width of the glazing. • Luminance contrast of doors – A 50mm wide 30% colour contrast must provided to all doorways so that persons with vision impairments can readily identify the door. • All new/modified doorways are to achieve a minimum clear opening of 850mm.		comply. To be considered during design development.	comply. To be considered during design development.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
D-8	*Disability Discrimination Act* The Disability Discrimination Act (DDA) is complaints based legislation; therefore full compliance is unable to be determined unless tested in the court of law. However, the Disability (Access to Premises – Buildings) Standards 2010 (and subsequently BCA) have been revised to meet the intent of the DDA. The Commonwealth Government have confirmed that compliance with both the Disability (Access to Premises – Buildings) Standards 2010 and the BCA will meet the intent of the DDA. This report identifies compliance with the: • Disability (Access to Premises – Buildings) Standards 2010 • Building Code of Australia (and subsequently AS1428.1) To provide further advice against a complaint being made under the DDA, Knisco Inclusive Access can provide more detailed advice relating to access for people with a disability, including the management of DDA risks. Further to this, Knisco Inclusive Access can assist in the formulation of any Performance Solutions.	Note only. Compliance with the intent of the DDA does not comply.	To be considered during design development – in addition to the requirements of the BCA & Australian Standards. DDA Access Consultant recommended through design phase.	To be considered during design development – in addition to the requirements of the BCA & Australian Standards. DDA Access Consultant recommended through design phase.
Part E – Services & Equipment				
E-1	*Part E1.3* Fire hydrant coverage must be achieved throughout all parts of the building. It is noted that no hydrant works are proposed as part of the "***full refurbishment"*** unless required to achieve coverage compliance. Scaled hydrant drawings will be required that show the new fitout to determine compliance but it is not anticipated that revisions to that system will be required.	N/A	Coverage review of existing system to be reviewed with new layout. An upgrade of the existing system may be required.	Coverage review of existing system to be reviewed with new layout. An upgrade of the existing system may be required.
E-2	*Part E1.4* Fire hose reel coverage must be achieved throughout all parts of the building.	N/A	Coverage review of existing system	Coverage review of existing system

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
			to be reviewed with new layout. An upgrade of the existing system may be required. As part of the new works, fire hose reels may be removed as they are no longer required under BCA2019.	to be reviewed with new layout. An upgrade of the existing system may be required. As part of the new works, fire hose reels may be removed as they are no longer required under BCA2019.
E-3	*Part E1.5* Any building exceeding the allowable floor area and volume of Part C2 of the BCA could be considered a large isolated building. Based on the floor area of the Edison building exceeding Part C2, the building should be considered a large isolated building – which requires vehicle access and sprinklers.	N/A	N/A	Note only. Section 81 of the Building Act 1975 does not require the building to be upgraded to comply with sprinklers and vehicular access, however, if additional works are proposed beyond the scope of this project, Powerlink must reconsider the implications of Section 81 of the Act.
E-4	*Part E1.6* Fire extinguishers must be provided and comply with AS2444. Note that there is the chance to remove FHR from class 5 office parts and replace with extra fire extinguishers under the new building codes (BCA 2019 Amdt. 1). If you would like to investigate this option, it is recommended that you discuss with relevant services designer to confirm the	N/A	Upgrade existing system to comply with current code.	Upgrade existing system to comply with current code.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
	practicality/savings.			
E-5	*Part E2.2 & E4.9* It is noted that both existing buildings are protected with a smoke detection and alarm system. It is understood that under the "***full refurbishment***" option that the smoke detection and alarm system is being replaced. Note that service design will be responsible for ensuring that the smoke detection and alarm system complies with the relevant Australian Standards.	N/A	New fire detection system to ensure compliance with AS1670.1.	New fire detection system to ensure compliance with AS1670.1.
E-6	*Part E3.6* It is understood that the existing passenger lift is at the "end of life" and is proposed to be replaced under the "***full refurbishment***" option. Note that the following lift options are available from Table E3.6(a): • Electric, electrohydraulic and inclined lifts; **or** • Small sized, low-speed automatic lift – must not be used for travel more than 12m. The new lift will need to comply with AS1735.12 for disability access features.	N/A	N/A	New lift to ensure compliance with Part E3.6 – details of lift design to be discussed during design development.
E-7	*Part E4.2 & E4.5* It is understood that the existing emergency lighting and exit signage system is proposed to be replaced under the "***full refurbishment***" option. It is therefore a requirement that the whole system us upgraded to comply with AS2293.1.	N/A.	New works to ensure upgraded emergency lighting and exit signage.	New works to ensure upgraded emergency lighting and exit signage.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
Part F – Health & Amenity				
F-1	*Part F2.2 & F2.3* It is noted that the existing sanitary facilities are proposed to be stripped and refurbished as part of the "***full refurbishment***" option. It is noted that the extent of works is intended to keep the existing partitions. Note that this level of refurbishment will require all sanitary facilities to be upgraded to comply with current building legislation. The following upgrades will be applicable: • Existing accessible sanitary facility (PWD) is to be upgraded to comply with AS1428.1:2009; & • Compliant ambulant facilities are to be added to the existing facilities at a rate of 1 ambulant facility per sex, per bank of toilets; & • Paths of travel/circulation spaces leading to the upgraded facilities are to be made compliant; & • **Edison Building (Level 1) – will require 2x new accessible sanitary facilities to comply with the minimum required 50% of all banks having a PWD.** Note that there are no specific requirements for upgrades to the following facilities: • Existing washbasins (except in a PWD bathroom); • Existing urinals • Existing water closets (except ambulant facilities). The number of sanitary facilities required is based on the proposed population for the buildings. In order to accurately assess the required sanitary facility numbers it is recommended that the end user (Powerlink) provide the expected maximum population of each storey of each building.	N/A	N/A	New works to ensure compliance achieved.

<table>
<tr><th colspan="2"></th><th colspan="3">Building Work Options</th></tr>
<tr><th>Ref.</th><th>Issue/s</th><th>No Works</th><th>Minor Work</th><th>Major Work</th></tr>
<tr><td></td><td>Based on the current proposal the following maximum population is catered for:
<table><tr><th colspan="5">Edison Building</th></tr><tr><th></th><th>WC</th><th>WB</th><th>Urinal</th><th>Pop</th></tr><tr><td>Male</td><td>16</td><td>12</td><td>12</td><td rowspan="3">Total 565
280M
285F</td></tr><tr><td>Female</td><td>18</td><td>14</td><td>N/A</td></tr><tr><td>Accessible</td><td>2</td><td>2</td><td>N/A</td></tr></table>
<table><tr><th colspan="5">Brian Sharp Building</th></tr><tr><th></th><th>WC</th><th>WB</th><th>Urinal</th><th>Pop</th></tr><tr><td>Male</td><td>12</td><td>6</td><td>Nil</td><td rowspan="3">Total 285
150M
135F</td></tr><tr><td>Female</td><td>6</td><td>6</td><td>N/A</td></tr><tr><td>Accessible</td><td>3</td><td>3</td><td>N/A</td></tr></table>
NOTES:
• A unisex PWD facility can be counted once for each sex (male and female) when determining toilet numbers.</td><td></td><td></td><td></td></tr>
<tr><td>F-2</td><td><u>Part F2.5</u>
If a distance of less than 1200mm is measured between the doorframe and the toilet pan (and if the door swings into the toilet), removable hinges must be provided.
  </td><td>N/A</td><td>N/A</td><td>All new works to comply. To be considered during design development.</td></tr>
<tr><td>F-3</td><td><u>Part F3.1</u>
It is understood that under the “full refurbishment” option that new ceilings are being provided throughout, therefore all new ceilings are to comply for the minimum heights as follows:

Height of rooms and other spaces must be</td><td>N/A</td><td>N/A</td><td>All new works to comply. To be considered during design development.</td></tr>
</table>

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
	as follows: • Stairways, ramps & landings – 2m above FFL or stair nosing • Bathrooms, sanitary facilities or the like – 2.1m • Corridors, passageways or the like – 2.1m • Habitable rooms – 2.4m			
F-4	*Part F4.4* Artificial lighting must be provided to all room that are frequently occupied, all spaces required to be accessible, all corridors, circulation spaces and paths of egress in accordance with AS/NZS1680.0. It is understood that under the "***full refurbishment***" option that a new mechanical ventilation system is proposed, therefore it must be designed to comply with the Energy Efficiency provisions under Part J5 of BCA.	N/A	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.
F-5	*Part F4.5* Alterations to the mechanical ventilation system must be carried in accordance with AS1668.2 and AS3666.1. It is understood that under the "***full refurbishment***" option that a new mechanical ventilation system is proposed, therefore it must be designed to comply with the Energy Efficiency provisions under Part J5 of BCA.	N/A	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.
Part J – Energy Efficiency				
J-1	*Part J* It is understood the proposed work does not impact on the existing building fabric or external glazing. As a result, the following may apply for the purposes of Part J of the BCA: • Part J5 for air-conditioning and ventilation systems; • Part J6 for artificial lighting and power;	N/A	All new works to comply. To be considered during design development.	All new works to comply. To be considered during design development.

		Building Work Options		
Ref.	**Issue/s**	**No Works**	**Minor Work**	**Major Work**
	and • Part J7 for hot water supply; and • Part J8 for facilities for energy monitoring. NOTE: Compliance with Parts J1, J2 & J3 may be required if the proposed work involve alterations to the external fabric of the building. Knisco understands this is not the case – please confirm if this understanding is incorrect.			

Annex F: KPMG Capital Expenditure Assessment

CONDITION AND LIFECYCLE AUDIT / CAPEX FORECAST SCHEDULE

Powerlink Complex
33 Harold Street, Virginia QLD 4014

December 2019

Ref	Building	Discipline	Item	Condition	Comments	Recommended Works	Capex / R & M	Responsive / Cyclical / Planned	Essential / Desirable	Core Cost	Out of Hours Multiplier	PM / Consultant Fee Multiplier	Cost	Year to Action or Frequency of Cyclical Maintenance	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034	2034/2035	2035/2036	2036/2037	Total
1	36 Northlink Place	Structure & Fabric	K tchenette	2	K tchenettes are in fair condition.	Fittings may benefit from a refurbishment.	Capex	Planned	D	$ 200,000	1	10%	$ 220,000	2	$ 22,000	$ 99,000	$ 99,000													$ 220,000
3	36 Northlink Place	Structure & Fabric	WC's	2	WC's are in a fair - good condition.	Allow for cyclical refurbishment of fittings.	Capex	Planned	D	$ 250,000	1	10%	$ 275,000	-	$ 27,500	$ 123,750	$ 123,750													$ 275,000
4	36 Northlink Place	Structure & Fabric	Office Area	2	Office in fair condition, however, would benef t from a refurbishment.	Allowance for general office refurbishment (excluding furniture).	Capex	Planned	D	$ 483,400	1	10%	$ 531,740	3	$ 53,174	$ 239,283	$ 239,283													$ 531,740
5	36 Northlink Place	Structure & Fabric	Cladding	1	Potential combust ble cladding has been identified to the sunshade / facades.	Allowance to remove.	Capex	Planned	E	$ 554,378	1	0%	$ 554,378	1															$ 0
7	36 Northlink Place	Vertical	Lift	1	Lift requirements w ll be triggered by BCA.	Install lift access.	Capex	Responsive	D	$ 204,000	1	0%	$ 204,000	1		$ 204,000													$ 204,000
8	36 Northlink Place	Mechanical	Air distribution / VAV / BMS upgrade	2	The air distribution system, VAVs and BMS are nearing the end of their typical economic life.	Allow for major upgrades to these equipment items.	Capex	Planned	E	$ 900,000	1	0%	$ 900,000	2	$ 90,000	$ 405,000	$ 405,000													$ 900,000
9	36 Northlink Place	Mechanical	Cooling towers	2	The cooling towers have a typical economic life of 25-30 years following a mid- fe maior overhaul.	Allow for major overhaul of the towers.	Capex	Planned	E	$ 60,000	1.5	10%	$ 96,000	1	$ 96,000															$ 96,000
11	Brian Sharp Building	Electrical	Uninterruptable power supply (UPS)	2	The UPS is understood to be original and is approaching the end of its typical economic life.	Allow for life cycle replacement. **Note,** we have assumed 2 x 400kVa systems w th a 30minute battery autonomy, please confirm requirements.	Capex	Planned	E	$ 1,000,000	1	0%	$ 1,000,000	8						$ 1,000,000									$ 1,000,000
12	Brian Sharp Building	Mechanical	Chillers	2	The chillers have a typical economic life of 20 years and the coils, fans and other components are corroding.	An AG Coombes report suggest replacement of the 3 chi lers in the short term. Allow for life cycle replacement of the chillers.	Capex	Planned	E	$ 1,500,000	1.5	10%	$ 2,400,000	3	$ 792,000	$ 792,000	$ 792,000													$ 2,376,000
13	Brian Sharp Building	Mechanical	Variable air volume boxes (VAVs)	3	The VAVs w ll be approaching the end of their typical economic life during the reporting timeframe.	Allow for the VAVs to be replaced.	Capex	Planned	E	$ 315,000	1.5	10%	$ 504,000	7					$ 504,000										$ 504,000
14	Brian Sharp Building	Mechanical	Ventilation fans	3	A number of ventilation fans are provided to the building. Some of the fans appear to be nearing the end of their economic life.	Allow for life cycle replacement of a proportion of the ventilation fans.	Capex	Planned	E	$ 60,000	1.5	10%	$ 96,000	7					$ 96,000										$ 96,000
15	Brian Sharp Building	Mechanical	Air handling units (AHUs)	3	The AHUs will be nearing the end of their economic life during the reporting timeframe.	Allow for life cycle replacement.	Capex	Planned	E	$ 420,000	1.5	10%	$ 672,000	7					$ 672,000										$ 672,000
16	Brian Sharp Building	Mechanical	Chilled water pumps	3	The chilled water pumps have a typical economic life of 20-25 years and will be approaching the end of their economic life within the reporting timeframe.	Allow for life cycle replacement of the pumps.	Capex	Planned	E	$ 90,000	1	10%	$ 99,000	7					$ 99,000										$ 99,000
17	Brian Sharp Building	Mechanical	Valves	3	A number of chilled water valves are corroding, especially in external areas. The valves are nearing the end of their typical economic life.	Allow for valve overhauls and treatment of corrosion in the short term where required and life cycle replacement of a proportion of the valves as required in the long term.	Capex	Planned	E	$ 49,000	1	0%	$ 49,000	3	$ 49,000															$ 49,000
19	Brian Sharp Building	Structure & Fabric	K tchenettes	3	K tchenettes are in fair condition.	Fittings may benefit from a refurbishment.	Capex	Planned	D	$ 200,000	1	10%	$ 220,000		$ 22,000	$ 99,000	$ 99,000													$ 220,000
20	Brian Sharp Building	Structure & Fabric	Roof Area	2	No significant issues noted with the roof membrane.	Allow for cyclical replacement.	Capex	Planned	E	$ 230,000	1	0%	$ 230,000	6				$ 230,000											$ 230,000
21	Brian Sharp Building	Structure & Fabric	WC's	3	WC's are in a fair condition.	Allow for cyclical refurbishment of fittings.	Capex	Planned	D	$ 500,000	1	10%	$ 550,000		$ 55,000	$ 247,500	$ 247,500													$ 550,000
22	Brian Sharp Building	Structure & Fabric	Cladding	1	Potential combust ble cladding has been identified to the sunshade / facades.	Allowance to remove.	Capex	Planned	E	$ 404,967	1	0%	$ 404,967	1															$ 0
24	Brian Sharp Building	Mechanical	Computer room air conditioning (CRAC) units	2	The CRAC units are nearing the end of their typical economic life and will require replacement.	Allow for life cycle replacement.	Capex	Planned	E	$ 650,000	1.5	10%	$ 1,040,000	3	$ 343,200	$ 343,200	$ 343,200													$ 1,029,600
25	Brian Sharp Building	Structure & Fabric	Office Area	2	Office in fair condition, however, would benef t from a refurbishment.	Allowance for general office refurbishment (excluding furniture).	Capex	Planned	D	$ 1,236,000	1	10%	$ 1,359,600	3	$ 135,960	$ 611,820	$ 611,820													$ 1,359,600
26	Brian Sharp Building	Vertical	Lift controls and car and door operators	3	The Lft controls and car and door operators date to the original construction and are nearing the end of their economic life.	Allow for controls and car and door operators to be upgraded.	Capex	Planned	E	$ 130,000	1.5	10%	$ 208,000	3	$ 208,000													$ 208,000	$ 416,000
27	Brian Sharp Building	Mechanical	Building management system (BMS)	2	The BMS is original and nearing the end of its economic life. Components of the BMS have an economic life of 8-15 years and technology developments can influence early replacement.	Allow for software upgrade and partial hardware replacement.	Capex	Planned	E	$ 60,000	1.5	10%	$ 96,000	3	$ 96,000															$ 96,000
28	Brian Sharp Building	Fire	VESDA system	2	The VESDA system is nearing the end of its typical economic l fe.	Allow for life cycle replacement.	Capex	Planned	E	$ 50,000	1.5	10%	$ 80,000	3	$ 80,000											$ 80,000			$ 160,000
29	Brian Sharp Building	Mechanical	Variable speed drives (VSDs)	2	The VSDs associated with the chilled water pumps and AHUs are approaching the end of their typical economic life.	Allow for replacement of the VSDs.	Capex	Planned	E	$ 50,000	1	0%	$ 50,000	3	$ 50,000															$ 50,000
30	Brian Sharp Building	Fire	Mimic fire indicator panel	3	The mimic fire panel is nearing the end of its economic life.	Allow for life cycle replacement.	Capex	Planned	E	$ 20,000	1.5	10%	$ 32,000	3	$ 32,000													$ 32,000	$ 64,000
31	Brian Sharp Building	Mechanical	Spl t air conditioning units	3	The split air conditioning units appear to have had partial upgrades in the past and have a typical economic life of 10-15 years.	Allow for life cycle replacement of a small number of units in the medium and long terms as required.	Capex	Planned	E	$ 18,000	1.5	10%	$ 28,800	Every Five Years Commencing Year 3	$ 28,800					$ 28,800				$ 28,800					$ 86,400
32	Brian Sharp Building	Fire	Fire detection and alarm system field devices	2	The field devices for the fire detection and alarm system, including smoke and thermal detectors, manual call points and speakers, are approaching the end of their typical economic life.	Allow for life cycle replacement as devices fail.	Capex	Planned	E	$ 25,000	1	0%	$ 25,000	Every Three Years	$ 25,000			$ 25,000			$ 25,000						$ 25,000	$ 100,000
33	Brian Sharp Building	Electrical	Emergency lighting and exit signage	3	The emergency lighting and exit signage appears to have been upgraded in the past.	Allow for replacement of fittings, subject to testing to AS2293.2	Capex	Cyclical	E	$ 4,000	1	0%	$ 4,000	Annually	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 60,000
34	Brian Sharp Building	Hydraulic	Hot water un ts	2	Hot water units have a typical economic life of 10-12 years and will require ongoing cyclical replacement as they fa l.	Allow for life cycle replacement.	Capex	Cyclical	E	$ 4,000	1	0%	$ 4,000	Every Three Years	$ 4,000			$ 4,000			$ 4,000			$ 4,000			$ 4,000		$ 20,000
35	Brian Sharp Building	Fire	Fire extinguishers	3	Fire extinguishers vary in ages and have a typical economic life of 8-10 years.	Allow for life cycle replacement, subject to testing to AS1851.	Capex	Cyclical	E	$ 800	1	0%	$ 800	Annually	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 12,000
36	Carpark 1	Fire	Fire indicator panel	3	The fire indicator panel is nearing the end of its economic life.	Allow for life cycle replacement of the panel.	Capex	Planned	E	$ 20,000	1	10%	$ 22,000	4		$ 22,000													$ 22,000
37	Carpark 1	Mechanical	Ventilation fans	3	The car park exhaust fans will be nearing the end of their economic life in the reporting timeframe.	Allow for life cycle replacement of the fans.	Capex	Planned	E	$ 60,000	1	10%	$ 66,000	4		$ 66,000													$ 66,000
41	Carpark 1	Electrical	Emergency lighting and exit signage	3	The emergency lighting and exit signage is nearing the end of its economic life and w l require cyclical replacement as fittings fail.	Allow for replacement of fittings, subject to testing to AS2293.2	Capex	Cyclical	E	$ 4,000	1	0%	$ 4,000	Annually	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 4,000	$ 60,000
42	Carpark 2	Fire	Sub fire indicator panel	3	The sub fire indicator panel is nearing the end of its economic life.	Allow for life cycle replacement of the panel.	Capex	Planned	E	$ 20,000	1	10%	$ 22,000	6				$ 22,000											$ 22,000
45	Carpark 2	Electrical	Emergency lighting and exit signage	3	The emergency lighting and exit signage is nearing the end of its economic life and w l require cyclical replacement as fittings fail.	Allow for replacement of fittings, subject to testing to AS2293.2	Capex	Cyclical	E	$ 3,200	1	0%	$ 3,200	Annually	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 3,200	$ 48,000
46	Carpark 2	Fire	Fire detection and alarm system field devices	2	The field devices for the fire detection and alarm system, including smoke and thermal detectors are approaching the end of their typical economic life.	Allow for life cycle replacement as devices fail.	Capex	Planned	E	$ 1,000	1	0%	$ 1,000	Annually	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 1,000	$ 15,000
47	Edison Building	Mechanical	Building management system (BMS)	2	The BMS is nearing the end of its typical economic life and there are constant issues with the control and air distribution of the current system.	Costs have been approved and works are due to be carried out in 2020.	Capex	Planned	E	$ 50,000	1	0%	$ 50,000											$ 50,000					$ 50,000
49	Edison Building	Mechanical	Chillers	3	The chillers are nearing the end of their typical economic life.	Allow for life cycle replacement. Note, if the major upgrade works (identified in the previous item) are completed the remaining service life will be extended and full replacement costs can be moved to the long term.	Capex	Planned	E	$ 1,000,000	1.5	10%	$ 1,500,000	5		$ 528,000	$ 528,000	$ 528,000												$ 1,584,000
50	Edison Building	Mechanical	Variable air volume boxes (VAVs) main	1	The VAVs are nearing the end of their typical economic life and there are constant issues with the control and air distribution of the current system.	Costs have been approved and works are due to be carried out in 2020.	Capex	Planned	E	$ -	1	0%	$																$ 0
51	Edison Building	Mechanical	Air distribution	1	The air distribution system is nearing the end of its typical economic life and there are constant issues with the control and air distribution of the current system.	Costs have been approved and works are due to be carried out in 2020.	Capex	Planned	E	$ -	1	0%	$																$ 0
52	Edison Building	Structure & Fabric	Cafeteria	2	Cafeteria in fair condition.	Allow for refurbishment	Capex	Planned	D	$ 200,000	1	0%	$ 200,000	7						$ 200,000									$ 200,000
53	Edison Building	Mechanical	Variable speed drives (VSDs)	3	The VSDs associated with the chilled water pumps are approaching the end of their typical economic life during the reporting timeframe.	Allow for replacement of the VSDs due to their age.	Capex	Planned	E	$ 15,000	1	0%	$ 15,000	7					$ 15,000									$ 15,000	$ 30,000

CONDITION AND LIFECYCLE AUDIT / CAPEX FORECAST SCHEDULE

Powerlink Complex
33 Harold Street, Virginia QLD 4014

December 2019

Ref	Building	Discipline	Item	Condition	Comments	Recommended Works	Capex / R & M	Responsive / Cyclical / Planned	Essential / Desirable	Core Cost	Out of Hours Multiplier	PM / Consultant Fee Multiplier	Cost	Year to Action or Frequency of Cyclical Maintenance	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034	2034/2035	2035/2036	2036/2037	Total
54	Edison Building	Mechanical	Cool room equipment	2	The cool room equipment serving the kitchen / cafe is nearing the end of its typical economic life.	Allow for life cycle replacement.	Capex	Planned	E	$ 48,000	1.5	10%	$ 76,800	1						$ 76,800										$ 76,800
55	Edison Building	Electrical	Distribution boards (DBs)	3	The DBs are nearing the end of their typical economic life.	Allow for life cycle replacement of the DB's. Upgrade costs are currently shown at end of typical life, however we recommend upgrades to occur at the time of other major electrical equipment upgrades.	Capex	Planned	E	$ 350,000	1.5	10%	$ 560,000	8						$ 560,000										$ 560,000
56	Edison Building	Mechanical	Mechanical services switchboard (MSSB)	2	The MSSBs date to the 1997 refurbishment and are aged and nearing the end of their typical economic life.	Allow for life cycle replacement of the MSSBs. Upgrade costs are currently shown at end of typical life, however we recommend upgrades to occur at the time of other major mechanical equipment upgrades.	Capex	Planned	E	$ 400,000	1.5	10%	$ 640,000	8						$ 640,000										$ 640,000
57	Edison Building	Electrical	Main Switchboard	3	Due to the age of the equipment and upgrades recommended for a large number of services equipment items, component replacement is recommended for the main switchboard.	Allow for component replacement as other services equipment items are upgraded, e.g., distribution boards, MSSBs, etc.	Capex	Planned	D	$ 80,000	1.5	10%	$ 128,000	8						$ 128,000										$ 128,000
58	Edison Building	Structure & Fabric	Cladding	1	Potential combustible cladding has been identified to the sunshade / facades.	Allowance to remove.	Capex	Planned	E	$ 1,385,736	1	0%	$ 1,385,736	1															$ 0
59	Edison Building	Electrical	Lighting internal	2	The internal lighting is aged and nearing the end of its typical economic life.	Allow for life cycle replacement of the internal light fittings to more energy efficient LEDs. Price obtained from Mark Gannon and Associates report dated May 2019. Includes removal and disposal of existing fittings.	Capex	Planned	E	$ 722,000	1.5	10%	$ 1,155,200	1	$ 115,520	$ 519,840	$ 519,840													$ 1,155,200
60	Edison Building	Mechanical	Air handling units (AHUs) and fan coil units (FCUs) main	2	The AHUs and FCUs date to the 1997 refurbishment, are corroding and have a typical economic life of 20 years.	Allow for life cycle replacement.	Capex	Planned	E	$ 720,000	1.5	10%	$ 1,152,000	3	$ 380,160	$ 380,160	$ 380,160													$ 1,140,480
61	Edison Building	Structure & Fabric	Office Area	2	Office in fair condition, however, would benefit from a refurbishment.	Allowance for general office refurbishment (excluding furniture).	Capex	Planned	D	$ 1,213,200	1	10%	$ 1,334,520	3	$ 133,452	$ 600,534	$ 600,534													$ 1,334,520
62	Edison Building	Structure & Fabric	WC's	2	WC's are in a fair condition.	Allow for cyclical refurbishment of fittings.	Capex	Planned	D	$ 250,000	1	10%	$ 275,000	3	$ 27,500	$ 123,750	$ 123,750													$ 275,000
63	Edison Building	Structure & Fabric	Kitchenette	2	Kitchenettes are in fair condition.	Fittings may benefit from a refurbishment.	Capex	Planned	D	$ 200,000	1	10%	$ 220,000	3	$ 22,000	$ 99,000	$ 99,000													$ 220,000
64	Edison Building	Mechanical	Chillers	3	The coils on one of the chillers have been replaced approximately 6 months ago. The chillers are nearing the end of their economic life.	Allow for coil replacement on the second chiller. In addition to this and to extend the life of the equipment, we recommend allowing for controller replacement and replacement of one compressor per chiller. Note, if these major upgrade works are completed the remaining service life will be extended and full replacement costs can be moved to the long term.	Capex	Planned	D	$ 180,000	1	10%	$ 198,000	3	$ 198,000														$ 198,000
65	Edison Building	Mechanical	Outside air management	2	The mechanical maintenance contractor recommends incorporating a carbon dioxide monitoring system in the return air of the AHUs as part of the AHU upgrade. This is designed to improved energy efficiencies while maintaining the minimum outside air quantities required by the Standards and Code.	Recommend sensors installed in conjunction with the AHU upgrade, including BMS modifications.	Capex	Planned	D	$ 105,000	1.5	10%	$ 168,000	3	$ 168,000														$ 168,000
66	Edison Building	Structure & Fabric	Reception	2	Office in fair condition, however, would benefit from a refurbishment.	We understand that detailed plans are in progress. Allowance to undertake refurbishment.	Capex	Planned	D	$ 150,000	1	0%	$ 150,000	3	$ 150,000														$ 150,000
67	Edison Building	Fire	Fire indicator panel (FIP)	3	The fire indicator panel is nearing the end of its typical economic life.	Allow for life cycle replacement.	Capex	Planned	E	$ 80,000	1.5	10%	$ 128,000	3	$ 128,000														$ 128,000
69	Edison Building	Mechanical	Fire / smoke dampers	2	The dampers in the atrium are understood to date to the 1997 refurbishment and have a typical economic life of 20 years.	Allow for life cycle replacement of the dampers.	Capex	Planned	E	$ 40,000	1.5	10%	$ 64,000	3	$ 64,000														$ 64,000
71	Edison Building	Electrical	Dynalite system	2	The Dynalite system is aged and will require upgrading during the reporting timeframe.	Allow for replacement in conjunction with light fitting upgrades.	Capex	Planned	E	$ 30,000	1.5	10%	$ 48,000	3	$ 48,000													$ 40,000	$ 88,000
72	Edison Building	Electrical	Lighting external	2	The external lighting is aged and nearing the end of its typical economic life.	Allow for life cycle replacement of the external light fittings.	Capex	Planned	E	$ 40,000	1	10%	$ 44,000	3	$ 44,000														$ 44,000
73	Edison Building	Mechanical	Ventilation fans	3	The ventilation fans appear to have varying dates of manufacture with the majority aged.	Allow for replacement of a proportion of the fans.	Capex	Planned	E	$ 20,000	1.5	10%	$ 32,000	Every Three Years	$ 32,000			$ 32,000			$ 32,000								$ 96,000
74	Edison Building	Fire	VESDA system	2	The VESDA system is nearing the end of its typical economic life.	Allow for life cycle replacement.	Capex	Planned	E	$ 15,000	1.5	10%	$ 24,000	3	$ 24,000										$ 24,000				$ 48,000
75	Edison Building	Mechanical	Chilled water valves	2	A number of chilled water valves are corroding, especially in external areas. The valves are nearing the end of their typical economic life.	Allow for replacement of the valves as required.	Capex	Planned	E	$ 20,000	1	0%	$ 20,000	Every Three Years	$ 20,000			$ 20,000			$ 20,000			$ 20,000			$ 20,000		$ 100,000
76	Edison Building	Fire	Fire detection and alarm system field devices	2	The field devices for the fire detection and alarm system, including smoke and thermal detectors, manual call points and speakers, are approaching the end of their typical economic life.	Allow for life cycle replacement as devices fail.	Capex	Planned	E	$ 50,000	1	0%	$ 15,000	Annually	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 225,000
77	Edison Building	Vertical	Lift	3	The lift dates to the 1997 refurbishment and is nearing the end of its typical economic life.	We have been advised that the lift is operating well, with minimal issues. Due to the age of the lift we recommend a detailed condition report to assess the remaining life of the equipment in the short term. Budget $100,000 for end of life replacement in the long term.	Capex	Planned	E	$ 8,000	1.5	10%	$ 12,800	3	$ 12,800														$ 12,800
79	Edison Building	Electrical	Emergency lighting and exit signage	2	The emergency lighting and exit signage appears to have been replaced as fittings fail.	Allow for replacement of fittings, subject to testing to AS2293.2	Capex	Cyclical	E	$ 8,000	1	0%	$ 8,000	Annually	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 8,000	$ 120,000
80	Edison Building	Hydraulic	Hot water units	2	Hot water units have a typical economic life of 10-12 years and will require ongoing cyclical replacement as they fail.	Allow for life cycle replacement.	Capex	Cyclical	E	$ 4,000	1	0%	$ 4,000	Every Three Years	$ 4,000			$ 4,000			$ 4,000			$ 4,000			$ 4,000		$ 20,000
81	Edison Building	Fire	Fire hose reels	3	Fire hose reels date to the 1997 refurbishment and are approaching the end of their economic life.	Allow for life cycle replacement, subject to testing to AS1851.	Capex	Cyclical	E	$ 1,200	1	0%	$ 1,200	Annually	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 18,000
82	Edison Building	Fire	Fire extinguishers	3	Fire extinguishers vary in ages and have a typical economic life of 8-10 years.	Allow for life cycle replacement, subject to testing to AS1851.	Capex	Cyclical	E	$ 800	1	0%	$ 800	Annually	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 12,000
83	General	Electrical	Generators	3	The generators at the property vary in age, with the generators serving Edison and Tesla buildings dating to 1996 and nearing the end of their economic life.	Allow for life cycle replacement of the two generators serving Edison and Tesla buildings (275kVA and 188kVA).	Capex	Planned	E	$ 435,000	1.5	10%	$ 696,000	2	$ 348,000	$ 348,000													$ 696,000
84	General	Electrical	Closed circuit television (CCTV) system	3	The majority of CCTV cameras are digital type and have a typical economic life of 5 years.	Allow for replacement of a proportion of the cameras as they fail.	Capex	Planned	E	$ 100,000	1	0%	$ 100,000	Every Five Years Commencing Year 4		$ 100,000					$ 100,000					$ 100,000			$ 300,000
85	General	Hydraulic	Water main pipework	1	The main underground cold water pipework serving Edison and Tesla buildings at the Powerlink property is understood to date to the original construction. The pipework has a typical economic life of 35-40.	Allow for life cycle replacement of the original pipework.	Capex	Planned	E	$ 945,000	1	20%	$ 1,134,000	7						$ 1,134,000									$ 1,134,000
86	General	Fire	Underground fire hydrant pipework	1	The underground fire hydrant pipework at the Powerlink property is understood to date to the original construction. The pipework has a typical economic life of 35-40.	Allow for life cycle replacement of the original pipework.	Capex	Planned	E	$ 735,000	1	20%	$ 735,000	7						$ 735,000									$ 735,000
88	Tesla Building	Vertical	Cranes (7off)	1	Cranes are original, past their economic life and a potential safety issue.	Recommended works and pricing as per NQCranes report dated September 2019.	Capex	Planned	E	$ 312,545	1	0%	$ 312,545	8						$ 312,545									$ 312,545

Ref	Building	Discipline	Item	Condition	Comments	Recommended Works	Capex / R & M	Responsive / Cyclical / Planned	Essential / Desirable	Core Cost	Out of Hours Multiplier	PM / Consultant Fee Multiplier	Cost	Year to Action or Frequency of Cyclical Maintenance	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	2029/2030	2030/2031	2031/2032	2032/2033	2033/2034	2034/2035	2035/2036	2036/2037	Total
89	Tesla Building	Structure & Fabric	Facades	1	Windows are corroded and reported to be seizing. Whilst undertaking their function when closed. They are past their typical effective l fe expectancy.	We recommend an allowance for replacement.	Capex	Planned	D	$ 511,235	1	0%	$ 511,235	8						$ 511,235									$ 511,235
90	Tesla Building	Fire	Multi aspirating smoke detection system (MASDS)	3	A MASDS is provided in the Tesla building and w ll be nearing the end of its economic fe in the reporting timeframe.	Allow for life cycle replacement.	Capex	Planned	E	$ 65,000	1.5	10%	$ 104,000	6				$ 104,000											$ 104,000
91	Tesla Building	Mechanical	Air distribution / VAV / BMS upgrade	2	The air distribution system, VAVs and BMS are nearing the end of their typical economic life.	Allow for major upgrades to these equipment items.	Capex	Planned	E	$ 400,000	1	10%	$ 440,000	8						$ 440,000									$ 440,000
92	Tesla Building	Fire	Sub fire indicator panel (SFIP)	3	The sub fire indicator panel is nearing the end of its typical economic fe.	Allow for life cycle replacement.	Capex	Planned	E	$ 35,000	1.5	10%	$ 56,000	9							$ 56,000								$ 56,000
93	Tesla Building	Electrical	Distribution boards (DBs)	1	A large number of the DBs date to the original construction and are at the end of their economic life.	Allow for replacement of the DB's.	Capex	Planned	E	$ 1,090,000	1.5	10%	$ 1,744,000	8						$ 1,744,000									$ 1,744,000
94	Tesla Building	Mechanical	MSSBs	3	The MSSBs for the Williamson Centre are understood to date to 1996/1997 and are aged and nearing the end of their typical economic life.	Allow for life cycle replacement of the MSSBs. Upgrade costs are currently shown at end of typical l fe, however we recommend upgrades to occur at the time of other major mechanical equipment upgrades.	Capex	Planned	E	$ 250,000	1.5	10%	$ 400,000	8						$ 400,000									$ 400,000
95	Tesla Building	Electrical	Electrical cabling	1	Cabling associated with the original electrical boards is at the end of its economic life.	Allow for replacement of the cabling associated with the original electrical boards.	Capex	Planned	E	$ 400,000	1.5	10%	$ 640,000	8						$ 640,000									$ 640,000
96	Tesla Building	Electrical	Main Switchboard (MSB)	1	The main switchboard is understood to date to the original construction, circa 1960. The MSB is due for life cycle replacement.	Allow for replacement of the MSB.	Capex	Planned	E	$ 250,000	1.5	10%	$ 400,000	8						$ 400,000									$ 400,000
97	Tesla Building	Mechanical	Air conditioning equipment	2	The majority of the air conditioning equipment dates to 1996/1997, with two units recently replaced in 2018. The ol laboratory un ts vary in age, typically dating to 2014. The older units are nearing the end of their typical economic life.	Allow for life cycle replacement of the older air cond tioning equipment.	Capex	Planned	E	$ 175,000	1.5	10%	$ 280,000	Every Five Years Commencing Year 3	$ 92,400	$ 92,400	$ 92,400			$ 280,000									$ 557,200
98	Tesla Building	Structure & Fabric	WC's	2	WC's are in a fair / various condition.	Allow for cyclical refurbishment of fittings.	Capex	Planned	D	$ 150,000	1	10%	$ 165,000	-	$ 16,500	$ 74,250	$ 74,250													$ 165,000
99	Tesla Building	Structure & Fabric	Office Area	2	Office in fair condition, however, would benef t from a refurbishment.	Allowance for general office refurbishment (excluding furniture).	Capex	Planned	D	$ 416,000	1	10%	$ 457,600	3	$ 45,760	$ 205,920	$ 205,920													$ 457,600
100	Tesla Building	Structure & Fabric	K tchenette	2	K tchenettes are in fair condition.	Fittings may benefit from a refurbishment.	Capex	Planned	D	$ 120,000	1	10%	$ 132,000	3	$ 13,200	$ 59,400	$ 59,400													$ 132,000
101	Tesla Building	Mechanical	Communication room air conditioning equipment	1	We have been advised that the communications room has been partially decommissioned and the requirement for CRAC units no longer exists. The CRAC un ts are understood to be aged.	Allow for removal of the CRAC units and replacement with a number of spl t air conditioning units in the short term.	Capex	Planned	E	$ 35,000	1	10%	$ 38,500	3	$ 38,500															$ 38,500
103	Tesla Building	Mechanical	Ventilation fans	3	A number of ventilation fans are provided to the building. Some of the fans appear to be nearing the end of their economic life.	Allow for life cycle replacement of a proportion of the ventilation fans.	Capex	Planned	E	$ 8,000	1.5	10%	$ 12,800	Every Three Years	$ 12,800			$ 12,800			$ 12,800									$ 38,400
104	Tesla Building	Electrical	Roller doors	3	The roller door equipment genera ly appears to be aged and nearing the end of its economic life.	Allow for replacement of a proportion of the ro ler door equipment (motor and control/electrical items only) across the reporting timeframe.	Capex	Planned	E	$ 10,000	1	0%	$ 10,000	Every Five Years Commencing Year 3	$ 10,000					$ 10,000					$ 10,000					$ 30,000
105	Tesla Building	Fire	Fire detection and alarm system field devices	3	The field devices for the fire detection and alarm system, including smoke and thermal detectors, manual call points and speakers, are approaching the end of their typical economic life.	Allow for life cycle replacement as devices fail.	Capex	Planned	E	$ 5,000	1.5	0%	$ 7,500	Bi-annually Commencing Year 1	$ 7,500		$ 7,500		$ 7,500		$ 7,500									$ 30,000
106	Tesla Building	Electrical	Emergency lighting and exit signage	3	The emergency lighting and exit signage appears to have been upgraded in the past.	Allow for replacement of fittings, subject to testing to AS2293.2	Capex	Cyclical	E	$ 6,000	1	0%	$ 6,000	Annually	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 90,000
107	Tesla Building	Hydraulic	Hot water un ts	2	Hot water units have a typical economic life of 10-12 years and will require ongoing cyclical replacement as they fa l.	Allow for life cycle replacement.	Capex	Cyclical	E	$ 4,000	1	0%	$ 4,000	Every Three Years	$ 4,000			$ 4,000			$ 4,000									$ 12,000
108	Tesla Building	Fire	Fire hose reels	3	Fire hose reels are approaching the end of their economic l fe.	Allow for life cycle replacement, subject to testing to AS1851.	Capex	Cyclical	E	$ 1,200	1	0%	$ 1,200	Annually	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200	$ 1,200		$ 1,200		$ 1,200		$ 1,200		$ 13,200
109	Tesla Building	Fire	Fire extinguishers	3	Fire extinguishers vary in ages and have a typical economic l fe of 8-10 years.	Allow for life cycle replacement, subject to testing to AS1851.	Capex	Cyclical	E	$ 800	1	0%	$ 800	Annually	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 800	$ 12,000

Annex G: KPMG Operational Expenditure Assessment

	2022-23 Budget	2023-24 Budget	2024-25 Budget	2025-26 Budget	2026-27 Budget	2027-28 Budget	2028-29 Budget	2029-30 Budget	2030-31 Budget	2031-32 Budget	2032-33 Budget	2033-34 Budget	2034-35 Budget	2035-36 Budget	2036-37 Budget	TOTAL
Do Nothing - Zero Capex	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 4,914,667	$ 73,720,007
"Do Nothing" - KPMG CAPEX	$ 4,834,243	$ 4,670,172	$ 4,625,596	$ 3,758,408	$ 3,983,578	$ 3,987,030	$ 3,997,410	$ 4,002,003	$ 4,023,048	$ 4,029,299	$ 4,035,038	$ 4,060,198	$ 4,066,443	$ 4,088,892	$ 4,095,502	$ 62,256,859
Light Touch Refurb - HSR	$ 4,707,287	$ 4,543,216	$ 4,498,641	$ 3,145,534	$ 3,370,704	$ 3,374,156	$ 3,384,536	$ 3,389,129	$ 3,410,174	$ 3,416,425	$ 3,422,163	$ 3,447,324	$ 3,453,569	$ 3,476,017	$ 3,482,628	$ 54,521,503
Full Refurb - HSR	$ 4,686,521	$ 4,522,450	$ 4,477,874	$ 3,052,617	$ 3,277,787	$ 3,291,240	$ 3,301,620	$ 3,306,213	$ 3,422,257	$ 3,388,508	$ 3,399,247	$ 3,424,408	$ 3,430,652	$ 3,453,101	$ 3,499,712	$ 53,934,207
Light Touch Refurb - LSR	$ 4,796,410	$ 4,632,339	$ 4,587,764	$ 3,346,792	$ 3,571,962	$ 3,575,414	$ 3,585,794	$ 3,590,387	$ 3,611,432	$ 3,617,683	$ 3,623,421	$ 3,648,582	$ 3,654,827	$ 3,677,275	$ 3,683,886	$ 57,203,968
Full Refurb - LSR	$ 4,708,260	$ 4,544,189	$ 4,499,614	$ 3,258,642	$ 3,483,812	$ 3,592,264	$ 3,562,644	$ 3,567,237	$ 3,588,282	$ 3,594,533	$ 3,600,272	$ 3,625,432	$ 3,631,677	$ 3,654,126	$ 3,700,736	$ 56,611,721

Sell 36 NLP in FY24/25

"Do Nothing" - KPMG CAPEX	$ 4,834,243	$ 4,670,172	$ 4,116,781	$ 3,344,983	$ 3,545,384	$ 3,548,457	$ 3,557,695	$ 3,561,783	$ 3,580,513	$ 3,586,076	$ 3,591,183	$ 3,613,576	$ 3,619,134	$ 3,639,113	$ 3,644,997	$ 56,454,090
Light Touch Refurb - HSR	$ 4,707,287	$ 4,543,216	$ 4,003,790	$ 2,799,525	$ 2,999,926	$ 3,002,999	$ 3,012,237	$ 3,016,325	$ 3,035,055	$ 3,040,618	$ 3,045,725	$ 3,068,118	$ 3,073,676	$ 3,093,655	$ 3,099,539	$ 49,541,693
Full Refurb - HSR	$ 4,686,521	$ 4,522,450	$ 3,985,308	$ 2,716,829	$ 2,917,231	$ 2,929,203	$ 2,938,442	$ 2,942,530	$ 3,045,809	$ 3,015,772	$ 3,025,330	$ 3,047,723	$ 3,053,281	$ 3,073,260	$ 3,114,743	$ 49,014,431
Light Touch Refurb - LSR	$ 4,796,410	$ 4,632,339	$ 4,083,110	$ 2,978,645	$ 3,179,046	$ 3,182,119	$ 3,191,357	$ 3,195,445	$ 3,214,174	$ 3,219,738	$ 3,224,845	$ 3,247,238	$ 3,252,796	$ 3,272,775	$ 3,278,658	$ 51,948,694
Full Refurb - LSR	$ 4,708,260	$ 4,544,189	$ 4,004,656	$ 2,900,191	$ 3,100,592	$ 3,197,115	$ 3,170,754	$ 3,174,841	$ 3,193,571	$ 3,199,134	$ 3,204,242	$ 3,226,635	$ 3,232,193	$ 3,252,172	$ 3,293,655	$ 51,402,201

Landlord Cost
HVAC & BMS Contract
Cleaning Contract
Fire Contract
Landscaping
Lift Contract
Pest Control
Plumbing
Rates & land taxes
Water

Tenant Cost
Access Control
Cafeteria & coffee stations
Chairs
Cleaning Other
Consultants
COVID-19
Cranes
Diesel
Diesel Fuel
Electricity
Generators Contract
Licences
Manned Security
Other Services
Security Other
Toilet Reqs
Waste
Workstations

Repairs Cost
Air R&M
Blinds
Electrical R&M
Fire R&M
Gates & Locks
Lifts R&M
Painting Contract
Painting R&M
Roofing R&M
Safety R&M
Signs R&M
Surfaces R&M

Assumptions:	
4 year average	We have taken a number of the costs using an average cost, based on the previous 4 year actual costs.
Inflation	No inflation has been used on the year on year budgets; however, a CPI of 2% was used for FY2021/22.
Air R&M	In alignment with the capex - PM fee's in year 1, so some breakdowns still occurring. Reduced breakdowns during construction with nominal towards the completion phase. No breakdown costs during DLP. Escalating PA @ 2.5% of the averaged annual R&M Costs.
Electrical R&M	In alignment with the capex - PM fee's in year 1. Assuming some breakdowns still occurring to Tesla warehouse until it's works in 2027-28, reduced R&M ongoing based on an % of previous 4 year average with an escalating average 5 years % .
Fire R&M	In alignment with the capex - PM fee's in year 1. Assuming some R&M required, with reduced R&M ongoing based on an % of previous 4 year average with an escalating average 5 years % .
Safety R&M	The scope / works require clarifying. We assume as Safety R&M is undertaken others do not occur. The trend based on the 4 year actuals is reducing and we have an ongoing cost at 85% of the previous years cost.
Lift R&M	In alignment with the capex. Assuming some R&M required whilst other lifts are being replaced, with significantly reduced R&M and a nominal amount for repairs ongoing, increasing every 5 years.
Electricity Charges	Assumption of 25% increase in electricity usage during construction phase. Assumption of 50% energy efficiency based on 4 year average usage costs.
Gates and Locks	Averaged over 3 years, excluding the abnormal year of $66k.
Low Density	Office costs calculated at 82% of the current high density costs (calculated difference in workstations).
Defects Liability Period	Zero costs for service AND repairs & maintenance during DLP for new installations.
Without 36 NLP	Costs after 5 year on the bottom summary are calculated at 11% less - which is the 4 year given average cost allowance.

Annex H: BSE Building Services Assessment

Powerlink Workplace Review - Full Refurbishment

Project: **Powerlink**
Job Number 20200567
Revision 2 - 21.08.20
Engineer Cameron Webb
Mathew Potts
Gerard Kirwan
Darren Bess

Powerlink - Expected 15 year life expectancy

Building	Year Const	Age
Brian Sharp Builing	1997	23
Edision Building	2007	13

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Edision Building Full Refurbishment - Summary

Disipline	Item	Description of Works	KPMG / Capex Estimate	BSE Estimate (Qty)	Rate	Total	Generate Property Group Comments
Electrical	Main Switchboard	Existing main switchboard retained but internal componentary upgraded to achive 15 year life expectancy	$ 128,000	1	$150,000	$ 150,000	
Electrical	Distribution Boards	Existing Boards replaced to with new to achieve 15 year life expectancy	$ 560,000	12	$30,000	$ 360,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Electrical	Lighting Control	Existing Dynalite control system to be replaced to suit 15 year life expectancy	$ 48,000	7200	$10	$ 72,000	
Electrical	External Lighting	Existing external lighting replaced with new LED's and sensor control pole lighting	$ 44,000	1	$80,000	$ 80,000	
Electrical	Internal Lighting	Existing lighting to be replaced with new Led type light fittings to improve internal lighting lux levels	$ 1,155,200	7200	$85	$ 612,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Electrical	General power	Existing workstatiosn and general power upgrades to suit new layouts	$ -	7200	$65	$ 468,000	Required for fitout only.
Electrical	Emergency & Exit Lighting	Existing emegrnecy and exit lighting to be replaced	$ 120,000	7200	$8	$ 57,600	KPMG allows for another replacements in the 15 year period, BSE's is for upfront price only.
Electrical	Generators	Edision 275 kva Generator to be replaced	$ 348,000	1	$350,000	$ 350,000	Not included in our cost plans - not considered to be essential for a number of years after works completed. Therefore in ongoing capex instead.
Security	Access Control	Existing access control system to be retained and upgraded	$ -	1	$100,000	$ 100,000	Recommended to proceed in fitout.
Security	CCTV	Existing CCTv to be upgraded to suit 15 year life expectancy	$ 300,000	1	$250,000	$ 250,000	
Communications	Data Cabling	Existing Krone Patch by Exception system removed and replaced with new Cat 6A data cabling throughout	$ -	7200	$95	$ 684,000	Recommended to proceed in fitout.
Communications	Communications Room	Existing communicatins room completely refurbished and upgraded	$ -	1	$25,000	$ 25,000	Recommended to proceed in fitout.
Fire	Fire Indicator Panel	The existing FIP to be repalced with new to achieve 15 year life expectancy	$ 128,000	1	$80,000	$ 80,000	KPMG allows for another replacement in the 15 year period, BSE's is for upfront price only.
Fire	Fire Detection & Alarms	Existing Fire Detection and Alam devices and cabling to be replaced with new	$ 225,000	7200	$20	$ 144,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Comms Room VESDA	Existing VESDA system to be removed and replaced with new	$ 48,000	1	$15,000	$ 15,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Fire Hose Reels	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ 18,000			$ -	Not considered critical - generaly included in fitout sqm rates.
Fire	Fire Hydrants	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ 735,000			$ -	KPMG's price is for full replacement of in ground pipework. This is not considered to be necessary for the fitout and would not be required for a number of years after fitout. Not included in costs.
Fire	Sprinklers	Full refurbishment may trigger sprinkler install due to Classification and type of construction of existing structure. We assume a type B construction that results in a maximum floor area of 5500sqm. At 7200sqm the building exceeds the allowance. For DTS compliance sprinklers need to be considered.	$ -	7200	$105	$ 756,000	KPMG does not include, as sprinklers are not triggered with a do nothing scenario
Fire	Sprinkler Pumps	As nopted above to provide sprinklers to building addiotnal pumps will be required to maination operating pressure	$ -	2	$100,000	$ 200,000	KPMG does not include, as sprinklers are not triggered with a do nothing scenario
Fire	Drencher Sprinklers	To achieve seperation between Edision and Brian Sharp Building we assume that a Fire Engineering Report will be required and that sprinklers will be used across the glazing face to provide a non DTS solution.	$ -	1	$60,000	$ 60,000	KPMG does not include, as sprinklers are not triggered with a do nothing scenario
Mechanical	Chillers	Existing Chillers are to be removed and replaced with new to achieve 15 year life expectancy	$ 1,584,000	2	$450,000	$ 900,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.

Mechanical	Chilled Water Pumps	Existing Chilled water pumps are to be removed and replaced with new to achieve 15 year life expectancy	$ 60,000	3	$25,000	$ 75,000	
Mechanical	Chilled Water Valves	Existing Chilled water vlaves are to be removed and replaced with new to achieve 15 year life expectancy	$ 100,000	2	$30,000	$ 60,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Air Handling Units	Existing air handling units are to be removed and replaced with new to achieve 15 year life expectancy	$ 1,140,480	8	$125,000	$ 1,000,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Variable Speed Drives	Existing Variable Spreed Drives for Pumps, AHU's to be removed and replaced with new to achieve 15 year life expectancy	$ 30,000	2	$8,000	$ 16,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Outside Air Control	Existing startic outside air dampers to be replaced with new motorsied dampers and c02 control	$ 168,000	9	$15,000	$ 135,000	Added for sustainability and control for energy efficeincy
Mechanical	Supply Air Ductwork	Existing supply air ductwork is ot be retained, cleaned and returned to service. Allowance for repairs to existing insulation to be allowed.	$ -	7200	$18	$ 129,600	Recommended to proceed in fitout.
Mechanical	Atrium Relief Dampers	Existing Atrium Dampers to be removed and replaced with new	$ 64,000	9	$6,000	$ 54,000	
Mechanical	VAV's	Existing VAV's are being upgraded at present. No works required.	$ -			$ -	Existing VAV's being replaced a part of separate package
Mechanical	BMS Controls	Existing BMS is being upgraded at present. No works required.	$ 50,000			$ -	Existing BMS being upgraded as part of separate package
Mechanical	Air Distribution	Existing air distribution to be removed including grilles and flex to achieve 15 year life expectancy	$ -	7200	$55	$ 396,000	Recommended to proceed in fitout.
Mechanical	Kitchen Exhaust	Existing kitchen exhaust hood to be removed and replaced with new to achieve 15 year life expectancy	$ -	1	$25,000	$ 25,000	Recommended to proceed in fitout.
Mechanical	Refrigeration	Existing cold rooms to be removed and replaced with new to achieve 15 year life expectancy	$ 76,800	3	$5,000	$ 15,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Mechanical Services Switchboards	Existing mechanical switchboards to be replaced with new to be removed and replaced with new to achieve 15 year life expectancy	$ 640,000	8	$45,000	$ 360,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Ventilation Fans	Existing Toilet exhaust fans are to be removed and replaced with new to achieve 15 year life expectancy	$ 96,000	8	$5,000	$ 40,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Roof Exhaust	The existing damperlon roof over the saw tooth roof requires addiotnal ventilation to reduce heatload to atrium. Roof mounted solar ventalitors to be installed	$ -	9	$6,000	$ 54,000	Venitlation only, not structural amendments
Hydraulic	Water Infrastructure	Allow for life cycle replacement of water infrastructure to suit 15 year life expectancy	$ 1,134,000	1	$0	$ -	KPMG's price is for full replacement of in ground pipework. This is not considered to be necessary for the fitout and would not be required for a number of years after fitout. Not included in costs.
Hydraulic	Amentity Refurbishment	Existing Amentities works	$ -			$ -	Included in fitout rates prepared by CCM.
Hydraulic	Roof Drainage	Existing box gutters to be re-conditioned to suit 15 year life expectancy	$ -	1	$40,000	$ 40,000	KPMG has this in the R&M budget. We should allow for this in refurbishment.
Hydraulic	Hot Water Units	Existing hot water units to be replaced to suit 15 year life expectancy	$ 20,000	6	$4,000	$ 24,000	
Total			$ 9,020,480			$ 7,787,200	

Brian Sharp - Full Refurbishment - Summary

Disipline	Item	Description of Works	KPMG / Capex Estimate	BSE Estimate (Qty)	Rate	Total	Comments
Electrical	Main Switchboard	Existing main switchboard retained but internal componentary upgraded to achive 15 year life expectancy	$ -	1	$15,000	$ 15,000	Recommended to proceed in fitout.
Electrical	Distribution Boards	Existing Boards retained but internal componentary upgraded to achive 15 year life expectancy	$ -	6	$30,000	$ 180,000	Recommended to proceed in fitout.
Electrical	Lighting Control	Existing Dynalite control system to be replaced to suit 15 year life expectancy	$ -	2000	$10	$ 20,000	Recommended to proceed in fitout.
Electrical	External Lighting	Existing external lighting replaced with new LED's and sensor control pole lighting	$ -	1	$20,000	$ 20,000	Recommended to proceed in fitout.
Electrical	Internal Lighting	Existing LED lighting will require replacement to achieve the required 15 year life expectancy	$ -	2000	$85	$ 170,000	Recommended to proceed in fitout.
Electrical	General power	Existing workstatiosn and general power upgrades to suit new layouts	$ -	2000	$65	$ 130,000	Recommended to proceed in fitout.
Electrical	Emergency & Exit Lighting	Existing emegrnecy and exit lighting to be replaced	$ 60,000	2000	$8	$ 16,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Electrical	UPS	UPS will require replacemenet to achieve 15 year life expectancy	$ 1,000,000	2	$450,000	$ 900,000	
Communications	Data Cabling	Existing data cabling system removed and replaced with new Cat 6A data cabling throughout to achieve 15 year life Expectancy	$ -	2000	$95	$ 190,000	Recommended to proceed in fitout.
Communications	Control Room	No scope of works, replaced as part of separate control room upgrade project	$ -	0	$0	$ -	
Fire	Fire Indicator Panel	The existing FIP to be repalced with new to achieve 15 year life expectancy	$ 60,000	1	$30,000	$ 30,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Fire Detection & Alarms	Existing Fire Detection and Alam devices and cabling to be replaced with new	$ 100,000	2000	$20	$ 40,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Control Room VESDA	No scope of works, replaced as part of separate control room upgrade project	$ 160,000	1	$15,000	$ 15,000	KPMG price is not considered relevant to the required scope of works under a fitout scenario
Fire	Fire Hose Reels	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ -			$ -	
Fire	Fire Hydrants	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ -			$ -	
Fire	Gas Supression System	Existing Gas Suppression Bottles - FM200 will be discontinued (existing bottles will last for 10 years - Stamped 2016 therefore replacement required in 2026) Replace with Novec 1230 system	$ -	4	$35,000	$ 140,000	Recommended to proceed in fitout.
Fire	Extinguishers	Allow life cycle replacement	$ 12,000	1	$12,000	$ 12,000	
Mechanical	Chillers	Existing Chillers are to be removed and replaced with new to achieve 15 year life expectancy	$ 2,376,000	3	$550,000	$ 1,650,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Chilled Water Pumps	Existing Chilled water pumps are to be removed and replaced with new to achieve 15 year life expectancy	$ 99,000	4	$25,000	$ 100,000	
Mechanical	Chilled Water Valves	Existing Chilled water vlaves are to be removed and replaced with new to achieve 15 year life expectancy	$ 49,000	3	$30,000	$ 90,000	
Mechanical	Air Handling Units	Existing air handling units are to be removed and replaced with new to achieve 15 year life expectancy	$ 672,000	6	$105,000	$ 630,000	
Mechanical	Variable Speed Drives	Existing Variable Spreed Drives for Pumps, AHU's to be removed and replaced with new to achieve 15 year life expectancy	$ 50,000	8	$8,000	$ 64,000	
Mechanical	Outside Air Control	Existing startic outside air dampers to be replaced with new motorsied dampers and c02 control	$ -	9	$10,000	$ 90,000	Recommended to proceed in fitout.
Mechanical	Supply Air Ductwork	Existing supply air ductwork is ot be retained, cleaned and returned to service. Allowance for repairs to existing insulation to be allowed.	$ -	2000	$18	$ 36,000	Recommended to proceed in fitout.
Mechanical	Computer Room CRAC Units	Replacement of Control Room CRAC Units	$ 1,040,000	8	$125,000	$ 1,000,000	
Mechanical	VAV's	Existing VAV's will need to be replaced to suit 15 year life expectancy	$ 504,000	2000	$250	$ 500,000	Existing VAV's being replaced a part of separate package
Mechanical	BMS Controls	Existing BMS is being upgraded at present. No works required.	$ 96,000			$ -	Existing BMS being upgraded as part of separate package
Mechanical	Air Distribution	Existing air distribution to be removed including grilles and flex to achieve 15 year life expectancy	$ -	2000	$55	$ 110,000	Recommended to proceed in fitout.
Mechanical	Mechanical Services Switchboards	Existing mechanical switchboards to be replaced with new to be removed and replaced with new to achieve 15 year life expectancy	$ -	8	$45,000	$ 360,000	Recommended to proceed in fitout.
Mechanical	Ventilation Fans	Existing Toilet exhaust fans are to be removed and replaced with new to achieve 15 year life expectancy	$ 96,000	6	$5,000	$ 30,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Mechanical	Roof Exhaust	The existing damperlon roof over the saw tooth roof requires addiotnal ventilation to reduce heatload to atrium. Roof mounted solar ventalitors to be installed	$ -	9	$6,000	$ 54,000	Recommended to proceed in fitout.
Mechanical	Split systems	Spit System to Gym and Lift Motor rooms	$ 28,000	9	$2,800	$ 25,200	
Hydraulic	Amentity Refurbishment	Existing Amentities to be refurbished	$ -			$ -	
Hydraulic	Roof Drainage	Existing box gutters to be re-conditioned to suit 15 year life expectancy	$ -	1	$40,000	$ 40,000	Recommended to proceed in fitout.
Hydraulic	Hot Water Units	Existing hot water units to be replaced to suit 15 year life expectancy	$ 12,000	3	$4,000	$ 12,000	
			$ -				
Total			$ 6,414,000			$ 6,669,200	

Powerlink Workplace Review - Light Refurbishment

Project: **Powerlink**
Job Number 20200567
Revision 2 - 21.08.20
Engineer Cameron Webb
Mathew Potts
Gerard Kirwan
Darren Bess

Powerlink - Expected 15 year life expectancy

Building	Year Const	Age
Brian Sharp Builing	2007	13
Edision Building	1997	23

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Edision Building Light Refurbishment - Summary

Disipline	Item	Description of Works	KPMG / Capex Estimate	BSE Estimate (Qty)	Rate	Total	Generate Property Group Comments
Electrical	Main Switchboard	Existing main switchboard retained but internal componentary upgraded to achive 15 year life expectancy	$ 128,000	1	$150,000	$ 150,000	
Electrical	Distribution Boards	Existing Boards replaced to with new to achieve 15 year life expectancy	$ 560,000	12	$30,000	$ 360,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Electrical	Lighting Control	Existing Dynalite control system to be replaced to suit 15 year life expectancy	$ 48,000	7200	$10	$ 72,000	
Electrical	External Lighting	Existing external lighting replaced with new LED's and sensor control pole lighting	$ 44,000	1	$80,000	$ 80,000	
Electrical	Internal Lighting	Existing lighting to be replaced with new Led type light fittings to improve internal lighting lux levels	$ 1,155,200	7200	$85	$ 612,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Electrical	General power	Existing workstatiosn and general power upgrades to suit new layouts	$ -	7200	$65	$ 468,000	Required for fitout only.
Electrical	Emergency & Exit Lighting	Existing emegrnecy and exit lighting to be replaced	$ 120,000	7200	$12	$ 86,400	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Electrical	Generators	Edision 275 kva Generator to be replaced	$ 348,000	1	$350,000	$ 350,000	Not included in our cost plans - not considered to be essential for a number of years after works completed. Therefore in ongoing capex instead.
Security	Access Control	Existing access control system to be retained and upgraded	$ -	1	$100,000	$ 100,000	Recommended to proceed in fitout.
Security	CCTV	Existing CCTv to be upgraded to suit 15 year life expectancy	$ 300,000	1	$250,000	$ 250,000	
Communications	Data Cabling	Existing Krone Patch by Exception system removed and replaced with new Cat 6A data cabling throughout	$ -	7200	$95	$ 684,000	Recommended to proceed in fitout.
Communications	Communications Room	Existing communicatins room completely refurbished and upgraded	$ -	1	$25,000	$ 25,000	Recommended to proceed in fitout.
Fire	Fire Indicator Panel	The existing FIP to be repalced with new to achieve 15 year life expectancy	$ 128,000	1	$80,000	$ 80,000	KPMG allows for another replacements in the 15 year period, BSE's is for upfront price only.
Fire	Fire Detection & Alarms	Existing Fire Detection and Alam devices and cabling to be replaced with new	$ 225,000	7200	$20	$ 144,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Comms Room VESDA	Existing VESDA system to be removed and replaced with new	$ 48,000	1	$15,000	$ 15,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Fire Hose Reels	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ 18,000			$ -	Not considered critical - generallly included in fitout sqm rates.
Fire	Fire Hydrants	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ 735,000			$ -	KPMG's price is for full replacement of in ground pipework. This is not considered to be necessary for the fitout and would not be required for a number of years after fitout. Not included in costs.
Mechanical	Chillers	Existing Chillers are to be removed and replaced with new to achieve 15 year life expectancy	$ 1,584,000	2	$450,000	$ 900,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Chilled Water Pumps	Existing Chilled water pumps are to be removed and replaced with new to achieve 15 year life expectancy	$ 60,000	3	$25,000	$ 75,000	
Mechanical	Chilled Water Valves	Existing Chilled water valves are to be removed and replaced with new to achieve 15 year life expectancy	$ 100,000	2	$30,000	$ 60,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Air Handling Units	Existing air handling units are to be removed and replaced with new to achieve 15 year life expectancy	$ 1,140,480	8	$125,000	$ 1,000,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Variable Speed Drives	Existing Variable Spreed Drives for Pumps, AHU's to be removed and replaced with new to achieve 15 year life expectancy	$ 30,000	2	$8,000	$ 16,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Outside Air Control	Existing startic outside air dampers to be replaced with new motorsied dampers and c02 control	$ 168,000	9	$15,000	$ 135,000	
Mechanical	Supply Air Ductwork	Existing supply air ductwork is ot be retained, cleaned and returned to service. Allowance for repairs to existing insulation to be allowed.	$ -	7200	$18	$ 129,600	Recommended to proceed in fitout.
Mechanical	Atrium Relief Dampers	Existing Atrium Dampers to be removed and replaced with new	$ 64,000	9	$6,000	$ 54,000	
Mechanical	VAV's	Existing VAV's are being upgraded at present. No works required.	$ -			$ -	Existing VAV's being replaced a part of separate package
Mechanical	BMS Controls	Existing BMS is being upgraded at present. No works required.	$ 50,000			$ -	Existing BMS being upgraded as part of separate package prior to our project. KPMG's works includes for lifecycle replacement over 15 years also.
Mechanical	Air Distribution	Existing air distribution to be removed including grilles and flex to achieve 15 year life expectancy	$ -	7200	$55	$ 396,000	Recommended to proceed in fitout.
Mechanical	Kitchen Exhaust	Existing kitchen exhaust hood to be removed and replaced with new to achieve 15 year life expectancy	$ -	1	$25,000	$ 25,000	Required for fitout only

Mechanical	Refrigeration	Existing cold rooms to be removed and replaced with new to achieve 15 year life expectancy	$ 76,800	3	$5,000	$ 15,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Mechanical Services Switchboards	Existing mechanical switchboards to be replaced with new to be removed and replaced with new to achieve 15 year life expectancy	$ 640,000	8	$45,000	$ 360,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Ventilation Fans	Existing Toilet exhaust fans are to be removed and replaced with new to achieve 15 year life expectancy	$ 96,000	8	$5,000	$ 40,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Roof Exhaust	The existing damperlon roof over the saw tooth roof requires addiotnal ventilation to reduce heatload to atrium. Roof mounted solar ventalitors to be installed	$ -	9	$6,000	$ 54,000	
Hydraulic	Water Infrastructure	Allow for life cycle replacement of water infrastructure to suit 15 year life expectancy	$ 1,134,000	1	$0	$ -	KPMG's price is for full replacement of in ground pipework. This is not considered to be necessary for the fitout and would not be required for a number of years after fitout. Not included in costs.
Hydraulic	Amentity Refurbishment	Existing Amentities works	$ -			$ -	Included in fitout rates prepared by CCM.
Hydraulic	Roof Drainage	Existing box gutters to be re-conditioned to suit 15 year life expectancy	$ -	1	$40,000	$ 40,000	
Hydraulic	Hot Water Units	Existing hot water units to be replaced to suit 15 year life expectancy	$ 20,000	6	$4,000	$ 24,000	
Total			$ 9,020,480			$ 6,800,000	

Brian Sharp - Light Refurbishment - Summary

Disipline	Item	Description of Works	KPMG / Capex Estimate	BSE Estimate (Qty)	Rate	Total	Comments
Electrical	Main Switchboard	Existing main switchboard retained but internal componentary upgraded to achive 15 year life expectancy	$ -	1	$150,000	$ 150,000	Recommended to proceed in fitout.
Electrical	Distribution Boards	Existing Boards replaced to with new to achieve 15 year life expectancy	$ -	4	$30,000	$ 120,000	Recommended to proceed in fitout.
Electrical	Lighting Control	Existing Dynalite control system to be replaced to suit 15 year life expectancy	$ -	2000	$10	$ 20,000	Recommended to proceed in fitout.
Electrical	External Lighting	Existing external lighting replaced with new LED's and sensor control pole lighting	$ -	1	$20,000	$ 20,000	Recommended to proceed in fitout.
Electrical	Internal Lighting	Existing LED lighting will require replacement to achieve the required 15 year life expectancy	$ -	2000	$85	$ 170,000	Recommended to proceed in fitout.
Electrical	General power	Existing workstatiosn and general power upgrades to suit new layouts	$ -	2000	$65	$ 130,000	Recommended to proceed in fitout.
Electrical	Emergency & Exit Lighting	Existing emegrnecy and exit lighting to be replaced	$ 60,000	2000	$8	$ 16,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Electrical	UPS	UPS will require replacemenet to achieve 15 year life expectancy	$ 1,000,000	2	$450,000	$ 900,000	
Communications	Data Cabling	Existing data cabling system removed and replaced with new Cat 6A data cabling throughout to achieve 15 year life Expectancy	$ -	2000	$95	$ 190,000	Recommended to proceed in fitout.
Communications	Control Room	No scope of works, replaced as part of separate control room upgrade project	$ -	0	$0	$ -	
Fire	Fire Indicator Panel	The existing FIP to be repalced with new to achieve 15 year life expectancy	$ 64,000	1	$30,000	$ 30,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Fire Detection & Alarms	Existing Fire Detection and Alam devices and cabling to be replaced with new	$ 100,000	2000	$20	$ 40,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Fire	Control Room VESDA	No scope of works, replaced as part of separate control room upgrade project	$ 160,000	1	$15,000	$ 15,000	
Fire	Fire Hose Reels	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ -			$ -	
Fire	Fire Hydrants	Existing to be retained. Minor alternations may be required subject to final layout. Full upgrade not included.	$ -			$ -	
Fire	Extinguishers	Allow life cycle replacement	$ 12,000	1	$12,000	$ 12,000	
Mechanical	Chillers	Existing Chillers are to be removed and replaced with new to achieve 15 year life expectancy	$ 2,376,000	3	$550,000	$ 1,650,000	KPMG works based upon after hours in a live environment, not required if we complete as part of a fitout project.
Mechanical	Chilled Water Pumps	Existing Chilled water pumps are to be removed and replaced with new to achieve 15 year life expectancy	$ 99,000	4	$25,000	$ 100,000	
Mechanical	Chilled Water Valves	Existing Chilled water vlaves are to be removed and replaced with new to achieve 15 year life expectancy	$ 49,000	3	$30,000	$ 90,000	
Mechanical	Air Handling Units	Existing air handling units are to be removed and replaced with new to achieve 15 year life expectancy	$ 672,000	6	$105,000	$ 630,000	
Mechanical	Variable Speed Drives	Existing Variable Spreed Drives for Pumps, AHU's to be removed and replaced with new to achieve 15 year life expectancy	$ 50,000	8	$8,000	$ 64,000	
Mechanical	Outside Air Control	Existing startic outside air dampers to be replaced with new motorsied dampers and c02 control	$ -	9	$10,000	$ 90,000	Recommended to proceed in fitout.
Mechanical	Supply Air Ductwork	Existing supply air ductwork is ot be retained, cleaned and returned to service. Allowance for repairs to existing insulation to be allowed.	$ -	2000	$18	$ 36,000	Recommended to proceed in fitout.
Mechanical	Computer Room CRAC Units	Replacement of Control Room CRAC Units	$ 1,040,000	8	$125,000	$ 1,000,000	
Mechanical	VAV's	Existing VAV's will need to be replaced to suit 15 year life expectancy	$ 504,000	2000	$250	$ 500,000	
Mechanical	BMS Controls	Existing BMS is being upgraded at present. No works required.	$ 96,000			$ -	Existing BMS being upgraded as part of separate package
Mechanical	Air Distribution	Existing air distribution to be removed including grilles and flex to achieve 15 year life expectancy	$ -	2000	$55	$ 110,000	Recommended to proceed in fitout.
Mechanical	Mechanical Services Switchboards	Existing mechanical switchboards to be replaced with new to be removed and replaced with new to achieve 15 year life expectancy	$ -	8	$45,000	$ 360,000	Recommended to proceed in fitout.
Mechanical	Ventilation Fans	Existing Toilet exhaust fans are to be removed and replaced with new to achieve 15 year life expectancy	$ 96,000	6	$5,000	$ 30,000	KPMG allows for multiple replacements in the 15 year period, BSE's is for upfront price only.
Mechanical	Roof Exhaust	The existing damperlon roof over the saw tooth roof requires addiotnal ventilation to reduce heatload to atrium. Roof mounted solar ventalitors to be installed	$ -	9	$6,000	$ 54,000	Recommended to proceed in fitout.
Mechanical	Split systems	Spit System to Gym and Lift Motor rooms	$ 28,000	9	$2,800	$ 25,200	
Hydraulic	Amentity Refurbishment	Existing Amentities works	$ -		.		
Hydraulic	Roof Drainage	Existing box gutters to be re-conditioned to suit 15 year life expectancy	$ -	1	$40,000	$ 40,000	Recommended to proceed in fitout.
Hydraulic	Hot Water Units	Existing hot water units to be replaced to suit 15 year life expectancy	$ 20,000	3	$4,000	$ 12,000	
			$ -				
Total			$ 6,426,000			$ 6,604,200	

Annex I: Cost Planning Reports

Due to size document not incorporated into this report, please refer to separate document issued via web-link